APPENDIX TRA – TRANSPORTATION IMPACT ANALYSIS

TRANSPORTATION IMPACT ANALYSIS

El Camino Real/Chestnut Avenue Area Plan Update

PREPARED FOR:

CITY OF SOUTH SAN FRANCISCO

APRIL 2017 | DRAFT

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1. INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) has been retained by the City of South San Francisco to prepare an updated traffic study for the El Camino Real/Chestnut Avenue Area Plan in South San Francisco, California. Kimley-Horn had previously prepared the traffic study for the 2011 EIR for the El Camino Real/Chestnut Avenue Area Plan. This update incorporates the inclusion of the new Civic Center to the Specific Plan Area. The traffic analysis focuses on the Area Plan's projected impacts to intersection and freeway operations, parking, pedestrian and bicycle facilities, and the transit network.

PROJECT OVERVIEW

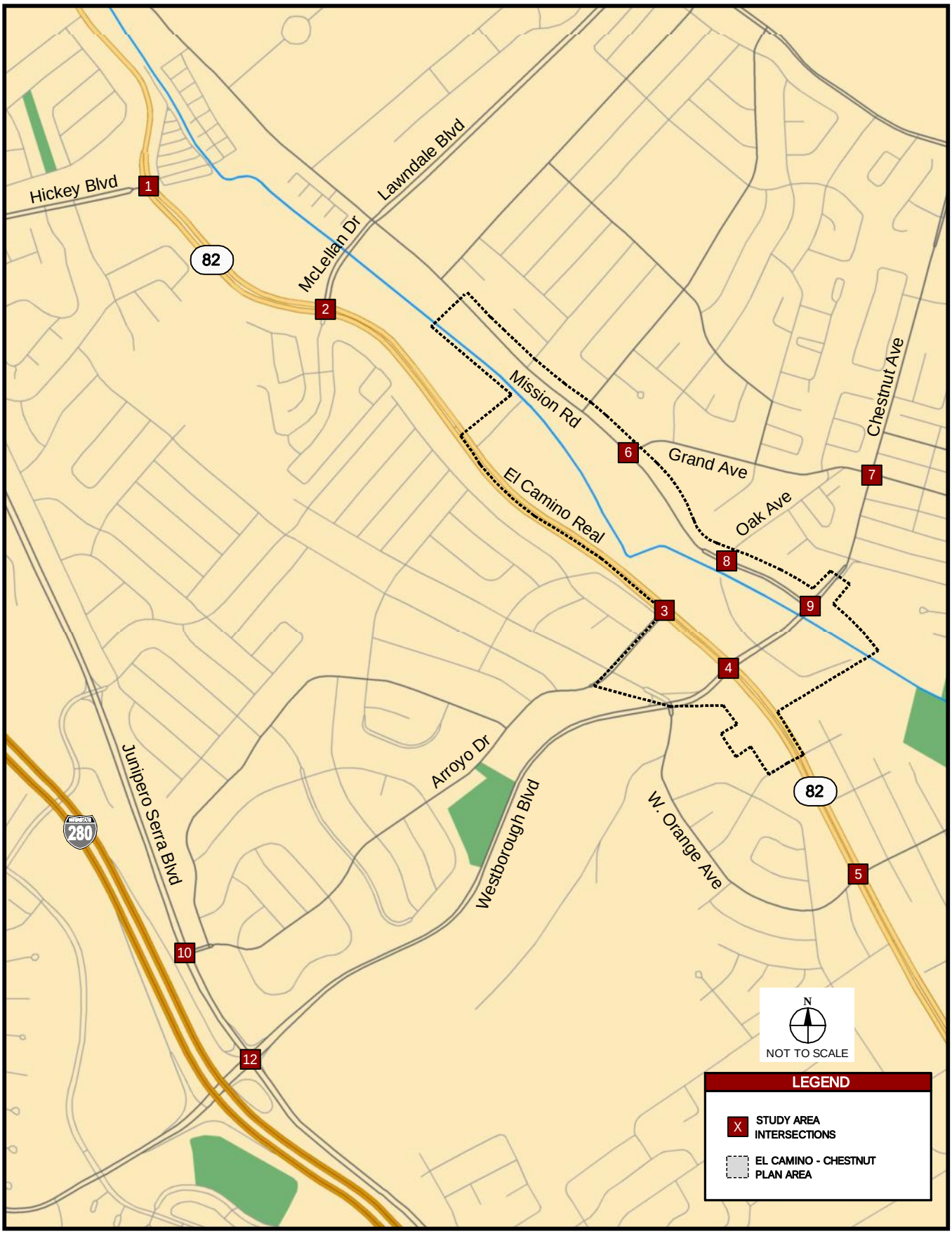
The update to the El Camino Real/Chestnut Avenue Area Plan proposes to include the new Civic Center to the study area. This update is planned to coincide with the original El Camino Real/Chestnut Avenue Area Plan, which established a land use plan to create a new walkable, distinctive, mixed-use district. In the previous study, the project included the addition of the Oak Avenue extension as a means to relieve traffic congestion in the area, as well as provide more connectivity throughout. The Oak Avenue Extension would extend Oak Avenue from Mission Road to El Camino Real and connect with Arroyo Drive. However, this update to the Area Plan does not include the Oak Avenue Extension as part of the project. Instead, the Oak Avenue Extension is assumed to be included in the Cumulative conditions, without this project.

STUDY AREA

The project area is the same as previously studied, being located to the west of downtown South San Francisco, and primarily bordered by the South San Francisco BART Station to the north, El Camino Real to the west, Mission Road to the east, and the existing retail just south of Chestnut Avenue. **Figure 1** shows the Plan Area boundaries, in addition to the study intersections. It is located between the two regional freeways in the area, I-280 and US-101. Access to I-280 is provided either via Westborough Boulevard (the west leg of the El Camino Real & Chestnut Avenue intersection) or to the north of project area via Hickey Boulevard (via El Camino Real). I-280 runs parallel and to the west of US-101, connecting San Francisco and San Jose. Within South San Francisco, I-280 has annual average daily volumes of approximately 186,000 vehicles (Caltrans, 2014). US-101 is further from the study area than I-280 and its most direct access from the project area is via Grand Avenue, through downtown South San Francisco. US-101 is a primary north-south state highway connecting Northern California cities in Sonoma, Marin, San Francisco, San Mateo, Santa Clara, and Monterey Counties. Within South San Francisco, US-101 has an annual average daily volume of approximately 198,000 vehicles.

Located between I-280 and US-101, El Camino Real (SR-82) stretches from San Francisco to San Jose. Over this stretch, El Camino Real carries between 14,500 and 50,000 annual average daily vehicles. Within South San Francisco, it ranges from 15,400 daily trips in the north to approximately 32,000 daily trips in the south.

Locally, Grand Avenue, accessed from either Chestnut Avenue or Mission Road, provides access to downtown South San Francisco. Orange Memorial Park is located to the south of the study area and is accessed via El Camino Real or Grand Avenue.



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FIGURE 1
STUDY AREA & INTERSECTION LOCATIONS

ANALYSIS SCENARIOS

For purposes of CEQA and identification of project-specific impacts and mitigation measures, this report evaluates the study area intersection and freeway traffic conditions for the AM and PM peak hours under the following scenarios:

- **Existing (2016) Conditions**: Existing traffic volumes obtained from weekday peak hour traffic counts collected in 2016. It should be noted that the previous existing conditions included intersection volumes from 2010.
- **Existing (2016) Plus Project**: Existing traffic volumes obtained from counts plus additional vehicular trips generated by the land uses proposed in the Area Plan.
- **2030 Cumulative Conditions – No Project**: Estimated traffic volumes for the year 2030 based on growth factors derived from the City/County Association of Governments of San Mateo County (C/CAG) travel forecasting model.
- **2030 Cumulative Conditions Plus Project**: 2030 No Project volumes plus additional vehicular trips generated by the land uses proposed in the Area Plan.

Baseline conditions (Existing and Cumulative No Project) establish background conditions for the evaluation of the project in the future and form the basis for determining and comparing Project and Cumulative impacts.

STUDY METHODOLOGY AND IMPACT

The traffic analysis of the study intersections was conducted using the same methodology as the previous traffic study for consistency. Therefore, the methodology was in accordance with the requirements from Appendix B of the C/CAG's *Congestion Management Plan for 2009*. This requires that the latest version of the *Highway Capacity Manual* (HCM) or the Transportation Board's *Circular 212* methodology be used to calculate levels of service.

Level of service (LOS) is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or at an intersection during a specific time interval. It ranges from LOS A (very little delay) to LOS F (long delays and congestion). **Table 1** provides a definition for each level of service category.

SIGNALIZED INTERSECTIONS

Signalized intersection level of service is measured as the average control delay in seconds per vehicle. Control delay is the portion of the total delay experienced by drivers at intersections that is attributable to traffic signal operation. It includes the delay for decelerating to a stop at a signal, moving slowly in a queue of vehicles, stopped delay, and acceleration after the signal turns green. **Table 2** summarizes the relationship between the level of service rating and control delay for signalized intersections. To evaluate signalized intersections, the operations method of the *Highway Capacity Manual (HCM)*, Transportation Research Board, National Research Council, 2000 was utilized.

Table 1: Level of Service Definitions

Level of Service	Description
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream. At signalized intersections, turning movements are easily made and all queues clear in a single signal cycle.
B	Stable traffic. Traffic flows smoothly with few delays. An occasional approach phase is fully utilized. Drivers begin to feel somewhat restricted within platoons of vehicles.
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays. Major approach phases fully utilized. Backups may develop behind turning vehicles.
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours. Queues may develop but dissipate rapidly, without excessive delays.
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.
F	Forced or breakdown flow that causes reduced capacity. Traffic demand exceeds the capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.

Source: Transportation Research Board, *Highway Capacity Manual 2000*, National Research Council, 2000.

UNSIGNALIZED INTERSECTIONS

Unsignalized intersection level of service evaluation also utilized the HCM 2000 operations methodology. This methodology determines the LOS based on delay. Similar to signalized intersections, the measure of effectiveness of an unsignalized intersection is measured in average control delay; however, the delay is reported for the worst-case approach of the intersection. The LOS criteria for unsignalized intersections are summarized in **Table 2**.

Table 2: Level of Service Definitions for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	≤ 10	≤ 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

FREEWAY SEGMENTS

Performance measures such as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience are used to describe freeway operation conditions. These measures are related to the density of traffic and volume to capacity ratio and LOS is a quality measure describing operation

conditions within the stream of traffic during the peak hours. The 2000 HCM defines six LOS grades for each type of facility. LOS is designated from A to F, with LOS A representing the best operating conditions and LOS F the worst. For this study, the LOS for a basic freeway segment is based on the volume to capacity ratio, assuming that one freeway travel lane has a capacity of 2,200 vehicles per hour. **Table 3** describes the relationship between freeway LOS, density, and volume to capacity.

Table 3: Freeway LOS Definitions

Estimated Freeway LOS	Density Range (pc/mi/ln)	Volume to Capacity Ratio
A	≤ 11	0.30
B	> 11 – 18	0.50
C	> 18 – 26	0.71
D	> 26 – 35	0.89
E	> 35 – 45	1.00
F	> 45	>1.00

SIGNIFICANCE CRITERIA

The City of South San Francisco requires that LOS D be maintained for intersections during the AM and PM peak periods. A project would be considered to have a significant impact if the trips generated by the project would cause the intersection to operate at a level of service that does not meet the City standard. If the existing intersection currently meets the City LOS standard, a project would also be considered to have a significant impact if the cumulative scenario showed that the combination of the project traffic and future cumulative traffic would result in the intersection not meeting the City LOS standard and the proposed project traffic increased the average control delay for the intersection by four seconds or more. If the existing intersection operations do not meet the current City LOS standard, the project is considered to have an impact if the trips generated by the project would add any additional traffic to that intersection.

The San Mateo County Congestion Management Program (CMP) sets the LOS standards for the freeways within the County, including the segments analyzed as part of this study. The CMP states that the LOS standard for I-280 within the study are is LOS D. For freeway segments, a project is considered to have a significant impact if the trips generated by the project would cause a freeway segment to operate at a level of service that does not meet the CMP standard. If the freeway segment does not currently meet the CMP standard, the project is considered to have a significant impact if the trips generated by the project add one percent or more of the freeway capacity or the volume to capacity ratio increases by one percent. The project will also cause an impact if the future cumulative analysis shows that the addition of background traffic and project traffic would result in the freeway segment not meeting the CMP standard and the project traffic increases demand on the freeway by one percent or the volume to capacity ratio increases by one percent.

None of the study area intersections are listed in the San Mateo County (CMP). However, the freeway segments along I-280 analyzed as part of the study are included in the CMP.

Impact criteria for parking, bicycle and pedestrian facilities, and transit system are in accordance with standard measures. Pedestrian impacts are considered significant if the project disrupts existing, or interferes with planned pedestrian facilities, or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards. Bicycle impacts are considered significant if the project disrupts

existing, or interferes with planned bicycle facilities, or creates inconsistencies with adopted pedestrian system plans, guidelines, policies, or standards. Transit impacts are considered significant if the project disrupts existing, or interferes with planned transit services or facilities, creates demand for public transit services above that which is provided or planned, or creates inconsistencies with adopted transit system plans, guidelines, policies, or standards.

RELEVANT GENERAL PLAN POLICIES

The Transportation Element of the General Plan contains policies that will guide the development of the Plan's transportation recommendations. Specifically, the following are relevant General Plan guiding and implementing policies:

STREET SYSTEM

- Policy 4.2-G-2: Improve connections between different parts of the city. These would help integrate different parts of the city. Connections between areas west and east of US-101 (currently limited to streets that provide freeway access) would also free-up capacity along streets such as Grand Avenue and Oyster Point Boulevard that provide access to US-101. Connections are also critical across El Camino Real and Junipero Serra Boulevard and from Westborough to Downtown. Connections should provide access for multiple modes of transportation including bicycle and pedestrian access.
- Policy 4.2-G-3: Where appropriate, use abandoned railroad rights-of-way and the BART right-of-way to establish new streets.
- Policy 4.2-G-4: Use the El Camino Real/Chestnut Area Plan as a guide for detailed implementation of General Plan transportation policies for the El Camino Real/Chestnut Area.
- Policy 4.2-G-7: Use Figure 4-1: Street Classifications, to identify, schedule, and implement roadway improvements. Use the El Camino Real/Chestnut Avenue Area Plan to identify, schedule, and implement roadway improvements for the El Camino Real/Chestnut Area and the Downtown Station Area Specific Plan for the Downtown Station Area roadway improvements.
- Policy 4.2-G-8: Use the Bicycle Master Plan to identify, schedule, and implement roadway improvements that enhance bicycle access.
- Policy 4.2-G-9: Use the Pedestrian Master Plan to identify, schedule, and implement roadway improvements that enhance pedestrian access.
- Policy 4.2-G-10: Make efficient use of existing transportation facilities and, through the arrangement of land uses, improve alternate modes, and enhanced integration of various transportation systems serving South San Francisco, strive to reduce the total vehicle-miles traveled.
- Policy 4.2-G-11: Coordinate local actions with regional agencies, and undertake active efforts to undertake transportation improvements.
- Policy 4.2-G-12: Provide fair and equitable means for paying for future street improvements including mechanisms such as development impact fees.
- Policy 4.2-G-13: Strive to maintain LOS D or better on arterial and collector streets, at all intersections, and on principal arterials in the CMP during peak hours.
- Policy 4.2-G-14: Accept LOS E or F after finding that:
    - There is no practical and feasible way to mitigate the lower level of service; and
    - The uses resulting in the lower level of service are of clear, overall public benefit.
- Policy 4.2-G-15: Exempt development within one-quarter mile of a Caltrain or BART station, or a City-designated ferry terminal, from LOS standards.

- Policy 4.2-I-2: Undertake street improvements identified in the General Plan including:
    - Connection between Hillside Boulevard and El Camino Real near the BART station.
    - Arroyo Drive/Oak Avenue connection.
    - Mission Road extension from Chestnut Avenue to South Linden Avenue extension on the BART right-of-way.
- Policy 4.2-I-7: Continue to require that new development pays a fair share of the costs of street and other traffic and transportation improvements, based on traffic generated and impacts on service levels. Explore the feasibility of establishing impact fee, especially for improvements required in the Lindenville area.
- Policy 4.2-I-10: Design roadway improvements and evaluate development proposals based on LOS standards.
- Policy 4.2-I-11: Implement, to the extent feasible, circulation system improvements prior to deterioration in levels of service below the stated standard.

ALTERNATIVE TRANSPORTATION SYSTEMS

Alternative Transportation System implementing policies include bicycle, pedestrian, and transit focused policies.

- Policy 4.3-G-1: Develop a comprehensive and integrated system of bikeways that promote bicycle riding for transportation and recreation.
- Policy 4.3-G-2: Provide safe and direct pedestrian routes and bikeways between and through residential neighborhoods, and to transit centers.
- Policy 4.3-G-3: Use the El Camino Real/Chestnut Avenue Area Plan as a guide for detailed implementation of General Plan alternative transportation system policies for the El Camino Real / Chestnut Area.
- Policy 4.3-G-5: In partnership with employers, continue efforts to expand shuttle operations.
- Policy 4.3-G-6: In partnership with the local business community, develop a transportation systems management plan with identified trip-reduction goals, while continuing to maintain a positive and supportive business environment.
- Policy 4.3-I-1: Prepare and adopt a Bikeways Master Plan that includes goals and objectives, a list or map of improvements, a signage program, detailed standards, and an implementation program. Once adopted, the Bicycle Master Plan shall be the guiding policy document regarding bicycling matters that are within the scope of the adopted Bicycle Master Plan.

Bicycle

- Policy 4.3-I-2: As part of the Bikeways Master Plan, include improvements identified in the General Plan, and identify additional improvements that include abandoned railroad rights-of-way and other potential connections including:
    - Bike Path on linear park on the BART right-of-way, extending from the South San Francisco BART Station to the San Bruno BART station.
    - Bike connections between Mission Road and El Camino Real
    - Bike connection between Camaritas Avenue and El Camino Real
- Policy 4.3-I-4: Require provision of secure covered bicycle parking at all existing and future multifamily residential, commercial, industrial, and office/institutional uses.

Pedestrian Circulation

- Policy 4.3-I-5: Prepare, adopt, and maintain a PMP as a long-term vision for supporting and improving pedestrian access in South San Francisco, including goals, policies, and strategic near-term implementation measures that encourage pedestrian activity and prioritizes pedestrian improvements for funding.
- Policy 4.3-I-12: Use the El Camino Real/Chestnut Avenue Area Plan to identify, schedule, and implement pedestrian improvements for the El Camino Real/Chestnut Area.

Transportation Demand Management (TDM)

- Policy 4.3-I-15: Adopt a TDM program or ordinance which includes, but is not limited to, the following components:
    - Methodology to determine eligibility for land use intensity bonuses for TDM programs identified in the Land Use Element
    - Procedures to ensure continued maintenance of measures that result in intensity bonuses
    - Requirements for off-site improvements (such as bus shelters and pedestrian connections) that are directly necessary as a result of development
    - Establishment of baseline TDM requirements for all new projects generating more than 100 peak period trips.
    - Establishment of additional requirements for all new projects seeking a FAR bonus.
    - An ongoing monitoring and enforcement program to ensure TDM measures are actually implemented.
    - Reduce parking requirements for new projects implementing a TDM Program in proximity to fixed guide way transit or those

Parking

- Policy 4.3-I-18: Establish parking standards to support trip reduction goals by:
    - Allowing parking reductions for projects that have agreed to implement trip reduction methods, such as paid parking, and for mixed use development.
    - Requiring projects larger than 25 employees to provide preferential parking for carpools and vanpools.
- Policy 4.3-I-19: Amend the Zoning Ordinance to reduce minimum parking requirements for projects proximate to transit stations and for projects implementing a TDM program.
- Policy 4.3-I-20: Investigate opportunities for shared parking facilities whenever possible to reduce the number of new parking stalls required.

Transit

- Policy 4.4-G-1: Promote local and regional public transit serving South San Francisco.
- Policy 4.4-G-2: Explore mechanisms to integrate various forms of transit.
- Policy 4.4-I-3: Explore the feasibility of a shuttle system between the Downtown/multi-modal station and South San Francisco and San Bruno stations.

2. EXISTING (2016) CONDITIONS

This section describes the current transportation network within the study area, including roadway, bicycle, pedestrian, and transit facilities. The Existing (2016) traffic operations of the study area intersections are analyzed and discussed as well.

ROADWAY NETWORK

The existing circulation network is composed of freeways, arterial streets, collector streets, and local streets. The City of South San Francisco General Plan provides the definitions below for street classifications.

FREEWAYS

Freeways are limited-access, high-speed travelways included in the State and federal highway systems. These travelways carry regional through traffic and access is provided by interchanges at intervals of one-mile or greater. No access is provided to adjacent land uses. There are two freeways in South San Francisco – US-101 and I-280.

ARTERIALS

Arterials are major streets that primarily serve through traffic and provide access to abutting properties as a secondary function. Arterials are generally designed with four to six travel lanes and major intersections are signalized. In South San Francisco, there are two types of arterials: major arterials and minor arterials. Major arterials are typically divided (have raised medians), have more travel lanes, and carry more traffic than minor arterials. Major arterials in the city include El Camino Real, Sisters Cities Boulevard, Junipero Serra Boulevard, and East Grand Avenue. Minor arterials include Mission Road and Orange Avenue.

COLLECTORS

Collectors connect arterials with local streets, and provide access and circulation within neighborhoods. Collectors are typically designed with two travel lanes, parking lanes, planter strips, and sidewalks. Examples of collectors in South San Francisco are Commercial Avenue and Del Monte Avenue.

LOCAL STREETS

Local streets provide direct access to abutting properties as their primary function. Local streets have no more than two travel lanes.

REGIONAL ACCESS

The City of South San Francisco is connected to several regional highways, including I-280, I-380, and US-101. I-280 is an eight-lane freeway that provides regional access to San Francisco, the Peninsula, and San Jose. I-380 is a six-lane freeway that provides access to the San Francisco International Airport, I-280, and US-101. US-101 is an eight-lane freeway that provides regional access to San Francisco, and cities up and down the Peninsula. US-101 is a major north-south highway connecting Southern and Northern California.

LOCAL ACCESS

The project study area is within the South San Francisco city limits and consists of arterials, collectors, and local streets. The following describes the roadways in the vicinity of the study area.

El Camino Real (SR-82) is a six-lane Major Arterial with a raised, landscaped median. The median has openings for left-turn pockets at all intersections and some major driveways. On-street parking is allowed on some segments on the roadway. The speed limit is 40 miles per hour. Several SamTrans bus routes operate along the segment of El Camino Real with the study area. Gaps in the sidewalk system occur on El Camino Real on the west side between Arroyo Drive and BART Road.

Mission Road is a four-lane Minor Arterial with no median or center turn lane, except from Oak Avenue to Chestnut Avenue where a raised median exists. On-street parking is not allowed on this street within the study area. The speed limit is 30 miles per hour. Mission Road does not have a sidewalk on the west side of the street between Oak Avenue and Grand Avenue.

Westborough Boulevard/Chestnut Avenue is a four-lane Major Arterial with a raised median west of Mission Road. Except for a short segment in the eastbound direction between El Camino Real and Mission Road, on-street parking is not allowed. The speed limit is not posted on the street in the area of the project, but is posted at 45 miles per hour to the west of Camaritas Avenue and is posted at 30 miles per hour to the east of Mission Road. In the vicinity of the project area Westborough Boulevard/Chestnut Avenue has sidewalks on both sides of the street.

Arroyo Drive is a two-lane Collector with a double yellow centerline, except for a short segment with a raised median near El Camino Real. There are two pedestrian crossings with ladder-style markings between Camaritas Avenue and El Camino Real. On-street parking is allowed within the study area. On the south side of Arroyo Drive between Camaritas Avenue and El Camino Real, in front of the City's municipal building, the on-street parking is angled. The speed limit is 25 miles per hour. Arroyo Drive has a sidewalk on both sides of the street within the study area. It is designated as a Class III bike route.

Camaritas Avenue is classified as an Other Street in the City's General Plan. It is four lanes between Arroyo Drive and Westborough Road, otherwise it is two lanes. Over the four-lane section, on-street parking is allowed in the southbound direction. North of Arroyo Drive, on-street parking is allowed in both directions. The four-lane section is designated as a Class III bike route. The four-lane section does not have a posted speed limit. Sidewalks are provided on both sides of the street on Camaritas Avenue.

Oak Avenue is a two-lane Collector with a double yellow centerline. It has a two-way left-turn lane east of Commercial Avenue. It has on-street parking on both sides of the street, and the posted speed limit is 25 miles per hour. Sidewalks are provided on both sides of the street. This street is proposed to be extended from Mission Road to El Camino Real.

INTERSECTION OPERATIONS

Intersection turning movement counts were collected on a typical weekday between 7:00-9:00 AM and 4:00-6:00 PM at all the study area intersections. The traffic counts were conducted on September 13, 2016. A field visit was also conducted to confirm intersection geometry, intersection control, pedestrian and bicycle accessibility, and queue lengths. The existing (2016) intersection geometry and traffic control is illustrated in **Figure 2**. The existing (2016) conditions traffic volumes are shown in **Figure 3**.

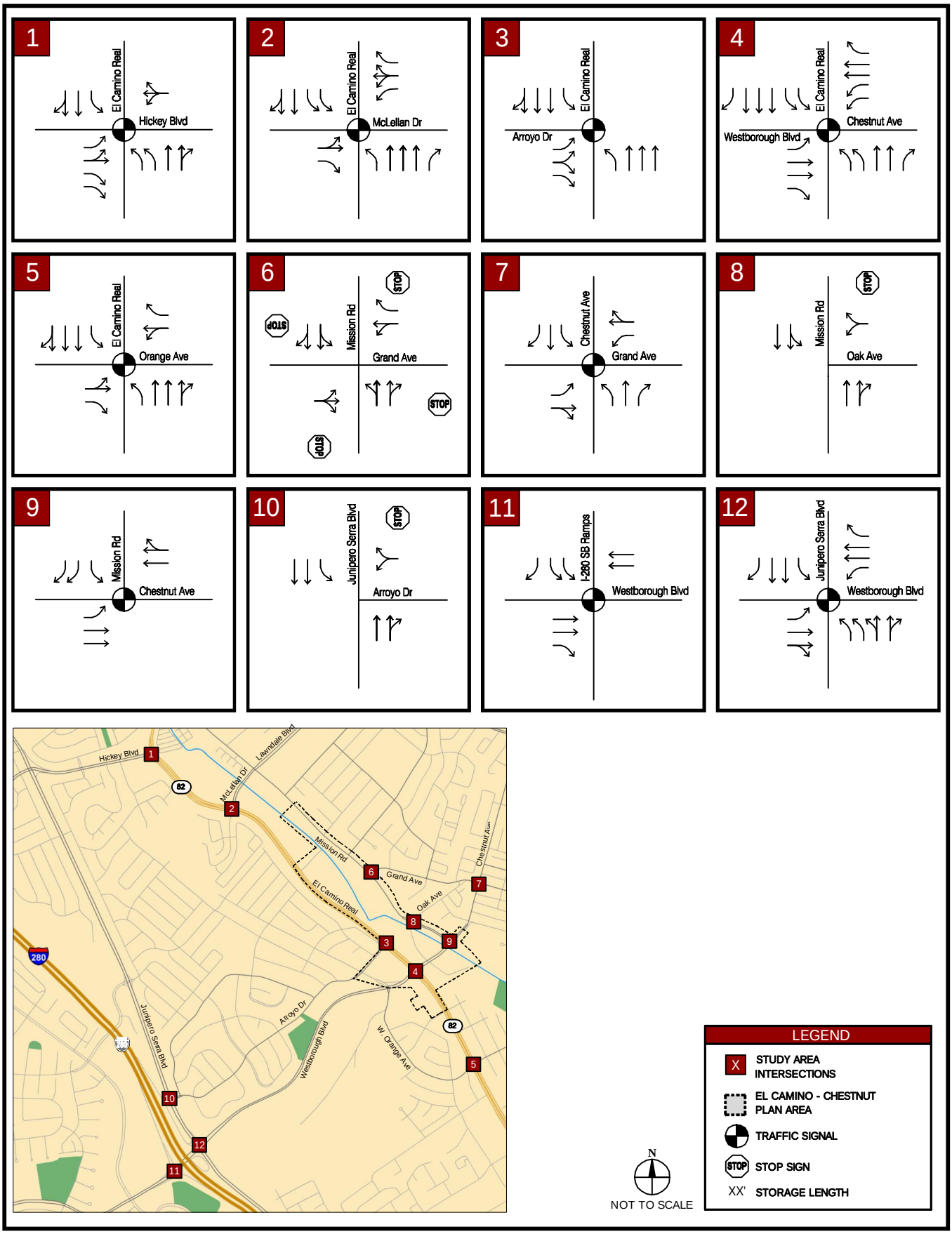


FIGURE 2
EXISTING (2016) CONDITION
LANE GEOMETRY AND TRAFFIC CONTROL

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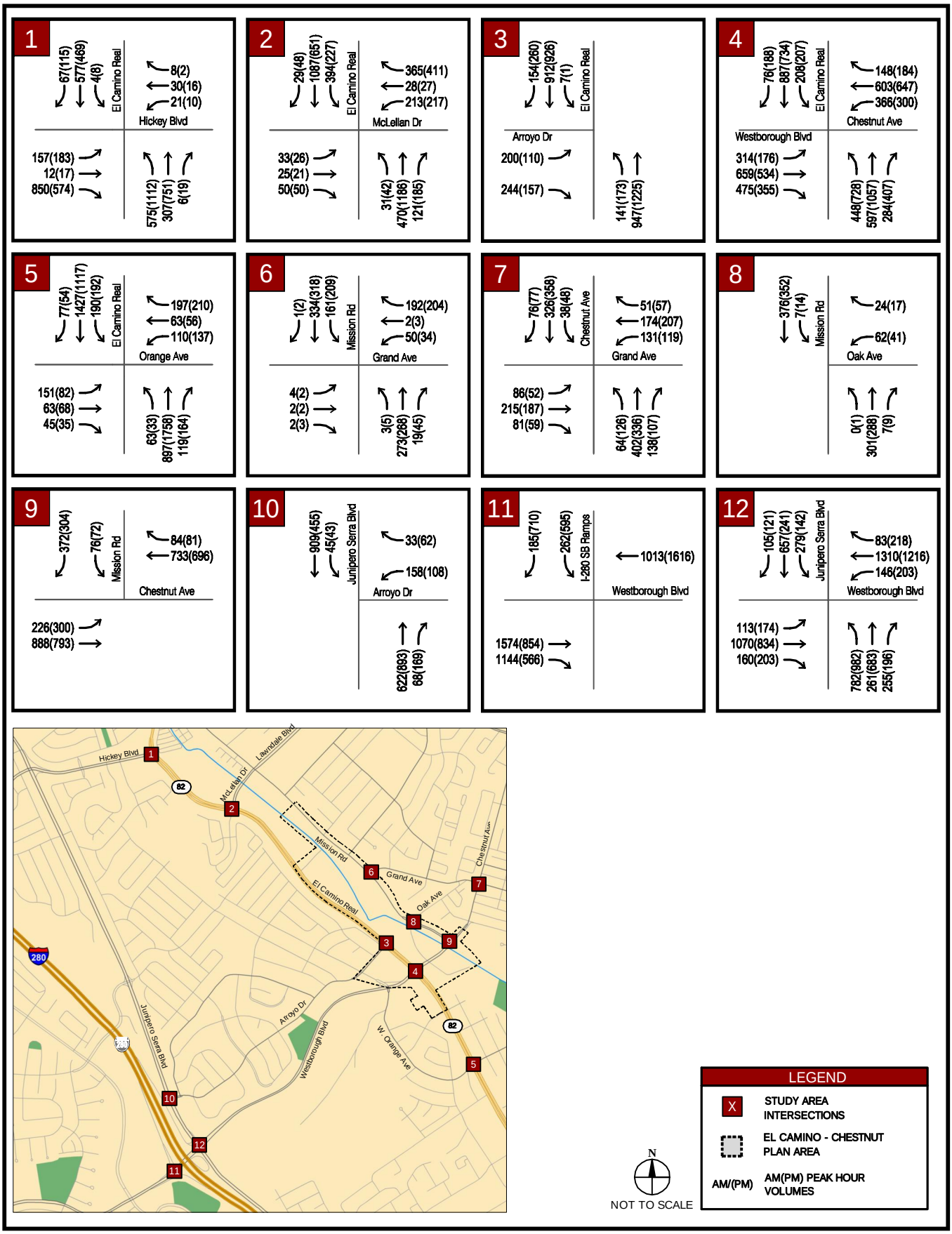


FIGURE 3

EXISTING (2016) CONDITION

PEAK HOUR TURNING MOVEMENT VOLUMES

FIELD OBSERVATIONS

Field observations were conducted at the study intersections during the PM peak period in September 2016. The following intersections were observed to have heavy congestion in the PM peak hour.

El Camino Real/Hickey Boulevard – Vehicles were queued up in the northbound left turn lanes during the PM peak hour. Queues in these lanes backed up approximately 400 feet, but were contained within the left turn storage pocket. This high northbound left turn volume resulted in less green time for the southbound approach, resulting in noticeable queues for this approach.

El Camino Real/Chestnut Avenue – This intersection showed heavy vehicle congestion in the westbound approach during the PM peak hour. The westbound approach has a short storage length due to the close proximity of the adjacent signalized intersection of Chestnut Avenue/Antoinette Lane. This short storage length would result in vehicles consistently backing up into the intersection of Chestnut Avenue/Antoinette Lane, and sometimes blocking vehicles making southbound right and northbound left at the intersection.

Junipero Serra Boulevard/Arroyo Drive – This intersection showed high delays for vehicles making a westbound left turn from Arroyo Drive to southbound Junipero Serra Boulevard. Due to the higher vehicle speeds along Junipero Serra Boulevard and the wide intersection, vehicles needed more time to make a westbound left turn onto Junipero Serra Boulevard. However, the traffic signal at the intersection of Junipero Serra Boulevard/Westborough Boulevard created gaps that allowed vehicles to make this turn.

The following intersections were evaluated under existing (2016) conditions for the AM and PM peak hours:

1. El Camino Real/Hickey Boulevard
2. El Camino Real/McLellan Boulevard
3. El Camino Real/Arroyo Drive/Oak Extension
4. El Camino Real/Chestnut Avenue
5. El Camino Real/Orange Avenue
6. Mission Road/Grand Avenue
7. Chestnut Avenue/Grand Avenue
8. Mission Road/Oak Avenue
9. Mission Road/Chestnut Avenue
10. Junipero Serra Boulevard/Arroyo Drive
11. Westborough Boulevard/I-280 SB Off Ramp
12. Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard

A traffic operations model was developed for the study area using TRAFFIX software. **Table 4** summarizes the existing (2016) intersection levels of service for the AM and PM peak hours. Most study intersections operate at an acceptable LOS D or better, except at the following locations:

- Intersection #1 – El Camino Real and Hickey Boulevard – PM peak hour
- Intersection #4 – El Camino Real and Chestnut Avenue – AM peak hour
- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive – AM and PM peak hours
- Intersection #12 – Westborough Boulevard and I-280 NB on-ramp/Junipero Serra Boulevard – AM peak hour

Table 4: Existing Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Existing (2016)				Existing (2010)			
				AM Peak		PM Peak		AM Peak		PM Peak	
				LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	El Camino Real/Hickey Boulevard	D	Signal	D	53.4	**E**	**58.9**	D	35.9	D	38.5
2	El Camino Real/McLellan Boulevard	D	Signal	C	31.8	D	35.0	C	31.2	C	30.5
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	25.5	C	20.5	B	19.8	B	15.9
4	El Camino Real/Chestnut Avenue	D	Signal	**E**	**56.7**	D	52.4	D	39.7	D	38.1
5	El Camino Real/Orange Avenue	D	Signal	D	36.8	D	40.7	C	33.1	C	32.7
6	Mission Road/Grand Avenue	D	AWSC	B	12.9	B	13.0	B	13.2	B	12.4
7	Chestnut Avenue/Grand Avenue	D	Signal	C	32.2	C	31.2	C	29.0	C	29.0
8	Mission Road/Oak Avenue	D	SSSC	A	2.3	A	1.0	A	1.4	A	0.8
	Worst Approach			B	14.9	B	11.8	C	15.4	B	12.2
9	Mission Road/Chestnut Avenue	D	Signal	C	26.7	C	26.4	C	24.4	C	22.5
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	B	11.5	A	3.8	A	8.1	A	7.2
	Worst Approach			**F**	**99.7**	**E**	**39.2**	**E**	**47.8**	**F**	**62.6**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	A	5.3	A	9.8	B	15.8	D	41.9
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**85.6**	D	54.9	D	41.3	**E**	**78.0**

Note: Intersections that are operating below acceptable levels are shown in **BOLD**.

Table 4 also summarizes the existing (2010) intersection levels of service for the AM and PM peak hours from the previous study. These intersection LOS results for the existing (2016) condition are similar to the previous traffic study's existing (2010) condition intersection LOS results. The following intersections operate unacceptably in both existing (2016) and existing (2010) conditions:

- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive
- Intersection #12 – Westborough Boulevard and I-280 NB on-ramp/Junipero Serra Boulevard

The following intersections only operate unacceptably in the existing (2016), but not the existing (2010) conditions:

- Intersection #1 – El Camino Real and Hickey Boulevard
- Intersection #4 – El Camino Real and Chestnut Avenue

This is a result of increased volumes at each of these two intersections in 2016.

FREEWAY OPERATIONS

It was requested by Caltrans that four freeway mainline segments be analyzed to determine if the trips generated by the project impact the freeway. Freeway volumes were determined by growing the latest volumes (i.e. 2015) provided on the Caltrans Traffic Census Program website to existing (2016) condition volumes.

Table 5 summarizes the existing (2016) freeway levels of service during the AM and PM peak hour. Each freeway segment operates at a LOS E for either the AM peak hour or PM peak hour, which fails to meet the current CMP LOS standards. Both northbound I-280 freeway segments operate at a deficient LOS E in the PM peak hour and southbound I-280 from Hickey Boulevard to Westborough Boulevard operates at a deficient LOS E in the PM peak hour. Southbound I-280 from Westborough Boulevard to Avalon Drive operates at a deficient LOS E. **Table 6** summarizes the existing (2010) freeway levels of service from the previous study. Compared to the previous traffic study, the freeway volumes have increased and therefore the LOS has worsened from an acceptable LOS D to an unacceptable LOS E at the same locations.

Table 5: Existing (2016) Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Existing (2016) Conditions					
							AM Peak			PM Peak		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	6,269	D	0.712	8,032	E	0.913
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	7,575	D	0.861	8,727	E	0.992
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	7,179	D	0.816	8,073	E	0.917
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	7,876	E	0.895	7,334	D	0.833

Table 6: Existing (2010) Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Existing (2010) Conditions					
							AM Peak			PM Peak		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	4,722	C	0.537	7,327	D	0.833
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	5,056	C	0.575	7,091	D	0.806
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	5,708	C	0.649	6,214	D	0.706
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	6,305	D	0.716	5,155	C	0.586

TRANSIT NETWORK

Public transportation is provided by Bay Area Rapid Transit (BART), San Mateo County Transit District (SamTrans) and Caltrain. Public transportation routes, stops and stations within the project vicinity are shown in **Figure 4**.

BART

BART connects the San Francisco Peninsula with Oakland, Berkeley, Fremont, Walnut Creek, Dublin, Pleasanton and other East Bay cities via above- and below-ground heavy rail. From the project area, BART provides service to the north towards San Francisco and across the bay. BART also provides direct access to San Francisco International Airport.

The South San Francisco BART station is located just to the north of the study area. Its primary drop-off area and parking garage are accessed from BART Road via El Camino Real or Mission Road. Pedestrian access is provided via El Camino Real, Mission Road, and McLellan Drive.

The South San Francisco BART station opened in 2003 as part of the BART extension from Colma to San Francisco International Airport/Millbrae. It operates underground in the project vicinity, bisecting the project area. The travel time is approximately 20 minutes via BART to travel from the South San Francisco station to the Civic Center station in San Francisco and approximately 35 minutes via BART to travel to the 12th Street Station in Oakland.

The BART station is adjoined by a large, daily parking garage that is discussed in the parking chapter of this report.

SAMTRANS

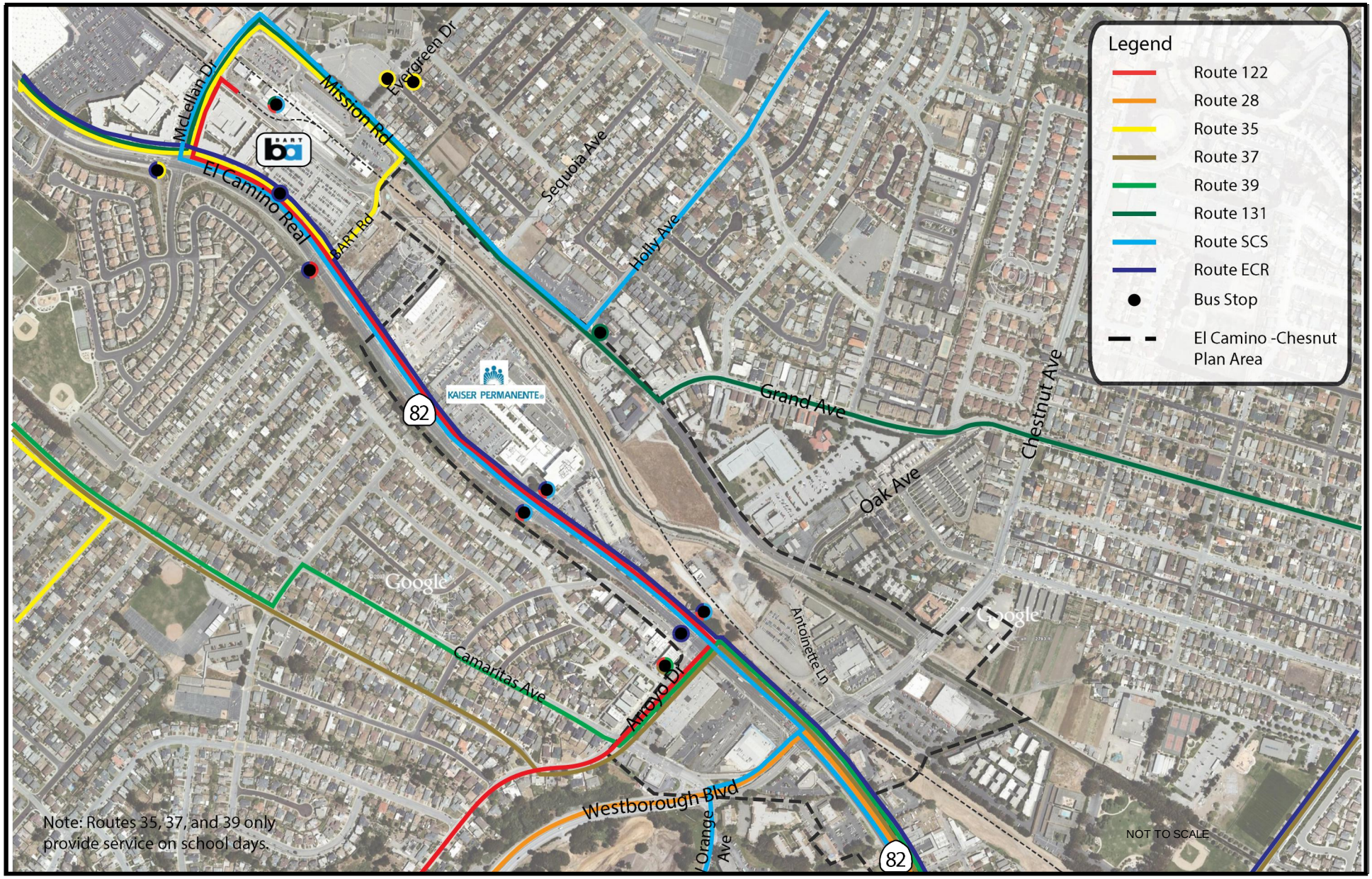
SamTrans operates fixed-route buses, community-based shuttles, paratransit, and BART commuter shuttles within San Mateo County. Many bus routes and shuttles operate through South San Francisco and the project vicinity.

Many SamTrans fixed bus routes and BART commuter shuttles provide local and regional service to the South San Francisco BART station. As a result, bus stops within or adjacent to the project area are served by multiple bus routes.

Fixed Route Bus Service

Route 28 travels between the Serramonte Center in Daly City and South San Francisco High School. Along the route, it connects with regional shopping centers in Daly City and South San Francisco. It operates with 10-minute headways during the AM period and 6-minute headways during the PM period except for Wednesdays. The service is only provided on school days. In the project vicinity, it travels on Westborough Boulevard and then heads south on El Camino Real.

Route 35 provides community service from the intersection of Warwick Street and Christen Avenue to El Camino High School, located near the South San Francisco BART station. It operates with 10- to 40-minute headways during AM peak hours. It also operates with 6-minute headways during the PM period. This service only operates three AM loops and three PM loops. The service is only provided on school days. In the project vicinity, it travels on El Camino Real between Hickey Boulevard and BART station.



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FIGURE 4
EXISTING (2016) TRANSIT NETWORK

Route 37 travels through South San Francisco from the intersection of Grove Avenue and Hillside Boulevard to Alta Loma Middle School. It provides service during school start and dismissal times at Alta Loma Middle School. The service is only provided on school days and operates one morning and one afternoon bus from 7:59 to 8:20 AM and 3:35 to 3:59 PM, respectively. In the project vicinity, it travels on El Camino Real between Arroyo Drive and Orange Avenue.

Route 39 travels through South San Francisco from the intersection of Hazelwood Drive and Northwood Drive to Alta Loma Middle School. It provides service during school start and dismissal times at Alta Loma Middle School. The service is only provided on school days and operates one morning and one afternoon bus from 8:16 to 8:32 AM and 3:25 to 3:40 PM, respectively. In the project vicinity, it travels on El Camino Real between Arroyo Drive and Orange Avenue.

Route 122 travels between the Stonestown Shopping Center in San Francisco and the South San Francisco BART station, providing service to the Colma BART Station, San Francisco State University and many retail and medical centers along the way. On weekdays, it operates with an approximate 20-minute headway during the peak hours and approximate 30-minute headway for the rest of the day, from 6:00 AM to 10:00 PM. It operates on weekends and holidays with 30-minute headways. In the project vicinity, it travels on El Camino Real south of the South San Francisco Station and then travels west on Arroyo Drive.

Route 131 travels between the Serramonte Center in Daly City and the intersection of Airport Boulevard & Linden Avenue in South San Francisco. It also provides service to the South San Francisco BART station. On weekdays, it operates with 15- to 20-minute headways during the peak hours and approximately 15- to 30-minute headways for the rest of the day, from 5:05 AM to 10:56 PM. It operates on Saturdays with 30-minute headways and on Sundays and holidays with 60-minute headways. In the project vicinity, it travels on El Camino Real, Mission Road, and Grand Avenue.

Route ECR travels between Daly City BART station and Palo Alto Transit Center. Along the route, it connects with the Daly City, Colma, South San Francisco, San Bruno and Millbrae BART stations, the Millbrae and Redwood City Transit Center and various Caltrain stations. On weekdays, it operates with approximately 15-minute headways during peak hours and 30-minute headways from 4:00 AM to 2:00 AM. On the weekends, it operates with 15- to 30-minute headways from 5:00 AM to 2:00 AM.

The South City Shuttle travels in a clockwise loop around South San Francisco. Points on the route include South San Francisco BART station, the City Library, and the City's Community Learning Center. On weekdays, it operates in approximately 45-minute headways from 7:15 AM to 6:39 PM.

Paratransit Service

In addition, SamTrans operates demand-responsive paratransit service within the project area.

CALTRAIN

The study area is also served by Caltrain, a commuter rail system connecting Gilroy to San Francisco with a station located approximately 2 miles from the study area, just to the east of US-101 near the Grand Avenue interchange. Transfers between the Caltrain and the BART system can occur at the Millbrae BART station. Access from the study area is provided to Caltrain via BART or SamTrans bus routes.

BICYCLE FACILITIES

Bicycle facilities are classified either as Class I, Class II, or Class III. Class I facilities are paved paths separated from the roadway. Class II facilities are bike lanes striped on the roadway and include associated

signage. Class III facilities are bike routes along roadways that are designated by signs only and may or may not include additional pavement width in the roadway. Bicycle facilities in the project vicinity are shown in **Figure 5**.

The following is a list of Class I bicycle paths in the vicinity of the study area:

- Centennial Way Trail between South San Francisco BART Station and San Bruno BART Station

The following is a list of Class II bicycle lanes in the vicinity of the study area:

- Westborough Boulevard between I-280 and Camaritas Avenue/West Orange Avenue
- Grand Avenue between Chestnut Avenue and Spruce Avenue
- Mission Road north of McLellan Drive

The following is a list of Class III bicycle routes in the vicinity of the study area:

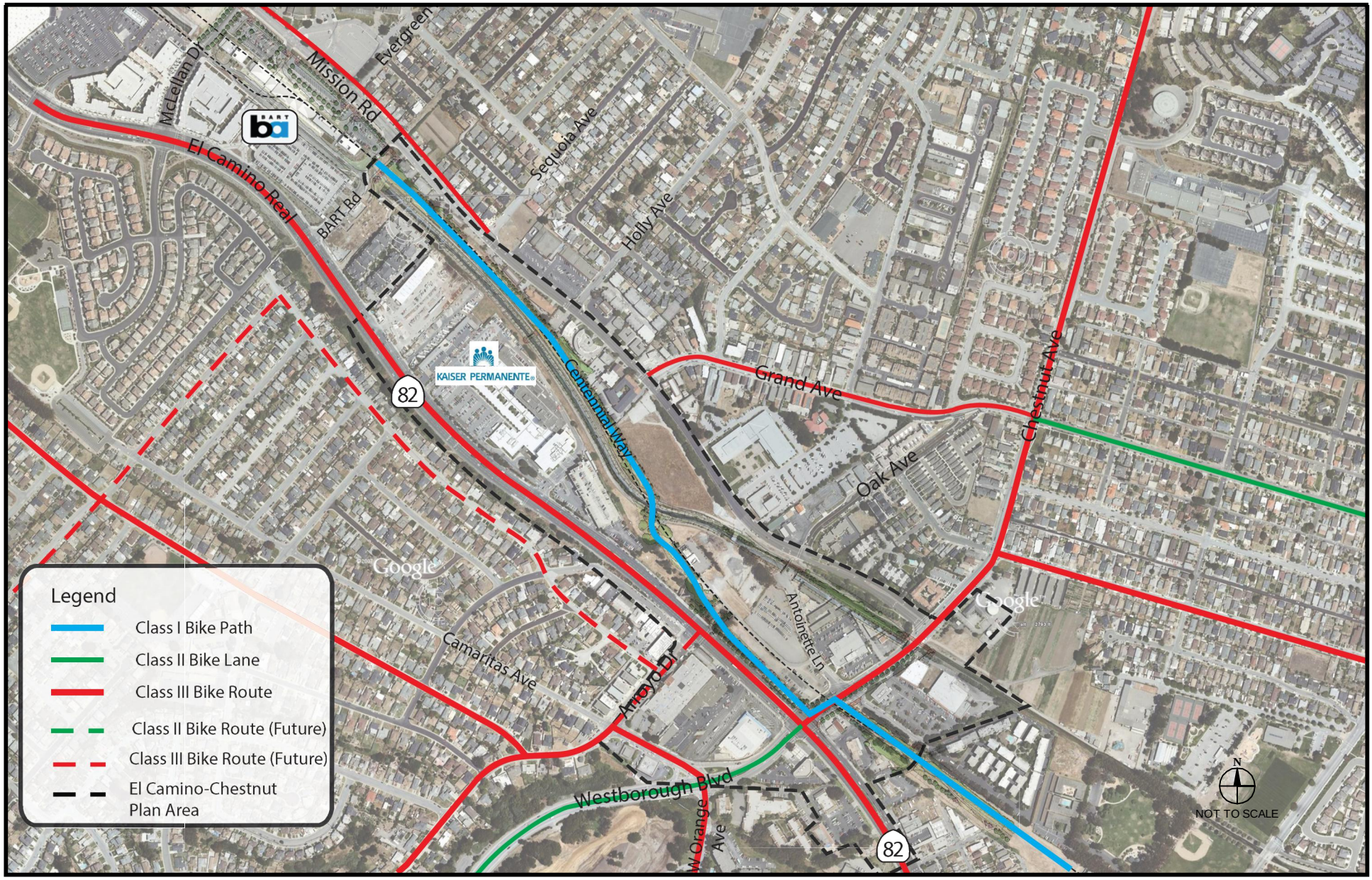
- Camaritas Avenue-West Orange Avenue south of Arroyo Drive
- Commercial Avenue between Chestnut Avenue and Lindon Avenue
- Del Monte Avenue between Bryon Drive to Arroyo Drive
- El Camino Real through its extents within the City of South San Francisco
- Mission Road between McLellan Drive and Sequoia Avenue
- Westborough Boulevard-Chestnut Avenue between Camaritas Avenue/West Orange Avenue and Hillside Boulevard
- Grand Avenue between Mission Road and Chestnut
- Alta Loma Drive between San Felipe Avenue and Arroyo Drive (Proposed)
- San Felipe Avenue west of Alta Loma Drive (Proposed)

PEDESTRIAN FACILITIES

Most roads within the study area have pedestrian sidewalks and are ADA (Americans with Disabilities Act) accessible. Most signalized intersections in the area have pedestrian crossings at all or most approaches with pedestrian signals and pushbuttons. The Centennial Way trail is a multi-use bicycle and pedestrian path and travels through the study area. An additional multi-use bicycle and pedestrian path is located adjacent to North Canal Street from West Orange Avenue to South Spruce Avenue.

There are a few gaps within the sidewalk network in the vicinity of the project area. Most prominently is the lack of a sidewalk on the west side of El Camino Real from BART Road to just north of Arroyo Drive. This is identified as an improvement and is recommended by the City's El Camino Real Master Plan, prepared in 2006. There is also a lack of a sidewalk on the west side of Mission Road from approximately Oak Avenue to Grand Avenue. The need for this walkway may be reduced with the construction of Linear Park, although with the development of parcels on the west side of Mission Road and the extension of Oak Avenue, there may be a need for a sidewalk adjacent to the roadway.

Access from the Buri Buri neighborhood, located west of El Camino Real, to the study area is limited to Arroyo Drive and a stairway opposite the BART road due to steep grades between the neighborhood and El Camino Real. Access from the east side of Mission Road to the study area is currently limited to Chestnut Avenue and a pedestrian bridge along Mission Road that connects to Antoinette Lane through Centennial Way Trail.



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FIGURE 5
EXISTING (2016) BICYCLE FACILITIES

3. EXISTING (2016) PLUS PROJECT CONDITIONS

The existing (2016) plus project scenario is a scenario that identifies specific impacts of the proposed plan for comparative purposes. The peak hour traffic volumes for this scenario were developed by adding the net new trips generated by the land use plan to the existing traffic volumes. It will also evaluate potential impacts to pedestrian, bicycle, and transit circulation. Overall, traffic patterns are not anticipated to change significantly, because the primary roadway network remains the same.

PROJECT DESCRIPTION

The initial Plan included an update to the land uses and intensities of the El Camino Real/Chestnut Avenue Area Plan. The El Camino Real/Chestnut Avenue Area Plan is divided into different blocks, as shown in **Figure 6**. Each block included new land uses that generated project trips. This update to the Plan Area included the following:

- Addition of the Civic Center – The proposed Civic Center will include the following land uses:
    - Police Department, IT Department, and HR Department – 44,500 SF
    - Fire Station – 7,000 SF
    - Library – 50,000 SF
    - Parks & Recreation – 43,500 SF

  The addition of the Civic Center would be to Blocks D, E, F, and G. However, the fire station would be located on the eastern corner of the intersection of Arroyo Drive and Camaritas Avenue.

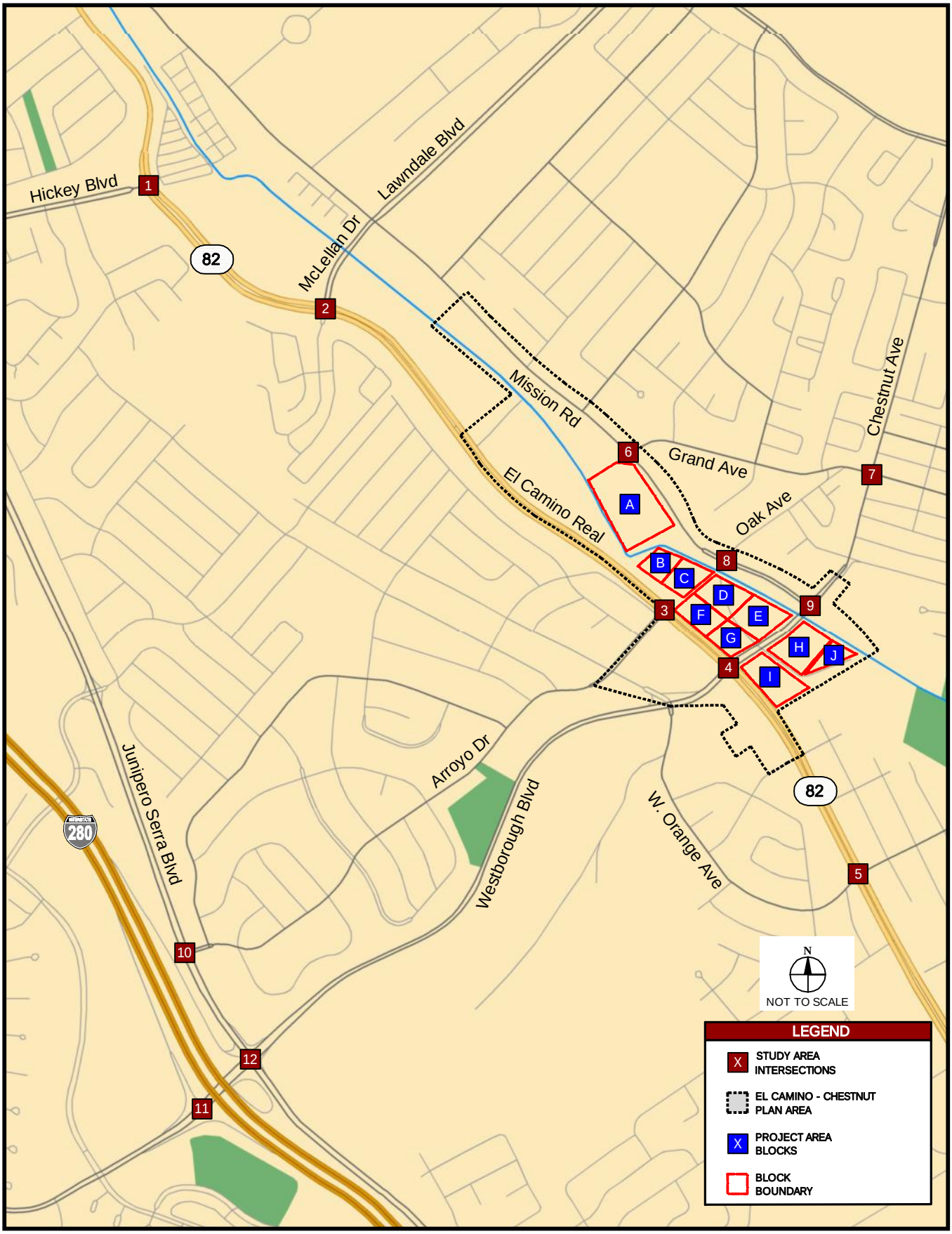
The other major change to the Plan is that the Oak Avenue Extension is not included as part of the project. Since the Oak Avenue Extension is not planned to be constructed with the Civic Center, it will be included in the Cumulative (2030) condition.

PROJECT TRIP GENERATION

The Institute of Transportation Engineer's (ITE) *Trip Generation Manual, 9th Edition*, was used to estimate daily and peak hour trip generation that can be attributed to the proposed Area Plan development. Trip generation rates are the number of trips generated by a particular land use per an independent variable of dwelling units, employees, or square feet. These rates are developed through many studies conducted throughout the country and, therefore, the rates represent a national average for similar land use types. Trip generation rates can vary depending on where the studies were conducted, and ITE provides a range of rates. It should be noted that the previous traffic study used the ITE *Trip Generation, 8th Edition*, which had slightly different trip rates for some of the land uses.

A trip is defined in the *Trip Generation Manual* as a single or one-directional vehicle movement with either the origin or destination at the project site. In other words, a trip can be either "to" or "from" the site. In addition, a single customer visit to a site is counted as two trips (i.e., one to and one from the site).

For purposes of determining the worst-case impacts of traffic on the surrounding street network, the trips generated by a proposed development are typically estimated between the hours of 7:00-9:00 AM and 4:00-6:00 PM. While the project itself may generate more traffic occurring some other time of the day such as around noon, the peak of "adjacent street traffic" represents the time period when the uses generally contribute to the greatest amount of congestion, with the PM peak commonly being the greatest congestion period.



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FIGURE 6
PROJECT AREA BLOCKS

Although the trips generated by the project may be greater during certain hours of the day, the background volumes on the street network would be relatively low compared to weekday peak traffic volumes. For this reason, this section of the traffic report focused on the weekday AM and PM peak hours. This methodology is in harmony with typical City of South San Francisco practice in the preparation of other traffic impact studies.

Net new proposed land uses were used to calculate the potential trip generation of the Area Plan. Trip generation was calculated based on the proposed development for each individual block and then added together to estimate the overall Plan's trips. **Table 7** presents the total trip generation for the site on a per block basis. Additional trip generation calculations are provided in the **Appendix**.

Table 7: Project Trip Generation by Development Block

Land Use Designation	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
		In	Out	Total	In	Out	Total
Block A	1,984	30	122	152	120	65	185
Blocks B & C	1,001	14	43	57	50	29	79
Blocks D & E	-340	35	0	35	-6	24	18
Blocks F & G	4,856	27	71	98	126	318	444
Blocks H, I, & J	1,406	22	104	126	96	47	143
Outside Focus Area	1,055	-53	72	19	87	-16	71
Total Trip Generation	**9,962**	**75**	**412**	**487**	**473**	**467**	**940**

As noted in **Table 7**, the net new development within the Area Plan will generate approximately 487 new AM peak hour trips and 940 new PM peak hour trips. **Table 8** shows the previous project trip generation.

Table 8: Previous Project Trip Generation by Development Block

Land Use Designation	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
		In	Out	Total	In	Out	Total
Block A	2,343	36	144	180	141	77	218
Blocks B & C	1,078	15	49	64	52	32	84
Blocks D & E	3,784	57	100	157	141	111	252
Blocks F & G	3,778	112	21	133	37	111	148
Blocks H, I, & J	1,716	26	123	149	115	57	172
Outside Focus Area	3,768	57	124	181	157	112	269
Total Trip Generation	**16,467**	**303**	**561**	**864**	**643**	**500**	**1,143**

The previous project generated more trips in the AM peak hour, PM peak hour, and daily. The biggest difference between the previous project and the current project is Blocks D & E, Blocks F & G, and outside the focus area. Blocks D & E and Blocks F & G are where the Civic Center is proposed to be located and outside the focus area is where the existing Civic Center buildings are located.

INTERNAL CAPTURE

With multi-use development, there is the potential for interaction among uses within the site. These types of trips are considered internal to the site and are "captured" within the site. Internal capture reductions for each use on the development blocks were calculated separately based on data published in ITE's *Trip Generation Handbook, 3rd Edition*. Additional internal capture calculations are contained in the **Appendix**.

PROJECT TRANSIT TRIP REDUCTION

Developments constructed in close proximity to an existing BART station outside central business districts have lower trip generation due to transit use. The following transit trip reductions were taken to the land uses in the project as follows:

- Residential: 15 percent
- Office: 25 percent
- Retail: 5 percent

It should be noted that these are the same percentages as from the previous traffic study.

TRANSPORTATION DEMAND MANAGEMENT

The El Camino Real/Chestnut Avenue Area Plan discusses the City's Municipal Code requirement for new development to implement a transportation demand management (TDM) program to ensure that a minimum of 28 percent of the development's trips are made by transit, bicycling, or walking. Therefore, the project trips from each block were reduced by a total of 28 percent to account for the TDM reductions. This 28 percent includes the transit reductions.

PROJECT TRIP PASS-BY

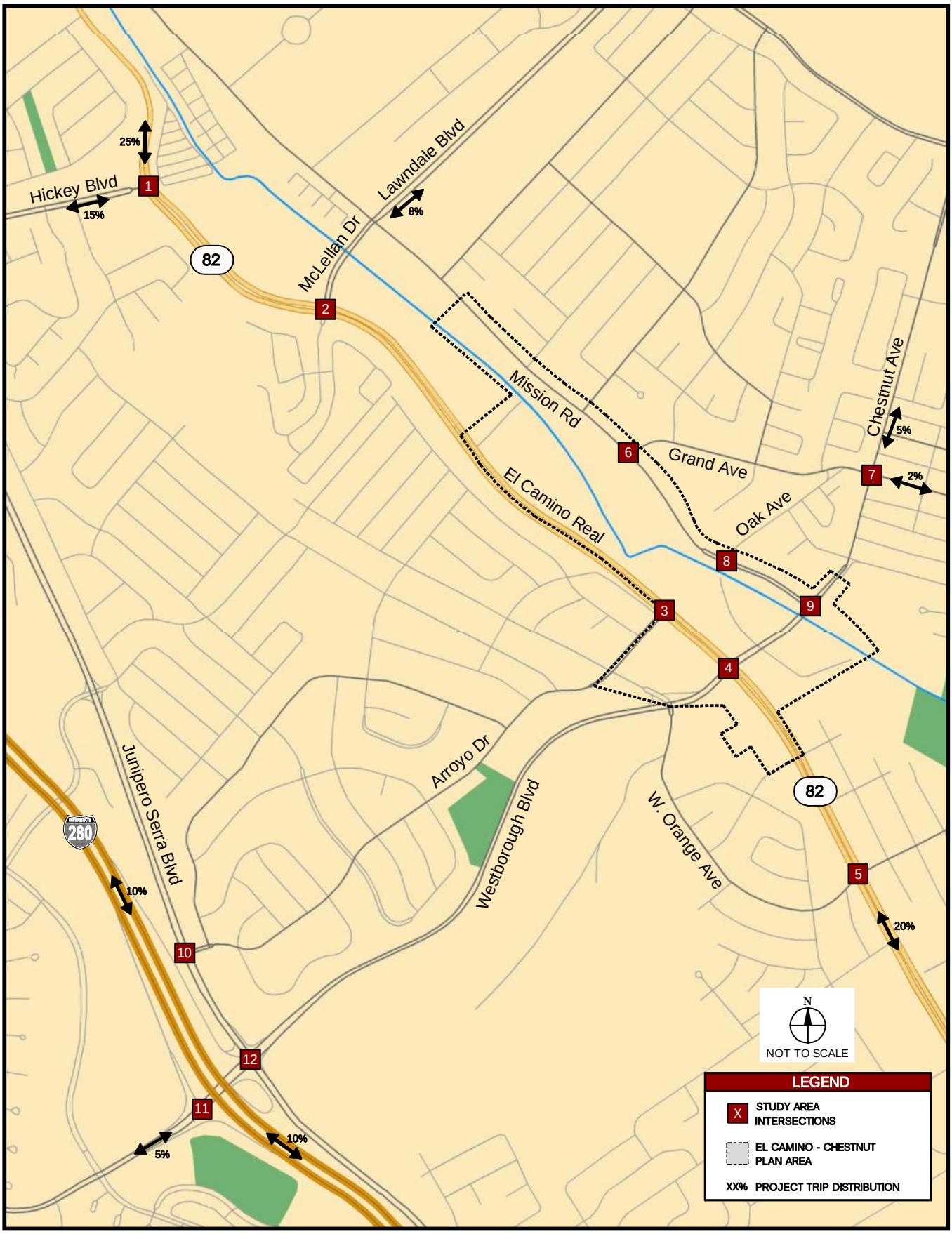
Pass-by trips represent trips already on the road which stop as they pass by the site as a matter of convenience on their path to another destination. These trips enter and exit the site at the driveways but are not new trips to the study area. The most complete source of data regarding average pass-by rates for various land uses is found in *Trip Generation Handbook*.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Because of the nature of the development, the majority of customers to the project are expected to travel from nearby locations throughout South San Francisco and neighboring cities. Project distribution was developed based on existing traffic count information, traffic volumes in the C/CAG travel demand model, and the general orientation of similar land uses to the site and population and employment sources to the study area. **Figure 7** presents the traffic distributions assumed for this traffic study. The trip distribution is the same as from the previous traffic study.

INTERSECTION OPERATIONS

Each study area intersection was analyzed using the intersection geometry and traffic control illustrated in **Figure 8**. Using the trip generation from **Table 7** and the trip distribution percentages from **Figure 7**, the project trips were calculated and added to the existing traffic volumes to develop the existing (2016) plus project traffic volumes. **Figure 9** illustrates the Existing (2016) plus Project peak hour volumes and **Figure 10** presents the peak hour volumes generated by the project in the Existing (2016) plus Project condition.



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FIGURE 7
PROJECT TRIP DISTRIBUTION

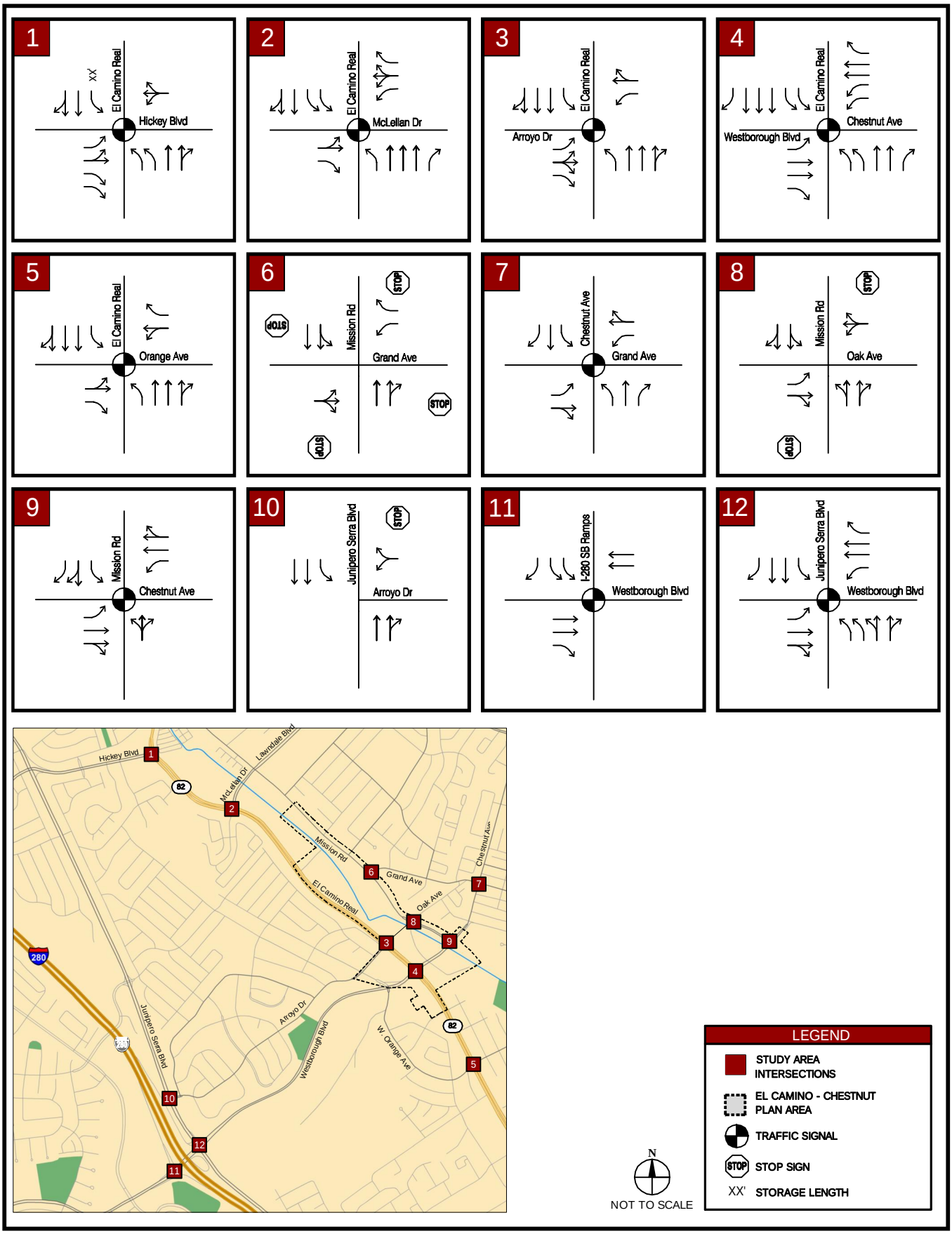


FIGURE 8
FUTURE CONDITION
LANE GEOMETRY AND TRAFFIC CONTROL

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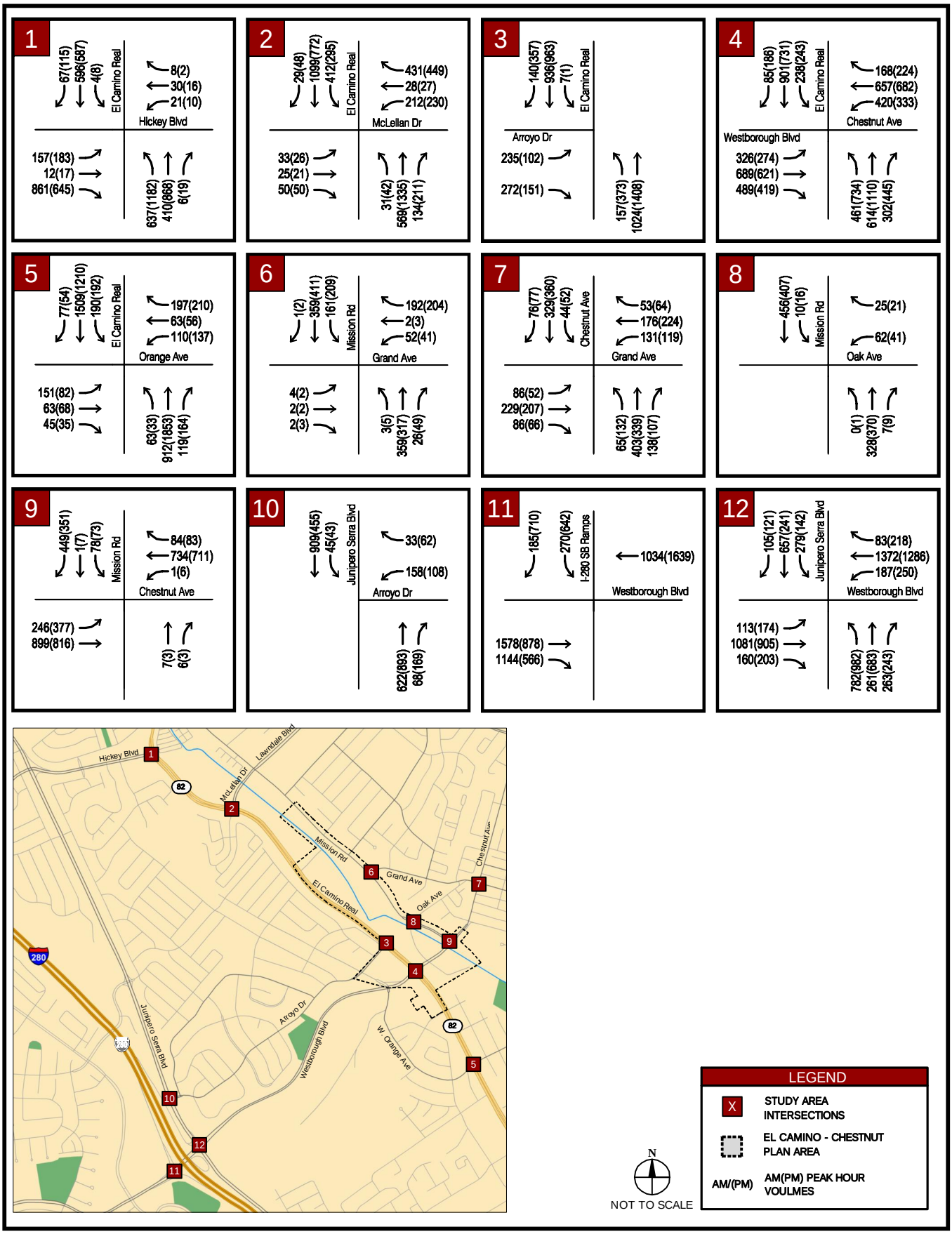
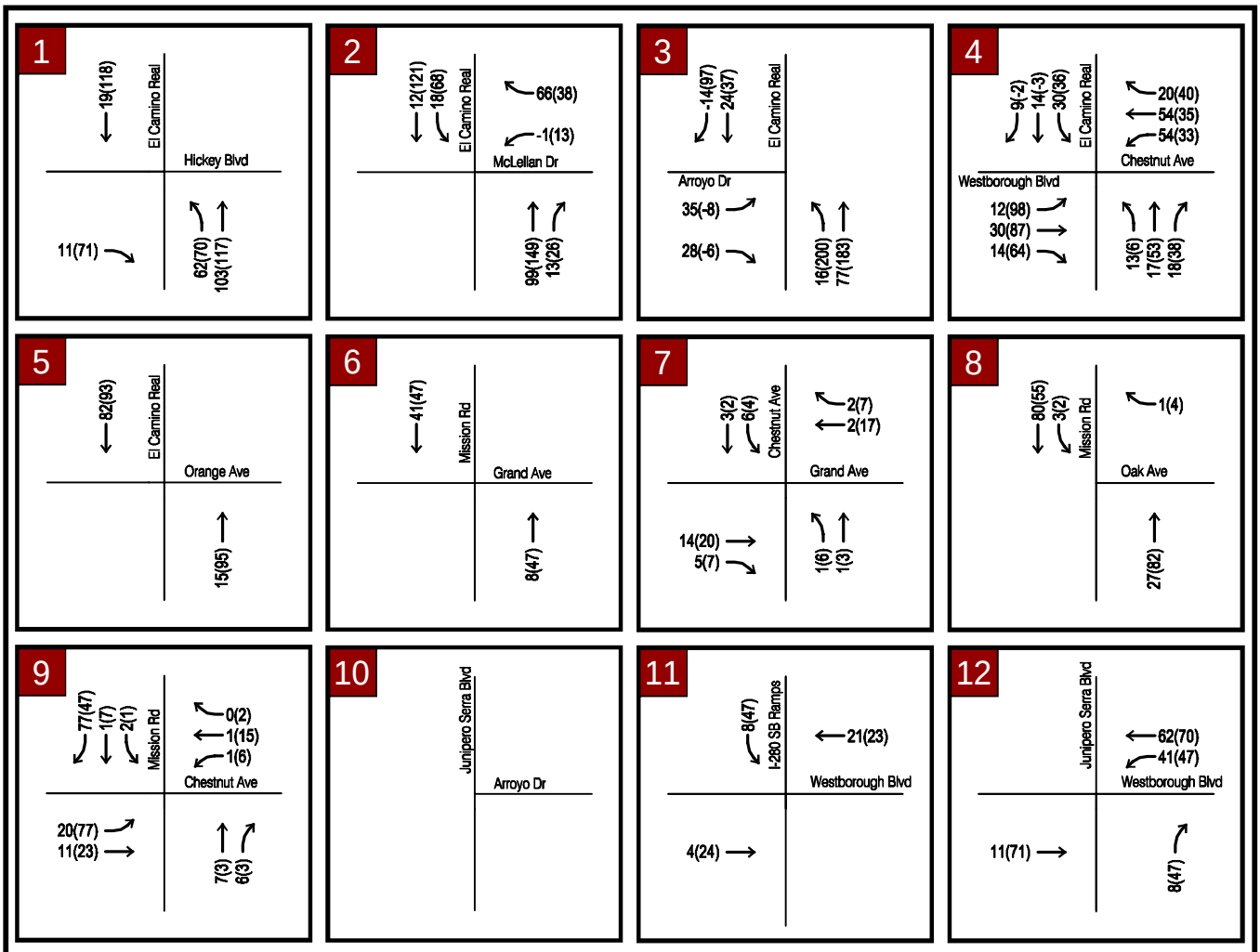
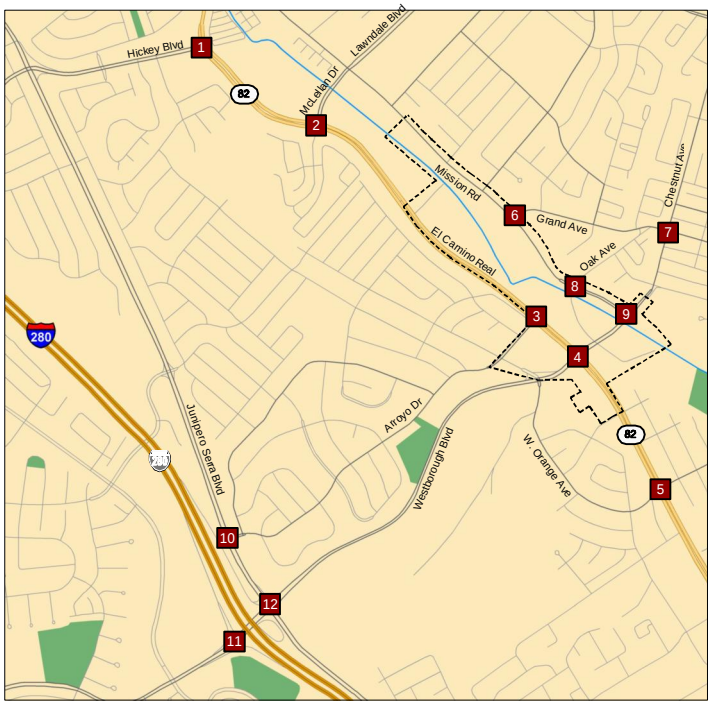


FIGURE 9

EXISTING (2016) PLUS PROJECT CONDITION

PEAK HOUR TURNING MOVEMENT VOLUMES





NOT TO SCALE

LEGEND

X	STUDY AREA INTERSECTIONS
	EL CAMINO - CHESTNUT PLAN AREA
AM/(PM)	AM(PM) PEAK HOUR VOULMES

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FIGURE 10
PROJECT (EXISTING) GENERATED PEAK HOUR TURNING MOVEMENT VOLUMES

Results of the intersection level of service are shown in **Table 9**. Most study intersections operate at an acceptable LOS D or better, except at the following locations:

- Intersection #1 – El Camino Real and Hickey Boulevard – AM and PM peak hours – **Significant Impact**
- Intersection #4 – El Camino Real and Chestnut Avenue – AM and PM peak hours – **Significant Impact**
- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive – AM and PM peak hours – Not a Significant Impact
- Intersection #12 – Westborough Boulevard and I-280 NB on-ramp/Junipero Serra Boulevard – AM and PM peak hours – **Significant Impact**

Intersections #1, #4, and #12 are significantly impacted by the proposed project because the project either worsened the intersection from an acceptable LOS D or better to an unacceptable LOS E or worse, or the proposed projected worsened the intersection from an unacceptable LOS E or worse and added at least four (4) seconds of delay to the intersection. Intersection #10 operates at a deficient LOS F in the AM and PM peak hours, however the project does not increase the delay by at least four seconds, and therefore it is not a significant impact.

Table 10 shows the previous Existing (2010) plus Project LOS summary table. The previous traffic study identified significant intersection LOS impacts at two of the same intersections in the Existing (2010) plus Project conditions: Intersections #1 and #12. The significant impact at Intersection #4 is new. This new impact is because the without project volumes in 2016 are higher than in 2010 and operate at an unacceptable LOS even without the project. Although the project increases the delay by less than the previous project, the combination of the higher volumes in 2016 and the new project volumes results in a significant impact at this location.

IMPACTS AND MITIGATIONS

Impact TRAF-1: Traffic generated by the project would affect levels of service at study intersections under Existing (2016) Plus Project conditions.

As shown in **Table 9**, the study intersections in the Existing (2016) Plus Project scenario would continue to operate at acceptable levels of service, except for the following intersections:

- Intersection #1 - El Camino Real and Hickey Boulevard (AM and PM peak hours)
- Intersection #4 - El Camino Real and Chestnut Avenue (AM and PM peak hours)
- Intersection #12 - Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard (AM and PM peak hours)

The intersection of El Camino Real/Hickey Boulevard, El Camino Real/Chestnut Avenue, and Westborough Boulevard/I-280 On-Ramp/Junipero Serra Boulevard operates at an unacceptable level of service during both AM and PM peak hours with the additional trips generated by the project.

Impact TRAF–1a: Traffic generated by the proposed project would cause the intersection of El Camino Real/Hickey Boulevard to operate below acceptable levels of service in the AM and PM peak hours.

Table 9: Existing (2016) Plus Project Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Existing (2016)				Existing (2016) + Proposed Project					
				AM Peak		PM Peak		AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	D	53.4	**E**	**58.9**	**E**	**57.8**	**4.4**	**F**	**87.3**	**28.4**
2	El Camino Real/McLellan Boulevard	D	Signal	C	31.8	D	35.0	C	33.8	2.0	D	36.7	1.7
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	25.5	C	20.5	C	26.8	1.3	C	24.0	3.5
4	El Camino Real/Chestnut Avenue	D	Signal	**E**	**56.7**	D	52.4	**E**	**60.8**	**4.1**	**E**	**58.0**	**5.6**
5	El Camino Real/Orange Avenue	D	Signal	D	36.8	D	40.7	D	36.9	0.1	D	40.9	0.2
6	Mission Road/Grand Avenue	D	AWSC	B	12.9	B	13.0	B	14.1	1.2	B	14.7	1.7
7	Chestnut Avenue/Grand Avenue	D	Signal	C	32.2	C	31.2	C	33	0.8	C	31.9	0.7
8	Mission Road/Oak Avenue	D	SSSC	A	2.3	A	1.0	A	2.3	0.0	A	0.9	-0.1
	Worst Approach			B	14.9	B	11.8	C	16.5	1.6	B	12.7	0.9
9	Mission Road/Chestnut Avenue	D	Signal	C	26.7	C	26.4	C	29.3	2.6	C	29.2	2.8
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	B	11.5	A	3.8	B	11.5	0.0	A	3.8	0.0
	Worst Approach			**F**	**99.7**	**E**	**39.2**	**F**	**99.7**	**0.0**	**E**	**39.2**	**0.0**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	A	5.3	A	9.8	A	5.4	0.1	B	10.5	0.7
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**85.6**	D	54.9	**F**	**96.8**	**11.2**	**E**	**65.4**	**10.5**

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

Table 10: Previous Existing (2010) Plus Project Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Existing (2010)				Existing (2010) + Project					
				AM Peak		PM Peak		AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	D	35.9	D	38.5	D	40.5	4.6	**E**	**58.8**	**20.3**
2	El Camino Real/McLellan Boulevard	D	Signal	C	31.2	C	30.5	C	32.4	1.2	C	33.0	2.5
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	B	19.8	B	15.9	C	29.7	9.9	C	26.1	10.2
4	El Camino Real/Chestnut Avenue	D	Signal	D	39.7	D	38.1	D	44.7	5.0	D	43.9	5.8
5	El Camino Real/Orange Avenue	D	Signal	C	33.1	C	32.7	C	33.2	0.1	C	33.9	1.2
6	Mission Road/Grand Avenue	D	AWSC	B	13.2	B	12.4	B	14.9	1.7	B	14.0	1.6
7	Chestnut Avenue/Grand Avenue	D	Signal	C	29.0	C	29.0	C	29.3	0.3	C	29.3	0.3
8	Mission Road/Oak Avenue	D	SSSC	A	1.4	A	0.8	A	2.9	1.5	A	3.5	2.7
	Worst Approach			C	15.4	B	12.2	C	18.4	3.0	C	16.0	3.8
9	Mission Road/Chestnut Avenue	D	Signal	C	24.4	C	22.5	C	24.5	0.1	C	23.7	1.2
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	A	8.1	A	7.2	A	8.1	0.0	A	7.2	0.0
	Worst Approach			**E**	**47.8**	**F**	**62.6**	**E**	**47.8**	**0.0**	**F**	**62.6**	**0.0**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	15.8	D	41.9	B	15.9	0.1	D	43.0	1.1
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	D	41.3	**E**	**78.0**	D	49.4	8.1	**F**	**97.3**	**19.3**

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

Mitigation Measure TRAF-1a: The City will add an eastbound right turn overlap phase for vehicles going eastbound on Hickey Boulevard and making a right turn onto southbound El Camino Real.

This intersection of El Camino Real/Hickey Boulevard currently operates at a LOS D during the AM peak hour and a LOS E during the PM peak hour. It is projected to operate at a LOS E and a LOS F during the AM and PM peak hours, respectively, with the addition of the project generated trips. The mitigation measure would mitigate the project's impact at this intersection and would improve the intersection level of service to an acceptable LOS C during the AM and PM peak hours and therefore would reduce the project impact to less than significant. It should be noted that this is the same mitigation identified in the previous traffic study.

Since this is an Existing (2016) plus Project impact, the mitigation would need to be implemented by the City prior to issuance of the Certificate of Occupancy.

Significance: **Less-than-Significant with Mitigation**.

Impact TRAF–1b: Traffic generated by the proposed project would cause the intersection of El Camino Real/Chestnut Avenue to operate below acceptable levels of service in the AM and PM peak hours.

Mitigation Measure TRAF-1b: The City will modify the signal timing to optimize the cycle length at the intersection of El Camino Real/Chestnut Avenue.

The intersection of El Camino Real/Chestnut Avenue currently operates at a LOS E during the AM peak hour and a LOS D during the PM peak hour. It is projected to operate at a LOS E for both AM and PM peak hours with the additional trips generated by the project. The proposed mitigation measure will alleviate the project's impact at this intersection and will improve the intersection level of service to an acceptable LOS D for both AM and PM peak hours and reduce the project impact to less than significant.

Since this is an Existing (2016) plus Project impact, the mitigation would need to be implemented by the City prior to issuance of the Certificate of Occupancy.

Significance: **Less-than-Significant with Mitigation**.

Impact TRAF–1c: Traffic generated by the proposed project would continue to cause the intersection of Westborough Boulevard/I-280 NB On-Ramp/Junipero Serra Boulevard to operate below acceptable levels of service in the AM and PM peak hours.

Mitigation Measure TRAF-1c: The City will modify the signal timing to optimize the cycle length in the AM and PM peak hours. The City will also restripe the southbound approach on Junipero Serra Boulevard to one left turn lane, one shared through/left turn lane, one through lane, and one right turn lane. In addition, the City will add an eastbound left turn lane and a westbound left turn lane along Westborough Boulevard.

The intersection of Westborough Boulevard / I-280 NB On-Ramp / Junipero Serra Boulevard currently operates at an unacceptable LOS F during the AM peak hour and a LOS D during the PM peak hour. With the additional trips generated by the proposed project, the intersection is proposed to operate at an unacceptable LOS F during the AM peak hour and an unacceptable LOS E during the PM peak hour.

The proposed mitigation measure would mitigate the project's impact at this intersection by improving the operations of the intersection to a better than without project LOS E in the AM peak hour and to an acceptable LOS D during the PM peak hour. Therefore, this would reduce the project impact to less than significant. It should be noted that this is a different mitigation than identified in the previous traffic study.

The restriping of the southbound approach on Junipero Serra Boulevard would not require any additional right-of-way. The addition of the eastbound and westbound left turn lanes could be constructed within the existing landscaped median and therefore would not require any additional right-of-way. It should be noted that the previous mitigation will no longer mitigate the project's impact.

Since this is an Existing (2016) plus Project impact, the mitigation would need to be implemented by the City prior to issuance of the Certificate of Occupancy.

Significance: **Less-than-Significant with Mitigation**.

The Existing (2016) plus Project and Existing (2016) plus Project plus Mitigation levels of service are summarized in **Table 11**. **Table 12** shows a comparison of the previous project impacts and mitigations to the current project impacts and mitigations.

- Intersection #1 has the same impact and mitigation (shown in green) as the previous study.
- Intersection #4 is a new impact and has a new mitigation (shown in red).
- Intersection #12 is a still an impact, but requires a new mitigation (shown in orange).

FREEWAY OPERATIONS

Table 13 summarizes the freeway segment analysis for Existing (2016) Plus Project conditions and compares to the Existing (2016) conditions. Each freeway segment continues to operate at a LOS E for either in the AM peak hour or PM peak hour, which fails to meet the current CMP LOS standards:

- I-280 NB from Avalon Drive to Westborough Boulevard – PM peak hour – Not a Significant Impact
- I-280 NB from Westborough Blvd to Hickey Boulevard – PM peak hour – Not a Significant Impact
- I-280 SB from Hickey Boulevard to Westborough Blvd – PM peak hour – Not a Significant Impact
- I-280 SB from Westborough Boulevard to Avalon Drive – AM peak hour – Not a Significant Impact

Although each freeway segment operates at a deficient LOS in either the AM peak hour or the PM peak hour, the project adds less than one percent of the freeway capacity and the volume to capacity ratio increases by less than one percent. Therefore, the proposed project does not significantly impact the freeway segments. It should be noted that the previous traffic study did not identify a significant impact to the freeway segments either, as shown in **Table 14**.

Table 11: Existing (2016) Plus Project Mitigated – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Existing (2016)				Existing (2016) + Proposed Project						Existing (2016) + Project (Mitigated)					
				AM Peak		PM Peak		AM Peak			PM Peak			AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	D	53.4	**E**	**58.9**	**E**	**57.8**	**4.4**	**F**	**87.3**	**28.4**	C	33.2	-20.2	C	30.8	-28.1
2	El Camino Real/McLellan Boulevard	D	Signal	C	31.8	D	35	C	33.8	2	D	36.7	1.7						
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	C	25.5	C	20.5	C	26.8	1.3	C	24	3.5						
4	El Camino Real/Chestnut Avenue	D	Signal	**E**	**56.7**	D	52.4	**E**	**60.8**	**4.1**	**E**	**58.0**	**5.6**	D	49.1	-7.6	D	42.0	-10.4
5	El Camino Real/Orange Avenue	D	Signal	D	36.8	D	40.7	D	36.9	0.1	D	40.9	0.2						
6	Mission Road/Grand Avenue	D	AWSC	B	12.9	B	13.0	B	14.1	1.2	B	14.7	1.7						
7	Chestnut Avenue/Grand Avenue	D	Signal	C	32.2	C	31.2	C	33.0	0.8	C	31.9	0.7						
8	Mission Road/Oak Avenue	D	SSSC	A	2.3	A	1.0	A	2.3	0.0	A	0.9	-0.1						
	Worst Approach			B	14.9	B	11.8	C	16.5	1.6	B	12.7	0.9						
9	Mission Road/Chestnut Avenue	D	Signal	C	26.7	C	26.4	C	29.3	2.6	C	29.2	2.8						
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	B	11.5	A	3.8	B	11.5	0.0	A	3.8	0.0						
	Worst Approach			**F**	**99.7**	**E**	**39.2**	**F**	**99.7**	**0.0**	**E**	**39.2**	**0.0**						
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	A	5.3	A	9.8	A	5.4	0.1	B	10.5	0.7						
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**85.6**	D	54.9	**F**	**96.8**	**11.2**	**E**	**65.4**	**10.5**	**E**	**78.8**	**-6.8**	D	47.9	-7.0

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.

Table 12: Existing Plus Project Intersection Impact Comparison – Previous (2011) Study and Current (2016) Study

Int #	Intersection	2011 Analysis		2016 Analysis	
		Impact?	Mitigation	Impact?	Mitigation
Existing + Project Impacts					
1	El Camino Real/Hickey Blvd	Yes	Add EBR overlap	Yes	Same as 2011
4	El Camino Real/Chestnut Ave	No	Not an impact	Yes	Optimize Signal Timing
12	Westborough Blvd and NB I-280 Ramps	Yes	Add a WB right turn lane and restripe WB shared thru-right to thru lane; Add a EB right turn lane and restripe EB shared thru-right to thru lane	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane

Same Impact/Mitigation
New Impact/Mitigation
Still Impact, But new Mitigation
No Longer an Impact

Table 13: Existing (2016) Plus Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Existing (2016) Conditions						Existing (2016) + Project Conditions						
							AM Peak			PM Peak			AM Peak Hour				PM Peak Hour		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	6,269	D	0.712	8,032	E	0.913	6,277	D	0.713	0.001	8,079	E	0.918	0.005
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	7,575	D	0.861	8,727	E	0.992	7,616	D	0.865	0.005	8,774	E	0.997	0.005
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	7,179	D	0.816	8,073	E	0.917	7,187	D	0.817	0.001	8,120	E	0.923	0.005
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	7,876	E	0.895	7,334	D	0.833	7,917	E	0.900	0.005	7,381	D	0.839	0.005

Table 14: Previous Existing (2010) Plus Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Existing (2010) Conditions						Existing (2010) + Project Conditions						
							AM Peak			PM Peak			AM Peak Hour				PM Peak Hour		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	4,722	C	0.537	7,327	D	0.833	4,752	C	0.540	0.003	7,391	D	0.840	0.007
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	5,056	C	0.575	7,091	D	0.806	5,112	C	0.581	0.006	7,141	D	0.811	0.005
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	5,708	C	0.649	6,214	D	0.706	5,738	C	0.652	0.003	6,278	D	0.713	0.007
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	6,305	D	0.716	5,155	C	0.586	6,361	D	0.723	0.007	5,205	C	0.591	0.005

PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

Impact TRAF-2: Implementation of the project under Existing (2016) plus Project conditions would generate pedestrian, bicycle, and transit trips, which would use the existing and planned circulation network in the project area. (Less than significant)

The previous traffic study noted that there would be no significant impacts to pedestrian facilities, bicycle facilities, and transit facilities within the study area. With the update of this project to incorporate the Civic Center project, the project would continue to not significantly impact the pedestrian, bicycle, and transit facilities.

As noted previously, the project would be considered to have a significant impact if it conflicted with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) or generate pedestrian, bicycle, or transit travel demand that would not be accommodated by current pedestrian facilities, bicycle development plans, or long-range transit plans.

Currently, sidewalks and pedestrian paths exist along the vast majority of roadways within the Plan Area. The project would potentially generate pedestrian demand; however, the project is not anticipated to interfere with any of the existing or planned pedestrian facilities.

Currently, there are several bicycle facilities within the vicinity of the proposed project. There are also several planned and proposed bicycle facilities within the Plan Area, as identified in current bike plans. The Project's traffic generation or site access would not interfere with the existing or planned bicycle facilities. In addition, there are several additional bicycle facilities proposed as part of the Area Plan. The proposed project would not interfere with any of the existing or proposed bicycle facilities, or conflict with currently adopted pedestrian goals or policies. Therefore, the project would not result in any adverse impacts to bicyclists.

The development of the proposed land use plan is expected to generate transit ridership. Additional passengers generated by the project would be accommodated by the existing service and impact to transit services would not be considered significant as current services have reserve capacity.

The proposed project would not interfere with existing or planned pedestrian or bicycle facilities, transit service or transit stops and dispersion of the project-generated riders to the various planned bus routes is expected to result in a minimal effect on transit capacity. Thus, the project's impact on pedestrian, bicycle, and transit facilities is determined to be less than significant.

Mitigation Measure TRAF-2: None Required.

Significance after Mitigation: Less-than-Significant.

4. CUMULATIVE (2030) NO PROJECT CONDITIONS

Cumulative baseline traffic projections establish background conditions for the evaluation of the project in the future and form the basis for determining and comparing cumulative impacts. This step in the analysis makes it possible to identify long-term traffic impacts, regardless of the proposed project.

The Cumulative traffic volume used the same methodology as the previous traffic study. The Cumulative traffic volumes at the study area intersections and roadways were estimated for year 2030 by using growth rates derived from the City/County Association of Governments of San Mateo County (C/CAG) travel demand forecasting model. Land use data is included in the model on a traffic analysis zone (TAZ) level of detail. Model trip generation is performed with algorithms that reflect land use, population, employment, income levels, auto ownership, persons per household and other socio-economic factors specific to the area. The model's trip generation is "calibrated" to match local conditions. Using the land use, socioeconomic data, and network (street and intersection) data, the model distributes or allocates trips to/from each TAZ, or land use area. The model then assigns the trips to the roadway network based on least cost (time and/or distance) path. The model output is in the form of directional link volumes. The C/CAG model includes a weekday AM peak period and PM peak period volume component.

Model output files, including directional link volumes, were received from C/CAG and utilized to develop future traffic projections. Volumes from the model were used to forecast weekday AM and PM peak hour volumes for the Cumulative (2030) No Project scenario. The growth in the link volumes between the base year model (2005) and the forecast year model (2030) was used to develop an annual growth rate. The growth rate was applied to existing link volumes on roadways and at intersections, resulting in Cumulative (2030) No Project forecast volumes.

Many of the local streets within the study area are not represented in the current C/CAG model. Traffic volumes from the base year model and forecast year model were compared for the study area roadways in the current model, which consist of El Camino Real, Hickey Boulevard, and Westborough Boulevard/Chestnut Avenue. An average overall growth rate of 2.5 percent per year was calculated and applied to the existing (2016) traffic counts to project intersection turning movement volumes for the Cumulative (2030) No Project conditions on major and local streets. This is considered conservative since local streets are not anticipated to experience the same level of growth in traffic as major streets. The Cumulative No Project traffic volumes are shown in **Figure 11**.

OAK AVENUE EXTENSION

It is anticipated that the Oak Avenue extension from its current terminus at Mission Road to El Camino Real at Arroyo Drive will be constructed to alleviate traffic congestion in the area. Background volumes were redistributed to account for this new roadway segment. This redistribution included the following paths:

- A portion of vehicles traveling southbound along El Camino Real and headed eastbound on Chestnut Avenue, would use the new Oak Avenue Extension to bypass the intersection of El Camino Real and Chestnut Avenue.
- A portion of vehicles traveling eastbound along Chestnut Avenue and headed northbound on Mission Road, would use the new Oak Avenue Extension to bypass the intersection of Mission Road and Chestnut Avenue.
- A portion of vehicles traveling southbound along Mission Road and headed westbound on Chestnut Avenue, would use the new Oak Avenue Extension to bypass the intersection of Mission Road and Chestnut Avenue.

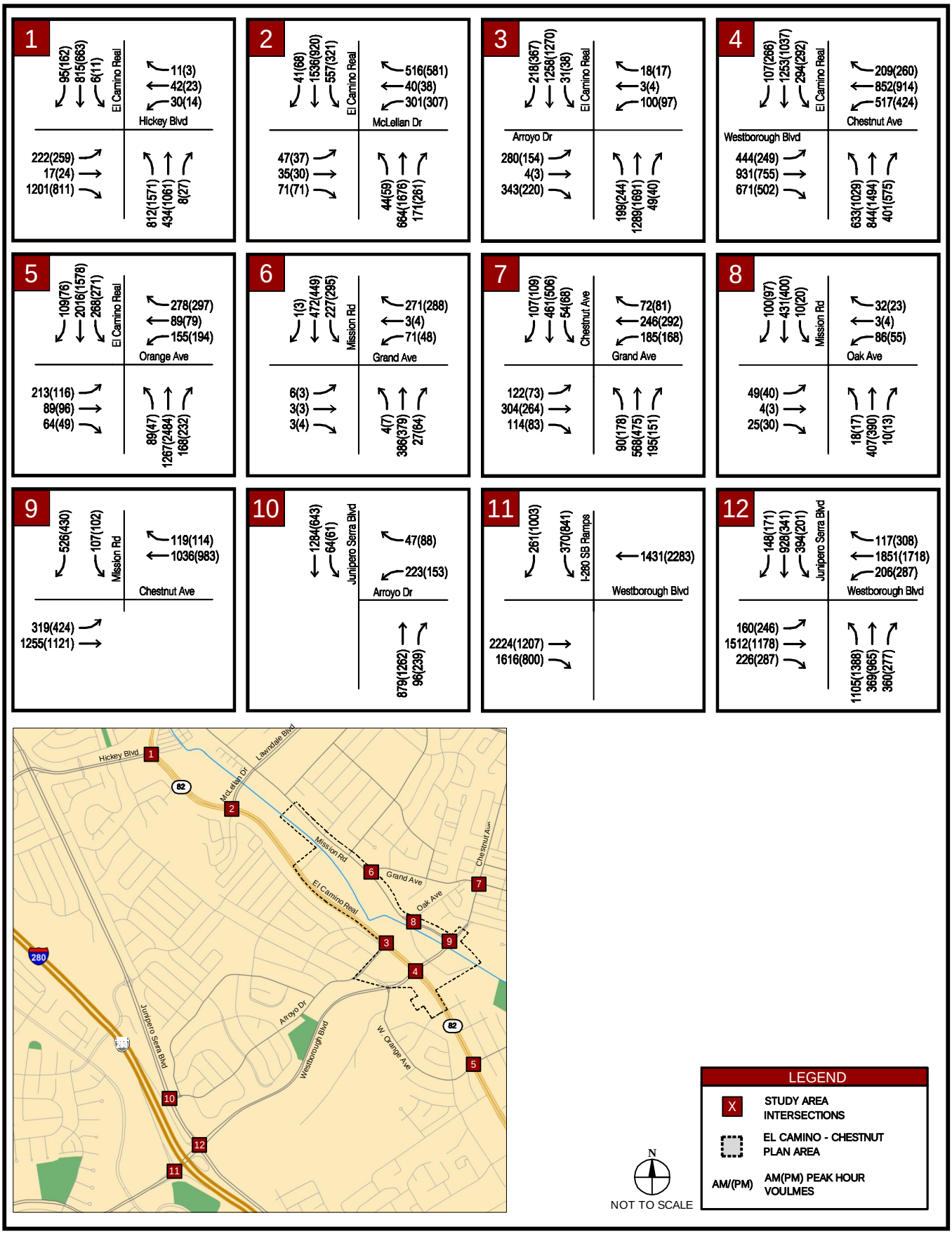


FIGURE 11
CUMULATIVE CONDITION
PEAK HOUR TURNING MOVEMENT VOLUMES

- A portion of vehicles traveling westbound along Chestnut Avenue and headed northbound on El Camino Real, would use the new Oak Avenue Extension to bypass the intersection of El Camino Real and Chestnut Avenue.

INTERSECTION OPERATIONS

Each study area intersection was analyzed based on the volumes shown in **Figure 11** and the intersection geometry and traffic control with the new Oak Avenue extension. Results of the traffic operations analysis are summarized in **Table 15**. Many study intersections are projected to deteriorate to unacceptable levels of service during either the AM peak hour or the PM peak hour prior to adding trips generated by the proposed Plan, including:

- Intersection #1 – El Camino Real and Hickey Boulevard (AM and PM peak hours)
- Intersection #2 – El Camino Real and McLellan Drive (AM peak hour)
- Intersection #4 – El Camino Real and Chestnut Avenue (AM and PM peak hours)
- Intersection #5 – El Camino Real and Orange Avenue (AM and PM peak hours)
- Intersection #8 – Mission Road and Oak Avenue (AM peak hour)
- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive (AM and PM peak hours)
- Intersection #12 – Westborough Boulevard and I-280 NB On-Ramp (AM and PM peak hours)

Table 15: Cumulative (2030) No Project Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Cumulative (2030) - 2016 Analysis				Cumulative (2030) - Previous 2011 Analysis			
				AM Peak		PM Peak		AM Peak		PM Peak	
				LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	El Camino Real/Hickey Boulevard	D	Signal	**F**	**176.5**	**F**	**178.6**	**F**	**152.3**	**F**	**187.6**
2	El Camino Real/McLellan Boulevard	D	Signal	**E**	**62.8**	D	45.2	**E**	**73.5**	F	103.5
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	D	37.7	C	30.8	D	46.4	D	36.3
4	El Camino Real/Chestnut Avenue	D	Signal	**F**	**127.4**	**F**	**97.2**	**F**	**144.5**	**F**	**138.5**
5	El Camino Real/Orange Avenue	D	Signal	**E**	**72.6**	**F**	**105.5**	**F**	**118.9**	**F**	**153.9**
6	Mission Road/Grand Avenue	D	AWSC	C	22.4	C	23.1	**E**	**40.9**	B	12.4
7	Chestnut Avenue/Grand Avenue	D	Signal	D	49.7	D	42.1	D	50.9	D	43.4
8	Mission Road/Oak Avenue	D	SSSC	A	5.8	A	1.3	A	7.9	A	2.7
	Worst Approach			**E**	**30.8**	B	14.1	**F**	**67.1**	C	22.2
9	Mission Road/Chestnut Avenue	D	Signal	C	27.6	C	28.2	**E**	**62.5**	D	36.4
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	**F**	**76.5**	D	28.9	**F**	**163.6**	**F**	**186.2**
	Worst Approach			**F**	**674.1**	**F**	**322.7**	**F**	**1005.7**	**F**	**1710.9**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	10.6	D	41.9	C	34.3	**F**	**214.6**
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**265.1**	**F**	**196.0**	**F**	**193.8**	**F**	**355.5**

Note: It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

Table 15 also summarizes the Cumulative (2030) intersection levels of service for the AM and PM peak hours from the previous 2011 study. These intersection LOS results for the Cumulative (2030) condition are similar to the previous traffic study's Cumulative (2030) condition intersection LOS results. The following intersections operate unacceptably in both Cumulative conditions:

- Intersection #1 – El Camino Real and Hickey Boulevard
- Intersection #2 – El Camino Real and McLellan Drive
- Intersection #4 – El Camino Real and Chestnut Avenue

- Intersection #5 – El Camino Real and Orange Avenue
- Intersection #8 – Mission Road and Oak Avenue
- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive
- Intersection #12 – Westborough Boulevard and I-280 NB On-Ramp

The following intersections now operate acceptably in the Cumulative (2030) condition, but did not in the previous Cumulative (2030) conditions:

- Intersection #6 – Mission Road and Grand Avenue
- Intersection #9 – Mission Road and Chestnut Avenue
- Intersection #11 – Westborough Boulevard and I-280 SB Off-ramp

This is a result of lower volumes at each of these three intersections in the current Cumulative (2030) analysis due to the lower existing (2016) volumes at critical movements and also because the 2030 volumes grew for fewer years based on 2016 existing counts, as opposed to 2011 existing counts.

FREEWAY OPERATIONS

The freeway operations in the Cumulative condition were analyzed as well. In the Cumulative condition, the number of lanes for each segment increased from four lanes to five lanes, per the C/CAG model. With the increase in the number of lanes, the capacity of each freeway segment increased. The freeway volumes for the Cumulative scenario were also determined based on the C/CAG travel demand forecasting model. The growth between the base year model and the future year model was added to the existing freeway volumes. This is the same methodology used as in the previous traffic study.

Table 16 summarizes the freeway segment analysis for Cumulative (2030) No Project conditions. The results indicate that all freeway segments are projected to operate at a LOS D or better in the study area, therefore meeting the CMP LOS standard.

Table 17 summarizes the previous Cumulative (2030) freeway levels of service from the previous study. Compared to the previous traffic study, the freeway volumes have increased, but the freeway segment LOS has remained the same or improved. The reason for the improved LOS is because the prior freeway analysis assumed a four-lane capacity for the freeway segments, not the five-lane capacity.

BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES

No modifications to the bicycle, pedestrian, and transit networks surrounding the project site are planned or approved as part of any other project.

Table 16: Cumulative (2030) No Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Cumulative Conditions					
							AM Peak			PM Peak		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C
I-280 NB from Avalon to Westborough	2,200	5	11,000	70	65	D	6,602	C	0.600	8,484	D	0.771
I-280 NB from Westborough to Hickey	2,200	5	11,000	70	65	D	8,541	D	0.776	9,225	D	0.839
I-280 SB from Hickey to Westborough	2,200	5	11,000	70	65	D	7,847	D	0.713	9,434	D	0.858
I-280 SB from Westborough to Avalon	2,200	5	11,000	70	65	D	8,813	D	0.801	8,223	D	0.748

Table 17: Previous Cumulative (2030) No Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Cumulative (2030) Conditions - Previous Study					
							AM Peak			PM Peak		
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	5,969	C	0.678	8,187	E	0.930
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	7,374	D	0.838	8,043	E	0.914
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	6,400	D	0.727	8,446	E	0.960
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	7,269	D	0.826	6,633	D	0.754

5. CUMULATIVE (2030) PLUS PROJECT CONDITIONS

Turning movement volumes for the Cumulative (2030) plus Project scenario were calculated by applying the growth rate (as described in the Cumulative No Project Conditions section) to the existing (2016) traffic volumes and adding the net new trips generated by the Project. The Cumulative plus Project traffic volumes are shown in **Figure 12** and **Figure 13** presents the peak hour volumes generated by the project in the Cumulative plus Project condition.

INTERSECTION OPERATIONS

Each study area intersection was analyzed based on the proposed intersection geometry and traffic control with the Oak Avenue extension and the peak hour turning movement volumes shown in **Figure 12**. Results of the capacity analysis are shown in **Table 18**. The following intersections operate at an unacceptable LOS during the AM peak period, PM peak period, or both under Cumulative (2030) Plus Project scenario, failing to meet the City LOS standard.

- Intersection #1 – El Camino Real and Hickey Boulevard (AM and PM peak hours) – **Significant Impact**
- Intersection #2 – El Camino Real and McLellan Drive (AM peak hour) – **Significant Impact**
- Intersection #4 – El Camino Real and Chestnut Avenue (AM and PM peak hours) – **Significant Impact**
- Intersection #5 – El Camino Real and Orange Avenue (AM and PM peak hours) – **Significant Impact**
- Intersection #8 – Mission Road and Oak Avenue (AM peak hour) – **Significant Impact**
- Intersection #10 – Junipero Serra Boulevard and Arroyo Drive (AM and PM peak hours) – Not a Significant Impact
- Intersection #12 – Westborough Boulevard and I-280 NB On-Ramp (AM and PM peak hours) – **Significant Impact**

Intersections #1, #2, #4, #5, #8, and #12 are significantly impacted by the proposed project because the project either worsened the intersection from an acceptable LOS D or better to an unacceptable LOS E or worse, or the proposed projected worsened the intersection from an unacceptable LOS E or worse and added at least four (4) seconds of delay to the intersection. Intersection #10 operates at a deficient LOS F in the AM and PM peak hours, however the project does not increase the delay by at least four seconds, and therefore it is not a significant impact.

Table 19 shows the previous Cumulative (2030) plus Project LOS summary table. The previous traffic study identified significant intersection LOS impacts at the same intersections as the current Cumulative plus Project conditions: Intersections #1, 2, 4, 5, 8, and 12. In addition, the previous traffic study identified additional impacts at three intersections: Intersections #3, 6, and 9. These impacts went away because the updated Cumulative (2030) volumes were less and therefore the project did not add enough vehicle trips to result in an unacceptable LOS.

Table 18: Cumulative (2030) Plus Project Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Cumulative (2030)				Cumulativee (2030) + Project					
				AM Peak		PM Peak		AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	**F**	**176.5**	**F**	**178.6**	**F**	**187.4**	**10.9**	**F**	**214.7**	**36.1**
2	El Camino Real/McLellan Boulevard	D	Signal	**E**	**62.8**	D	45.2	**E**	**67.4**	**4.6**	D	53.4	8.2
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	D	37.7	C	30.8	D	42.0	4.3	C	33.8	3.0
4	El Camino Real/Chestnut Avenue	D	Signal	**F**	**127.4**	**F**	**97.2**	**F**	**139.3**	**11.9**	**F**	**129.5**	**32.3**
5	El Camino Real/Orange Avenue	D	Signal	**E**	**72.6**	**F**	**105.5**	**E**	**75.7**	**3.1**	**F**	**110.4**	**4.9**
6	Mission Road/Grand Avenue	D	AWSC	C	22.4	C	23.1	D	25.1	2.7	D	27.7	4.6
7	Chestnut Avenue/Grand Avenue	D	Signal	D	49.7	D	42.1	D	52.8	3.1	D	44.4	2.3
8	Mission Road/Oak Avenue	D	SSSC	A	5.8	A	1.3	A	7.2	1.4	A	1.3	0.0
	Worst Approach			**E**	**30.8**	B	14.1	**E**	**39.6**	**8.8**	B	14.8	0.7
9	Mission Road/Chestnut Avenue	D	Signal	C	27.6	C	28.2	C	30.3	2.7	C	33.9	5.7
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	**F**	**76.5**	D	28.9	**F**	**76.5**	**0.0**	D	28.9	0.0
	Worst Approach			**F**	**674.1**	**F**	**322.7**	**F**	**674.1**	**0.0**	**F**	**322.7**	**0.0**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	10.6	D	41.9	B	10.9	0.3	D	48.9	7.0
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**265.1**	**F**	**196.0**	**F**	**278.9**	**13.8**	**F**	**216.0**	**20.0**

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.
It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact

Table 19: Previous Cumulative (2030) Plus Project Conditions – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Previous Study Cumulative (2030)				Previous Study Cumulative (2030) + Project					
				AM Peak		PM Peak		AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	**F**	**152.3**	**F**	**187.6**	**F**	**178.8**	**26.5**	**F**	**230.3**	**42.7**
2	El Camino Real/McLellan Boulevard	D	Signal	**E**	**73.5**	**F**	**103.5**	**F**	**86.1**	**12.6**	**F**	**142.1**	**38.6**
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	D	46.4	D	36.3	**E**	**59.7**	**13.3**	D	47.4	11.1
4	El Camino Real/Chestnut Avenue	D	Signal	**F**	**144.5**	**F**	**138.5**	**F**	**173.7**	**29.2**	**F**	**173.2**	**34.7**
5	El Camino Real/Orange Avenue	D	Signal	**F**	**118.9**	**F**	**153.9**	**F**	**123.9**	**5.0**	**F**	**162.8**	**8.9**
6	Mission Road/Grand Avenue	D	AWSC	**E**	**40.9**	B	12.4	**F**	**58.3**	**17.4**	B	14.0	1.6
7	Chestnut Avenue/Grand Avenue	D	Signal	D	50.9	D	43.4	D	54.4	3.5	D	46.0	2.6
8	Mission Road/Oak Avenue	D	SSSC	A	7.9	A	2.7	B	11.6	3.7	A	6.8	4.1
	Worst Approach			**F**	**67.1**	C	22.2	**F**	**91.9**	**24.8**	**E**	**41.6**	**19.4**
9	Mission Road/Chestnut Avenue	D	Signal	**E**	**62.5**	D	36.4	**E**	**72.4**	**9.9**	D	45.9	9.5
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	**F**	**163.6**	**F**	**186.2**	**F**	**163.6**	**0.0**	**F**	**186.2**	**0.0**
	Worst Approach			**F**	**1005.7**	**F**	**1710.9**	**F**	**1005.7**	**0.0**	**F**	**1710.9**	**0.0**
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	C	34.3	**F**	**214.6**	D	35.3	1.0	**F**	**215.1**	**0.5**
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**193.8**	**F**	**355.5**	**F**	**216.3**	**22.5**	**F**	**382.6**	**27.1**

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.
It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact

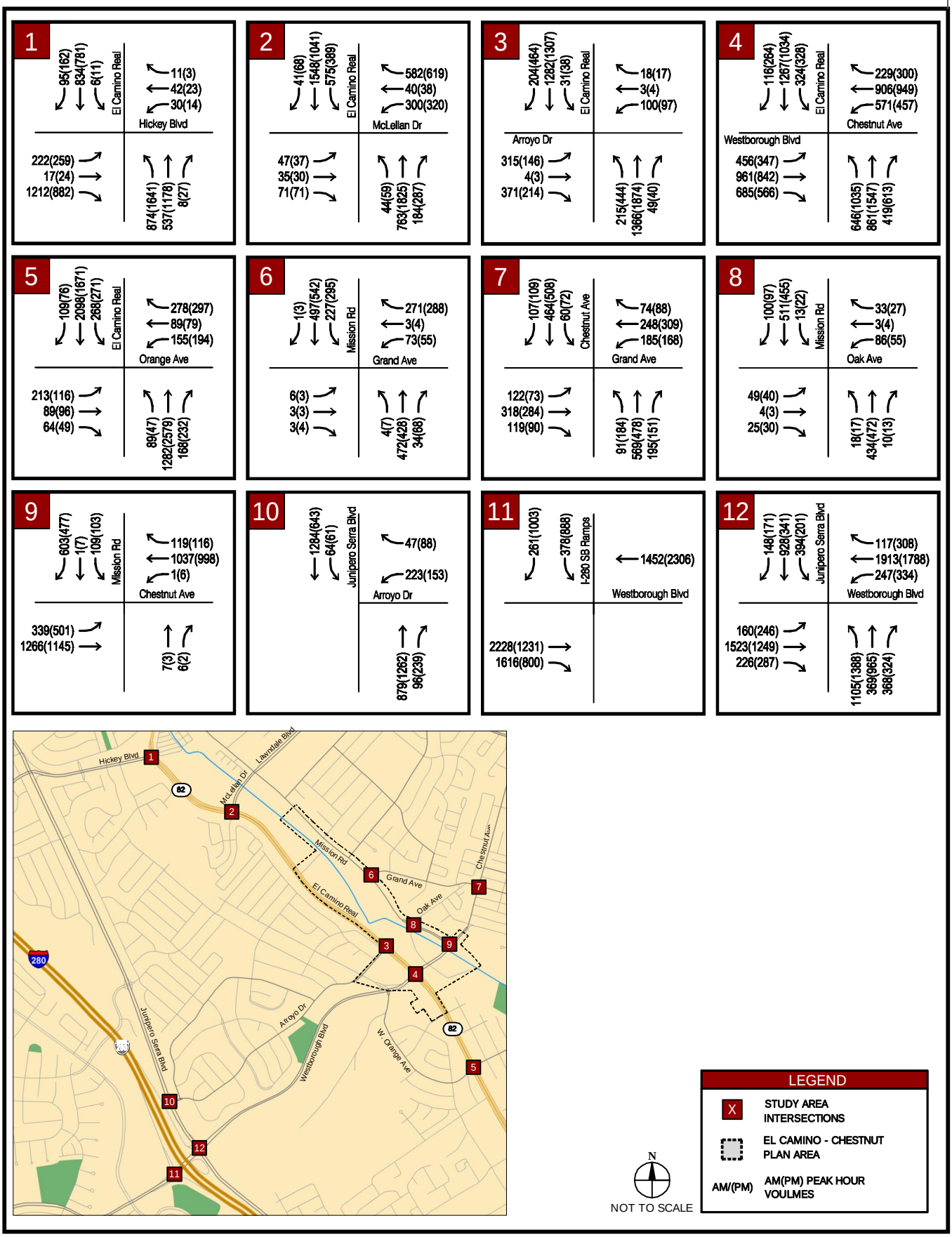
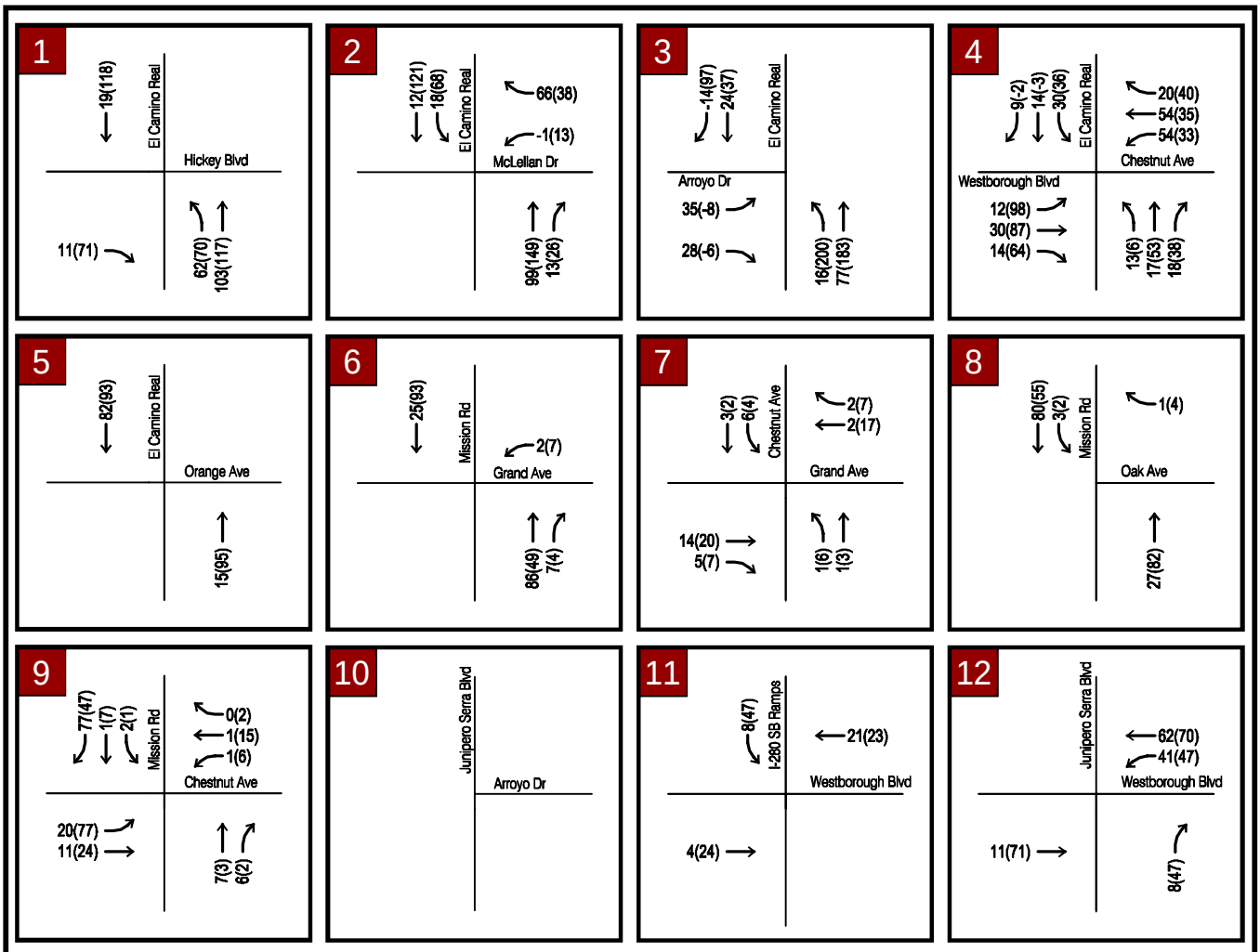
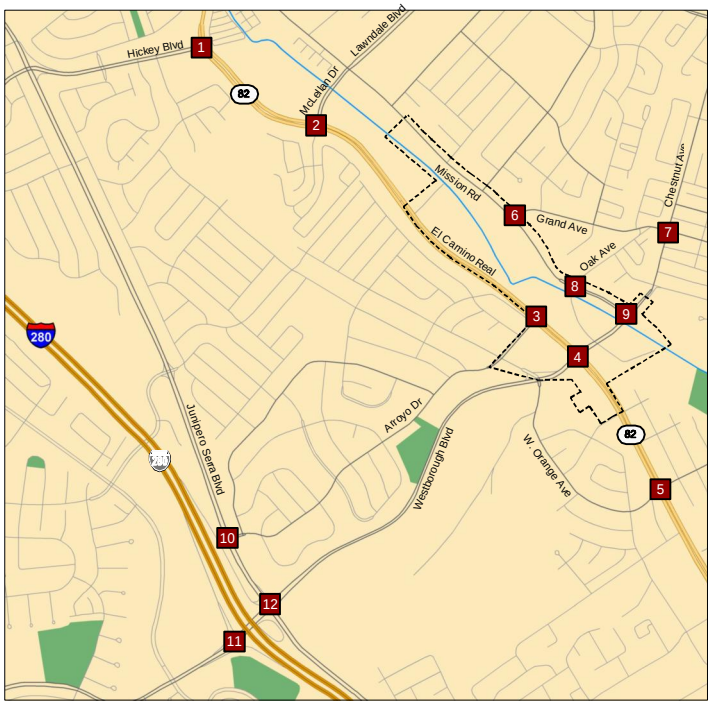


FIGURE 12

CUMULATIVE PLUS PROJECT CONDITION

PEAK HOUR TURNING MOVEMENT VOLUMES





LEGEND

X — STUDY AREA INTERSECTIONS

EL CAMINO - CHESTNUT PLAN AREA

AM/(PM) — AM(PM) PEAK HOUR VOULMES

N

NOT TO SCALE

FIGURE 13

PROJECT (CUMULATIVE) GENERATED PEAK HOUR TURNING MOVEMENT VOLUMES

Impact TRAF-2: Traffic generated by the project would affect levels of service at study intersections under Cumulative plus Project conditions.

As shown in **Table 18**, there are impacts at several intersections, including:

- Intersection #1 - El Camino Real/Hickey Boulevard (AM and PM peak hours)
- Intersection #2 - El Camino Real/ McLellan Drive (AM peak hour)
- Intersection #4 - El Camino Real/Chestnut Avenue (AM and PM peak hours)
- Intersection #5 - El Camino Real/Orange Avenue (AM and PM peak hours)
- Intersection #8 - Mission Road/Oak Avenue (AM peak hour)
- Intersection #12 - Westborough Boulevard/I-280 NB On-Ramp/Junipero Serra Boulevard (AM and PM peak hours)

The intersection of Junipero Serra Boulevard/Arroyo Drive are not impacted as the trips generated by the project do not increase the intersection control delay by more than four seconds.

Impact TRAF–2a: Traffic generated by the proposed project would cause the intersection of El Camino Real/Hickey Boulevard to continue operating below acceptable levels of service for the AM and PM peak hours with an increase of more than four seconds of delay at the intersection.

Mitigation Measure TRAF-2a: The City will add an eastbound right turn overlap phase for vehicles going eastbound on Hickey Boulevard and making a right turn onto southbound El Camino Real. (Same as Mitigation Measure TRAF-1a)

This intersection is projected to operate at a LOS F during the AM and PM peak hours under the Cumulative (2030) No Project scenario and is projected to operate at a LOS F during the AM and PM peak hours with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. The mitigation measure would mitigate the project's impact at this intersection. With this proposed mitigation, the intersection would continue to operate at a LOS E during the AM peak hour and a LOS F in the PM peak hour with an overall intersection delay less than cumulative without project conditions and therefore would reduce the project impact to less than significant. It should be noted that this is the same mitigation identified in the previous traffic study.

Since this mitigation is the same mitigation identified in the Existing (2016) plus Project impact, the mitigation would need to be implemented by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

Impact TRAF–2b: Traffic generated by the proposed project would cause the intersection of El Camino Real/McLellan Drive to continue operating below acceptable levels of service for the AM peak hour with an increase of more than four seconds of delay at the intersection.

Mitigation Measure TRAF-2b: The City will modify the signal timing to remove split phasing and optimize the cycle length in the AM peak hour. In addition, the City will restripe the eastbound approach on McLellan Drive to one left turn lane and one shared through/right turn lane and restripe the westbound approach on McLellan Drive to one left turn lane, one shared through/right turn lane and one right turn lane.

This intersection is projected to operate at LOS E during the AM peak hour under the Cumulative (2030) No Project scenario and is projected to operate at LOS E with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. With the proposed mitigation, the intersection would operate at an acceptable LOS D for the AM peak hour under the Cumulative (2030) Plus Project scenario. It should be noted that this is a new mitigation compared to the previous traffic study.

Since this intersection was operating unacceptably without the project and the project exacerbated the congestion, the project is responsible for paying its fair share contribution. The full fair share payment shall be paid by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

Impact TRAF–2c: Traffic generated by the proposed project would cause the intersection of El Camino Real and Chestnut Avenue to operate at below acceptable levels of service for the AM and PM peak hours.

Mitigation Measure TRAF-2c: The City will modify traffic signal operations to include an eastbound right turn overlap phase for vehicles traveling eastbound on Chestnut Avenue and add an eastbound left turn lane from Chestnut Avenue to El Camino Real. In addition, optimize the cycle length in both the AM and PM peak hours.

This intersection is projected to operate at LOS F during the AM and PM peak hours in the Cumulative (2030) No Project scenario, and is projected to continue to operate at LOS F with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. The mitigation measure would mitigate the project's impact at this intersection. With this proposed mitigation, the intersection would continue to operate at a LOS F during both the AM and PM peak hours with an overall intersection delay less than the cumulative without project conditions and therefore would reduce the project impact to less than significant.

Constructing the additional eastbound left turn lane may fit in the existing right-of-way, however if additional right-of-way is required and relocation of utilities is required, this mitigation would be infeasible. It should be noted that the previous traffic study also proposed the additional eastbound left turn lane, but the additional eastbound right turn lane is no longer necessary. The previous study also noted that the construction of additional lanes would contradict the purpose of the El Camino Real/Chestnut Area Plan to create a pedestrian, bicycle, and transit oriented development. The LOS standard only applies to automobile traffic and not the many other users of the transportation network, including pedestrians and bicyclists. This intersection is also a state controlled intersection and under the jurisdiction of Caltrans. Policy 4.2-G-14 of the South San Francisco General Plan states "accept LOS E or F after finding that there is no practical and feasible way to mitigate the lower level of service; and the uses resulting in the lower level of service are of clear, overall public benefit." As this is the case with the El Camino Real/Chestnut Area development, the project would not result in a significant impact at this intersection.

Since this intersection was operating unacceptably without the project and the project exacerbated the congestion, the project is responsible for paying its fair share contribution. The full fair share payment shall be paid by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

Impact TRAF–2d: Traffic generated by the proposed project would cause the intersection of El Camino Real and Orange Avenue to continue operating below acceptable levels of service for

the AM and PM peak periods with an increase of more than four seconds of delay at the intersection.

Mitigation Measure TRAF-2d: The City will modify the southbound lane geometry on El Camino Real to include a southbound left turn lane.

This intersection is projected to operate at LOS E during the AM peak hour and LOS F during the PM peak hour under the Cumulative (2030) No Project scenario and is projected to operate at LOS E during the AM peak hour and LOS F during the PM peak hour with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. To mitigate the project's impacts, an additional southbound left turn lane from El Camino Real to Orange Avenue would need to be constructed. The additional southbound left turn lane should not require additional right-of-way. With this improvement, the intersection would continue to operate at a deficient LOS E during the AM peak hour and a deficient LOS F during the PM peak hour, but with a lower intersection delay compared to the Cumulative (2030) No Project scenario. Therefore, the project's impacts would be mitigated. It should be noted that this is a new mitigation compared to the previous traffic study.

Since this intersection was operating unacceptably without the project and the project exacerbated the congestion, the project is responsible for paying its fair share contribution. The full fair share payment shall be paid by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

Impact TRAF–2e: Traffic generated by the proposed project would cause the intersection of Mission Road and Oak Avenue to continue operating below acceptable levels of service for the AM peak period with an increase of more than four seconds of delay at the intersection.

Mitigation Measure TRAF-2d: The City will restripe the eastbound approach on Oak Avenue to be one left turn lane and one shared through/right turn lane and restripe westbound approach on Oak Avenue to be one left turn lane and one shared through/right turn lane. In addition, the City will construct a two-way left-turn lane (TWLTL) along Mission Road.

This intersection is projected to operate at LOS E during the AM peak hour under the Cumulative (2030) No Project scenario and is projected to operate at worse LOS E during the AM peak hour with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. With the proposed mitigation, the intersection would operate at an acceptable LOS D for the AM peak period under the Cumulative (2030) Plus Project scenario. Therefore, the project's impacts would be mitigated.

Restriping the eastbound and westbound approaches on Oak Avenue will likely not require any additional right-of-way. The addition of the two-way left-turn lane will likely not require any additional right-of-way. It should be noted that this is a new mitigation compared to the previous traffic study.

Since this intersection was operating unacceptably without the project and the project exacerbated the congestion, the project is responsible for paying its fair share contribution. The full fair share payment shall be paid by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

Impact TRAF–3f: Traffic generated by the proposed project would cause the intersection of Westborough Boulevard and I-280 NB on-ramp to continue operating below acceptable levels of

service for the AM and PM peak periods with an increase of more than four seconds of delay at the intersection.

Mitigation Measure TRAF-3f: The City will modify the signal timing to optimize the cycle length in the AM and PM peak hours. The City will restripe the southbound approach on Junipero Serra Boulevard to one left turn lane, one shared through/left turn lane, one through lane, and one right turn lane. In addition, the City will add an eastbound left turn lane and a westbound left turn lane along Westborough Boulevard. (Same as Mitigation Measure TRAF-1c)

This intersection is projected to operate at LOS F during the AM and PM peak hours in the Cumulative (2030) No Project scenario, and is projected to continue to operate at LOS F with the addition of the project generated trips under the Cumulative (2030) plus Project scenario. The mitigation measure would mitigate the project's impact at this intersection. With this proposed mitigation, the intersection would continue to operate at a LOS F during both the AM and PM peak hours with an overall intersection delay less than cumulative without project conditions and therefore would reduce the project impact to less than significant.

Since this mitigation is the same mitigation identified in the Existing (2016) plus Project impact, the mitigation would need to be implemented by the City prior to issuance of the Certificate of Occupancy.

Significance: **Cumulatively Significant, Project Contribution Less than Significant with Mitigation.**

The Cumulative (2030) plus Project and Cumulative (2030) plus Project plus Mitigation levels of service are summarized in **Table 20**. **Table 21** shows a comparison of the previous project impacts and mitigations to the current project impacts and mitigations. The following intersections have the same impact and mitigation (shown in green):

- Intersection #1

The following intersections have the same impact, but require a new mitigation (shown in orange):

- Intersection #2
- Intersection #4
- Intersection #5
- Intersection #8
- Intersection #12

The following intersections are no longer impacts (shown in blue):

- Intersection #3
- Intersection #6
- Intersection #9

Table 20: Cumulative (2030) Plus Project Mitigated – Intersection Levels of Service

#	Intersection	LOS Criteria	Control	Cumulative (2030)				Cumulative (2030) + Project						Cumulative (2030) + Project (Mitigated)					
				AM Peak		PM Peak		AM Peak			PM Peak			AM Peak			PM Peak		
				LOS	Delay	LOS	Delay	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var	LOS	Delay	Var
1	El Camino Real/Hickey Boulevard	D	Signal	**F**	**176.5**	**F**	**178.6**	**F**	**187.4**	**10.9**	**F**	**214.7**	**36.1**	**E**	**56.2**	**-120.3**	**F**	**89.6**	**-89.0**
2	El Camino Real/McLellan Boulevard	D	Signal	**E**	**62.8**	D	45.2	**E**	**67.4**	**4.6**	D	53.4	8.2	D	51.3	-11.5			
3	El Camino Real/Arroyo Drive/Oak Extension	D	Signal	D	37.7	C	30.8	D	42.0	4.3	C	33.8	3.0						
4	El Camino Real/Chestnut Avenue	D	Signal	**F**	**127.4**	**F**	**97.2**	**F**	**139.3**	**11.9**	**F**	**129.5**	**32.3**	**F**	**87.1**	**-40.3**	**F**	**80.1**	**-17.1**
5	El Camino Real/Orange Avenue	D	Signal	**E**	**72.6**	**F**	**105.5**	**E**	**75.7**	**3.1**	**F**	**110.4**	**4.9**	**E**	**62.2**	**-10.4**	**F**	**84.8**	**-20.7**
6	Mission Road/Grand Avenue	D	AWSC	C	22.4	C	23.1	D	25.1	2.7	D	27.7	4.6						
7	Chestnut Avenue/Grand Avenue	D	Signal	D	49.7	D	42.1	D	52.8	3.1	D	44.4	2.3						
8	Mission Road/Oak Avenue	D	SSSC	A	5.8	A	1.3	A	7.2	1.4	A	1.3	0.0						
	Worst Approach			**E**	**30.8**	B	14.1	**E**	**39.6**	**8.8**	B	14.8	0.7	D	30.0	-0.8			
9	Mission Road/Chestnut Avenue	D	Signal	C	27.6	C	28.2	C	30.3	2.7	C	33.9	5.7						
10	Junipero Serra Boulevard/Arroyo Drive	D	SSSC	**F**	**76.5**	D	28.9	**F**	**76.5**	**0.0**	D	28.9	0.0						
	Worst Approach			**F**	**674.1**	**F**	**322.7**	**F**	**674.1**	**0.0**	**F**	**322.7**	**0.0**						
11	Westborough Boulevard/I-280 SB Off Ramp	D	Signal	B	10.6	D	41.9	B	10.9	0.3	D	48.9	7.0						
12	Westborough Boulevard/I-280 NB On Ramp/Junipero Serra Boulevard	D	Signal	**F**	**265.1**	**F**	**196.0**	**F**	**278.9**	**13.8**	**F**	**216.0**	**20.0**	**F**	**236.3**	**-28.8**	**F**	**166.2**	**-29.8**

Note: Intersections that are operating below acceptable levels are shown in **BOLD** and significant impacts are highlighted.
It should be noted that calculations of delay at saturated conditions (i.e., LOS F) are less reliable than at LOS E or better. Therefore, delay in excess of 80 seconds is reported in the table to allow a relative comparison of without and with project conditions and should not be interpreted as an exact representation of actual delay.

Table 21: Cumulative Plus Project Intersection Impact Comparison – Previous (2011) Study and Current (2016) Study

Int #	Intersection	2011 Analysis		2016 Analysis	
		Impact?	Mitigation	Impact?	Mitigation
Cumulative + Project Impacts					
1	El Camino Real/Hickey Blvd	Yes	Add EBR overlap	Yes	Same as 2011
2	El Camino Real/McLellan Boulevard	Yes	Significant and Unavoidable	Yes	Restripe EB to be left and shared thru-right; Restripe WB to be left, shared thru-right and right; Remove Split Phasing
3	El Camino Real/Arroyo Drive/Oak Extension	Yes	Restripe WB shared thru-right lane to shared left-thru-right lane	No	Not an impact
4	El Camino Real/Chestnut Ave	Yes	Significant and Unavoidable	Yes	Add EBL lane; Add EBR overlap; Optimize Cycle Length
5	El Camino Real/Orange Avenue	Yes	Significant and Unavoidable	Yes	Add a SBL lane
6	Mission Road/Grand Avenue	Yes	Signalize and restripe SB shared thru-left to SBL turn lane	No	Not an impact
8	Mission Road/Oak Avenue	Yes	Significant and Unavoidable	Yes	Restripe EB to be left and shared thru-right; Restripe WB to be left and shared thru-right; Add TWLTL
9	Mission Road/Chestnut Avenue	Yes	Significant and Unavoidable	No	Not an impact
12	Westborough Blvd and NB I-280 Ramps	Yes	Add a WB right turn lane and restripe WB shared thru-right to thru lane; Add a NB right turn lane	Yes	Optimize Signal Timing; Change SB to be left, shared left-thru, thru, and right; Add EBL lane; Add WBL Lane

Same Impact/Mitigation
New Impact/Mitigation
Still Impact, But new Mitigation
No Longer an Impact

FREEWAY OPERATIONS

Table 22 summarizes the freeway segment analysis for Cumulative (2030) Plus Project conditions and compares to the Cumulative (2030) No Project conditions. With the additional project trips added to the four freeway segments, they continue to operate at an acceptable LOS in the Cumulative (2030) Plus Project scenario. Therefore, the project does not have an impact on these freeway segments.

It should be noted that the previous traffic study did not identify a significant impact to the freeway segments either, as shown in **Table 23**.

Table 22: Cumulative (2030) Plus Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Cumulative (2030) Conditions						Cumulative (2030) + Project Conditions							
							AM Peak			PM Peak			AM Peak Hour				PM Peak Hour			
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	5	11,000	70	65	D	6,602	C	0.600	8,484	D	0.771	6,610	C	0.601	0.001	8,531	D	0.776	0.004
I-280 NB from Westborough to Hickey	2,200	5	11,000	70	65	D	8,541	D	0.776	9,225	D	0.839	8,582	D	0.780	0.004	9,272	D	0.843	0.004
I-280 SB from Hickey to Westborough	2,200	5	11,000	70	65	D	7,847	D	0.713	9,434	D	0.858	7,855	D	0.714	0.001	9,481	D	0.862	0.004
I-280 SB from Westborough to Avalon	2,200	5	11,000	70	65	D	8,813	D	0.801	8,223	D	0.748	8,854	D	0.805	0.004	8,270	D	0.752	0.004

Table 23: Previous Cumulative (2030) Plus Project Conditions – Freeway Segment Levels of Service

Freeway Segment	Capacity per Lane	# of Lanes	Total Capacity	Speed Limit	Free Flow Speed	LOS Standard	Cumulative (2030) Conditions - Previous Study						Cumulative (2030) + Project Conditions - Previous Study							
							AM Peak			PM Peak			AM Peak Hour				PM Peak Hour			
							Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Volume (veh/hr)	LOS	V/C	Δ	Volume (veh/hr)	LOS	V/C	Δ
I-280 NB from Avalon to Westborough	2,200	4	8,800	70	65	D	5,969	C	0.678	8,187	E	0.930	5,999	C	0.682	0.004	8,251	E	0.938	0.008
I-280 NB from Westborough to Hickey	2,200	4	8,800	70	65	D	7,374	D	0.838	8,043	E	0.914	7,430	D	0.844	0.006	8,093	E	0.920	0.006
I-280 SB from Hickey to Westborough	2,200	4	8,800	70	65	D	6,400	D	0.727	8,446	E	0.960	6,430	D	0.731	0.004	8,510	E	0.967	0.007
I-280 SB from Westborough to Avalon	2,200	4	8,800	70	65	D	7,269	D	0.826	6,633	D	0.754	7,325	D	0.832	0.006	6,683	D	0.759	0.005

PEDESTRIAN, BICYCLE AND TRANSIT FACILITIES

Impact TRAF-4: Implementation of the project under Cumulative plus Project conditions would generate pedestrian, bicycle, and transit trips, which would use the existing and planned circulation network in the project area. (Less than significant)

Refer to Impact TRAF-2 for discussion.

Mitigation Measure TRAF-4: None required**.**

Significance after Mitigation: Less-than-Significant.

REFERENCES

El Camino Real/Chestnut Avenue Area Plan, and associated General Plan Amendment, and Zoning Ordinance Amendment Final Environmental Impact Report, April 2011.

City/County Association of Governments of San Mateo County, *Congestion Management Program 2015*.

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Draft Environmental Impact Report for South El Camino Real General Plan Amendment, November 2009.

Institute of Transportation Engineers. *Trip Generation*, 9th Edition, 2012.

Institute of Transportation Engineers. *Trip Generation Handbook*, 3rd Edition, 2014.

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Transportation Research Board. *Highway Capacity Manual, 2010*.

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Caltrans (2017). Caltrans Traffic Census Program website. Retrieved from: http://www.dot.ca.gov/trafficops/census/

APPENDIX

A: TURNING MOVEMENT COUNTS

B: TRIP GENERATION

C: EXISTING (2016) TRAFFIC CONDITIONS ANALYSIS

D: EXISTING (2016) PLUS PROJECT TRAFFIC CONDITIONS ANALYSIS

E: CUMULATIVE PROJECT TRAFFIC CONDITIONS ANALYSIS

F: CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS ANALYSIS

G: MITIGATED EXISTING PLUS PROJECT TRAFFIC CONDITONS ANALYSIS

H: MITIGATED CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS ANALYSIS

Turning Movement Counts

Trip Generation

Existing (2016) Traffic Conditions Analysis

Existing (2016) Plus Project Traffic Conditions Analysis

Cumulative Traffic Conditions Analysis

Cumulative Plus Project Traffic Conditions Analysis

Mitigated Existing (2016) Plus Project Traffic Conditions Analysis

Mitigated Cumulative Plus Project Traffic Conditions Analysis

APPENDIX

A: TURNING MOVEMENT COUNTS

B: TRIP GENERATION

C: EXISTING (2016) TRAFFIC CONDITIONS ANALYSIS

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F: CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS ANALYSIS

G: MITIGATED EXISTING PLUS PROJECT TRAFFIC CONDITONS ANALYSIS

H: MITIGATED CUMULATIVE PLUS PROJECT TRAFFIC CONDITIONS ANALYSIS

Turning Movement Counts

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-001 El Camino Real & Hickey Blvd
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	2	71	11	0	84	3	6	0	0	9	76	41	0	2	119	4	4	85	6	99	311	8
7:15	2	101	12	0	115	2	5	2	0	9	75	48	0	10	133	11	0	113	9	133	390	19
7:30	3	125	9	0	137	7	3	4	0	14	114	44	2	3	163	12	3	219	8	242	556	11
7:45	1	153	12	0	166	5	6	4	0	15	150	69	1	8	228	24	2	255	5	286	695	13
Total	8	450	44	0	502	17	20	10	0	47	415	202	3	23	643	51	9	672	28	760	1952	51
8:00	2	158	17	0	177	7	6	1	0	14	182	76	0	6	264	32	4	225	7	268	723	13
8:15	0	142	17	0	159	4	12	2	0	18	110	84	1	12	207	25	4	186	14	229	613	26
8:30	1	124	21	0	146	5	6	1	0	12	97	78	4	10	189	41	2	184	9	236	583	19
8:45	1	143	23	0	167	5	5	1	0	11	103	110	1	12	226	42	0	143	10	195	599	22
Total	4	567	78	0	649	21	29	5	0	55	492	348	6	40	886	140	10	738	40	928	2518	80
16:00	4	126	29	0	159	2	4	1	0	7	217	147	4	10	378	42	1	173	15	231	775	25
16:15	2	124	23	0	149	1	3	2	0	6	216	143	2	17	378	30	4	159	8	201	734	25
16:30	3	106	24	0	133	2	3	1	0	6	244	151	3	10	408	28	5	160	11	204	751	21
16:45	2	136	22	0	160	1	1	0	0	2	193	165	4	13	375	31	7	162	13	213	750	26
Total	11	492	98	0	601	6	11	4	0	21	870	606	13	50	1539	131	17	654	47	849	3010	97
17:00	0	115	24	0	139	2	1	1	0	4	251	199	3	11	464	31	5	129	15	180	787	26
17:15	2	127	29	0	158	3	3	0	0	6	301	193	6	14	514	40	6	170	13	229	907	27
17:30	1	97	38	0	136	5	4	0	0	9	236	174	6	11	427	25	1	133	13	172	744	24
17:45	5	130	24	0	159	0	8	1	0	9	270	185	4	18	477	29	5	142	17	193	838	35
Total	8	469	115	0	592	10	16	2	0	28	1058	751	19	54	1882	125	17	574	58	774	3276	112
Grand Total	31	1978	335	0	2344	54	76	21	0	151	2835	1907	41	167	4950	447	53	2638	173	3311	10756	340
Apprch %	1.3%	84.4%	14.3%	0.0%		35.8%	50.3%	13.9%	0.0%		57.3%	38.5%	0.8%	3.4%		13.5%	1.6%	79.7%	5.2%			
Total %	0.3%	18.4%	3.1%	0.0%	21.8%	0.5%	0.7%	0.2%	0.0%	1.4%	26.4%	17.7%	0.4%	1.6%	46.0%	4.2%	0.5%	24.5%	1.6%	30.8%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	1	153	12	0	166	5	6	4	0	15	150	69	1	8	228	24	2	255	5	286	695
8:00	2	158	17	0	177	7	6	1	0	14	182	76	0	6	264	32	4	225	7	268	723
8:15	0	142	17	0	159	4	12	2	0	18	110	84	1	12	207	25	4	186	14	229	613
8:30	1	124	21	0	146	5	6	1	0	12	97	78	4	10	189	41	2	184	9	236	583
Total Volume	4	577	67	0	648	21	30	8	0	59	539	307	6	36	888	122	12	850	35	1019	2614
% App Total	0.6%	89.0%	10.3%	0.0%		35.6%	50.8%	13.6%	0.0%		60.7%	34.6%	0.7%	4.1%		12.0%	1.2%	83.4%	3.4%		
PHF	.500	.913	.798	.000	.915	.750	.625	.500	.000	.819	.740	.914	.375	.750	.841	.744	.750	.833	.625	.891	.904

PM PEAK HOUR	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	115	24	0	139	2	1	1	0	4	251	199	3	11	464	31	5	129	15	180	787
17:15	2	127	29	0	158	3	3	0	0	6	301	193	6	14	514	40	6	170	13	229	907
17:30	1	97	38	0	136	5	4	0	0	9	236	174	6	11	427	25	1	133	13	172	744
17:45	5	130	24	0	159	0	8	1	0	9	270	185	4	18	477	29	5	142	17	193	838
Total Volume	8	469	115	0	592	10	16	2	0	28	1058	751	19	54	1882	125	17	574	58	774	3276
% App Total	1.4%	79.2%	19.4%	0.0%		35.7%	57.1%	7.1%	0.0%		56.2%	39.9%	1.0%	2.9%		16.1%	2.2%	74.2%	7.5%		
PHF	.400	.902	.757	.000	.931	.500	.500	.500	.000	.778	.879	.943	.792	.750	.915	.781	.708	.844	.853	.845	.903

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-001 El Camino Real & Hickey Blvd
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:15	0	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
7:30	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	4
7:45	0	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	3	0	0	12
Total	0	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0	0	6	0	0	24
8:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
8:15	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	7
16:00	0	0	0	2	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	8
16:15	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	3
16:30	0	0	0	4	0	0	0	0	2	0	0	0	0	2	0	0	0	0	4	0	0	12
16:45	0	0	0	6	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	10
Total	0	0	0	13	0	0	0	0	8	0	0	0	0	2	0	0	0	0	10	0	0	33
17:00	0	0	0	9	0	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0	17
17:15	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
17:30	0	1	0	6	1	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1	10
17:45	0	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	11
Total	0	1	0	22	1	0	0	0	9	0	0	0	0	0	0	0	0	0	10	0	1	41
Grand Total	0	1	0	49	1	0	0	0	27	0	0	0	0	2	0	0	0	0	27	0	1	105
Apprch %	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%				
Total %	0.0%	100.0%	0.0%		100.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	4	0	0	0	0	5	0	0	0	0	0	0	0	0	0	3	0	0
8:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
8:15	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	7	0	0	0	0	6	0	0	0	0	0	0	0	0	0	4	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

PM PEAK HOUR	El Camino Real Southbound					Hickey Blvd Westbound					El Camino Real Northbound					Hickey Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	9	0	0	0	0	2	0	0	0	0	0	0	0	0	0	6	0	0
17:15	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	1	0	6	1	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1
17:45	0	0	0	5	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0
Total Volume	0	1	0	22	1	0	0	0	9	0	0	0	0	0	0	0	0	0	10	0	1
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.250	.000		.250	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.250

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-002 El Camino Real & McLellan Blvd
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	26	114	1	0	141	20	4	36	0	60	3	61	16	0	80	11	4	11	0	26	307	0
7:15	39	148	2	0	189	47	1	46	0	94	3	77	12	1	93	9	5	11	0	25	401	1
7:30	92	229	5	0	326	43	6	64	1	114	0	75	24	0	99	18	5	10	0	33	572	1
7:45	137	269	7	1	414	62	5	110	0	177	2	98	33	0	133	12	9	12	0	33	757	1
Total	294	760	15	1	1070	172	16	256	1	445	8	311	85	1	405	50	23	44	0	117	2037	3
8:00	140	284	7	0	431	52	10	130	1	193	11	133	28	0	172	6	6	9	0	21	817	1
8:15	54	274	9	1	338	60	8	67	1	136	6	129	29	0	164	9	4	16	0	29	667	2
8:30	60	260	6	1	327	39	5	58	0	102	12	110	31	0	153	6	6	13	0	25	607	1
8:45	33	254	3	0	290	34	4	50	0	88	0	169	18	1	188	9	8	8	0	25	591	1
Total	287	1072	25	2	1386	185	27	305	2	519	29	541	106	1	677	30	24	46	0	100	2682	5
16:00	52	176	8	1	237	40	7	84	1	132	17	225	36	1	279	2	2	7	0	11	659	3
16:15	48	190	13	3	254	42	3	87	0	132	7	229	37	1	274	6	7	3	0	16	676	4
16:30	61	152	8	0	221	58	6	74	1	139	10	240	37	1	288	9	5	10	0	24	672	2
16:45	75	197	16	3	291	47	5	94	0	146	16	246	34	2	298	10	6	9	0	25	760	5
Total	236	715	45	7	1003	187	21	339	2	549	50	940	144	5	1139	27	20	29	0	76	2767	14
17:00	52	141	12	0	205	49	5	94	0	148	8	310	48	0	366	7	6	10	0	23	742	0
17:15	64	183	16	0	263	54	7	99	0	160	14	288	45	2	349	5	7	14	0	26	798	2
17:30	53	152	14	2	221	63	9	105	0	177	8	296	52	0	356	5	5	15	0	25	779	2
17:45	56	175	6	0	237	51	6	113	0	170	9	292	40	1	342	9	3	11	0	23	772	1
Total	225	651	48	2	926	217	27	411	0	655	39	1186	185	3	1413	26	21	50	0	97	3091	5
Grand Total	1042	3198	133	12	4385	761	91	1311	5	2168	126	2978	520	10	3634	133	88	169	0	390	10577	27
Apprch %	23.8%	72.9%	3.0%	0.3%		35.1%	4.2%	60.5%	0.2%		3.5%	81.9%	14.3%	0.3%		34.1%	22.6%	43.3%	0.0%			
Total %	9.9%	30.2%	1.3%	0.1%	41.5%	7.2%	0.9%	12.4%	0.0%	20.5%	1.2%	28.2%	4.9%	0.1%	34.4%	1.3%	0.8%	1.6%	0.0%	3.7%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	137	269	7	1	414	62	5	110	0	177	2	98	33	0	133	12	9	12	0	33	757
8:00	140	284	7	0	431	52	10	130	1	193	11	133	28	0	172	6	6	9	0	21	817
8:15	54	274	9	1	338	60	8	67	1	136	6	129	29	0	164	9	4	16	0	29	667
8:30	60	260	6	1	327	39	5	58	0	102	12	110	31	0	153	6	6	13	0	25	607
Total Volume	391	1087	29	3	1510	213	28	365	2	608	31	470	121	0	622	33	25	50	0	108	2848
% App Total	25.9%	72.0%	1.9%	0.2%		35.0%	4.6%	60.0%	0.3%		5.0%	75.6%	19.5%	0.0%		30.6%	23.1%	46.3%	0.0%		
PHF	.698	.957	.806	.750	.876	.859	.700	.702	.500	.788	.646	.883	.917	.000	.904	.688	.694	.781	.000	.818	.871

PM PEAK HOUR	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	52	141	12	0	205	49	5	94	0	148	8	310	48	0	366	7	6	10	0	23	742
17:15	64	183	16	0	263	54	7	99	0	160	14	288	45	2	349	5	7	14	0	26	798
17:30	53	152	14	2	221	63	9	105	0	177	8	296	52	0	356	5	5	15	0	25	779
17:45	56	175	6	0	237	51	6	113	0	170	9	292	40	1	342	9	3	11	0	23	772
Total Volume	225	651	48	2	926	217	27	411	0	655	39	1186	185	3	1413	26	21	50	0	97	3091
% App Total	24.3%	70.3%	5.2%	0.2%		33.1%	4.1%	62.7%	0.0%		2.8%	83.9%	13.1%	0.2%		26.8%	21.6%	51.5%	0.0%		
PHF	.879	.889	.750	.250	.880	.861	.750	.909	.000	.925	.696	.956	.889	.375	.965	.722	.750	.833	.000	.933	.968

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-002 El Camino Real & McLellan Blvd
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	0	0	4	0	0	0	0	5	0	0	0	0	1	0	0	10
7:15	0	0	0	0	0	0	0	0	2	0	0	0	0	15	0	0	1	0	3	1	1	20
7:30	0	0	0	0	0	0	0	0	2	0	0	0	0	16	0	0	0	0	4	0	0	22
7:45	0	0	0	0	0	0	0	0	1	0	0	0	0	24	0	0	0	0	10	0	0	35
Total	0	0	0	0	0	0	0	0	9	0	0	0	0	60	0	0	1	0	18	1	1	87
8:00	0	0	0	0	0	0	0	0	4	0	0	0	0	17	0	0	0	0	2	0	0	23
8:15	1	1	0	0	2	0	0	0	4	0	0	0	0	11	0	0	0	0	1	0	2	16
8:30	0	0	0	0	0	0	1	0	3	1	0	0	0	11	0	0	2	0	0	2	3	14
8:45	0	0	0	0	0	0	1	0	3	1	0	0	0	5	0	0	0	0	2	0	1	10
Total	1	1	0	0	2	0	2	0	14	2	0	0	0	44	0	0	2	0	5	2	6	63
16:00	0	0	0	0	0	0	0	0	7	0	0	0	0	19	0	0	0	0	2	0	0	28
16:15	0	0	0	0	0	0	0	0	5	0	0	0	0	9	0	0	0	0	2	0	0	16
16:30	0	0	0	0	0	0	0	0	5	0	0	0	0	6	0	0	0	0	3	0	0	14
16:45	0	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0	0	0	0	0	0	9
Total	0	0	0	0	0	0	0	0	23	0	0	0	0	37	0	0	0	0	7	0	0	67
17:00	0	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0	0	0	2	0	0	11
17:15	0	0	0	0	0	0	0	0	14	0	0	0	0	17	0	0	0	0	8	0	0	39
17:30	0	0	0	0	0	0	0	0	8	0	0	0	0	16	0	0	0	0	4	0	0	28
17:45	0	0	0	1	0	0	0	0	3	0	0	0	0	4	0	0	0	0	2	0	0	10
Total	0	0	0	1	0	0	0	0	31	0	0	0	0	40	0	0	0	0	16	0	0	88
Grand Total	1	1	0	1	2	0	2	0	77	2	0	0	0	181	0	0	3	0	46	3	7	305
Apprch %	50.0%	50.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%				
Total %	14.3%	14.3%	0.0%		28.6%	0.0%	28.6%	0.0%		28.6%	0.0%	0.0%	0.0%		0.0%	0.0%	42.9%	0.0%		42.9%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	0	0	0	0	0	1	0	0	0	0	24	0	0	0	0	10	0	0
8:00	0	0	0	0	0	0	0	0	4	0	0	0	0	17	0	0	0	0	2	0	0
8:15	1	1	0	0	2	0	0	0	4	0	0	0	0	11	0	0	0	0	1	0	2
8:30	0	0	0	0	0	0	1	0	3	1	0	0	0	11	0	0	2	0	0	2	3
Total Volume	1	1	0	0	2	0	1	0	12	1	0	0	0	63	0	0	2	0	13	2	5
% App Total	50.0%	50.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.250	.250	.000		.250	.000	.250	.000		.250	.000	.000	.000		.000	.000	.250	.000		.250	.417

PM PEAK HOUR	El Camino Real Southbound					McLellan Blvd Westbound					El Camino Real Northbound					McLellan Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	0	0	6	0	0	0	0	3	0	0	0	0	2	0	0
17:15	0	0	0	0	0	0	0	0	14	0	0	0	0	17	0	0	0	0	8	0	0
17:30	0	0	0	0	0	0	0	0	8	0	0	0	0	16	0	0	0	0	4	0	0
17:45	0	0	0	1	0	0	0	0	3	0	0	0	0	4	0	0	0	0	2	0	0
Total Volume	0	0	0	1	0	0	0	0	31	0	0	0	0	40	0	0	0	0	16	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-003 El Camino Real & Arroyo Drive
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	88	12	1	101	0	0	0	0	0	11	138	0	0	149	19	0	42	0	61	311	1
7:15	0	159	16	1	176	0	0	0	0	0	8	166	0	1	175	28	0	33	0	61	412	2
7:30	0	188	18	1	207	0	0	0	0	0	14	174	0	2	190	39	0	57	0	96	493	3
7:45	0	214	51	1	266	0	0	0	0	0	21	237	0	1	259	64	0	60	1	125	650	3
Total	0	649	97	4	750	0	0	0	0	0	54	715	0	4	773	150	0	192	1	343	1866	9
8:00	0	208	58	0	266	0	0	0	0	0	43	220	0	7	270	62	0	49	0	111	647	7
8:15	0	247	24	2	273	0	0	0	0	0	42	275	0	4	321	42	0	66	0	108	702	6
8:30	0	243	21	4	268	0	0	0	0	0	18	215	0	5	238	30	0	69	1	100	606	10
8:45	0	190	24	0	214	0	0	0	0	0	14	258	0	8	280	27	0	48	0	75	569	8
Total	0	888	127	6	1021	0	0	0	0	0	117	968	0	24	1109	161	0	232	1	394	2524	31
16:00	0	203	55	0	258	0	0	0	0	0	25	241	0	10	276	23	0	29	0	52	586	10
16:15	0	231	45	1	277	0	0	0	0	0	31	239	0	8	278	17	0	40	0	57	612	9
16:30	0	209	54	1	264	0	0	0	0	0	37	224	0	9	270	27	0	44	0	71	605	10
16:45	0	218	47	1	266	0	0	0	0	0	31	266	0	6	303	15	0	46	0	61	630	7
Total	0	861	201	3	1065	0	0	0	0	0	124	970	0	33	1127	82	0	159	0	241	2433	36
17:00	0	229	65	0	294	0	0	0	0	0	23	311	0	11	345	21	0	38	0	59	698	11
17:15	0	244	59	0	303	0	0	0	0	0	37	302	0	12	351	31	0	38	1	70	724	13
17:30	0	219	71	1	291	0	0	0	0	0	32	322	0	10	364	26	0	37	0	63	718	11
17:45	0	234	65	0	299	0	0	0	0	0	39	290	0	9	338	27	0	44	4	75	712	13
Total	0	926	260	1	1187	0	0	0	0	0	131	1225	0	42	1398	105	0	157	5	267	2852	48
Grand Total	0	3324	685	14	4023	0	0	0	0	0	426	3878	0	103	4407	498	0	740	7	1245	9675	124
Apprch %	0.0%	82.6%	17.0%	0.3%		0.0%	0.0%	0.0%	0.0%		9.7%	88.0%	0.0%	2.3%		40.0%	0.0%	59.4%	0.6%			
Total %	0.0%	34.4%	7.1%	0.1%	41.6%	0.0%	0.0%	0.0%	0.0%	0.0%	4.4%	40.1%	0.0%	1.1%	45.6%	5.1%	0.0%	7.6%	0.1%	12.9%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	214	51	1	266	0	0	0	0	0	21	237	0	1	259	64	0	60	1	125	650
8:00	0	208	58	0	266	0	0	0	0	0	43	220	0	7	270	62	0	49	0	111	647
8:15	0	247	24	2	273	0	0	0	0	0	42	275	0	4	321	42	0	66	0	108	702
8:30	0	243	21	4	268	0	0	0	0	0	18	215	0	5	238	30	0	69	1	100	606
Total Volume	0	912	154	7	1073	0	0	0	0	0	124	947	0	17	1088	198	0	244	2	444	2605
% App Total	0.0%	85.0%	14.4%	0.7%		0.0%	0.0%	0.0%	0.0%		11.4%	87.0%	0.0%	1.6%		44.6%	0.0%	55.0%	0.5%		
PHF	.000	.923	.664	.438	.983	.000	.000	.000	.000	.000	.721	.861	.000	.607	.847	.773	.000	.884	.500	.888	.928

PM PEAK HOUR	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	229	65	0	294	0	0	0	0	0	23	311	0	11	345	21	0	38	0	59	698
17:15	0	244	59	0	303	0	0	0	0	0	37	302	0	12	351	31	0	38	1	70	724
17:30	0	219	71	1	291	0	0	0	0	0	32	322	0	10	364	26	0	37	0	63	718
17:45	0	234	65	0	299	0	0	0	0	0	39	290	0	9	338	27	0	44	4	75	712
Total Volume	0	926	260	1	1187	0	0	0	0	0	131	1225	0	42	1398	105	0	157	5	267	2852
% App Total	0.0%	78.0%	21.9%	0.1%		0.0%	0.0%	0.0%	0.0%		9.4%	87.6%	0.0%	3.0%		39.3%	0.0%	58.8%	1.9%		
PHF	.000	.949	.915	.250	.979	.000	.000	.000	.000	.000	.840	.951	.000	.875	.960	.847	.000	.892	.313	.890	.985

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-003 El Camino Real & Arroyo Drive
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
7:15	0	1	0	3	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	4
7:30	0	0	0	4	0	0	0	0	0	0	0	1	0	3	1	0	0	1	1	1	2	8
7:45	0	1	0	2	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1	5
Total	0	2	0	10	2	0	0	0	0	0	0	1	0	6	1	0	0	2	2	2	5	18
8:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	2
8:15	0	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1	4
8:30	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
8:45	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	0	5
Total	0	0	0	7	0	0	0	0	0	0	0	1	0	4	1	1	0	0	2	1	2	13
16:00	0	0	0	6	0	0	0	0	0	0	2	0	0	3	2	0	0	0	0	0	2	9
16:15	0	0	0	7	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	10
16:30	0	1	0	5	1	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	2	6
16:45	0	0	0	3	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2	0	1	5
Total	0	1	0	21	1	0	0	0	0	0	2	2	0	5	4	0	0	0	4	0	5	30
17:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
17:15	0	1	0	11	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	12
17:30	0	1	0	5	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	8
17:45	0	0	0	8	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0	13
Total	0	2	0	27	2	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	2	36
Grand Total	0	5	0	65	5	0	0	0	0	0	2	4	0	23	6	1	0	2	9	3	14	97
Apprch %	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			33.3%	66.7%	0.0%			33.3%	0.0%	66.7%				
Total %	0.0%	35.7%	0.0%		35.7%	0.0%	0.0%	0.0%		0.0%	14.3%	28.6%	0.0%		42.9%	7.1%	0.0%	14.3%		21.4%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	1	0	2	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	1
8:00	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
8:15	0	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	1
8:30	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Total Volume	0	1	0	7	1	0	0	0	0	0	0	1	0	4	1	1	0	0	2	1	3
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			
PHF	.000	.250	.000		.250	.000	.000	.000		.000	.000	.250	.000		.250	.250	.000	.000		.250	.750

PM PEAK HOUR	El Camino Real Southbound					Arroyo Drive Westbound					El Camino Real Northbound					Arroyo Drive Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	1	0	11	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:30	0	1	0	5	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1
17:45	0	0	0	8	0	0	0	0	0	0	0	0	0	4	0	0	0	0	1	0	0
Total Volume	0	2	0	27	2	0	0	0	0	0	0	0	0	8	0	0	0	0	1	0	2
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.500	.000		.500	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.500

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-004 El Camino Real & Chestnut Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	28	109	4	1	142	46	81	9	1	137	70	95	43	0	208	47	65	100	0	212	699	2
7:15	23	139	14	0	176	60	123	15	0	198	67	94	34	3	198	70	99	85	1	255	827	4
7:30	34	201	22	0	257	68	162	18	0	248	83	104	49	4	240	67	137	109	5	318	1063	9
7:45	51	213	25	1	290	107	152	21	0	280	126	151	64	5	346	84	169	141	1	395	1311	7
Total	136	662	65	2	865	281	518	63	1	863	346	444	190	12	992	268	470	435	7	1180	3900	22
8:00	51	181	18	0	250	105	218	48	3	374	115	138	98	7	358	76	155	128	2	361	1343	12
8:15	53	229	16	0	298	76	125	47	1	249	100	173	76	5	354	82	198	112	2	394	1295	8
8:30	51	264	17	1	333	74	108	32	0	214	80	135	46	10	271	65	137	94	2	298	1116	13
8:45	44	171	17	1	233	59	89	35	0	183	71	189	55	11	326	61	146	103	0	310	1052	12
Total	199	845	68	2	1114	314	540	162	4	1020	366	635	275	33	1309	284	636	437	6	1363	4806	45
16:00	47	177	28	1	253	71	105	33	1	210	131	206	96	9	442	38	110	94	4	246	1151	15
16:15	61	184	27	4	276	77	146	39	2	264	146	193	90	10	439	43	143	92	6	284	1263	22
16:30	48	191	35	1	275	43	138	34	0	215	140	205	81	11	437	35	149	66	3	253	1180	15
16:45	65	186	35	1	287	73	153	47	3	276	167	226	98	18	509	35	135	104	1	275	1347	23
Total	221	738	125	7	1091	264	542	153	6	965	584	830	365	48	1827	151	537	356	14	1058	4941	75
17:00	40	196	53	3	292	81	155	39	0	275	159	258	100	8	525	48	142	98	6	294	1386	17
17:15	49	165	46	4	264	75	143	47	1	266	172	274	109	9	564	39	130	85	7	261	1355	21
17:30	58	184	44	3	289	70	175	45	2	292	191	270	100	6	567	43	148	87	3	281	1429	14
17:45	48	189	45	2	284	71	174	53	0	298	176	255	98	7	536	30	114	85	0	229	1347	9
Total	195	734	188	12	1129	297	647	184	3	1131	698	1057	407	30	2192	160	534	355	16	1065	5517	61
Grand Total	751	2979	446	23	4199	1156	2247	562	14	3979	1994	2966	1237	123	6320	863	2177	1583	43	4666	19164	203
Apprch %	17.9%	70.9%	10.6%	0.5%		29.1%	56.5%	14.1%	0.4%		31.6%	46.9%	19.6%	1.9%		18.5%	46.7%	33.9%	0.9%			
Total %	3.9%	15.5%	2.3%	0.1%	21.9%	6.0%	11.7%	2.9%	0.1%	20.8%	10.4%	15.5%	6.5%	0.6%	33.0%	4.5%	11.4%	8.3%	0.2%	24.3%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	51	213	25	1	290	107	152	21	0	280	126	151	64	5	346	84	169	141	1	395	1311
8:00	51	181	18	0	250	105	218	48	3	374	115	138	98	7	358	76	155	128	2	361	1343
8:15	53	229	16	0	298	76	125	47	1	249	100	173	76	5	354	82	198	112	2	394	1295
8:30	51	264	17	1	333	74	108	32	0	214	80	135	46	10	271	65	137	94	2	298	1116
Total Volume	206	887	76	2	1171	362	603	148	4	1117	421	597	284	27	1329	307	659	475	7	1448	5065
% App Total	17.6%	75.7%	6.5%	0.2%		32.4%	54.0%	13.2%	0.4%		31.7%	44.9%	21.4%	2.0%		21.2%	45.5%	32.8%	0.5%		
PHF	.972	.840	.760	.500	.879	.846	.692	.771	.333	.747	.835	.863	.724	.675	.928	.914	.832	.842	.875	.916	.943

PM PEAK HOUR	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	40	196	53	3	292	81	155	39	0	275	159	258	100	8	525	48	142	98	6	294	1386
17:15	49	165	46	4	264	75	143	47	1	266	172	274	109	9	564	39	130	85	7	261	1355
17:30	58	184	44	3	289	70	175	45	2	292	191	270	100	6	567	43	148	87	3	281	1429
17:45	48	189	45	2	284	71	174	53	0	298	176	255	98	7	536	30	114	85	0	229	1347
Total Volume	195	734	188	12	1129	297	647	184	3	1131	698	1057	407	30	2192	160	534	355	16	1065	5517
% App Total	17.3%	65.0%	16.7%	1.1%		26.3%	57.2%	16.3%	0.3%		31.8%	48.2%	18.6%	1.4%		15.0%	50.1%	33.3%	1.5%		
PHF	.841	.936	.887	.750	.967	.917	.924	.868	.375	.949	.914	.964	.933	.833	.966	.833	.902	.906	.571	.906	.965

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-004 El Camino Real & Chestnut Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15	0	1	0	0	1	0	0	0	1	0	0	0	0	2	0	0	1	0	0	1	2	3
7:30	1	0	0	5	1	0	0	0	4	0	0	1	0	0	1	0	1	0	2	1	3	11
7:45	0	0	0	3	0	0	0	0	4	0	0	0	0	3	0	0	1	0	0	1	1	10
Total	1	1	0	8	2	0	0	0	10	0	0	1	0	5	1	0	3	0	2	3	6	25
8:00	0	1	0	2	1	1	1	0	2	2	0	0	0	5	0	0	0	0	4	0	3	13
8:15	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0	4
8:30	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	4	0	0	8
8:45	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0	0	0	0	1	0	0	6
Total	0	1	0	3	1	1	1	0	5	2	0	0	0	12	0	0	0	0	11	0	3	31
16:00	0	0	0	1	0	0	0	2	5	2	0	0	0	1	0	0	0	0	2	0	2	9
16:15	0	0	0	3	0	0	1	0	2	1	0	0	0	5	0	0	0	0	4	0	1	14
16:30	0	3	0	0	3	0	1	0	8	1	0	1	0	5	1	0	0	0	5	0	5	18
16:45	0	0	0	3	0	0	0	0	0	0	0	0	0	3	0	0	0	0	5	0	0	11
Total	0	3	0	7	3	0	2	2	15	4	0	1	0	14	1	0	0	0	16	0	8	52
17:00	0	0	0	2	0	0	0	0	3	0	0	0	0	2	0	0	0	0	6	0	0	13
17:15	0	1	0	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	8	0	1	12
17:30	0	1	0	4	1	0	0	0	2	0	0	0	0	3	0	0	1	0	2	1	2	11
17:45	0	0	0	3	0	0	1	0	2	1	0	0	0	3	0	0	0	0	2	0	1	10
Total	0	2	0	10	2	0	1	0	7	1	0	0	0	11	0	0	1	0	18	1	4	46
Grand Total	1	7	0	28	8	1	4	2	37	7	0	2	0	42	2	0	4	0	47	4	21	154
Apprch %	12.5%	87.5%	0.0%			14.3%	57.1%	28.6%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%				
Total %	4.8%	33.3%	0.0%		38.1%	4.8%	19.0%	9.5%		33.3%	0.0%	9.5%	0.0%		9.5%	0.0%	19.0%	0.0%		19.0%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	3	0	0	0	0	4	0	0	0	0	3	0	0	1	0	0	1	1
8:00	0	1	0	2	1	1	1	0	2	2	0	0	0	5	0	0	0	0	4	0	3
8:15	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	0
8:30	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	4	0	0
Total Volume	0	1	0	6	1	1	1	0	8	2	0	0	0	11	0	0	1	0	10	1	4
% App Total	0.0%	100.0%	0.0%			50.0%	50.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.250	.000		.250	.250	.250	.000		.250	.000	.000	.000		.000	.000	.250	.000		.250	.333

PM PEAK HOUR	El Camino Real Southbound					Chestnut Ave Westbound					El Camino Real Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	2	0	0	0	0	3	0	0	0	0	2	0	0	0	0	6	0	0
17:15	0	1	0	1	1	0	0	0	0	0	0	0	0	3	0	0	0	0	8	0	1
17:30	0	1	0	4	1	0	0	0	2	0	0	0	0	3	0	0	1	0	2	1	2
17:45	0	0	0	3	0	0	1	0	2	1	0	0	0	3	0	0	0	0	2	0	1
Total Volume	0	2	0	10	2	0	1	0	7	1	0	0	0	11	0	0	1	0	18	1	4
% App Total	0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.500	.000		.500	.000	.250	.000		.250	.000	.000	.000		.000	.000	.250	.000		.250	.500

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-005 El Camino Real & Orange Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	26	215	4	0	245	21	6	35	0	62	0	124	15	6	145	18	6	4	0	28	480	6
7:15	21	240	5	2	268	27	3	34	0	64	1	130	13	7	151	21	9	8	0	38	521	9
7:30	34	320	10	1	365	31	13	54	0	98	4	190	20	6	220	29	14	6	0	49	732	7
7:45	54	349	32	3	438	32	24	41	0	97	2	206	26	16	250	32	18	15	0	65	850	19
Total	135	1124	51	6	1316	111	46	164	0	321	7	650	74	35	766	100	47	33	0	180	2583	41
8:00	42	385	16	4	447	24	19	53	0	96	6	281	45	20	352	54	11	13	0	78	973	24
8:15	31	335	24	6	396	30	12	58	0	100	4	212	16	10	242	37	11	7	0	55	793	16
8:30	45	358	5	5	413	24	8	45	0	77	2	198	32	3	235	28	23	10	0	61	786	8
8:45	30	298	4	2	334	25	5	33	0	63	3	231	22	3	259	18	8	6	0	32	688	5
Total	148	1376	49	17	1590	103	44	189	0	336	15	922	115	36	1088	137	53	36	0	226	3240	53
16:00	30	270	14	2	316	40	17	52	0	109	3	316	33	3	355	23	12	15	0	50	830	5
16:15	41	278	12	2	333	28	16	49	0	93	2	318	33	7	360	19	10	9	0	38	824	9
16:30	27	251	13	3	294	26	12	62	0	100	3	334	38	7	382	18	14	9	1	42	818	11
16:45	44	284	11	5	344	30	13	39	0	82	3	379	36	1	419	26	14	10	0	50	895	6
Total	142	1083	50	12	1287	124	58	202	0	384	11	1347	140	18	1516	86	50	43	1	180	3367	31
17:00	42	299	19	9	369	32	10	48	0	90	1	424	32	3	460	20	16	6	0	42	961	12
17:15	50	268	12	3	333	34	19	49	0	102	5	467	49	5	526	18	19	6	0	43	1004	8
17:30	37	273	15	9	334	42	7	71	0	120	4	435	48	3	490	29	10	11	0	50	994	12
17:45	33	277	8	9	327	29	20	42	0	91	6	432	35	6	479	15	23	12	0	50	947	15
Total	162	1117	54	30	1363	137	56	210	0	403	16	1758	164	17	1955	82	68	35	0	185	3906	47
Grand Total	587	4700	204	65	5556	475	204	765	0	1444	49	4677	493	106	5325	405	218	147	1	771	13096	172
Apprch %	10.6%	84.6%	3.7%	1.2%		32.9%	14.1%	53.0%	0.0%		0.9%	87.8%	9.3%	2.0%		52.5%	28.3%	19.1%	0.1%			
Total %	4.5%	35.9%	1.6%	0.5%	42.4%	3.6%	1.6%	5.8%	0.0%	11.0%	0.4%	35.7%	3.8%	0.8%	40.7%	3.1%	1.7%	1.1%	0.0%	5.9%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	54	349	32	3	438	32	24	41	0	97	2	206	26	16	250	32	18	15	0	65	850
8:00	42	385	16	4	447	24	19	53	0	96	6	281	45	20	352	54	11	13	0	78	973
8:15	31	335	24	6	396	30	12	58	0	100	4	212	16	10	242	37	11	7	0	55	793
8:30	45	358	5	5	413	24	8	45	0	77	2	198	32	3	235	28	23	10	0	61	786
Total Volume	172	1427	77	18	1694	110	63	197	0	370	14	897	119	49	1079	151	63	45	0	259	3402
% App Total	10.2%	84.2%	4.5%	1.1%		29.7%	17.0%	53.2%	0.0%		1.3%	83.1%	11.0%	4.5%		58.3%	24.3%	17.4%	0.0%		
PHF	.796	.927	.602	.750	.947	.859	.656	.849	.000	.925	.583	.798	.661	.613	.766	.699	.685	.750	.000	.830	.874

PM PEAK HOUR	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	42	299	19	9	369	32	10	48	0	90	1	424	32	3	460	20	16	6	0	42	961
17:15	50	268	12	3	333	34	19	49	0	102	5	467	49	5	526	18	19	6	0	43	1004
17:30	37	273	15	9	334	42	7	71	0	120	4	435	48	3	490	29	10	11	0	50	994
17:45	33	277	8	9	327	29	20	42	0	91	6	432	35	6	479	15	23	12	0	50	947
Total Volume	162	1117	54	30	1363	137	56	210	0	403	16	1758	164	17	1955	82	68	35	0	185	3906
% App Total	11.9%	82.0%	4.0%	2.2%		34.0%	13.9%	52.1%	0.0%		0.8%	89.9%	8.4%	0.9%		44.3%	36.8%	18.9%	0.0%		
PHF	.810	.934	.711	.833	.923	.815	.700	.739	.000	.840	.667	.941	.837	.708	.929	.707	.739	.729	.000	.925	.973

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-005 El Camino Real & Orange Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	2	0	0	0	0	1	0	0	0	0	3	0	0	0	0	2	0	0	8
7:15	0	0	0	2	0	0	0	0	0	0	0	0	0	4	0	0	0	0	3	0	0	9
7:30	0	1	0	0	1	0	0	0	0	0	0	1	0	10	1	0	0	0	11	0	2	21
7:45	0	0	0	2	0	0	0	0	4	0	0	0	0	4	0	0	2	0	10	2	2	20
Total	0	1	0	6	1	0	0	0	5	0	0	1	0	21	1	0	2	0	26	2	4	58
8:00	0	0	0	6	0	0	0	0	3	0	0	0	0	6	0	0	0	0	8	0	0	23
8:15	0	0	0	3	0	0	0	0	6	0	0	0	0	5	0	1	0	0	0	1	1	14
8:30	0	0	0	1	0	0	1	0	0	1	0	0	0	7	0	0	0	0	5	0	1	13
8:45	0	0	0	0	0	0	0	0	1	0	0	0	0	7	0	0	0	0	3	0	0	11
Total	0	0	0	10	0	0	1	0	10	1	0	0	0	25	0	1	0	0	16	1	2	61
16:00	0	0	0	4	0	0	0	0	1	0	0	0	0	1	0	0	0	0	7	0	0	13
16:15	0	0	0	8	0	0	0	0	1	0	0	0	0	4	0	0	0	0	11	0	0	24
16:30	0	0	0	5	0	0	0	0	0	0	0	0	0	2	0	1	0	0	2	1	1	9
16:45	1	0	0	4	1	0	0	0	2	0	0	0	0	10	0	0	0	0	5	0	1	21
Total	1	0	0	21	1	0	0	0	4	0	0	0	0	17	0	1	0	0	25	1	2	67
17:00	0	0	0	3	0	0	1	0	1	1	0	0	0	3	0	0	0	0	7	0	1	14
17:15	0	1	0	1	1	0	0	0	1	0	0	0	0	12	0	0	0	0	4	0	1	18
17:30	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0	11
17:45	0	1	0	8	1	0	0	0	0	0	0	0	0	9	0	0	0	0	5	0	1	22
Total	0	2	0	16	2	0	1	0	2	1	0	0	0	25	0	0	0	0	22	0	3	65
Grand Total	1	3	0	53	4	0	2	0	21	2	0	1	0	88	1	2	2	0	89	4	11	251
Apprch %	25.0%	75.0%	0.0%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			50.0%	50.0%	0.0%				
Total %	9.1%	27.3%	0.0%		36.4%	0.0%	18.2%	0.0%		18.2%	0.0%	9.1%	0.0%		9.1%	18.2%	18.2%	0.0%		36.4%	100.0%	

AM PEAK HOUR	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	2	0	0	0	0	4	0	0	0	0	4	0	0	2	0	10	2	2
8:00	0	0	0	6	0	0	0	0	3	0	0	0	0	6	0	0	0	0	8	0	0
8:15	0	0	0	3	0	0	0	0	6	0	0	0	0	5	0	1	0	0	0	1	1
8:30	0	0	0	1	0	0	1	0	0	1	0	0	0	7	0	0	0	0	5	0	1
Total Volume	0	0	0	12	0	0	1	0	13	1	0	0	0	22	0	1	2	0	23	3	4
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			33.3%	66.7%	0.0%			
PHF	.000	.000	.000		.000	.000	.250	.000		.250	.000	.000	.000		.000	.250	.250	.000		.375	.500

PM PEAK HOUR	El Camino Real Southbound					Orange Ave Westbound					El Camino Real Northbound					Orange Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	3	0	0	1	0	1	1	0	0	0	3	0	0	0	0	7	0	1
17:15	0	1	0	1	1	0	0	0	1	0	0	0	0	12	0	0	0	0	4	0	1
17:30	0	0	0	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	6	0	0
17:45	0	1	0	8	1	0	0	0	0	0	0	0	0	9	0	0	0	0	5	0	1
Total Volume	0	2	0	16	2	0	1	0	2	1	0	0	0	25	0	0	0	0	22	0	3
% App Total	0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.500	.000		.500	.000	.250	.000		.250	.000	.000	.000		.000	.000	.000	.000		.000	.750

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-006 Mission Rd & Grand Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	17	31	1	0	49	10	0	29	0	39	1	22	2	0	25	1	0	0	0	1	114	0
7:15	19	39	0	0	58	12	0	49	0	61	0	33	3	0	36	0	0	1	0	1	156	0
7:30	29	73	0	0	102	5	1	33	0	39	1	61	10	0	72	0	1	1	0	2	215	0
7:45	35	88	0	0	123	24	0	55	0	79	0	90	0	1	91	1	0	1	0	2	295	1
Total	100	231	1	0	332	51	1	166	0	218	2	206	15	1	224	2	1	3	0	6	780	1
8:00	43	91	0	0	134	11	1	56	0	68	0	79	2	0	81	1	1	1	0	3	286	0
8:15	46	80	0	0	126	7	0	40	0	47	0	57	8	0	65	0	1	0	0	1	239	0
8:30	37	75	1	0	113	8	1	41	0	50	2	47	9	0	58	2	0	0	0	2	223	0
8:45	27	51	0	0	78	8	0	32	0	40	2	30	1	0	33	0	1	0	0	1	152	0
Total	153	297	1	0	451	34	2	169	0	205	4	213	20	0	237	3	3	1	0	7	900	0
16:00	32	54	1	0	87	4	1	40	0	45	2	75	11	0	88	0	0	0	0	0	220	0
16:15	30	68	0	0	98	4	2	41	0	47	1	53	10	0	64	0	1	1	0	2	211	0
16:30	42	61	1	0	104	7	1	48	1	57	1	49	12	0	62	1	0	1	0	2	225	1
16:45	42	61	1	0	104	7	0	56	0	63	2	70	9	0	81	1	1	1	0	3	251	0
Total	146	244	3	0	393	22	4	185	1	212	6	247	42	0	295	2	2	3	0	7	907	1
17:00	43	93	0	0	136	7	0	50	0	57	1	68	16	0	85	1	0	0	0	1	279	0
17:15	51	78	0	0	129	4	0	41	0	45	1	73	12	0	86	1	0	0	0	1	261	0
17:30	54	75	0	0	129	9	1	52	0	62	0	71	13	0	84	0	1	3	0	4	279	0
17:45	61	72	2	0	135	11	2	61	3	77	3	56	4	0	63	0	1	0	0	1	276	3
Total	209	318	2	0	529	31	3	204	3	241	5	268	45	0	318	2	2	3	0	7	1095	3
Grand Total	608	1090	7	0	1705	138	10	724	4	876	17	934	122	1	1074	9	8	10	0	27	3682	5
Apprch %	35.7%	63.9%	0.4%	0.0%		15.8%	1.1%	82.6%	0.5%		1.6%	87.0%	11.4%	0.1%		33.3%	29.6%	37.0%	0.0%			
Total %	16.5%	29.6%	0.2%	0.0%	46.3%	3.7%	0.3%	19.7%	0.1%	23.8%	0.5%	25.4%	3.3%	0.0%	29.2%	0.2%	0.2%	0.3%	0.0%	0.7%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	35	88	0	0	123	24	0	55	0	79	0	90	0	1	91	1	0	1	0	2	295
8:00	43	91	0	0	134	11	1	56	0	68	0	79	2	0	81	1	1	1	0	3	286
8:15	46	80	0	0	126	7	0	40	0	47	0	57	8	0	65	0	1	0	0	1	239
8:30	37	75	1	0	113	8	1	41	0	50	2	47	9	0	58	2	0	0	0	2	223
Total Volume	161	334	1	0	496	50	2	192	0	244	2	273	19	1	295	4	2	2	0	8	1043
% App Total	32.5%	67.3%	0.2%	0.0%		20.5%	0.8%	78.7%	0.0%		0.7%	92.5%	6.4%	0.3%		50.0%	25.0%	25.0%	0.0%		
PHF	.875	.918	.250	.000	.925	.521	.500	.857	.000	.772	.250	.758	.528	.250	.810	.500	.500	.500	.000	.667	.884

PM PEAK HOUR	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	43	93	0	0	136	7	0	50	0	57	1	68	16	0	85	1	0	0	0	1	279
17:15	51	78	0	0	129	4	0	41	0	45	1	73	12	0	86	1	0	0	0	1	261
17:30	54	75	0	0	129	9	1	52	0	62	0	71	13	0	84	0	1	3	0	4	279
17:45	61	72	2	0	135	11	2	61	3	77	3	56	4	0	63	0	1	0	0	1	276
Total Volume	209	318	2	0	529	31	3	204	3	241	5	268	45	0	318	2	2	3	0	7	1095
% App Total	39.5%	60.1%	0.4%	0.0%		12.9%	1.2%	84.6%	1.2%		1.6%	84.3%	14.2%	0.0%		28.6%	28.6%	42.9%	0.0%		
PHF	.857	.855	.250	.000	.972	.705	.375	.836	.250	.782	.417	.918	.703	.000	.924	.500	.500	.250	.000	.438	.981

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-006 Mission Rd & Grand Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	1	1	0	5	2	0	0	1	6	1	0	1	0	0	1	0	0	0	2	0	4	13
7:15	0	0	0	4	0	0	0	3	4	3	0	0	0	0	0	0	0	0	0	0	3	8
7:30	1	0	0	3	1	0	0	1	9	1	0	1	0	0	1	0	0	0	1	0	3	13
7:45	1	0	0	9	1	0	0	1	6	1	0	0	0	0	0	0	0	0	0	0	2	15
Total	3	1	0	21	4	0	0	6	25	6	0	2	0	0	2	0	0	0	3	0	12	49
8:00	0	0	0	5	0	0	0	2	7	2	0	1	0	2	1	0	0	0	2	0	3	16
8:15	1	0	0	4	1	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1	8
8:30	1	0	0	2	1	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	2	6
8:45	0	0	0	4	0	0	0	0	7	0	0	1	0	0	1	0	0	0	0	0	1	11
Total	2	0	0	15	2	0	0	3	21	3	0	2	0	2	2	0	0	0	3	0	7	41
16:00	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4
16:15	0	1	0	7	1	0	0	1	7	1	0	0	0	0	0	0	0	0	0	0	2	14
16:30	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	10
16:45	2	0	0	3	2	0	0	1	8	1	0	0	0	0	0	0	0	0	0	0	3	11
Total	2	1	0	12	3	0	0	2	27	2	0	0	0	0	0	0	0	0	0	0	5	39
17:00	0	0	0	1	0	0	0	1	11	1	0	0	0	0	0	0	0	0	0	0	1	12
17:15	1	0	0	6	1	0	0	1	3	1	0	1	0	0	1	0	0	0	0	0	3	9
17:30	0	2	0	0	2	0	0	1	3	1	0	0	0	1	0	0	0	0	2	0	3	6
17:45	2	0	0	4	2	0	0	2	3	2	0	1	0	1	1	0	1	0	0	1	6	8
Total	3	2	0	11	5	0	0	5	20	5	0	2	0	2	2	0	1	0	2	1	13	35
Grand Total	10	4	0	59	14	0	0	16	93	16	0	6	0	4	6	0	1	0	8	1	37	164
Apprch %	71.4%	28.6%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%				
Total %	27.0%	10.8%	0.0%		37.8%	0.0%	0.0%	43.2%		43.2%	0.0%	16.2%	0.0%		16.2%	0.0%	2.7%	0.0%		2.7%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	1	0	0	9	1	0	0	1	6	1	0	0	0	0	0	0	0	0	0	0	2
8:00	0	0	0	5	0	0	0	2	7	2	0	1	0	2	1	0	0	0	2	0	3
8:15	1	0	0	4	1	0	0	0	3	0	0	0	0	0	0	0	0	0	1	0	1
8:30	1	0	0	2	1	0	0	1	4	1	0	0	0	0	0	0	0	0	0	0	2
Total Volume	3	0	0	20	3	0	0	4	20	4	0	1	0	2	1	0	0	0	3	0	8
% App Total	100.0%	0.0%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.750	.000	.000		.750	.000	.000	.500		.500	.000	.250	.000		.250	.000	.000	.000		.000	.667

PM PEAK HOUR	Mission Rd Southbound					Grand Ave Westbound					Mission Rd Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	1	0	0	0	1	11	1	0	0	0	0	0	0	0	0	0	0	1
17:15	1	0	0	6	1	0	0	1	3	1	0	1	0	0	1	0	0	0	0	0	3
17:30	0	2	0	0	2	0	0	1	3	1	0	0	0	1	0	0	0	0	2	0	3
17:45	2	0	0	4	2	0	0	2	3	2	0	1	0	1	1	0	1	0	0	1	6
Total Volume	3	2	0	11	5	0	0	5	20	5	0	2	0	2	2	0	1	0	2	1	13
% App Total	60.0%	40.0%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.375	.250	.000		.625	.000	.000	.625		.625	.000	.500	.000		.500	.000	.250	.000		.250	.542

Southbound Peds = North Leg (traveling EB or WB)
Westbound Peds = East Leg (traveling NB or SB)
Northbound Peds = South Leg (traveling EB or WB)
Eastbound Peds = West Leg (traveling NB or SB)

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-007 Chestnut Ave & Grand Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	7	39	11	0	57	19	16	10	0	45	11	58	19	0	88	8	29	8	0	45	235	0
7:15	4	53	16	0	73	14	27	7	0	48	7	63	15	0	85	10	32	24	0	66	272	0
7:30	7	68	18	0	93	28	19	4	0	51	13	81	26	0	120	9	35	16	0	60	324	0
7:45	12	97	22	0	131	36	48	10	0	94	12	96	41	0	149	14	49	22	0	85	459	0
Total	30	257	67	0	354	97	110	31	0	238	43	298	101	0	442	41	145	70	0	256	1290	0
8:00	6	77	20	0	103	37	50	16	0	103	22	119	26	0	167	30	43	14	0	87	460	0
8:15	13	62	19	0	94	32	54	17	0	103	14	107	32	0	153	33	76	24	0	133	483	0
8:30	7	90	15	0	112	26	22	8	0	56	16	80	39	0	135	9	47	21	0	77	380	0
8:45	8	67	7	0	82	27	28	10	0	65	6	71	26	0	103	6	41	17	0	64	314	0
Total	34	296	61	0	391	122	154	51	0	327	58	377	123	0	558	78	207	76	0	361	1637	0
16:00	6	76	9	0	91	28	38	10	0	76	19	51	27	0	97	5	30	7	0	42	306	0
16:15	6	72	10	0	88	24	50	8	0	82	28	79	30	0	137	7	32	11	0	50	357	0
16:30	9	75	13	0	97	27	50	16	0	93	23	78	30	0	131	5	48	16	0	69	390	0
16:45	14	74	14	0	102	31	42	17	0	90	21	104	34	0	159	9	39	5	0	53	404	0
Total	35	297	46	0	378	110	180	51	0	341	91	312	121	0	524	26	149	39	0	214	1457	0
17:00	11	80	10	0	101	27	52	18	0	97	27	80	33	0	140	6	53	14	0	73	411	0
17:15	7	96	22	0	125	21	41	16	0	78	36	86	20	0	142	13	43	17	0	73	418	0
17:30	14	88	22	0	124	43	61	16	0	120	38	87	27	0	152	13	37	13	0	63	459	0
17:45	16	94	23	0	133	28	53	7	0	88	25	83	27	0	135	20	54	15	0	89	445	0
Total	48	358	77	0	483	119	207	57	0	383	126	336	107	0	569	52	187	59	0	298	1733	0
Grand Total	147	1208	251	0	1606	448	651	190	0	1289	318	1323	452	0	2093	197	688	244	0	1129	6117	0
Apprch %	9.2%	75.2%	15.6%	0.0%		34.8%	50.5%	14.7%	0.0%		15.2%	63.2%	21.6%	0.0%		17.4%	60.9%	21.6%	0.0%			
Total %	2.4%	19.7%	4.1%	0.0%	26.3%	7.3%	10.6%	3.1%	0.0%	21.1%	5.2%	21.6%	7.4%	0.0%	34.2%	3.2%	11.2%	4.0%	0.0%	18.5%	100.0%	

AM PEAK HOUR	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	12	97	22	0	131	36	48	10	0	94	12	96	41	0	149	14	49	22	0	85	459
8:00	6	77	20	0	103	37	50	16	0	103	22	119	26	0	167	30	43	14	0	87	460
8:15	13	62	19	0	94	32	54	17	0	103	14	107	32	0	153	33	76	24	0	133	483
8:30	7	90	15	0	112	26	22	8	0	56	16	80	39	0	135	9	47	21	0	77	380
Total Volume	38	326	76	0	440	131	174	51	0	356	64	402	138	0	604	86	215	81	0	382	1782
% App Total	8.6%	74.1%	17.3%	0.0%		36.8%	48.9%	14.3%	0.0%		10.6%	66.6%	22.8%	0.0%		22.5%	56.3%	21.2%	0.0%		
PHF	.731	.840	.864	.000	.840	.885	.806	.750	.000	.864	.727	.845	.841	.000	.904	.652	.707	.844	.000	.718	.922

PM PEAK HOUR	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	11	80	10	0	101	27	52	18	0	97	27	80	33	0	140	6	53	14	0	73	411
17:15	7	96	22	0	125	21	41	16	0	78	36	86	20	0	142	13	43	17	0	73	418
17:30	14	88	22	0	124	43	61	16	0	120	38	87	27	0	152	13	37	13	0	63	459
17:45	16	94	23	0	133	28	53	7	0	88	25	83	27	0	135	20	54	15	0	89	445
Total Volume	48	358	77	0	483	119	207	57	0	383	126	336	107	0	569	52	187	59	0	298	1733
% App Total	9.9%	74.1%	15.9%	0.0%		31.1%	54.0%	14.9%	0.0%		22.1%	59.1%	18.8%	0.0%		17.4%	62.8%	19.8%	0.0%		
PHF	.750	.932	.837	.000	.908	.692	.848	.792	.000	.798	.829	.966	.811	.000	.936	.650	.866	.868	.000	.837	.944

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-007 Chestnut Ave & Grand Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	2	0	0	1	0	1	1	0	0	0	0	0	0	1	0	4	1	2	7
7:15	0	0	0	3	0	0	2	0	1	2	0	0	0	1	0	0	0	0	0	0	2	5
7:30	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	1	0	3	1	2	5
7:45	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	2	2
Total	0	0	0	8	0	0	4	0	2	4	0	1	0	1	1	0	3	0	8	3	8	19
8:00	0	1	1	0	2	0	0	0	1	0	0	0	0	1	0	0	1	0	4	1	3	6
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1	1
8:30	0	0	0	0	0	0	1	0	2	1	0	0	0	1	0	0	1	0	1	1	2	4
8:45	0	1	0	3	1	0	0	0	1	0	0	0	0	2	0	0	0	0	1	0	1	7
Total	0	2	1	3	3	0	1	0	4	1	0	0	0	4	0	0	3	0	7	3	7	18
16:00	0	0	0	3	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
16:15	0	1	0	1	1	0	3	0	0	3	0	0	0	2	0	0	0	0	0	0	4	3
16:30	0	0	0	2	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2	0	1	5
16:45	0	0	0	1	0	0	1	0	0	1	0	0	0	1	0	0	0	1	3	1	2	5
Total	0	1	0	7	1	1	4	0	1	5	0	0	0	5	0	0	0	1	5	1	7	18
17:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
17:30	0	0	0	3	0	0	1	0	0	1	0	1	1	2	2	0	0	0	0	0	3	5
17:45	0	0	0	2	0	1	2	0	1	3	0	0	0	0	0	0	2	0	1	2	5	4
Total	0	0	0	5	0	1	4	0	1	5	0	1	1	3	2	0	2	0	2	2	9	11
Grand Total	0	3	1	23	4	2	13	0	8	15	0	2	1	13	3	0	8	1	22	9	31	66
Apprch %	0.0%	75.0%	25.0%			13.3%	86.7%	0.0%			0.0%	66.7%	33.3%			0.0%	88.9%	11.1%				
Total %	0.0%	9.7%	3.2%		12.9%	6.5%	41.9%	0.0%		48.4%	0.0%	6.5%	3.2%		9.7%	0.0%	25.8%	3.2%		29.0%	100.0%	

AM PEAK HOUR	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:45 to 08:45																					
Peak Hour For Entire Intersection Begins at 07:45																					
7:45	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	2
8:00	0	1	1	0	2	0	0	0	1	0	0	0	0	1	0	0	1	0	4	1	3
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
8:30	0	0	0	0	0	0	1	0	2	1	0	0	0	1	0	0	1	0	1	1	2
Total Volume	0	1	1	1	2	0	2	0	3	2	0	0	0	2	0	0	4	0	7	4	8
% App Total	0.0%	50.0%	50.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.250	.250		.250	.000	.500	.000		.500	.000	.000	.000		.000	.000	1.000	.000		1.000	.667

PM PEAK HOUR	Chestnut Ave Southbound					Grand Ave Westbound					Chestnut Ave Northbound					Grand Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
17:30	0	0	0	3	0	0	1	0	0	1	0	1	1	2	2	0	0	0	0	0	3
17:45	0	0	0	2	0	1	2	0	1	3	0	0	0	0	0	0	2	0	1	2	5
Total Volume	0	0	0	5	0	1	4	0	1	5	0	1	1	3	2	0	2	0	2	2	9
% App Total	0.0%	0.0%	0.0%			20.0%	80.0%	0.0%			0.0%	50.0%	50.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.250	.500	.000		.417	.000	.250	.250		.250	.000	.250	.000		.250	.450

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-008 Mission Rd & Oak Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	39	0	0	39	10	0	3	0	13	0	25	2	0	27	0	0	0	0	0	79	0
7:15	1	47	0	0	48	9	0	3	0	12	0	35	1	0	36	0	0	0	0	0	96	0
7:30	1	81	0	0	82	10	0	8	0	18	0	66	2	0	68	0	0	0	0	0	168	0
7:45	3	111	0	0	114	28	0	7	0	35	0	88	0	0	88	0	0	0	0	0	237	0
Total	5	278	0	0	283	57	0	21	0	78	0	214	5	0	219	0	0	0	0	0	580	0
8:00	2	97	0	0	99	14	0	7	0	21	0	80	2	0	82	0	0	0	0	0	202	0
8:15	1	87	0	0	88	10	0	2	0	12	0	67	3	0	70	0	0	0	0	0	170	0
8:30	6	72	0	0	78	9	0	5	0	14	0	55	3	0	58	0	0	0	0	0	150	0
8:45	1	60	0	0	61	5	0	1	0	6	0	34	4	0	38	0	0	0	0	0	105	0
Total	10	316	0	0	326	38	0	15	0	53	0	236	12	0	248	0	0	0	0	0	627	0
16:00	1	63	0	0	64	7	0	2	0	9	0	85	4	0	89	0	0	0	0	0	162	0
16:15	7	68	0	0	75	9	0	3	0	12	0	68	1	0	69	0	0	0	0	0	156	0
16:30	6	72	0	0	78	4	0	4	0	8	0	58	5	0	63	0	0	0	0	0	149	0
16:45	3	64	0	0	67	8	0	5	0	13	0	76	7	0	83	0	0	0	0	0	163	0
Total	17	267	0	0	284	28	0	14	0	42	0	287	17	0	304	0	0	0	0	0	630	0
17:00	4	101	0	0	105	7	0	4	0	11	0	73	2	0	75	0	0	0	0	0	191	0
17:15	3	83	0	0	86	10	0	2	0	12	0	82	1	0	83	0	0	0	0	0	181	0
17:30	1	85	0	0	86	12	0	7	0	19	0	75	4	1	80	0	0	0	0	0	185	1
17:45	6	83	0	0	89	12	0	4	0	16	0	58	2	0	60	0	0	0	0	0	165	0
Total	14	352	0	0	366	41	0	17	0	58	0	288	9	1	298	0	0	0	0	0	722	1
Grand Total	46	1213	0	0	1259	164	0	67	0	231	0	1025	43	1	1069	0	0	0	0	0	2559	1
Apprch %	3.7%	96.3%	0.0%	0.0%		71.0%	0.0%	29.0%	0.0%		0.0%	95.9%	4.0%	0.1%		0.0%	0.0%	0.0%	0.0%			
Total %	1.8%	47.4%	0.0%	0.0%	49.2%	6.4%	0.0%	2.6%	0.0%	9.0%	0.0%	40.1%	1.7%	0.0%	41.8%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	1	81	0	0	82	10	0	8	0	18	0	66	2	0	68	0	0	0	0	0	168
7:45	3	111	0	0	114	28	0	7	0	35	0	88	0	0	88	0	0	0	0	0	237
8:00	2	97	0	0	99	14	0	7	0	21	0	80	2	0	82	0	0	0	0	0	202
8:15	1	87	0	0	88	10	0	2	0	12	0	67	3	0	70	0	0	0	0	0	170
Total Volume	7	376	0	0	383	62	0	24	0	86	0	301	7	0	308	0	0	0	0	0	777
% App Total	1.8%	98.2%	0.0%	0.0%		72.1%	0.0%	27.9%	0.0%		0.0%	97.7%	2.3%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.583	.847	.000	.000	.840	.554	.000	.750	.000	.614	.000	.855	.583	.000	.875	.000	.000	.000	.000	.000	.820

PM PEAK HOUR	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	4	101	0	0	105	7	0	4	0	11	0	73	2	0	75	0	0	0	0	0	191
17:15	3	83	0	0	86	10	0	2	0	12	0	82	1	0	83	0	0	0	0	0	181
17:30	1	85	0	0	86	12	0	7	0	19	0	75	4	1	80	0	0	0	0	0	185
17:45	6	83	0	0	89	12	0	4	0	16	0	58	2	0	60	0	0	0	0	0	165
Total Volume	14	352	0	0	366	41	0	17	0	58	0	288	9	1	298	0	0	0	0	0	722
% App Total	3.8%	96.2%	0.0%	0.0%		70.7%	0.0%	29.3%	0.0%		0.0%	96.6%	3.0%	0.3%		0.0%	0.0%	0.0%	0.0%		
PHF	.583	.871	.000	.000	.871	.854	.000	.607	.000	.763	.000	.878	.563	.250	.898	.000	.000	.000	.000	.000	.945

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-008 Mission Rd & Oak Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	3	0	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	1	7
7:15	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30	0	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	7
7:45	0	0	0	2	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	1	4
Total	0	0	0	8	0	0	0	0	11	0	0	2	0	0	2	0	0	0	0	0	2	19
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2
8:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2
Total	0	0	0	2	0	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	2	6
16:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
16:30	0	0	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	6
16:45	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	2	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	12
17:00	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	7
17:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1
17:30	0	1	0	1	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1	6
17:45	0	0	0	3	0	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	1	7
Total	0	1	0	6	1	0	0	0	15	0	0	2	0	0	2	0	0	0	0	0	3	21
Grand Total	0	1	0	18	1	0	0	2	40	2	0	4	0	0	4	0	0	0	0	0	7	58
Apprch %	0.0%	100.0%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%				
Total %	0.0%	14.3%	0.0%		14.3%	0.0%	0.0%	28.6%		28.6%	0.0%	57.1%	0.0%		57.1%	0.0%	0.0%	0.0%		0.0%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	2	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	2	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	1
8:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	5	0	0	0	1	9	1	0	1	0	0	1	0	0	0	0	0	2
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.250		.250	.000	.250	.000		.250	.000	.000	.000		.000	.500

PM PEAK HOUR	Mission Rd Southbound					Oak Ave Westbound					Mission Rd Northbound					Oak Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
17:30	0	1	0	1	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	0	3	0	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	1
Total Volume	0	1	0	6	1	0	0	0	15	0	0	2	0	0	2	0	0	0	0	0	3
% App Total	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.250	.000		.250	.000	.000	.000		.000	.000	.500	.000		.500	.000	.000	.000		.000	.750

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-009 Mission Rd & Chestnut Ave
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	7	0	45	0	52	0	79	11	0	90	0	0	0	0	0	16	121	0	0	137	279	0
7:15	11	0	47	0	58	0	122	13	0	135	0	0	0	0	0	30	117	0	0	147	340	0
7:30	13	0	76	0	89	0	167	19	0	186	0	0	0	0	0	43	174	0	2	219	494	2
7:45	21	0	117	0	138	0	192	25	0	217	0	0	0	0	0	66	225	0	0	291	646	0
Total	52	0	285	0	337	0	560	68	0	628	0	0	0	0	0	155	637	0	2	794	1759	2
8:00	13	0	106	0	119	0	208	23	0	231	0	0	0	0	0	60	232	0	1	293	643	1
8:15	29	0	73	0	102	0	166	17	0	183	0	0	0	0	0	53	257	0	1	311	596	1
8:30	23	0	56	0	79	0	158	16	0	174	0	0	0	0	0	41	192	0	1	234	487	1
8:45	19	0	46	0	65	0	137	6	0	143	0	0	0	0	0	33	184	0	4	221	429	4
Total	84	0	281	0	365	0	669	62	0	731	0	0	0	0	0	187	865	0	7	1059	2155	7
16:00	17	0	50	0	67	0	158	14	0	172	0	0	0	0	0	69	151	0	8	228	467	8
16:15	15	0	62	0	77	0	154	10	0	164	0	0	0	0	0	64	183	0	11	258	499	11
16:30	17	0	63	0	80	0	140	14	1	155	0	0	0	0	0	53	190	0	14	257	492	15
16:45	12	0	61	0	73	0	169	24	0	193	0	0	0	0	0	67	210	0	9	286	552	9
Total	61	0	236	0	297	0	621	62	1	684	0	0	0	0	0	253	734	0	42	1029	2010	43
17:00	24	0	84	0	108	0	169	17	0	186	0	0	0	0	0	65	187	0	11	263	557	11
17:15	19	0	78	0	97	0	156	21	0	177	0	0	0	0	0	69	190	0	12	271	545	12
17:30	17	0	81	0	98	0	202	19	0	221	0	0	0	0	0	59	206	0	8	273	592	8
17:45	27	0	71	0	98	0	207	13	0	220	0	0	0	0	0	49	171	0	10	230	548	10
Total	87	0	314	0	401	0	734	70	0	804	0	0	0	0	0	242	754	0	41	1037	2242	41
Grand Total	284	0	1116	0	1400	0	2584	262	1	2847	0	0	0	0	0	837	2990	0	92	3919	8166	93
Apprch %	20.3%	0.0%	79.7%	0.0%		0.0%	90.8%	9.2%	0.0%		0.0%	0.0%	0.0%	0.0%		21.4%	76.3%	0.0%	2.3%			
Total %	3.5%	0.0%	13.7%	0.0%	17.1%	0.0%	31.6%	3.2%	0.0%	34.9%	0.0%	0.0%	0.0%	0.0%	0.0%	10.2%	36.6%	0.0%	1.1%	48.0%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	13	0	76	0	89	0	167	19	0	186	0	0	0	0	0	43	174	0	2	219	494
7:45	21	0	117	0	138	0	192	25	0	217	0	0	0	0	0	66	225	0	0	291	646
8:00	13	0	106	0	119	0	208	23	0	231	0	0	0	0	0	60	232	0	1	293	643
8:15	29	0	73	0	102	0	166	17	0	183	0	0	0	0	0	53	257	0	1	311	596
Total Volume	76	0	372	0	448	0	733	84	0	817	0	0	0	0	0	222	888	0	4	1114	2379
% App Total	17.0%	0.0%	83.0%	0.0%		0.0%	89.7%	10.3%	0.0%		0.0%	0.0%	0.0%	0.0%		19.9%	79.7%	0.0%	0.4%		
PHF	.655	.000	.795	.000	.812	.000	.881	.840	.000	.884	.000	.000	.000	.000	.000	.841	.864	.000	.500	.895	.921

PM PEAK HOUR	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	12	0	61	0	73	0	169	24	0	193	0	0	0	0	0	67	210	0	9	286	552
17:00	24	0	84	0	108	0	169	17	0	186	0	0	0	0	0	65	187	0	11	263	557
17:15	19	0	78	0	97	0	156	21	0	177	0	0	0	0	0	69	190	0	12	271	545
17:30	17	0	81	0	98	0	202	19	0	221	0	0	0	0	0	59	206	0	8	273	592
Total Volume	72	0	304	0	376	0	696	81	0	777	0	0	0	0	0	260	793	0	40	1093	2246
% App Total	19.1%	0.0%	80.9%	0.0%		0.0%	89.6%	10.4%	0.0%		0.0%	0.0%	0.0%	0.0%		23.8%	72.6%	0.0%	3.7%		
PHF	.750	.000	.905	.000	.870	.000	.861	.844	.000	.879	.000	.000	.000	.000	.000	.942	.944	.000	.833	.955	.948

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-009 Mission Rd & Chestnut Ave
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	2	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2
7:15	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
7:30	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	2
7:45	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	1	4
Total	0	0	0	6	0	0	0	2	5	2	0	0	0	0	0	1	1	0	0	2	4	11
8:00	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
8:15	0	0	1	0	1	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	2	3
8:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	1	3	1	0	2	0	4	2	0	0	0	0	0	0	0	0	0	0	3	7
16:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	1	2
16:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	1	0	0	0	1	1	3
16:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	0	0	0	0	0	1	0	10	1	0	0	0	0	0	1	0	0	0	1	2	10
17:00	0	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	8
17:15	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	2
17:30	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	2	2	3
17:45	0	0	1	1	1	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	2	6
Total	0	0	1	7	1	0	0	2	12	2	0	0	0	0	0	0	2	0	0	2	5	19
Grand Total	0	0	2	16	2	0	3	4	31	7	0	0	0	0	0	2	3	0	0	5	14	47
Apprch %	0.0%	0.0%	100.0%			0.0%	42.9%	57.1%			0.0%	0.0%	0.0%			40.0%	60.0%	0.0%				
Total %	0.0%	0.0%	14.3%		14.3%	0.0%	21.4%	28.6%		50.0%	0.0%	0.0%	0.0%		0.0%	14.3%	21.4%	0.0%		35.7%	100.0%	

AM PEAK HOUR	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1
7:45	0	0	0	2	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	1	1
8:00	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15	0	0	1	0	1	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	0	1	4	1	0	2	0	6	2	0	0	0	0	0	1	1	0	0	2	5
% App Total	0.0%	0.0%	100.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			50.0%	50.0%	0.0%			
PHF	.000	.000	.250		.250	.000	.500	.000		.500	.000	.000	.000		.000	.250	.250	.000		.500	.625

PM PEAK HOUR	Mission Rd Southbound					Chestnut Ave Westbound					Mission Rd Northbound					Chestnut Ave Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:45 to 17:45																					
Peak Hour For Entire Intersection Begins at 16:45																					
16:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	3	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1
17:30	0	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	2	0	0	2	2
Total Volume	0	0	0	6	0	0	0	1	10	1	0	0	0	0	0	0	2	0	0	2	3
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	100.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.250		.250	.000	.000	.000		.000	.000	.250	.000		.250	.375

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-010 Junipero Serra Blvd & Arroyo Dr
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	3	124	0	0	127	56	0	4	1	61	0	36	11	0	47	0	0	0	0	0	235	1
7:15	10	197	0	0	207	59	0	6	0	65	0	52	14	0	66	0	0	0	0	0	338	0
7:30	14	235	0	0	249	46	0	4	0	50	0	73	13	0	86	0	0	0	0	0	385	0
7:45	16	295	0	0	311	41	0	4	0	45	0	78	19	0	97	0	0	0	0	0	453	0
Total	43	851	0	0	894	202	0	18	1	221	0	239	57	0	296	0	0	0	0	0	1411	1
8:00	13	247	0	0	260	54	0	10	0	64	0	95	29	0	124	0	0	0	0	0	448	0
8:15	9	196	0	0	205	36	0	12	0	48	0	106	24	0	130	0	0	0	0	0	383	0
8:30	14	246	0	0	260	25	0	3	0	28	0	185	9	0	194	0	0	0	0	0	482	0
8:45	8	220	0	1	229	43	0	8	0	51	0	236	6	0	242	0	0	0	0	0	522	1
Total	44	909	0	1	954	158	0	33	0	191	0	622	68	0	690	0	0	0	0	0	1835	1
16:00	12	86	0	2	100	33	0	13	0	46	0	139	48	0	187	0	0	0	0	0	333	2
16:15	10	98	0	0	108	28	0	11	0	39	0	160	43	0	203	0	0	0	0	0	350	0
16:30	9	95	0	2	106	22	0	16	0	38	0	161	34	1	196	0	0	0	0	0	340	3
16:45	9	106	0	2	117	14	0	13	0	27	0	191	37	0	228	0	0	0	0	0	372	2
Total	40	385	0	6	431	97	0	53	0	150	0	651	162	1	814	0	0	0	0	0	1395	7
17:00	6	141	0	2	149	30	0	12	0	42	0	189	40	0	229	0	0	0	0	0	420	2
17:15	14	119	0	0	133	28	0	15	0	43	0	223	42	0	265	0	0	0	0	0	441	0
17:30	9	88	0	0	97	23	0	20	0	43	0	228	45	0	273	0	0	0	0	0	413	0
17:45	12	107	0	0	119	27	0	15	0	42	0	253	42	0	295	0	0	0	0	0	456	0
Total	41	455	0	2	498	108	0	62	0	170	0	893	169	0	1062	0	0	0	0	0	1730	2
Grand Total	168	2600	0	9	2777	565	0	166	1	732	0	2405	456	1	2862	0	0	0	0	0	6371	11
Apprch %	6.0%	93.6%	0.0%	0.3%		77.2%	0.0%	22.7%	0.1%		0.0%	84.0%	15.9%	0.0%		0.0%	0.0%	0.0%	0.0%			
Total %	2.6%	40.8%	0.0%	0.1%	43.6%	8.9%	0.0%	2.6%	0.0%	11.5%	0.0%	37.7%	7.2%	0.0%	44.9%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	

AM PEAK HOUR	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	13	247	0	0	260	54	0	10	0	64	0	95	29	0	124	0	0	0	0	0	448
8:15	9	196	0	0	205	36	0	12	0	48	0	106	24	0	130	0	0	0	0	0	383
8:30	14	246	0	0	260	25	0	3	0	28	0	185	9	0	194	0	0	0	0	0	482
8:45	8	220	0	1	229	43	0	8	0	51	0	236	6	0	242	0	0	0	0	0	522
Total Volume	44	909	0	1	954	158	0	33	0	191	0	622	68	0	690	0	0	0	0	0	1835
% App Total	4.6%	95.3%	0.0%	0.1%		82.7%	0.0%	17.3%	0.0%		0.0%	90.1%	9.9%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.786	.920	.000	.250	.917	.731	.000	.688	.000	.746	.000	.659	.586	.000	.713	.000	.000	.000	.000	.000	.879

PM PEAK HOUR	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	6	141	0	2	149	30	0	12	0	42	0	189	40	0	229	0	0	0	0	0	420
17:15	14	119	0	0	133	28	0	15	0	43	0	223	42	0	265	0	0	0	0	0	441
17:30	9	88	0	0	97	23	0	20	0	43	0	228	45	0	273	0	0	0	0	0	413
17:45	12	107	0	0	119	27	0	15	0	42	0	253	42	0	295	0	0	0	0	0	456
Total Volume	41	455	0	2	498	108	0	62	0	170	0	893	169	0	1062	0	0	0	0	0	1730
% App Total	8.2%	91.4%	0.0%	0.4%		63.5%	0.0%	36.5%	0.0%		0.0%	84.1%	15.9%	0.0%		0.0%	0.0%	0.0%	0.0%		
PHF	.732	.807	.000	.250	.836	.900	.000	.775	.000	.988	.000	.882	.939	.000	.900	.000	.000	.000	.000	.000	.948

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-010 Junipero Serra Blvd & Arroyo Dr
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0
16:45	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	2	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	2
Grand Total	0	1	0	2	1	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	2	4
Apprch %	0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%				
Total %	0.0%	50.0%	0.0%		50.0%	0.0%	0.0%	0.0%		0.0%	0.0%	50.0%	0.0%		50.0%	0.0%	0.0%	0.0%		0.0%	100.0%	

AM PEAK HOUR	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 08:00 to 09:00																					
Peak Hour For Entire Intersection Begins at 08:00																					
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

PM PEAK HOUR	Junipero Serra Blvd Southbound					Arroyo Dr Westbound					Junipero Serra Blvd Northbound					Arroyo Dr Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-011 I-280 SB Off Ramp & Westborough Blvd
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	64	0	37	0	101	0	99	0	0	99	0	0	0	0	0	0	256	238	0	494	694	0
7:15	46	0	26	0	72	0	127	0	0	127	0	0	0	0	0	0	334	315	0	649	848	0
7:30	50	0	29	0	79	0	183	0	0	183	0	0	0	0	0	0	388	274	0	662	924	0
7:45	60	0	48	0	108	0	311	0	0	311	0	0	0	0	0	0	422	290	0	712	1131	0
Total	220	0	140	0	360	0	720	0	0	720	0	0	0	0	0	0	1400	1117	0	2517	3597	0
8:00	69	0	56	0	125	0	295	0	0	295	0	0	0	0	0	0	390	293	0	683	1103	0
8:15	83	0	52	0	135	0	224	0	0	224	0	0	0	0	0	0	374	287	0	661	1020	0
8:30	76	0	40	0	116	0	193	0	0	193	0	0	0	0	0	0	282	251	0	533	842	0
8:45	81	0	34	0	115	0	179	0	0	179	0	0	0	0	0	0	304	205	0	509	803	0
Total	309	0	182	0	491	0	891	0	0	891	0	0	0	0	0	0	1350	1036	0	2386	3768	0
16:00	141	0	130	0	271	0	339	0	0	339	0	0	0	0	0	0	218	136	0	354	964	0
16:15	145	0	130	0	275	0	327	0	0	327	0	0	0	0	0	0	196	145	0	341	943	0
16:30	152	0	139	0	291	0	349	0	0	349	0	0	0	0	0	0	219	175	0	394	1034	0
16:45	130	0	145	0	275	0	393	0	0	393	0	0	0	0	0	0	218	137	0	355	1023	0
Total	568	0	544	0	1112	0	1408	0	0	1408	0	0	0	0	0	0	851	593	0	1444	3964	0
17:00	154	0	176	0	330	0	399	0	0	399	0	0	0	0	0	0	199	128	0	327	1056	0
17:15	147	0	153	0	300	0	413	0	0	413	0	0	0	0	0	0	226	126	0	352	1065	0
17:30	132	0	187	0	319	0	422	0	0	422	0	0	0	0	0	0	207	161	0	368	1109	0
17:45	162	0	194	0	356	0	382	0	0	382	0	0	0	0	0	0	222	151	0	373	1111	0
Total	595	0	710	0	1305	0	1616	0	0	1616	0	0	0	0	0	0	854	566	0	1420	4341	0
Grand Total	1692	0	1576	0	3268	0	4635	0	0	4635	0	0	0	0	0	0	4455	3312	0	7767	15670	0
Apprch %	51.8%	0.0%	48.2%	0.0%		0.0%	100.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	57.4%	42.6%	0.0%			
Total %	10.8%	0.0%	10.1%	0.0%	20.9%	0.0%	29.6%	0.0%	0.0%	29.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	28.4%	21.1%	0.0%	49.6%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	50	0	29	0	79	0	183	0	0	183	0	0	0	0	0	0	388	274	0	662	924
7:45	60	0	48	0	108	0	311	0	0	311	0	0	0	0	0	0	422	290	0	712	1131
8:00	69	0	56	0	125	0	295	0	0	295	0	0	0	0	0	0	390	293	0	683	1103
8:15	83	0	52	0	135	0	224	0	0	224	0	0	0	0	0	0	374	287	0	661	1020
Total Volume	262	0	185	0	447	0	1013	0	0	1013	0	0	0	0	0	0	1574	1144	0	2718	4178
% App Total	58.6%	0.0%	41.4%	0.0%		0.0%	100.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	57.9%	42.1%	0.0%		
PHF	.789	.000	.826	.000	.828	.000	.814	.000	.000	.814	.000	.000	.000	.000	.000	.000	.932	.976	.000	.954	.924

PM PEAK HOUR	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	154	0	176	0	330	0	399	0	0	399	0	0	0	0	0	0	199	128	0	327	1056
17:15	147	0	153	0	300	0	413	0	0	413	0	0	0	0	0	0	226	126	0	352	1065
17:30	132	0	187	0	319	0	422	0	0	422	0	0	0	0	0	0	207	161	0	368	1109
17:45	162	0	194	0	356	0	382	0	0	382	0	0	0	0	0	0	222	151	0	373	1111
Total Volume	595	0	710	0	1305	0	1616	0	0	1616	0	0	0	0	0	0	854	566	0	1420	4341
% App Total	45.6%	0.0%	54.4%	0.0%		0.0%	100.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	60.1%	39.9%	0.0%		
PHF	.918	.000	.915	.000	.916	.000	.957	.000	.000	.957	.000	.000	.000	.000	.000	.000	.945	.879	.000	.952	.977

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-011 I-280 SB Off Ramp & Westborough Blvd
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1
8:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	0	0	0	4	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	4
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%				
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	50.0%	0.0%		50.0%	0.0%	0.0%	0.0%		0.0%	0.0%	50.0%	0.0%		50.0%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.250	.000		.250	.000	.000	.000		.000	.000	.250	.000		.250	.500

PM PEAK HOUR	I-280 SB Off Ramp Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-012 I-280 NB On Ramp/Junipero Serra Blvd & Westboroug
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	32	92	15	0	139	28	110	7	0	145	91	26	25	0	142	10	166	12	0	188	614	0
7:15	44	142	15	0	201	40	140	9	0	189	117	44	43	0	204	14	182	24	0	220	814	0
7:30	62	158	22	0	242	37	199	13	0	249	136	53	51	0	240	19	243	31	2	295	1026	2
7:45	93	181	32	1	307	41	297	14	0	352	140	61	62	0	263	22	293	48	4	367	1289	5
Total	231	573	84	1	889	146	746	43	0	935	484	184	181	0	849	65	884	115	6	1070	3743	7
8:00	71	174	28	0	273	38	239	29	0	306	154	71	85	0	310	24	263	42	6	335	1224	6
8:15	51	144	23	1	219	30	201	27	0	258	123	76	57	0	256	27	271	39	4	341	1074	5
8:30	62	163	20	0	245	25	134	35	0	194	107	130	39	0	276	30	218	37	3	288	1003	3
8:45	56	161	27	0	244	24	102	21	0	147	87	170	33	0	290	45	239	37	1	322	1003	1
Total	240	642	98	1	981	117	676	112	0	905	471	447	214	0	1132	126	991	155	14	1286	4304	15
16:00	23	53	30	0	106	32	193	34	0	259	194	111	53	1	359	38	213	38	4	293	1017	5
16:15	29	55	29	0	113	35	189	41	0	265	196	130	63	0	389	31	220	31	1	283	1050	1
16:30	30	56	25	0	111	42	231	38	0	311	205	118	54	0	377	41	204	45	6	296	1095	6
16:45	35	59	25	0	119	42	222	42	1	307	230	151	55	2	438	34	196	46	4	280	1144	7
Total	117	223	109	0	449	151	835	155	1	1142	825	510	225	3	1563	144	833	160	15	1152	4306	19
17:00	50	75	33	0	158	49	219	47	5	320	224	144	60	0	428	37	203	51	1	292	1198	6
17:15	24	62	32	0	118	61	247	64	0	372	233	169	46	0	448	35	206	52	4	297	1235	4
17:30	30	47	20	0	97	42	242	49	1	334	224	184	47	1	456	40	220	50	5	315	1202	7
17:45	38	57	36	0	131	45	220	58	0	323	211	186	43	1	441	46	205	50	1	302	1197	2
Total	142	241	121	0	504	197	928	218	6	1349	892	683	196	2	1773	158	834	203	11	1206	4832	19
Grand Total	730	1679	412	2	2823	611	3185	528	7	4331	2672	1824	816	5	5317	493	3542	633	46	4714	17185	60
Apprch %	25.9%	59.5%	14.6%	0.1%		14.1%	73.5%	12.2%	0.2%		50.3%	34.3%	15.3%	0.1%		10.5%	75.1%	13.4%	1.0%			
Total %	4.2%	9.8%	2.4%	0.0%	16.4%	3.6%	18.5%	3.1%	0.0%	25.2%	15.5%	10.6%	4.7%	0.0%	30.9%	2.9%	20.6%	3.7%	0.3%	27.4%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	62	158	22	0	242	37	199	13	0	249	136	53	51	0	240	19	243	31	2	295	1026
7:45	93	181	32	1	307	41	297	14	0	352	140	61	62	0	263	22	293	48	4	367	1289
8:00	71	174	28	0	273	38	239	29	0	306	154	71	85	0	310	24	263	42	6	335	1224
8:15	51	144	23	1	219	30	201	27	0	258	123	76	57	0	256	27	271	39	4	341	1074
Total Volume	277	657	105	2	1041	146	936	83	0	1165	553	261	255	0	1069	92	1070	160	16	1338	4613
% App Total	26.6%	63.1%	10.1%	0.2%		12.5%	80.3%	7.1%	0.0%		51.7%	24.4%	23.9%	0.0%		6.9%	80.0%	12.0%	1.2%		
PHF	.745	.907	.820	.500	.848	.890	.788	.716	.000	.827	.898	.859	.750	.000	.862	.852	.913	.833	.667	.911	.895

PM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	50	75	33	0	158	49	219	47	5	320	224	144	60	0	428	37	203	51	1	292	1198
17:15	24	62	32	0	118	61	247	64	0	372	233	169	46	0	448	35	206	52	4	297	1235
17:30	30	47	20	0	97	42	242	49	1	334	224	184	47	1	456	40	220	50	5	315	1202
17:45	38	57	36	0	131	45	220	58	0	323	211	186	43	1	441	46	205	50	1	302	1197
Total Volume	142	241	121	0	504	197	928	218	6	1349	892	683	196	2	1773	158	834	203	11	1206	4832
% App Total	28.2%	47.8%	24.0%	0.0%		14.6%	68.8%	16.2%	0.4%		50.3%	38.5%	11.1%	0.1%		13.1%	69.2%	16.8%	0.9%		
PHF	.710	.803	.840	.000	.797	.807	.939	.852	.300	.907	.957	.918	.817	.500	.972	.859	.948	.976	.550	.957	.978

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-012 I-280 SB Off Ramp/Junipero Serra Blvd & Westboroug
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0
Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0
8:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2	0
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	0	0	0	1	0	0	1	0	1	1	1	0	0	0	1	0	1	0	0	1	3	2
Apprch %	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%				
Total %	0.0%	0.0%	0.0%		0.0%	0.0%	33.3%	0.0%		33.3%	33.3%	0.0%	0.0%		33.3%	0.0%	33.3%	0.0%		33.3%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
8:15	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	3
% App Total	0.0%	0.0%	0.0%			0.0%	100.0%	0.0%			100.0%	0.0%	0.0%			0.0%	100.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.250	.000		.250	.250	.000	.000		.250	.000	.250	.000		.250	.750

PM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 17:00 to 18:00																					
Peak Hour For Entire Intersection Begins at 17:00																					
17:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

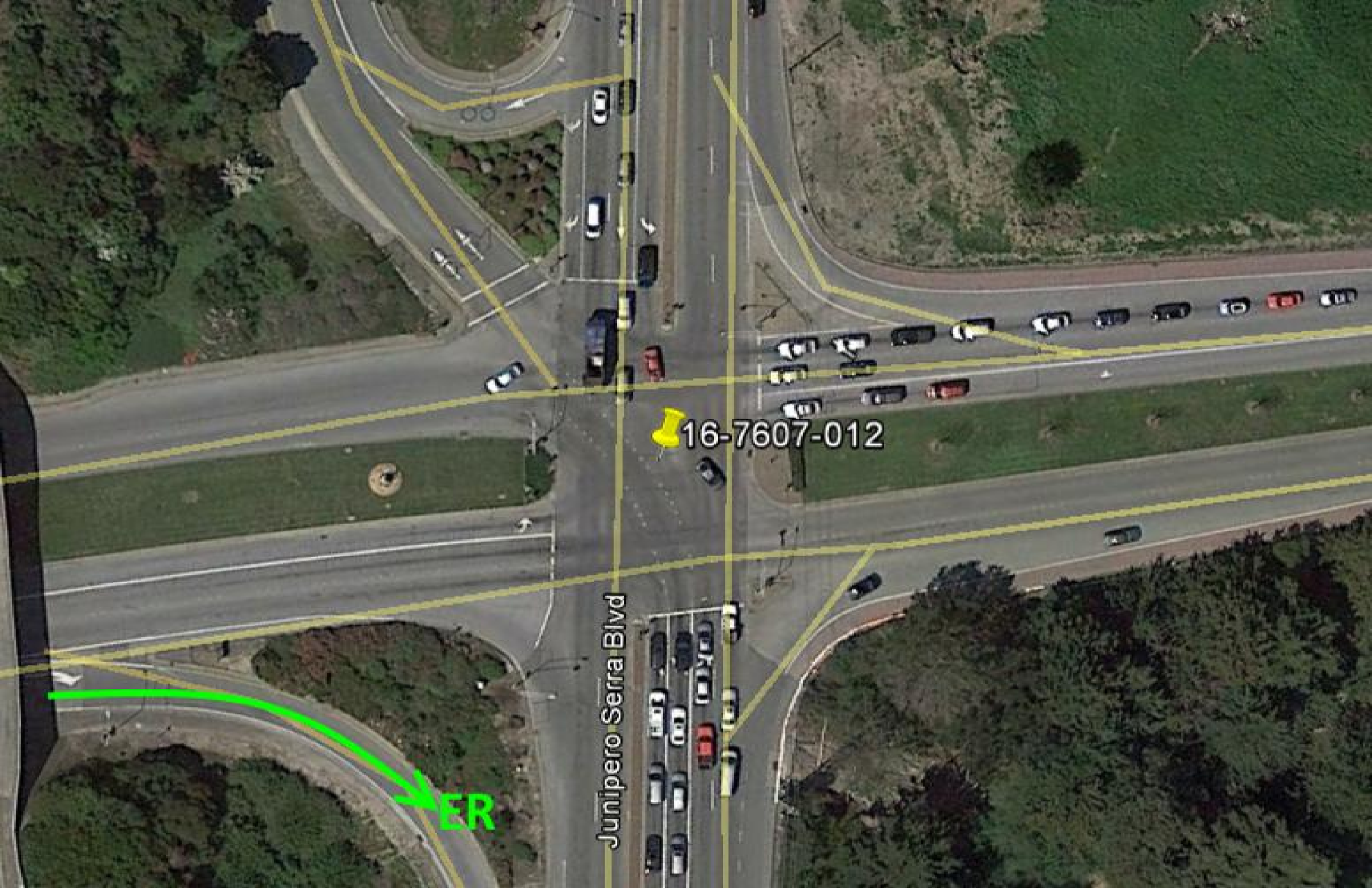
File Name : 16-7607-112 I-280 NB On Ramp/Junipero Serra Blvd & Westborou
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	120	0	120	120	0
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174	0	174	174	0
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	0	125	125	0
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131	0	131	131	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	550	0	550	550	0
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	0	123	123	0
8:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	0	123	123	0
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	77	0	77	77	0
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	56	0	56	56	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	379	0	379	379	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	0	64	64	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	57	0	57	57	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	70	70	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	0	71	71	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	262	0	262	262	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0	58	58	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	73	73	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	0	45	45	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	0	67	67	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	243	0	243	243	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1434	0	1434	1434	0
Apprch %	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%			
Total %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	174	0	174	174
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	125	0	125	125
7:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	131	0	131	131
8:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	123	0	123	123
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	553	0	553	553
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.795	.000	.795	.795

PM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	0	70	70
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	0	71	71
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	0	58	58
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73	0	73	73
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272	0	272	272
% App Total	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	100.0%	0.0%		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.932	.000	.932	.932


16-7607-012
ER
Junipero Serra Blvd

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-212 I-280 NB On Ramp/Junipero Serra Blvd & Westboroug
Date : 9/13/2016

Unshifted Count = All Vehicles & Uturns

	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total	Uturns Total
7:00	0	0	34	0	34	0	0	74	0	74	0	45	0	0	45	0	0	0	0	0	153	0
7:15	0	0	53	0	53	0	0	91	0	91	0	62	0	0	62	0	0	0	0	0	206	0
7:30	0	0	41	0	41	0	0	100	0	100	0	69	0	0	69	1	0	0	0	1	211	0
7:45	0	0	22	0	22	0	0	107	0	107	0	48	0	0	48	2	0	0	0	2	179	0
Total	0	0	150	0	150	0	0	372	0	372	0	224	0	0	224	3	0	0	0	3	749	0
8:00	0	0	29	0	29	0	0	76	0	76	0	50	0	0	50	2	0	0	0	2	157	0
8:15	0	0	22	0	22	0	0	84	0	84	0	49	0	0	49	2	0	0	0	2	157	0
8:30	0	0	25	0	25	0	0	44	0	44	0	22	0	0	22	3	0	0	0	3	94	0
8:45	0	0	8	0	8	0	0	35	0	35	0	9	0	0	9	1	0	0	0	1	53	0
Total	0	0	84	0	84	0	0	239	0	239	0	130	0	0	130	8	0	0	0	8	461	0
16:00	0	0	14	0	14	0	0	68	0	68	0	20	0	0	20	3	0	0	0	3	105	0
16:15	0	0	16	0	16	0	0	63	0	63	0	24	0	0	24	0	0	0	0	0	103	0
16:30	0	0	3	0	3	0	0	80	0	80	0	23	0	0	23	2	0	0	0	2	108	0
16:45	0	0	7	0	7	0	0	69	0	69	0	18	0	0	18	1	0	0	0	1	95	0
Total	0	0	40	0	40	0	0	280	0	280	0	85	0	0	85	6	0	0	0	6	411	0
17:00	0	0	14	0	14	0	0	67	0	67	0	19	0	0	19	1	0	0	0	1	101	0
17:15	0	0	18	0	18	0	0	72	0	72	0	28	0	0	28	1	0	0	0	1	119	0
17:30	0	0	16	0	16	0	0	57	0	57	0	32	0	0	32	3	0	0	0	3	108	0
17:45	0	0	13	0	13	0	0	46	0	46	0	23	0	0	23	0	0	0	0	0	82	0
Total	0	0	61	0	61	0	0	242	0	242	0	102	0	0	102	5	0	0	0	5	410	0
Grand Total	0	0	335	0	335	0	0	1133	0	1133	0	541	0	0	541	22	0	0	0	22	2031	0
Apprch %	0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%			
Total %	0.0%	0.0%	16.5%	0.0%	16.5%	0.0%	0.0%	55.8%	0.0%	55.8%	0.0%	26.6%	0.0%	0.0%	26.6%	1.1%	0.0%	0.0%	0.0%	1.1%	100.0%	

AM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 07:15 to 08:15																					
Peak Hour For Entire Intersection Begins at 07:15																					
7:15	0	0	53	0	53	0	0	91	0	91	0	62	0	0	62	0	0	0	0	0	206
7:30	0	0	41	0	41	0	0	100	0	100	0	69	0	0	69	1	0	0	0	1	211
7:45	0	0	22	0	22	0	0	107	0	107	0	48	0	0	48	2	0	0	0	2	179
8:00	0	0	29	0	29	0	0	76	0	76	0	50	0	0	50	2	0	0	0	2	157
Total Volume	0	0	145	0	145	0	0	374	0	374	0	229	0	0	229	5	0	0	0	5	753
% App Total	0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		
PHF	.000	.000	.684	.000	.684	.000	.000	.874	.000	.874	.000	.830	.000	.000	.830	.625	.000	.000	.000	.625	.892

PM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	3	0	3	0	0	80	0	80	0	23	0	0	23	2	0	0	0	2	108
16:45	0	0	7	0	7	0	0	69	0	69	0	18	0	0	18	1	0	0	0	1	95
17:00	0	0	14	0	14	0	0	67	0	67	0	19	0	0	19	1	0	0	0	1	101
17:15	0	0	18	0	18	0	0	72	0	72	0	28	0	0	28	1	0	0	0	1	119
Total Volume	0	0	42	0	42	0	0	288	0	288	0	88	0	0	88	5	0	0	0	5	423
% App Total	0.0%	0.0%	100.0%	0.0%		0.0%	0.0%	100.0%	0.0%		0.0%	100.0%	0.0%	0.0%		100.0%	0.0%	0.0%	0.0%		
PHF	.000	.000	.583	.000	.583	.000	.000	.900	.000	.900	.000	.786	.000	.000	.786	.625	.000	.000	.000	.625	.889

ALL TRAFFIC DATA

City of South San Francisco
All Vehicles & Uturns On Unshifted
Bikes & Peds On Bank 1
Nothing On Bank 2

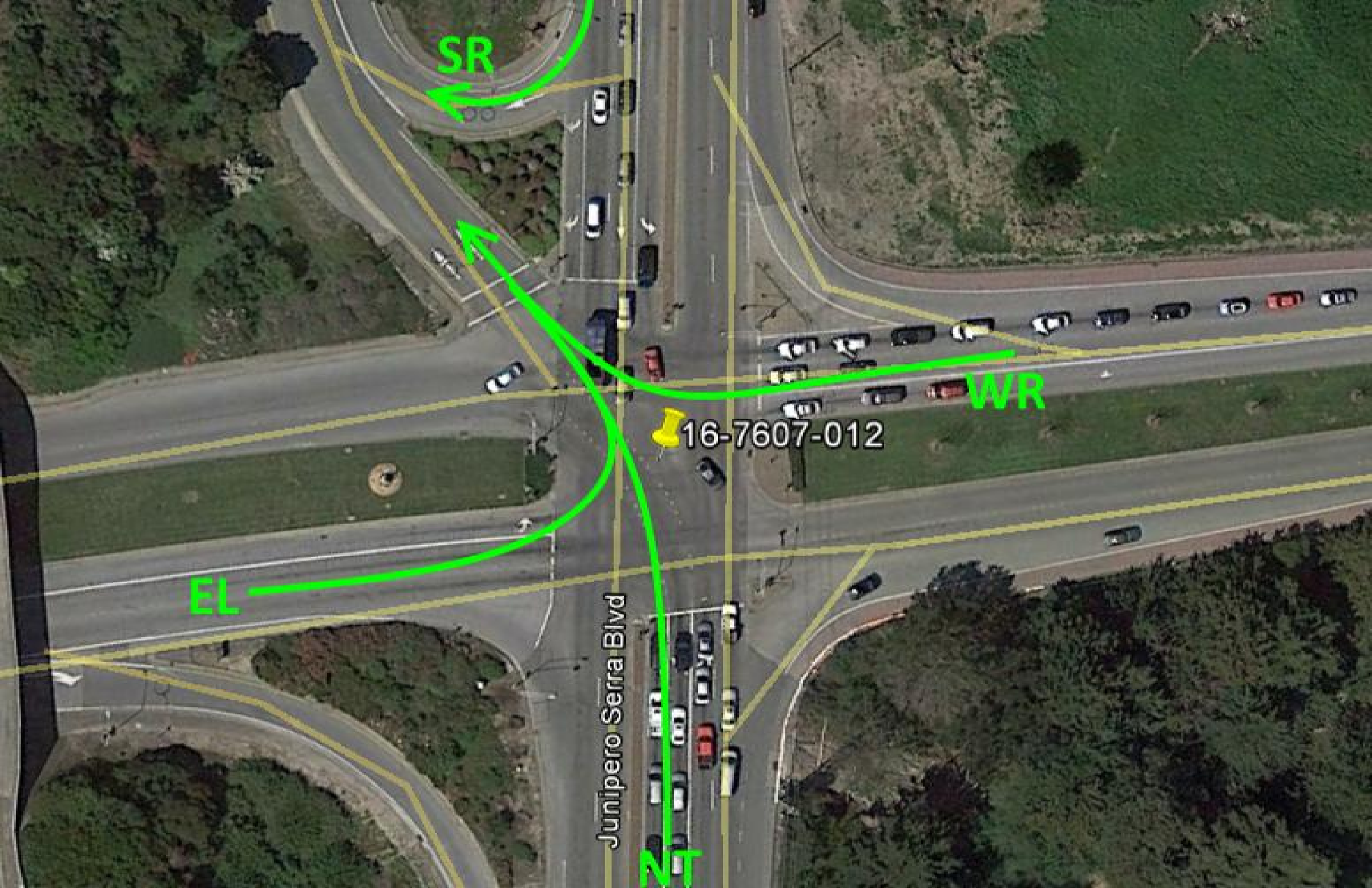
(916) 771-8700
orders@atdtraffic.com

File Name : 16-7607-212 I-280 SB Off Ramp/Junipero Serra Blvd & Westboroug
Date : 9/13/2016

Bank 1 Count = Bikes & Peds

	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound						
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total	Peds Total
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Apprch %	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 %	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	

PM PEAK HOUR	I-280 SB Off Ramp/Junipero Serra Blvd Southbound					Westborough Blvd Westbound					I-280 SB Off Ramp/Junipero Serra Blvd Northbound					Westborough Blvd Eastbound					
START TIME	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	LEFT	THRU	RIGHT	PEDS	APP.TOTAL	Total
Peak Hour Analysis From 16:30 to 17:30																					
Peak Hour For Entire Intersection Begins at 16:30																					
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
% App Total	0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			0.0%	0.0%	0.0%			
PHF	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000	.000	.000		.000	.000


SR
WR
16-7607-012
EL
Junipero Serra Blvd
NT

Trip Generation

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block A**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	380	Avg	6.65	0.51	0.62	2528	194	236	39	155	153	83
230	Residential Condominium/Townhouse	Dwelling Unit(s)	39	Avg	5.81	0.44	0.52	228	17	20	3	14	13	7
							Totals	**2756**	**211**	**256**	**42**	**169**	**166**	**90**

4/20/2017
9:25 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block B**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	43	Avg	6.65	0.51	0.62	286	22	27	4	18	18	9
							Totals	**286**	**22**	**27**	**4**	**18**	**18**	**9**

4/20/2017
9:25 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block C**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	75	Avg	6.65	0.51	0.62	500	38	47	8	30	31	16
230	Residential Condominium/Townhouse	Dwelling Unit(s)	19	Avg	5.81	0.44	0.52	112	8	10	1	7	7	3
820	Shopping Center	1,000 Sq Ft GLA	11.5	Avg	42.70	0.96	3.71	492	11	43	7	4	21	22
							Totals	**1104**	**57**	**100**	**16**	**41**	**59**	**41**

4/20/2017
9:25 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block D**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
							Totals	0	0	0	0	0	0	0

4/20/2017
9:26 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block E**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
710	General Office Building *(1)*	1,000 Sq Ft	44.5	Avg	11.03	1.56	1.49	492	69	66	61	8	11	55
820	Shopping Center	1,000 Sq Ft GLA	-24.26	Avg	42.70	0.96	3.71	-1036	-23	-90	-14	-9	-43	-47
							Totals	**-544**	**46**	**-24**	**47**	**-1**	**-32**	**8**

4/20/2017
9:26 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block F**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
590	Library	1,000 Sq Ft	50	Avg	56.24	1.04	7.30	2812	52	365	37	15	175	190
							Totals	**2812**	**52**	**365**	**37**	**15**	**175**	**190**

4/20/2017
9:26 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block G**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
435	Multipurpose Recreational Facility	Acre(s)	43.5	Avg	90.38	1.92	5.77	3932	84	251	0	84	0	251
							Totals	**3932**	**84**	**251**	**0**	**84**	**0**	**251**

4/20/2017
9:26 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block H**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	194	Avg	6.65	0.51	0.62	1292	99	120	20	79	78	42
230	Residential Condominium/Townhouse	Dwelling Unit(s)	29	Avg	5.81	0.44	0.52	170	13	15	2	11	10	5
820	Shopping Center	1,000 Sq Ft GLA	-8.53	Avg	42.70	0.96	3.71	-366	-8	-32	-5	-3	-15	-17
							Totals	**1096**	**104**	**103**	**17**	**87**	**73**	**30**

4/20/2017
9:27 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block I**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	102	Avg	6.65	0.51	0.62	680	52	63	10	42	41	22
							Totals	**680**	**52**	**63**	**10**	**42**	**41**	**22**

4/20/2017
9:27 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Block J**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	36	Avg	6.65	0.51	0.62	240	18	22	4	14	14	8
230	Residential Condominium/Townhouse	Dwelling Unit(s)	9	Avg	5.81	0.44	0.52	54	4	5	1	3	3	2
							Totals	**294**	**22**	**27**	**5**	**17**	**17**	**10**

4/20/2017
9:27 AM
Planner Sheet

Trip Generation Planner (ITE 9th Edition)

Kimley»Horn

Weekday Trip Generation
Trips Based on Average Rates/Equations

Project Name **ECR Chestnut - Outside Focus Area**
Project Number

ITE Code	Land Use Description	Independent Variable	No. of Units	Avg Rate or Eq	Trip Rates: Daily Rate	Trip Rates: AM Rate	Trip Rates: PM Rate	Total Trips: Daily Trips	Total Trips: AM Trips	Total Trips: PM Trips	Total Trips: AM Trips In	Total Trips: AM Trips Out	Total Trips: PM Trips In	Total Trips: PM Trips Out
220	Apartment	Dwelling Unit(s)	305	Avg	6.65	0.51	0.62	2030	156	189	31	125	123	66
820	Shopping Center	1,000 Sq Ft GLA	61.7	Avg	42.70	0.96	3.71	2636	59	229	37	22	110	119
							Totals	**4666**	**215**	**418**	**68**	**147**	**233**	**185**

4/20/2017
9:28 AM
Planner Sheet

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	South SF Chestnut & El Camino Specific Plan	**Organization:**	Kimley Horn and Assoiciates
Project Location:	South San Francisco, CA	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	2016	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	12	1,000 sf GFA	11	7	4
Restaurant				0		
Cinema/Entertainment				0		
Residential	220, 230	137	DU	68	13	55
Hotel				0		
All Other Land Uses[2]				0		
				79	20	59

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	79	20	59
Internal Capture Percentage	3%	5%	2%
External Vehicle-Trips[5]	77	19	58
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	14%	0%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	0%	2%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	South SF Chestnut & El Camino Specific Plan
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	7	7	1.00	4	4
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	13	13	1.00	55	55
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	1		1	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	1	11	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	1		0	1	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	1	6	7	6	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	0	13	13	13	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	0	4	4	4	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	54	55	54	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	South SF Chestnut & El Camino Specific Plan	**Organization:**	Kimley Horn and Assoiciates
Project Location:	South San Francisco, CA	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	2016	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	12	1,000 sf GFA	43	21	22
Restaurant				0		
Cinema/Entertainment				0		
Residential	220, 230	137	DU	84	56	28
Hotel				0		
All Other Land Uses[2]				0		
				127	77	50

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					500	
Restaurant						
Cinema/Entertainment						
Residential		500				
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	6	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	2	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	127	77	50
Internal Capture Percentage	13%	10%	16%
External Vehicle-Trips[5]	111	69	42
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	10%	27%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	11%	7%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	South SF Chestnut & El Camino Specific Plan
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	21	21	1.00	22	22
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	56	56	1.00	28	28
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		6	1	6	1
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	1	11	6	0		1
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		2	0	0	2	0
Retail	0		0	0	26	0
Restaurant	0	11		0	9	0
Cinema/Entertainment	0	1	0		2	0
Residential	0	2	0	0		0
Hotel	0	0	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	2	19	21	19	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	6	50	56	50	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	6	16	22	16	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	2	26	28	26	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	South SF Chestnut & El Camino Specific Plan	**Organization:**	Kimley Horn and Assoiciates
Project Location:	South San Francisco, CA	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	2016	**Checked By:**	
Analysis Period:	**AM Street Peak Hour**	**Date:**	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	62	1,000 sf GFA	62	38	24
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	305	DU	156	31	125
Hotel				0		
All Other Land Uses[2]				0		
				218	69	149

Table 2-A: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	1	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary

	Total	Entering	Exiting
All Person-Trips	218	69	149
Internal Capture Percentage	2%	3%	1%
External Vehicle-Trips[5]	214	67	147
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	3%	4%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	3%	1%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	South SF Chestnut & El Camino Specific Plan
Analysis Period:	**AM Street Peak Hour**

Table 7-A: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-A (D): Entering Trips			Table 7-A (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	38	38	1.00	24	24
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	31	31	1.00	125	125
Hotel	1.00	0	0	1.00	0	0

Table 8-A (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	7		3	0	3	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	3	1	25	0		0
Hotel	0	0	0	0	0	

Table 8-A (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		12	0	0	0	0
Retail	0		0	0	1	0
Restaurant	0	3		0	2	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	6	0	0		0
Hotel	0	2	0	0	0	

Table 9-A (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	1	37	38	37	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	30	31	30	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-A (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	1	23	24	23	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	1	124	125	124	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

NCHRP 684 Internal Trip Capture Estimation Tool			
Project Name:	South SF Chestnut & El Camino Specific Plan	**Organization:**	Kimley Horn and Assoiciates
Project Location:	South San Francisco, CA	**Performed By:**	
Scenario Description:		**Date:**	
Analysis Year:	2016	**Checked By:**	
Analysis Period:	**PM Street Peak Hour**	**Date:**	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)

Land Use	Development Data (*For Information Only*)			Estimated Vehicle-Trips[3]		
	ITE LUCs[1]	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail	820	62	1,000 sf GFA	230	113	117
Restaurant				0		
Cinema/Entertainment				0		
Residential	220	305	DU	189	123	66
Hotel				0		
All Other Land Uses[2]				0		
				419	236	183

Table 2-P: Mode Split and Vehicle Occupancy Estimates

Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.[4]	% Transit	% Non-Motorized	Veh. Occ.[4]	% Transit	% Non-Motorized
Office						
Retail	1.00	0%	0%	1.00	0%	0%
Restaurant						
Cinema/Entertainment						
Residential	1.00	0%	0%	1.00	0%	0%
Hotel						
All Other Land Uses[2]						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail					500	
Restaurant						
Cinema/Entertainment						
Residential		500				
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	30	0
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	10	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary

	Total	Entering	Exiting
All Person-Trips	419	236	183
Internal Capture Percentage	19%	17%	22%
External Vehicle-Trips[5]	339	196	143
External Transit-Trips[6]	0	0	0
External Non-Motorized Trips[6]	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use

Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	9%	26%
Restaurant	N/A	N/A
Cinema/Entertainment	N/A	N/A
Residential	24%	15%
Hotel	N/A	N/A

[1]Land Use Codes (LUCs) from *Trip Generation Manual*, published by the Institute of Transportation Engineers.

[2]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.

[3]Enter trips assuming no transit or non-motorized trips (as assumed in ITE *Trip Generation Manual*).

[4]Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be

[5]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.

[6]Person-Trips

*Indicates computation that has been rounded to the nearest whole number.

Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

Project Name:	South SF Chestnut & El Camino Specific Plan
Analysis Period:	**PM Street Peak Hour**

Table 7-P: Conversion of Vehicle-Trip Ends to Person-Trip Ends

Land Use	Table 7-P (D): Entering Trips			Table 7-P (O): Exiting Trips		
	Veh. Occ.	Vehicle-Trips	Person-Trips*	Veh. Occ.	Vehicle-Trips	Person-Trips*
Office	1.00	0	0	1.00	0	0
Retail	1.00	113	113	1.00	117	117
Restaurant	1.00	0	0	1.00	0	0
Cinema/Entertainment	1.00	0	0	1.00	0	0
Residential	1.00	123	123	1.00	66	66
Hotel	1.00	0	0	1.00	0	0

Table 8-P (O): Internal Person-Trip Origin-Destination Matrix (Computed at Origin)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	2		34	5	30	6
Restaurant	0	0		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	3	25	14	0		2
Hotel	0	0	0	0	0	

Table 8-P (D): Internal Person-Trip Origin-Destination Matrix (Computed at Destination)

Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		9	0	0	5	0
Retail	0		0	0	57	0
Restaurant	0	57		0	20	0
Cinema/Entertainment	0	5	0		5	0
Residential	0	10	0	0		0
Hotel	0	2	0	0	0	

Table 9-P (D): Internal and External Trips Summary (Entering Trips)

Destination Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	10	103	113	103	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	30	93	123	93	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

Table 9-P (O): Internal and External Trips Summary (Exiting Trips)

Origin Land Use	Person-Trip Estimates			External Trips by Mode*		
	Internal	External	Total	Vehicles[1]	Transit[2]	Non-Motorized[2]
Office	0	0	0	0	0	0
Retail	30	87	117	87	0	0
Restaurant	0	0	0	0	0	0
Cinema/Entertainment	0	0	0	0	0	0
Residential	10	56	66	56	0	0
Hotel	0	0	0	0	0	0
All Other Land Uses[3]	0	0	0	0	0	0

[1]Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

[2]Person-Trips

[3]Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator

*Indicates computation that has been rounded to the nearest whole number.

Existing (2016) Traffic Conditions Analysis

Scenario Report

Scenario:	Existing AM
Command:	Existing AM
Volume:	Existing AM
Geometry:	Existing AM
Impact Fee:	Default Impact Fee
Trip Generation:	None
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Existing AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	D	53.4	0.864	D	53.4	0.864	+ 0.000 D/V
# 2 El Camino Real / McLellan Dr	C	31.8	0.753	C	31.8	0.753	+ 0.000 D/V
# 3 El Camino Real / Arroyo Dr	C	25.5	0.447	C	25.5	0.447	+ 0.000 D/V
# 4 El Camino Real / Chestnut Ave	E	56.7	0.894	E	56.7	0.894	+ 0.000 D/V
# 5 El Camino Real / W. Orange Ave	D	36.8	0.735	D	36.8	0.735	+ 0.000 D/V
# 6 Mission Rd / Grand Ave	B	12.9	0.481	B	12.9	0.481	+ 0.000 V/C
# 7 Grand Ave / Chestnut Ave	C	32.2	0.661	C	32.2	0.661	+ 0.000 D/V
# 8 Mission Rd / Oak Ave	B	14.9	0.231	B	14.9	0.231	+ 0.000 D/V
# 9 Mission Rd / Chestnut Ave	C	26.7	0.615	C	26.7	0.615	+ 0.000 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	99.7	0.920	F	99.7	0.920	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	A	5.3	0.635	A	5.3	0.635	+ 0.000 D/V
# 12 I-280 NB Ramps / Westborough B	F	85.6	1.099	F	85.6	1.099	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	130	Critical Vol./Cap.(X):	0.864
Loss Time (sec):	12	Average Delay (sec/veh):	53.4
Optimal Cycle:	106	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:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
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:	575	307	6	4	577	67	157	12	850	21	30	8
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:	575	307	6	4	577	67	157	12	850	21	30	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	684	365	7	4	631	73	176	13	954	26	37	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	684	365	7	4	631	73	176	13	954	26	37	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	684	365	7	4	631	73	176	13	954	26	37	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.91	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.96	0.04	1.00	1.79	0.21	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3460	68	1769	3119	362	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.20	0.11	0.11	0.00	0.20	0.20	0.05	0.05	0.34	0.04	0.04	0.04
Crit Moves:	****				****				****		****	
Green/Cycle:	0.22	0.34	0.34	0.10	0.22	0.22	0.38	0.38	0.38	0.09	0.09	0.09
Volume/Cap:	0.91	0.31	0.31	0.02	0.91	0.91	0.14	0.14	0.91	0.43	0.43	0.43
Uniform Del:	49.6	31.6	31.6	52.9	49.4	49.4	26.8	26.8	38.6	55.8	55.8	55.8
IncremntDel:	15.4	0.1	0.1	0.1	15.1	15.1	0.0	0.0	11.8	1.8	1.8	1.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	65.0	31.7	31.7	52.9	64.5	64.5	26.8	26.8	50.4	57.6	57.6	57.6
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:	65.0	31.7	31.7	52.9	64.5	64.5	26.8	26.8	50.4	57.6	57.6	57.6
LOS by Move:	E	C	C	D	E	E	C	C	D	E	E	E
HCM2kAvgQ:	15	5	5	0	18	18	2	2	24	3	3	3

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 El Camino Real / McLellan Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.753
Loss Time (sec):	12	Average Delay (sec/veh):	31.8
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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1 1	0	0 1	0 0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
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:	31	470	121	394	1087	29	33	25	50	213	28	365
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:	31	470	121	394	1087	29	33	25	50	213	28	365
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	34	520	134	450	1241	33	40	31	61	270	36	463
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	520	134	450	1241	33	40	31	61	270	36	463
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	520	134	450	1241	33	40	31	61	270	36	463
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.80	0.90	0.93	0.93	0.95	0.95	0.76	0.88	0.88	0.87
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	0.57	0.43	1.00	1.33	0.09	1.58
Final Sat.:	1769	5083	1521	3432	3432	92	1030	780	1442	2223	146	2607
Capacity Analysis Module:												
Vol/Sat:	0.02	0.10	0.09	0.13	0.36	0.36	0.04	0.04	0.04	0.12	0.24	0.18
Crit Moves:	****				****		****				****	
Green/Cycle:	0.04	0.20	0.49	0.26	0.42	0.42	0.13	0.13	0.13	0.29	0.29	0.29
Volume/Cap:	0.48	0.50	0.18	0.50	0.85	0.85	0.30	0.30	0.33	0.43	0.85	0.62
Uniform Del:	47.0	35.3	14.3	31.4	25.9	25.9	39.4	39.4	39.5	29.1	33.7	31.1
IncremntDel:	5.1	0.4	0.1	0.5	4.9	4.9	0.7	0.7	1.0	0.2	7.8	1.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	52.1	35.7	14.4	31.9	30.8	30.8	40.1	40.1	40.5	29.3	41.5	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:	52.1	35.7	14.4	31.9	30.8	30.8	40.1	40.1	40.5	29.3	41.5	32.1
LOS by Move:	D	D	B	C	C	C	D	D	D	C	D	C
HCM2kAvgQ:	1	5	2	6	18	18	2	2	2	5	15	9

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 El Camino Real / Arroyo Dr

Cycle (sec):	144	Critical Vol./Cap.(X):	0.447
Loss Time (sec):	9	Average Delay (sec/veh):	25.5
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	3 0	0	1 0	2 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	141	947	0	7	912	154	200	0	244	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:	141	947	0	7	912	154	200	0	244	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:	141	947	0	7	912	154	200	0	244	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:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	166	1118	0	7	928	157	225	0	275	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	166	1118	0	7	928	157	225	0	275	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:	166	1118	0	7	928	157	225	0	275	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.87	0.87	0.88	1.00	0.88	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.56	0.44	1.45	0.00	1.55	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	4250	718	2423	0	2582	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.09	0.22	0.00	0.00	0.22	0.22	0.09	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.21	0.62	0.00	0.08	0.49	0.49	0.24	0.00	0.24	0.00	0.00	0.00
Volume/Cap:	0.45	0.35	0.00	0.05	0.45	0.45	0.39	0.00	0.45	0.00	0.00	0.00
Uniform Del:	49.5	13.3	0.0	61.4	24.1	24.1	46.1	0.0	46.8	0.0	0.0	0.0
IncremntDel:	0.9	0.1	0.0	0.2	0.1	0.1	0.2	0.0	0.3	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	50.4	13.3	0.0	61.6	24.2	24.2	46.3	0.0	47.0	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:	50.4	13.3	0.0	61.6	24.2	24.2	46.3	0.0	47.0	0.0	0.0	0.0
LOS by Move:	D	B	A	E	C	C	D	A	D	A	A	A
HCM2kAvgQ:	7	9	0	0	11	11	6	0	7	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 El Camino Real / Chestnut Ave

Cycle (sec):	144	Critical Vol./Cap.(X):	0.894
Loss Time (sec):	12	Average Delay (sec/veh):	56.7
Optimal Cycle:	127	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	208	887	76	314	659	475	366	603	148
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:	448	597	284	208	887	76	314	659	475	366	603	148
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:	448	597	284	208	887	76	314	659	475	366	603	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	483	643	306	237	1009	86	343	719	519	490	807	198
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	483	643	306	237	1009	86	343	719	519	490	807	198
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	483	643	306	237	1009	86	343	719	519	490	807	198
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1560	3432	5083	1530	1769	3538	1535	3432	3538	1547
Capacity Analysis Module:												
Vol/Sat:	0.14	0.18	0.20	0.07	0.20	0.06	0.19	0.20	0.34	0.14	0.23	0.13
Crit Moves:	****				****				****	****		
Green/Cycle:	0.16	0.28	0.28	0.10	0.22	0.22	0.25	0.38	0.38	0.16	0.29	0.29
Volume/Cap:	0.89	0.65	0.70	0.70	0.89	0.25	0.79	0.54	0.89	0.89	0.79	0.44
Uniform Del:	59.5	45.5	46.4	62.8	54.4	46.2	50.7	35.0	42.1	59.3	46.9	41.6
IncremntDel:	17.2	1.5	5.0	6.4	9.4	0.4	9.1	0.4	16.3	17.0	4.0	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	76.7	47.1	51.3	69.2	63.8	46.6	59.7	35.4	58.4	76.3	51.0	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:	76.7	47.1	51.3	69.2	63.8	46.6	59.7	35.4	58.4	76.3	51.0	42.2
LOS by Move:	E	D	D	E	E	D	E	D	E	E	D	D
HCM2kAvgQ:	14	14	13	7	19	3	16	13	25	14	19	7

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 El Camino Real / W. Orange Ave

Cycle (sec):	120	Critical Vol./Cap.(X):	0.735
Loss Time (sec):	12	Average Delay (sec/veh):	36.8
Optimal Cycle:	67	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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2	1 0	1 0	2	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
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:	63	897	119	190	1427	77	151	63	45	110	63	197
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:	63	897	119	190	1427	77	151	63	45	110	63	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	82	1171	155	201	1507	81	182	76	54	119	68	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	1171	155	201	1507	81	182	76	54	119	68	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:	82	1171	155	201	1507	81	182	76	54	119	68	213
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.88	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4403	584	1769	4783	258	1269	530	1510	1147	657	1534
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.11	0.32	0.32	0.14	0.14	0.04	0.10	0.10	0.14
Crit Moves:		****		****			****					****
Green/Cycle:	0.07	0.36	0.36	0.15	0.45	0.45	0.20	0.20	0.20	0.19	0.19	0.19
Volume/Cap:	0.70	0.74	0.74	0.74	0.70	0.70	0.74	0.74	0.18	0.55	0.55	0.74
Uniform Del:	54.8	33.3	33.3	48.4	26.5	26.5	45.4	45.4	40.3	44.0	44.0	45.8
IncremntDel:	17.2	1.6	1.6	9.9	1.0	1.0	7.9	7.9	0.3	1.9	1.9	9.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	72.0	34.9	34.9	58.3	27.5	27.5	53.2	53.2	40.6	45.9	45.9	55.2
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:	72.0	34.9	34.9	58.3	27.5	27.5	53.2	53.2	40.6	45.9	45.9	55.2
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	E
HCM2kAvgQ:	4	17	16	9	18	18	10	10	2	7	7	9

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.481
Loss Time (sec):	0	Average Delay (sec/veh):	12.9
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 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
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:	3	273	19	161	334	1	4	2	2	50	2	192
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:	3	273	19	161	334	1	4	2	2	50	2	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	4	337	23	174	361	1	6	3	3	65	3	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	337	23	174	361	1	6	3	3	65	3	249
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	337	23	174	361	1	6	3	3	65	3	249
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	1.85	0.13	0.65	1.34	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	11	1043	73	361	780	2	227	113	113	460	18	571
Capacity Analysis Module:												
Vol/Sat:	0.33	0.32	0.32	0.48	0.46	0.46	0.03	0.03	0.03	0.14	0.14	0.44
Crit Moves:	****			****				****				****
Delay/Veh:	11.8	11.7	11.6	14.6	13.8	13.5	10.4	10.4	10.4	11.0	11.0	12.9
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:	11.8	11.7	11.6	14.6	13.8	13.5	10.4	10.4	10.4	11.0	11.0	12.9
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	11.7			14.0			10.4			12.5		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.7			14.0			10.4			12.5		
LOS by Appr:	B			B			B			B		
AllWayAvgQ:	0.4	0.4	0.4	0.9	0.8	0.8	0.0	0.0	0.0	0.1	0.1	0.7

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 #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.661
Loss Time (sec):	12	Average Delay (sec/veh):	32.2
Optimal Cycle:	54	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:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
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:	64	402	138	38	326	76	86	215	81	131	174	51
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:	64	402	138	38	326	76	86	215	81	131	174	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:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	71	445	153	45	388	90	120	299	113	152	201	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	445	153	45	388	90	120	299	113	152	201	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	71	445	153	45	388	90	120	299	113	152	201	59
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.28	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1293	487	1769	1389	407
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.10	0.03	0.21	0.06	0.07	0.23	0.23	0.09	0.14	0.14
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.36	0.36	0.04	0.34	0.34	0.15	0.35	0.35	0.13	0.33	0.33
Volume/Cap:	0.62	0.66	0.27	0.64	0.62	0.18	0.44	0.66	0.66	0.66	0.44	0.44
Uniform Del:	45.6	26.8	22.6	47.3	27.8	23.4	38.5	27.5	27.5	41.4	26.5	26.5
IncremntDel:	10.0	2.5	0.3	18.0	1.9	0.2	1.2	2.7	2.7	7.0	0.5	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	55.6	29.3	22.9	65.3	29.7	23.6	39.7	30.2	30.2	48.5	27.1	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:	55.6	29.3	22.9	65.3	29.7	23.6	39.7	30.2	30.2	48.5	27.1	27.1
LOS by Move:	E	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	12	3	3	11	2	3	11	11	6	6	6

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: B[14.9]

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 1	0 1	0	0 1	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	301	7	7	376	0	0	0	0	62	0	24
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 1.00	1.00	1.00
Initial Bse:	0	301	7	7	376	0	0	0	0	62	0	24
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	301	7	7	376	0	0	0	0	62	0	24
User Adj:	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:	0.88 0.88	0.88	0.84	0.84 0.84	0.84	1.00	1.00 1.00	1.00	0.61	0.61	0.61	
PHF Volume:	0	344	8	8	448	0	0	0	0	101	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	344	8	8	448	0	0	0	0	101	0	39
Critical Gap Module:												
Critical Gp:	xxxxx xxxx xxxxx		4.1	xxxx xxxxx xxxxx xxxx xxxxx					6.8	6.5	6.9	
FollowUpTim:	xxxxx xxxx xxxxx		2.2	xxxx xxxxx xxxxx xxxx xxxxx					3.5	4.0	3.3	
Capacity Module:												
Cnflict Vol:	xxxx xxxx xxxxx		352	xxxx xxxxx xxxx xxxx xxxxx					588	812	176	
Potent Cap.:	xxxx xxxx xxxxx		1203	xxxx xxxxx xxxx xxxx xxxxx					440	311	837	
Move Cap.:	xxxx xxxx xxxxx		1203	xxxx xxxxx xxxx xxxx xxxxx					437	309	837	
Volume/Cap:	xxxx xxxx xxxx		0.01	xxxx xxxx xxxx xxxx xxxx					0.23	0.00	0.05	
Level Of Service Module:												
2Way95thQ:	xxxx xxxx xxxxx		0.0	xxxx xxxxx xxxx xxxx xxxxx					xxxx xxxx xxxxx			
Control Del:	xxxxx xxxx xxxxx		8.0	xxxx xxxxx xxxxx xxxx xxxxx					xxxxx xxxx xxxxx			
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx 505 xxxxx		
SharedQueue:	0.0 xxxx xxxxx			0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx 1.1 xxxxx		
Shrd ConDel:	7.2 xxxx xxxxx			8.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx 14.9 xxxxx		
Shared LOS:	A	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			14.9		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.615
Loss Time (sec):	9	Average Delay (sec/veh):	26.7
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	0 0	1	0 0	0 2	1	0 2	0 0	0	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	76	0	372	226	888	0	0	733	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:	0	0	0	76	0	372	226	888	0	0	733	84
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	76	0	372	226	888	0	0	733	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:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	0	0	94	0	458	253	992	0	0	829	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	94	0	458	253	992	0	0	829	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	0	94	0	458	253	992	0	0	829	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.73	0.93	0.93	1.00	1.00	0.92	0.91
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	1.00	2.00	0.00	0.00	1.79	0.21
Final Sat.:	0	0	0	1769	0	2786	1769	3538	0	0	3126	358
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.16	0.14	0.28	0.00	0.00	0.27	0.27
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.27	0.00	0.27	0.23	0.66	0.00	0.00	0.43	0.43
Volume/Cap:	0.00	0.00	0.00	0.20	0.00	0.62	0.62	0.42	0.00	0.00	0.62	0.62
Uniform Del:	0.0	0.0	0.0	36.8	0.0	41.8	44.7	10.2	0.0	0.0	28.6	28.6
IncremntDel:	0.0	0.0	0.0	0.2	0.0	1.5	2.8	0.1	0.0	0.0	0.8	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	37.0	0.0	43.3	47.5	10.4	0.0	0.0	29.4	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:	0.0	0.0	0.0	37.0	0.0	43.3	47.5	10.4	0.0	0.0	29.4	29.4
LOS by Move:	A	A	A	D	A	D	D	B	A	A	C	C
HCM2kAvgQ:	0	0	0	3	0	10	10	10	0	0	15	15

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 11.5 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:	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 1!	0 0	
Volume Module:																
Base Vol:	0	622	68		45	909	0		0	0	0		158	0	33	
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	622	68		45	909	0		0	0	0		158	0	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:	0	622	68		45	909	0		0	0	0		158	0	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:	0.71	0.71	0.71		0.92	0.92	0.92		1.00	1.00	1.00		0.75	0.75	0.75	
PHF Volume:	0	872	95		49	991	0		0	0	0		212	0	44	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	872	95		49	991	0		0	0	0		212	0	44	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.8	6.5	6.9	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	4.0	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		968	xxxx	xxxxx		xxxx	xxxx	xxxxx		1514	2009	484	
Potent Cap.:	xxxx	xxxx	xxxxx		708	xxxx	xxxxx		xxxx	xxxx	xxxxx		110	58	529	
Move Cap.:	xxxx	xxxx	xxxxx		708	xxxx	xxxxx		xxxx	xxxx	xxxxx		105	54	529	
Total Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		161	149	xxxxx		230	163	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.07	xxxx	xxxx		xxxx	xxxx	xxxx		0.92	0.00	0.08	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.2	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		10.5	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	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	255	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	9.9	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	99.7	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	F	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				99.7			
ApproachLOS:	*				*				*				F			

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 #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	6	Average Delay (sec/veh):	5.3
Optimal Cycle:	33	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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0	0	2 0	0	0 1	0 0	2	0 1	0 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	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	262	0	185	0	1574	1144	0	1013	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	262	0	185	0	1574	1144	0	1013	0
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:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	316	0	0	0	1650	0	0	1244	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	316	0	0	0	1650	0	0	1244	0
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:	0	0	0	316	0	0	0	1650	0	0	1244	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.47	0.00	0.00	0.35	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.63	0.00	0.00	0.48	0.00
Uniform Del:	0.0	0.0	0.0	20.1	0.0	0.0	0.0	3.3	0.0	0.0	2.7	0.0
IncremntDel:	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.8	0.0	0.0	0.0	3.8	0.0	0.0	2.9	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:	0.0	0.0	0.0	22.8	0.0	0.0	0.0	3.8	0.0	0.0	2.9	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	4	0	0	0	8	0	0	5	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.099
Loss Time (sec):	12	Average Delay (sec/veh):	85.6
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	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:	782	261	255	279	657	105	113	1070	160	146	1310	83
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:	782	261	255	279	657	105	113	1070	160	146	1310	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	907	303	296	329	775	124	124	1175	176	177	1584	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	907	303	296	329	775	124	124	1175	176	177	1584	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:	907	303	296	329	775	124	124	1175	176	177	1584	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.44	0.79	0.77	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3946	1317	1287	1769	3538	1583	1769	3018	451	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.22	0.08	0.07	0.39	0.39	0.10	0.45	0.06
Crit Moves:			****		****		****				****	
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.06	0.38	0.38	0.10	0.41	0.61
Volume/Cap:	1.10	1.10	1.10	0.93	1.10	0.39	1.10	1.04	1.04	1.04	1.10	0.11
Uniform Del:	39.5	39.5	39.5	39.4	40.0	34.8	46.8	31.2	31.2	45.2	29.6	8.3
IncremntDel:	56.0	56.0	56.0	31.2	64.1	0.8	113.7	35.1	35.1	79.1	55.5	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	95.5	95.5	95.5	70.6	104	35.6	160.5	66.4	66.4	124.3	85.1	8.3
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:	95.5	95.5	95.5	70.6	104	35.6	160.5	66.4	66.4	124.3	85.1	8.3
LOS by Move:	F	F	F	E	F	D	F	E	E	F	F	A
HCM2kAvgQ:	21	21	21	14	21	4	8	31	31	10	39	1

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Scenario Report

Scenario:	Existing PM
Command:	Existing PM
Volume:	Existing PM
Geometry:	Existing PM
Impact Fee:	Default Impact Fee
Trip Generation:	None
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Existing PM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	E	58.9	0.910	E	58.9	0.910	+ 0.000 D/V
# 2 El Camino Real / McLellan Dr	D	35.0	0.625	D	35.0	0.625	+ 0.000 D/V
# 3 El Camino Real / Arroyo Dr	C	20.5	0.427	C	20.5	0.427	+ 0.000 D/V
# 4 El Camino Real / Chestnut Ave	D	52.4	0.779	D	52.4	0.779	+ 0.000 D/V
# 5 El Camino Real / W. Orange Ave	D	40.7	0.853	D	40.7	0.853	+ 0.000 D/V
# 6 Mission Rd / Grand Ave	B	13.0	0.491	B	13.0	0.491	+ 0.000 V/C
# 7 Grand Ave / Chestnut Ave	C	31.2	0.609	C	31.2	0.609	+ 0.000 D/V
# 8 Mission Rd / Oak Ave	B	11.8	0.065	B	11.8	0.065	+ 0.000 D/V
# 9 Mission Rd / Chestnut Ave	C	26.4	0.598	C	26.4	0.598	+ 0.000 D/V
# 10 Juniperro Serra Blvd / Arroyo	E	39.2	0.499	E	39.2	0.499	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	A	9.8	0.757	A	9.8	0.757	+ 0.000 D/V
# 12 I-280 NB Ramps / Westborough B	D	54.9	0.988	D	54.9	0.988	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.910
Loss Time (sec):	12	Average Delay (sec/veh):	58.9
Optimal Cycle:	115	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:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1 1	0	1 0	1 1	0	1 1	0 0	2	0 0	1! 0	0
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
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:	1112	751	19	8	469	115	183	17	574	10	16	2
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:	1112	751	19	8	469	115	183	17	574	10	16	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1215	821	21	9	504	124	217	20	679	13	21	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1215	821	21	9	504	124	217	20	679	13	21	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1215	821	21	9	504	124	217	20	679	13	21	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.90	0.89	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.95	0.05	1.00	1.60	0.40	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3437	87	1769	2751	674	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.35	0.24	0.24	0.00	0.18	0.18	0.07	0.07	0.24	0.02	0.02	0.02
Crit Moves:	****				****				****	****		
Green/Cycle:	0.34	0.45	0.45	0.07	0.18	0.18	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.03	0.53	0.53	0.06	1.03	1.03	0.28	0.28	1.03	0.17	0.17	0.17
Uniform Del:	32.8	20.0	20.0	43.0	41.1	41.1	31.2	31.2	38.1	39.5	39.5	39.5
IncremntDel:	33.5	0.4	0.4	0.2	43.7	43.7	0.2	0.2	42.3	0.4	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	66.3	20.4	20.4	43.2	84.8	84.8	31.3	31.3	80.4	39.9	39.9	39.9
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:	66.3	20.4	20.4	43.2	84.8	84.8	31.3	31.3	80.4	39.9	39.9	39.9
LOS by Move:	E	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	24	9	9	0	16	16	3	3	18	1	1	1

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.625
Loss Time (sec):	12	Average Delay (sec/veh):	35.0
Optimal Cycle:	53	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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1	1 0	0	1 0	0 1	1 0	1! 0	1
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
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:	42	1186	185	227	651	48	26	21	50	217	27	411
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	1186	185	227	651	48	26	21	50	217	27	411
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	44	1229	192	258	740	55	28	23	54	235	29	444
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1229	192	258	740	55	28	23	54	235	29	444
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1229	192	258	740	55	28	23	54	235	29	444
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.72	0.90	0.92	0.92	0.95	0.95	0.78	0.87	0.87	0.87
Lanes:	1.00	3.00	1.00	2.00	1.86	0.14	0.55	0.45	1.00	1.32	0.08	1.60
Final Sat.:	1769	5083	1377	3432	3261	240	1002	809	1482	2188	131	2658
Capacity Analysis Module:												
Vol/Sat:	0.02	0.24	0.14	0.08	0.23	0.23	0.03	0.03	0.04	0.11	0.22	0.17
Crit Moves:		****		****			****				****	
Green/Cycle:	0.06	0.36	0.70	0.11	0.42	0.42	0.10	0.10	0.10	0.33	0.33	0.33
Volume/Cap:	0.43	0.67	0.20	0.67	0.54	0.54	0.28	0.28	0.36	0.32	0.67	0.50
Uniform Del:	59.3	34.9	7.0	55.3	28.5	28.5	54.2	54.2	54.6	32.4	37.2	34.7
IncremntDel:	3.0	1.0	0.1	4.4	0.4	0.4	0.8	0.8	1.5	0.1	1.6	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	62.3	35.8	7.1	59.8	28.9	28.9	55.0	55.0	56.1	32.5	38.8	35.0
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:	62.3	35.8	7.1	59.8	28.9	28.9	55.0	55.0	56.1	32.5	38.8	35.0
LOS by Move:	E	D	A	E	C	C	D	D	E	C	D	D
HCM2kAvgQ:	2	15	3	5	11	11	2	2	2	5	13	9

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.427
Loss Time (sec):	9	Average Delay (sec/veh):	20.5
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	3 0	0	1 0	2 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	173	1225	0	1	926	260	110	0	157	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:	173	1225	0	1	926	260	110	0	157	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:	173	1225	0	1	926	260	110	0	157	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:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	180	1276	0	1	946	266	124	0	176	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	180	1276	0	1	946	266	124	0	176	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:	180	1276	0	1	946	266	124	0	176	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.86	0.86	0.88	1.00	0.87	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.34	0.66	1.41	0.00	1.59	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	3831	1076	2346	0	2623	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.25	0.00	0.00	0.25	0.25	0.05	0.00	0.07	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.23	0.71	0.00	0.08	0.56	0.56	0.15	0.00	0.15	0.00	0.00	0.00
Volume/Cap:	0.44	0.35	0.00	0.01	0.44	0.44	0.35	0.00	0.44	0.00	0.00	0.00
Uniform Del:	49.5	8.3	0.0	64.1	19.5	19.5	56.9	0.0	57.8	0.0	0.0	0.0
IncremntDel:	0.8	0.1	0.0	0.0	0.1	0.1	0.2	0.0	0.5	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	50.3	8.3	0.0	64.1	19.6	19.6	57.2	0.0	58.3	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:	50.3	8.3	0.0	64.1	19.6	19.6	57.2	0.0	58.3	0.0	0.0	0.0
LOS by Move:	D	A	A	E	B	B	E	A	E	A	A	A
HCM2kAvgQ:	7	8	0	0	11	11	4	0	5	0	0	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	0.779
Loss Time (sec):	12	Average Delay (sec/veh):	52.4
Optimal Cycle:	80	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	207	734	188	176	534	355	300	647	184
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:	728	1057	407	207	734	188	176	534	355	300	647	184
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:	728	1057	407	207	734	188	176	534	355	300	647	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	754	1094	421	214	759	194	194	589	392	316	682	194
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	754	1094	421	214	759	194	194	589	392	316	682	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
FinalVolume:	754	1094	421	214	759	194	194	589	392	316	682	194
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.22	0.31	0.27	0.06	0.15	0.13	0.11	0.17	0.26	0.09	0.19	0.13
Crit Moves:	****				****				****	****		
Green/Cycle:	0.28	0.39	0.39	0.08	0.19	0.19	0.16	0.33	0.33	0.12	0.28	0.28
Volume/Cap:	0.78	0.78	0.68	0.78	0.78	0.68	0.68	0.51	0.78	0.78	0.68	0.44
Uniform Del:	49.5	39.9	37.7	67.8	57.6	56.3	59.2	40.6	45.5	64.2	47.6	44.0
IncremntDel:	4.1	3.0	3.2	13.8	4.1	6.3	6.4	0.4	7.6	9.3	1.9	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	53.6	42.9	40.9	81.6	61.7	62.6	65.6	41.0	53.1	73.5	49.5	44.7
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:	53.6	42.9	40.9	81.6	61.7	62.6	65.6	41.0	53.1	73.5	49.5	44.7
LOS by Move:	D	D	D	F	E	E	E	D	D	E	D	D
HCM2kAvgQ:	18	24	17	7	14	9	9	11	18	9	15	7

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	0.853
Loss Time (sec):	12	Average Delay (sec/veh):	40.7
Optimal Cycle:	106	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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2 1	0	1 0	2 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
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:	33	1758	164	192	1117	54	82	68	35	137	56	210
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:	33	1758	164	192	1117	54	82	68	35	137	56	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	36	1892	177	208	1210	59	89	74	38	163	67	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1892	177	208	1210	59	89	74	38	163	67	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1892	177	208	1210	59	89	74	38	163	67	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.74	0.26	1.00	2.86	0.14	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4589	428	1769	4813	233	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.02	0.41	0.41	0.12	0.25	0.25	0.09	0.09	0.03	0.13	0.13	0.16
Crit Moves:		****		****			****					****
Green/Cycle:	0.06	0.48	0.48	0.14	0.56	0.56	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.34	0.85	0.85	0.85	0.45	0.45	0.85	0.85	0.24	0.66	0.66	0.85
Uniform Del:	67.7	34.0	34.0	63.2	19.2	19.2	66.0	66.0	61.6	55.9	55.9	58.4
IncremntDel:	1.9	3.1	3.1	24.0	0.1	0.1	29.1	29.1	0.8	4.7	4.7	20.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	69.6	37.2	37.2	87.1	19.3	19.3	95.1	95.1	62.4	60.6	60.6	79.1
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:	69.6	37.2	37.2	87.1	19.3	19.3	95.1	95.1	62.4	60.6	60.6	79.1
LOS by Move:	E	D	D	F	B	B	F	F	E	E	E	E
HCM2kAvgQ:	2	32	32	12	12	12	10	10	2	11	11	14

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.491
Loss Time (sec):	0	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
Lanes:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
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:	5	268	45	209	318	2	2	2	3	34	3	204
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	268	45	209	318	2	2	2	3	34	3	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	5	290	49	215	327	2	5	5	7	43	4	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	290	49	215	327	2	5	5	7	43	4	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	290	49	215	327	2	5	5	7	43	4	261
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	1.69	0.28	0.79	1.20	0.01	0.28	0.29	0.43	0.92	0.08	1.00
Final Sat.:	18	953	163	438	702	4	133	133	199	441	39	572
Capacity Analysis Module:												
Vol/Sat:	0.31	0.30	0.30	0.49	0.47	0.46	0.03	0.03	0.03	0.10	0.10	0.46
Crit Moves:	****			****				****				****
Delay/Veh:	11.6	11.4	11.2	14.8	13.7	13.5	10.3	10.3	10.3	10.6	10.6	13.2
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:	11.6	11.4	11.2	14.8	13.7	13.5	10.3	10.3	10.3	10.6	10.6	13.2
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	11.4			14.1			10.3			12.8		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	11.4			14.1			10.3			12.8		
LOS by Appr:	B			B			B			B		
AllWayAvgQ:	0.4	0.4	0.4	0.9	0.8	0.8	0.0	0.0	0.0	0.1	0.1	0.7

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.609
Loss Time (sec):	12	Average Delay (sec/veh):	31.2
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
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:	126	336	107	48	358	77	52	187	59	119	207	57
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	336	107	48	358	77	52	187	59	119	207	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	135	359	114	53	394	85	62	223	70	149	259	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	135	359	114	53	394	85	62	223	70	149	259	71
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	135	359	114	53	394	85	62	223	70	149	259	71
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.78	0.22
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1362	430	1769	1410	388
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.07	0.03	0.21	0.05	0.04	0.16	0.16	0.08	0.18	0.18
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.39	0.39	0.08	0.35	0.35	0.07	0.27	0.27	0.14	0.33	0.33
Volume/Cap:	0.61	0.49	0.19	0.37	0.61	0.16	0.48	0.61	0.61	0.61	0.55	0.55
Uniform Del:	41.4	23.0	20.0	43.5	27.0	22.5	44.5	31.9	31.9	40.5	27.1	27.1
IncremntDel:	4.9	0.5	0.2	1.6	1.7	0.1	2.8	2.3	2.3	4.4	1.1	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	46.3	23.5	20.2	45.1	28.7	22.6	47.4	34.2	34.2	45.0	28.2	28.2
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:	46.3	23.5	20.2	45.1	28.7	22.6	47.4	34.2	34.2	45.0	28.2	28.2
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	8	2	2	11	2	2	8	8	5	9	9

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 1.0 Worst Case Level Of Service: B[11.8]

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 1 0	1	0	0 1 1	0	0	0 0 0	0	0	0 0 1!	0	0
Volume Module:												
Base Vol:	1	288	9	14	352	0	0	0	0	41	0	17
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:	1	288	9	14	352	0	0	0	0	41	0	17
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:	1	288	9	14	352	0	0	0	0	41	0	17
User Adj:	0.88	0.88	0.88	0.84	0.84	0.84	0.00	0.00	0.00	0.61	0.61	0.61
PHF Adj:	0.90	0.90	0.90	0.87	0.87	0.87	1.00	1.00	1.00	0.76	0.76	0.76
PHF Volume:	1	281	9	14	339	0	0	0	0	33	0	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	281	9	14	339	0	0	0	0	33	0	14
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	339	xxxx	xxxxx	289	xxxx	xxxxx	xxxx	xxxx	xxxxx	484	653	145
Potent Cap.:	1216	xxxx	xxxxx	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx	512	385	876
Move Cap.:	1216	xxxx	xxxxx	1269	xxxx	xxxxx	xxxx	xxxx	xxxxx	508	381	876
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.0	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	579	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	8.0	xxxx	xxxxx	7.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.8	xxxxx
Shared LOS:	A	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			11.8		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.598
Loss Time (sec):	9	Average Delay (sec/veh):	26.4
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	0 0	1 0	0	0 2	1 0	2	0 0	0 0	1	1 0
Volume Module:												
Base Vol:	0	0	0	72	0	304	300	793	0	0	696	81
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	72	0	304	300	793	0	0	696	81
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	72	0	304	300	793	0	0	696	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:	1.00	1.00	1.00	0.87	0.87	0.87	0.96	0.96	0.96	0.88	0.88	0.88
PHF Volume:	0	0	0	83	0	349	314	830	0	0	792	92
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	83	0	349	314	830	0	0	792	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	0	83	0	349	314	830	0	0	792	92
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.73	0.93	0.93	1.00	1.00	0.92	0.92
Lanes:	0.00	0.00	0.00	1.00	0.00	2.00	1.00	2.00	0.00	0.00	1.79	0.21
Final Sat.:	0	0	0	1769	0	2786	1769	3538	0	0	3118	363
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.05	0.00	0.13	0.18	0.23	0.00	0.00	0.25	0.25
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.00	0.21	0.30	0.72	0.00	0.00	0.42	0.42
Volume/Cap:	0.00	0.00	0.00	0.22	0.00	0.60	0.60	0.33	0.00	0.00	0.60	0.60
Uniform Del:	0.0	0.0	0.0	42.6	0.0	46.4	39.1	6.6	0.0	0.0	28.9	28.9
IncremntDel:	0.0	0.0	0.0	0.3	0.0	1.7	1.9	0.1	0.0	0.0	0.7	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	42.9	0.0	48.2	41.0	6.7	0.0	0.0	29.5	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	0.0	0.0	42.9	0.0	48.2	41.0	6.7	0.0	0.0	29.5	29.5
LOS by Move:	A	A	A	D	A	D	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	3	0	8	11	6	0	0	14	14

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: E[39.2]

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 1!	0 0	
Volume Module:																
Base Vol:	0	893	169		43	455	0		0	0	0		108	0	62	
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	893	169		43	455	0		0	0	0		108	0	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:	0	893	169		43	455	0		0	0	0		108	0	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:	0.90	0.90	0.90		0.84	0.84	0.84		1.00	1.00	1.00		0.99	0.99	0.99	
PHF Volume:	0	992	188		51	544	0		0	0	0		109	0	63	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	992	188		51	544	0		0	0	0		109	0	63	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.8	6.5	6.9	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	4.0	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1180	xxxx	xxxxx		xxxx	xxxx	xxxxx		1461	1733	590	
Potent Cap.:	xxxx	xxxx	xxxxx		588	xxxx	xxxxx		xxxx	xxxx	xxxxx		120	87	451	
Move Cap.:	xxxx	xxxx	xxxxx		588	xxxx	xxxxx		xxxx	xxxx	xxxxx		112	79	451	
Total Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		237	156	xxxxx		219	192	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.09	xxxx	xxxx		xxxx	xxxx	xxxx		0.50	0.00	0.14	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.3	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		11.7	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	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	270	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	4.0	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	39.2	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	E	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				39.2			
ApproachLOS:	*				*				*				E			

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.757
Loss Time (sec):	6	Average Delay (sec/veh):	9.8
Optimal Cycle:	43	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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0	0	2 0	0	0 1	0 0	2	0 1	0 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	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	595	0	710	0	854	566	0	1616	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	595	0	710	0	854	566	0	1616	0
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:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	650	0	0	0	897	0	0	1689	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	650	0	0	0	897	0	0	1689	0
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:	0	0	0	650	0	0	0	897	0	0	1689	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.25	0.00	0.00	0.48	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.63	0.00	0.00	0.63	0.00
Volume/Cap:	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.40	0.00	0.00	0.76	0.00
Uniform Del:	0.0	0.0	0.0	17.4	0.0	0.0	0.0	4.6	0.0	0.0	6.5	0.0
IncremntDel:	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.1	0.0	0.0	1.5	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.3	0.0	0.0	0.0	4.7	0.0	0.0	8.1	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	21.3	0.0	0.0	0.0	4.7	0.0	0.0	8.1	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	0	0	4	0	0	12	0

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.988
Loss Time (sec):	12	Average Delay (sec/veh):	54.9
Optimal Cycle:	175	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			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0	2 0	1	1 0	1	1 0	1 0	2 0	1
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
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:	982	683	196	142	241	121	174	834	203	203	1216	218
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:	982	683	196	142	241	121	174	834	203	203	1216	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:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1010	703	202	178	302	152	182	871	212	224	1341	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1010	703	202	178	302	152	182	871	212	224	1341	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1010	703	202	178	302	152	182	871	212	224	1341	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.89	0.89	0.93	0.93	0.83	0.93	0.90	0.90	0.93	0.93	0.83
Lanes:	2.15	1.44	0.41	1.00	2.00	1.00	1.00	1.61	0.39	1.00	2.00	1.00
Final Sat.:	3521	2449	703	1769	3538	1583	1769	2763	672	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.10	0.09	0.10	0.10	0.32	0.32	0.13	0.38	0.15
Crit Moves:			****	****			****				****	
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.35	0.35	0.14	0.38	0.49
Volume/Cap:	0.99	0.99	0.99	0.99	0.84	0.94	0.99	0.91	0.91	0.91	0.99	0.31
Uniform Del:	35.3	35.3	35.3	44.8	44.1	44.6	44.7	31.0	31.0	42.4	30.6	15.6
IncremntDel:	17.6	17.6	17.6	63.3	15.8	53.4	62.7	10.0	10.0	33.4	21.5	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	52.9	52.9	52.9	108.2	59.9	98.0	107.4	41.1	41.1	75.8	52.1	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:	52.9	52.9	52.9	108.2	59.9	98.0	107.4	41.1	41.1	75.8	52.1	15.8
LOS by Move:	D	D	D	F	E	F	F	D	D	E	D	B
HCM2kAvgQ:	22	22	22	10	7	8	10	21	21	10	28	5

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Existing (2016) Plus Project Traffic Conditions Analysis

Scenario Report

Scenario:	Ex + Project AM
Command:	Ex + Project AM
Volume:	Existing AM
Geometry:	Existing AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Ex + Project AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	D	53.4	0.864	E	57.8	0.899	+ 4.337 D/V
# 2 El Camino Real / McLellan Dr	C	31.8	0.753	C	33.8	0.788	+ 2.014 D/V
# 3 El Camino Real / Arroyo Dr	C	25.5	0.447	C	26.8	0.474	+ 1.269 D/V
# 4 El Camino Real / Chestnut Ave	E	56.7	0.894	E	60.8	0.936	+ 4.141 D/V
# 5 El Camino Real / W. Orange Ave	D	36.8	0.735	D	36.9	0.739	+ 0.101 D/V
# 6 Mission Rd / Grand Ave	B	12.9	0.481	B	14.1	0.521	+ 0.039 V/C
# 7 Grand Ave / Chestnut Ave	C	32.2	0.661	C	33.0	0.683	+ 0.822 D/V
# 8 Mission Rd / Oak Ave	B	14.9	0.231	C	16.5	0.262	+ 1.632 D/V
# 9 Mission Rd / Chestnut Ave	C	26.7	0.615	C	29.3	0.668	+ 2.581 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	99.7	0.920	F	99.7	0.920	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	A	5.3	0.635	A	5.4	0.639	+ 0.125 D/V
# 12 I-280 NB Ramps / Westborough B	F	85.6	1.099	F	96.8	1.125	+11.235 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	130	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	12	Average Delay (sec/veh):	57.8
Optimal Cycle:	124	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:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1 1	0	1 0	1 1	0	1 1	0 0	2	0 0	1! 0	0
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
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:	575	307	6	4	577	67	157	12	850	21	30	8
Added Vol:	62	103	0	0	19	0	0	0	11	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	637	410	6	4	596	67	157	12	861	21	30	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	757	488	7	4	651	73	176	13	966	26	37	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	757	488	7	4	651	73	176	13	966	26	37	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	757	488	7	4	651	73	176	13	966	26	37	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3480	51	1769	3132	352	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.14	0.00	0.21	0.21	0.05	0.05	0.35	0.04	0.04	0.04
Crit Moves:	****				****				****		****	
Green/Cycle:	0.23	0.37	0.37	0.08	0.22	0.22	0.36	0.36	0.36	0.09	0.09	0.09
Volume/Cap:	0.95	0.38	0.38	0.03	0.95	0.95	0.15	0.15	0.95	0.43	0.43	0.43
Uniform Del:	49.2	30.0	30.0	55.0	50.1	50.1	27.7	27.7	40.2	55.8	55.8	55.8
IncremntDel:	20.8	0.2	0.2	0.1	21.5	21.5	0.1	0.1	17.7	1.8	1.8	1.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	70.0	30.2	30.2	55.1	71.6	71.6	27.8	27.8	57.8	57.6	57.6	57.6
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:	70.0	30.2	30.2	55.1	71.6	71.6	27.8	27.8	57.8	57.6	57.6	57.6
LOS by Move:	E	C	C	E	E	E	C	C	E	E	E	E
HCM2kAvgQ:	17	7	7	0	19	19	2	2	26	3	3	3

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	100	Critical Vol./Cap.(X):	0.788
Loss Time (sec):	12	Average Delay (sec/veh):	33.8
Optimal Cycle:	74	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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1 1	0	0 1	0 0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
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:	31	470	121	394	1087	29	33	25	50	213	28	365
Added Vol:	0	99	13	18	12	0	0	0	0	-1	0	66
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	569	134	412	1099	29	33	25	50	212	28	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:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	34	629	148	470	1255	33	40	31	61	269	36	547
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	34	629	148	470	1255	33	40	31	61	269	36	547
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	629	148	470	1255	33	40	31	61	269	36	547
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.80	0.90	0.93	0.93	0.95	0.95	0.76	0.87	0.87	0.86
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	0.57	0.43	1.00	1.30	0.08	1.62
Final Sat.:	1769	5083	1521	3432	3433	91	1030	780	1442	2156	132	2659
Capacity Analysis Module:												
Vol/Sat:	0.02	0.12	0.10	0.14	0.37	0.37	0.04	0.04	0.04	0.12	0.27	0.21
Crit Moves:	****				****		****				****	
Green/Cycle:	0.04	0.21	0.51	0.24	0.41	0.41	0.13	0.13	0.13	0.30	0.30	0.30
Volume/Cap:	0.48	0.58	0.19	0.58	0.89	0.89	0.30	0.30	0.33	0.41	0.89	0.68
Uniform Del:	47.0	35.3	13.1	33.8	27.5	27.5	39.4	39.4	39.5	27.9	33.4	30.7
IncremntDel:	5.1	0.8	0.1	1.1	7.5	7.5	0.7	0.7	1.0	0.1	10.8	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	52.1	36.1	13.2	34.9	35.1	35.1	40.1	40.1	40.5	28.0	44.2	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:	52.1	36.1	13.2	34.9	35.1	35.1	40.1	40.1	40.5	28.0	44.2	32.3
LOS by Move:	D	D	B	C	D	D	D	D	D	C	D	C
HCM2kAvgQ:	1	6	2	6	19	18	2	2	2	5	17	10

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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 #3 El Camino Real / Arroyo Dr

Cycle (sec):	144	Critical Vol./Cap.(X):	0.474
Loss Time (sec):	9	Average Delay (sec/veh):	26.8
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	3 0	0	1 0	2 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	141	947	0	7	912	154	200	0	244	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:	141	947	0	7	912	154	200	0	244	0	0	0
Added Vol:	16	77	0	0	24	-14	35	0	28	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	157	1024	0	7	936	140	235	0	272	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:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	185	1209	0	7	952	142	265	0	306	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	1209	0	7	952	142	265	0	306	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:	185	1209	0	7	952	142	265	0	306	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.87	0.87	0.88	1.00	0.88	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.61	0.39	1.46	0.00	1.54	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	4335	648	2448	0	2563	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.10	0.24	0.00	0.00	0.22	0.22	0.11	0.00	0.12	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:	0.22	0.61	0.00	0.07	0.46	0.46	0.25	0.00	0.25	0.00	0.00	0.00
Volume/Cap:	0.47	0.39	0.00	0.06	0.47	0.47	0.43	0.00	0.47	0.00	0.00	0.00
Uniform Del:	48.8	14.1	0.0	62.3	26.5	26.5	45.1	0.0	45.7	0.0	0.0	0.0
IncremntDel:	0.9	0.1	0.0	0.2	0.2	0.2	0.2	0.0	0.3	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	49.7	14.2	0.0	62.5	26.7	26.7	45.3	0.0	46.0	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:	49.7	14.2	0.0	62.5	26.7	26.7	45.3	0.0	46.0	0.0	0.0	0.0
LOS by Move:	D	B	A	E	C	C	D	A	D	A	A	A
HCM2kAvgQ:	7	10	0	0	11	11	7	0	8	0	0	0

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	144	Critical Vol./Cap.(X):	0.936
Loss Time (sec):	12	Average Delay (sec/veh):	60.8
Optimal Cycle:	161	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	208	887	76	314	659	475	366	603	148
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:	448	597	284	208	887	76	314	659	475	366	603	148
Added Vol:	13	17	18	30	14	9	12	30	14	54	54	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	461	614	302	238	901	85	326	689	489	420	657	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:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	497	662	325	271	1025	97	356	752	534	562	880	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	497	662	325	271	1025	97	356	752	534	562	880	225
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	497	662	325	271	1025	97	356	752	534	562	880	225
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1560	3432	5083	1530	1769	3538	1535	3432	3538	1547
Capacity Analysis Module:												
Vol/Sat:	0.14	0.19	0.21	0.08	0.20	0.06	0.20	0.21	0.35	0.16	0.25	0.15
Crit Moves:	****				****				****	****		
Green/Cycle:	0.15	0.27	0.27	0.10	0.22	0.22	0.24	0.37	0.37	0.18	0.30	0.30
Volume/Cap:	0.94	0.70	0.78	0.78	0.94	0.29	0.82	0.57	0.94	0.94	0.82	0.48
Uniform Del:	60.2	47.4	48.7	63.1	55.5	47.3	51.4	36.1	43.6	58.6	46.7	41.0
IncremntDel:	24.2	2.3	8.9	10.5	14.4	0.5	12.0	0.6	23.0	22.2	5.3	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	84.4	49.7	57.6	73.6	69.9	47.8	63.5	36.7	66.6	80.8	51.9	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:	84.4	49.7	57.6	73.6	69.9	47.8	63.5	36.7	66.6	80.8	51.9	41.8
LOS by Move:	F	D	E	E	E	D	E	D	E	F	D	D
HCM2kAvgQ:	15	15	15	8	20	4	17	14	27	16	21	8

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	120	Critical Vol./Cap.(X):	0.739
Loss Time (sec):	12	Average Delay (sec/veh):	36.9
Optimal Cycle:	68	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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2	1 0	1 0	2	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
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:	63	897	119	190	1427	77	151	63	45	110	63	197
Added Vol:	0	15	0	0	82	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	912	119	190	1509	77	151	63	45	110	63	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	82	1191	155	201	1593	81	182	76	54	119	68	213
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	82	1191	155	201	1593	81	182	76	54	119	68	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:	82	1191	155	201	1593	81	182	76	54	119	68	213
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4416	576	1769	4801	245	1269	530	1510	1147	657	1534
Capacity Analysis Module:												
Vol/Sat:	0.05	0.27	0.27	0.11	0.33	0.33	0.14	0.14	0.04	0.10	0.10	0.14
Crit Moves:		****		****			****					****
Green/Cycle:	0.06	0.36	0.36	0.15	0.45	0.45	0.19	0.19	0.19	0.19	0.19	0.19
Volume/Cap:	0.73	0.74	0.74	0.74	0.73	0.73	0.74	0.74	0.19	0.55	0.55	0.74
Uniform Del:	55.2	33.1	33.1	48.5	26.7	26.7	45.5	45.5	40.4	44.2	44.2	46.0
IncremntDel:	21.4	1.6	1.6	10.3	1.2	1.2	8.1	8.1	0.3	2.0	2.0	9.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	76.6	34.8	34.8	58.8	27.9	27.9	53.6	53.6	40.7	46.1	46.1	55.7
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:	76.6	34.8	34.8	58.8	27.9	27.9	53.6	53.6	40.7	46.1	46.1	55.7
LOS by Move:	E	C	C	E	C	C	D	D	D	D	D	E
HCM2kAvgQ:	5	17	17	9	19	19	10	10	2	7	7	9

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	0	Average Delay (sec/veh):	14.1
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:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
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:	3	273	19	161	334	1	4	2	2	50	2	192
Added Vol:	0	86	7	0	25	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	359	26	161	359	1	4	2	2	52	2	192
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	4	443	32	174	388	1	6	3	3	67	3	249
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	4	443	32	174	388	1	6	3	3	67	3	249
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	443	32	174	388	1	6	3	3	67	3	249
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	1.85	0.13	0.61	1.38	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	9	1031	75	334	772	2	216	108	108	443	17	546
Capacity Analysis Module:												
Vol/Sat:	0.43	0.43	0.43	0.52	0.50	0.50	0.03	0.03	0.03	0.15	0.15	0.46
Crit Moves:	****			****				****				****
Delay/Veh:	13.6	13.5	13.3	15.9	15.0	14.7	10.8	10.8	10.8	11.4	11.4	13.8
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:	13.6	13.5	13.3	15.9	15.0	14.7	10.8	10.8	10.8	11.4	11.4	13.8
LOS by Move:	B	B	B	C	B	B	B	B	B	B	B	B
ApproachDel:	13.5			15.3			10.8			13.2		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	13.5			15.3			10.8			13.2		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	0.7	0.7	0.7	1.0	0.9	0.9	0.0	0.0	0.0	0.2	0.2	0.7

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 #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.683
Loss Time (sec):	12	Average Delay (sec/veh):	33.0
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
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:	64	402	138	38	326	76	86	215	81	131	174	51
Added Vol:	1	1	0	6	3	0	0	14	5	0	2	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	65	403	138	44	329	76	86	229	86	131	176	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:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	72	446	153	52	392	90	120	319	120	152	204	61
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	72	446	153	52	392	90	120	319	120	152	204	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:	72	446	153	52	392	90	120	319	120	152	204	61
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.27	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1295	486	1769	1379	415
Capacity Analysis Module:												
Vol/Sat:	0.04	0.24	0.10	0.03	0.21	0.06	0.07	0.25	0.25	0.09	0.15	0.15
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.35	0.35	0.04	0.33	0.33	0.15	0.36	0.36	0.13	0.33	0.33
Volume/Cap:	0.64	0.68	0.28	0.68	0.64	0.18	0.44	0.68	0.68	0.68	0.44	0.44
Uniform Del:	45.7	27.7	23.4	47.2	28.4	23.9	38.5	27.1	27.1	41.8	26.1	26.1
IncremntDel:	11.5	3.0	0.3	22.4	2.2	0.2	1.2	3.0	3.0	8.5	0.5	0.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	57.2	30.7	23.7	69.6	30.6	24.1	39.7	30.2	30.2	50.3	26.6	26.6
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:	57.2	30.7	23.7	69.6	30.6	24.1	39.7	30.2	30.2	50.3	26.6	26.6
LOS by Move:	E	C	C	E	C	C	D	C	C	D	C	C
HCM2kAvgQ:	3	13	3	3	11	2	3	11	11	6	7	7

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 2.3 Worst Case Level Of Service: C[16.5]

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 1	0 1	0	0 1	1 0	0	0 0	0 0	0	0 0	1! 0	0
Volume Module:												
Base Vol:	0	301	7	7	376	0	0	0	0	62	0	24
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	301	7	7	376	0	0	0	0	62	0	24
Added Vol:	0	27	0	3	80	0	0	0	0	0	0	1
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	328	7	10	456	0	0	0	0	62	0	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:	0.88	0.88	0.88	0.84	0.84	0.84	1.00	1.00	1.00	0.61	0.61	0.61
PHF Volume:	0	375	8	12	543	0	0	0	0	101	0	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	375	8	12	543	0	0	0	0	101	0	41
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	383	xxxx	xxxxx	xxxx	xxxx	xxxxx	674	946	191
Potent Cap.:	xxxx	xxxx	xxxxx	1172	xxxx	xxxxx	xxxx	xxxx	xxxxx	388	260	818
Move Cap.:	xxxx	xxxx	xxxxx	1172	xxxx	xxxxx	xxxx	xxxx	xxxxx	385	258	818
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.26	0.00	0.05
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	454	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.3	xxxxx
Shrd ConDel:	7.2	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	16.5	xxxxx
Shared LOS:	A	*	*	A	*	*	*	*	*	*	C	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			16.5		
ApproachLOS:	*			*			*			C		

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 #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.668
Loss Time (sec):	9	Average Delay (sec/veh):	29.3
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	1 0	0	1 0	1 1	1 0	2 0	0	0	1 0	1 0
Volume Module:												
Base Vol:	0	0	0	76	0	372	226	888	0	0	733	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:	0	0	0	76	0	372	226	888	0	0	733	84
Added Vol:	0	7	6	2	1	77	20	11	0	1	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	7	6	78	1	449	246	899	0	1	734	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:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	7	6	96	1	553	275	1004	0	1	830	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	7	6	96	1	553	275	1004	0	1	830	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	7	6	96	1	553	275	1004	0	1	830	95
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.92	0.91	0.81	0.81	0.81	0.93	0.93	1.00	0.88	0.88	0.87
Lanes:	0.00	0.54	0.46	0.99	0.01	2.00	1.00	2.00	0.00	0.01	1.79	0.20
Final Sat.:	0	937	803	1514	19	3067	1769	3538	0	4	2982	341
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.06	0.06	0.18	0.16	0.28	0.00	0.28	0.28	0.28
Crit Moves:			****			****	****				****	
Green/Cycle:	0.00	0.01	0.01	0.27	0.27	0.27	0.23	0.65	0.00	0.42	0.42	0.42
Volume/Cap:	0.00	0.67	0.67	0.23	0.23	0.67	0.67	0.44	0.00	0.67	0.67	0.67
Uniform Del:	0.0	64.0	64.0	37.0	37.0	42.3	45.3	11.1	0.0	30.6	30.6	30.6
IncremntDel:	0.0	63.2	63.2	0.0	0.0	1.8	4.2	0.1	0.0	1.3	1.3	1.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	127	127.3	37.0	37.0	44.1	49.5	11.3	0.0	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:	0.0	127	127.3	37.0	37.0	44.1	49.5	11.3	0.0	31.9	31.9	31.9
LOS by Move:	A	F	F	D	D	D	D	B	A	C	C	C
HCM2kAvgQ:	0	1	1	3	3	11	11	10	0	15	15	15

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 11.5 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:	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	1!	0	0	
Volume Module:																								
Base Vol:	0	622		68			45	909		0			0		0		0		158		0		33	
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	622		68			45	909		0			0		0		0		158		0		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:	0	622		68			45	909		0			0		0		0		158		0		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:	0.71	0.71		0.71			0.92	0.92		0.92			1.00		1.00		1.00		0.75		0.75		0.75	
PHF Volume:	0	872		95			49	991		0			0		0		0		212		0		44	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	0	872		95			49	991		0			0		0		0		212		0		44	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx		xxxx		xxxxx		6.8		6.5		6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx		xxxx		xxxxx		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			968	xxxx		xxxxx			xxxx		xxxx		xxxxx		1514		2009		484	
Potent Cap.:	xxxx	xxxx		xxxxx			708	xxxx		xxxxx			xxxx		xxxx		xxxxx		110		58		529	
Move Cap.:	xxxx	xxxx		xxxxx			708	xxxx		xxxxx			xxxx		xxxx		xxxxx		105		54		529	
Total Cap:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			161		149		xxxxx		230		163		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx			0.07	xxxx		xxxx			xxxx		xxxx		xxxx		0.92		0.00		0.08	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			0.2	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx			10.5	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	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		255		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		9.9		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		99.7		xxxxx	
Shared LOS:	*	*		*			*	*		*			*	*		*			*		F		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						99.7					
ApproachLOS:	*						*						*						F					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.639
Loss Time (sec):	6	Average Delay (sec/veh):	5.4
Optimal Cycle:	33	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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0	0 0	2 0	0	0 1	0 0	2	0 1	0 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	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	262	0	185	0	1574	1144	0	1013	0
Added Vol:	0	0	0	8	0	0	0	4	0	0	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	270	0	185	0	1578	1144	0	1034	0
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:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	326	0	0	0	1654	0	0	1270	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	326	0	0	0	1654	0	0	1270	0
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:	0	0	0	326	0	0	0	1654	0	0	1270	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.47	0.00	0.00	0.36	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.64	0.00	0.00	0.49	0.00
Uniform Del:	0.0	0.0	0.0	20.0	0.0	0.0	0.0	3.4	0.0	0.0	2.8	0.0
IncremntDel:	0.0	0.0	0.0	2.7	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	22.7	0.0	0.0	0.0	3.9	0.0	0.0	3.0	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	22.7	0.0	0.0	0.0	3.9	0.0	0.0	3.0	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	4	0	0	0	8	0	0	5	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.125
Loss Time (sec):	12	Average Delay (sec/veh):	96.8
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1	0	1 0	1	0	2 0 1	1	0	1 1 0	1	0	2 0 1
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	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:	782	261	255	279	657	105	113	1070	160	146	1310	83
Added Vol:	0	0	8	0	0	0	0	11	0	41	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	782	261	263	279	657	105	113	1081	160	187	1372	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	907	303	305	329	775	124	124	1187	176	226	1659	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	907	303	305	329	775	124	124	1187	176	226	1659	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:	907	303	305	329	775	124	124	1187	176	226	1659	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.43	0.78	0.79	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3918	1308	1318	1769	3538	1583	1769	3022	447	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.22	0.08	0.07	0.39	0.39	0.13	0.47	0.06
Crit Moves:		****			****		****				****	
Green/Cycle:	0.21	0.21	0.21	0.19	0.19	0.19	0.06	0.36	0.36	0.12	0.42	0.61
Volume/Cap:	1.12	1.12	1.12	0.96	1.12	0.40	1.12	1.09	1.09	1.09	1.12	0.11
Uniform Del:	39.7	39.7	39.7	39.8	40.3	35.2	46.9	31.9	31.9	44.1	29.2	8.1
IncremntDel:	66.3	66.3	66.3	36.7	73.9	0.9	123.1	52.0	52.0	87.1	65.5	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	106.0	106	106.0	76.5	114	36.0	170.0	83.9	83.9	131.2	94.6	8.1
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:	106.0	106	106.0	76.5	114	36.0	170.0	83.9	83.9	131.2	94.6	8.1
LOS by Move:	F	F	F	E	F	D	F	F	F	F	F	A
HCM2kAvgQ:	22	22	22	15	22	4	8	34	34	13	42	1

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Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Ex + Project PM
Command:	Ex + Project PM
Volume:	Existing PM
Geometry:	Existing PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Ex + ProjectPM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	E	58.9	0.910	F	87.3	1.010	+28.358 D/V
# 2 El Camino Real / McLellan Dr	D	35.0	0.625	D	36.7	0.701	+ 1.655 D/V
# 3 El Camino Real / Arroyo Dr	C	20.5	0.427	C	24.0	0.581	+ 3.483 D/V
# 4 El Camino Real / Chestnut Ave	D	52.4	0.779	E	58.0	0.872	+ 5.610 D/V
# 5 El Camino Real / W. Orange Ave	D	40.7	0.853	D	40.9	0.874	+ 0.222 D/V
# 6 Mission Rd / Grand Ave	B	13.0	0.491	B	14.7	0.585	+ 0.094 V/C
# 7 Grand Ave / Chestnut Ave	C	31.2	0.609	C	31.9	0.635	+ 0.680 D/V
# 8 Mission Rd / Oak Ave	B	11.8	0.065	B	12.7	0.076	+ 0.979 D/V
# 9 Mission Rd / Chestnut Ave	C	26.4	0.598	C	29.2	0.681	+ 2.832 D/V
# 10 Juniperro Serra Blvd / Arroyo	E	39.2	0.499	E	39.2	0.499	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	A	9.8	0.757	B	10.5	0.782	+ 0.738 D/V
# 12 I-280 NB Ramps / Westborough B	D	54.9	0.988	E	65.4	1.009	+10.531 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.010
Loss Time (sec):	12	Average Delay (sec/veh):	87.3
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1	1 0	1 0	1	1 0	1 1	0	0 2	0 0	1!	0 0
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
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:	1112	751	19	8	469	115	183	17	574	10	16	2
Added Vol:	70	117	0	0	118	0	0	0	71	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1182	868	19	8	587	115	183	17	645	10	16	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1292	949	21	9	631	124	217	20	763	13	21	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1292	949	21	9	631	124	217	20	763	13	21	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1292	949	21	9	631	124	217	20	763	13	21	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.67	0.33	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3452	76	1769	2880	564	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.38	0.27	0.27	0.00	0.22	0.22	0.07	0.07	0.27	0.02	0.02	0.02
Crit Moves:	****				****				****	****		
Green/Cycle:	0.33	0.45	0.45	0.07	0.19	0.19	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.14	0.60	0.60	0.07	1.14	1.14	0.28	0.28	1.14	0.17	0.17	0.17
Uniform Del:	33.5	20.5	20.5	43.8	40.4	40.4	31.0	31.0	38.0	39.5	39.5	39.5
IncremntDel:	75.6	0.7	0.7	0.3	81.9	81.9	0.2	0.2	81.7	0.4	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	109.1	21.2	21.2	44.1	122	122.3	31.2	31.2	119.8	39.9	39.9	39.9
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:	109.1	21.2	21.2	44.1	122	122.3	31.2	31.2	119.8	39.9	39.9	39.9
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	31	11	11	0	22	22	3	3	24	1	1	1

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.701
Loss Time (sec):	12	Average Delay (sec/veh):	36.7
Optimal Cycle:	63	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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1 1	0	0 1	0 0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
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:	42	1186	185	227	651	48	26	21	50	217	27	411
Added Vol:	0	149	26	68	121	0	0	0	0	13	0	38
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	42	1335	211	295	772	48	26	21	50	230	27	449
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	44	1383	219	335	877	55	28	23	54	249	29	485
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	1383	219	335	877	55	28	23	54	249	29	485
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1383	219	335	877	55	28	23	54	249	29	485
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.72	0.90	0.92	0.92	0.95	0.95	0.78	0.87	0.87	0.87
Lanes:	1.00	3.00	1.00	2.00	1.88	0.12	0.55	0.45	1.00	1.31	0.07	1.62
Final Sat.:	1769	5083	1377	3432	3300	205	1002	809	1482	2178	122	2672
Capacity Analysis Module:												
Vol/Sat:	0.02	0.27	0.16	0.10	0.27	0.27	0.03	0.03	0.04	0.11	0.24	0.18
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.36	0.68	0.13	0.44	0.44	0.10	0.10	0.10	0.32	0.32	0.32
Volume/Cap:	0.48	0.75	0.23	0.75	0.60	0.60	0.28	0.28	0.36	0.36	0.75	0.57
Uniform Del:	60.0	36.5	8.0	54.6	27.8	27.8	54.2	54.2	54.6	34.2	39.8	37.0
IncremntDel:	4.0	1.8	0.1	7.2	0.7	0.7	0.8	0.8	1.5	0.1	3.3	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	64.1	38.3	8.1	61.7	28.5	28.5	55.0	55.0	56.1	34.3	43.1	37.6
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:	64.1	38.3	8.1	61.7	28.5	28.5	55.0	55.0	56.1	34.3	43.1	37.6
LOS by Move:	E	D	A	E	C	C	D	D	E	C	D	D
HCM2kAvgQ:	2	18	3	6	14	14	2	2	2	6	15	10

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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 #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.581
Loss Time (sec):	9	Average Delay (sec/veh):	24.0
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	3 0	0	1 0	2 1	0	1 0	1! 0	1	0 0	0 0	0
Volume Module:												
Base Vol:	173	1225	0	1	926	260	110	0	157	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:	173	1225	0	1	926	260	110	0	157	0	0	0
Added Vol:	200	183	0	0	37	97	-8	0	-6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	373	1408	0	1	963	357	102	0	151	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:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	389	1467	0	1	984	365	115	0	170	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	389	1467	0	1	984	365	115	0	170	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:	389	1467	0	1	984	365	115	0	170	0	0	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	1.00	0.93	0.86	0.85	0.87	1.00	0.87	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.18	0.82	1.40	0.00	1.60	0.00	0.00	0.00
Final Sat.:	1769	5083	0	1769	3551	1316	2326	0	2632	0	0	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.29	0.00	0.00	0.28	0.28	0.05	0.00	0.06	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:	0.37	0.76	0.00	0.07	0.46	0.46	0.11	0.00	0.11	0.00	0.00	0.00
Volume/Cap:	0.60	0.38	0.00	0.01	0.60	0.60	0.46	0.00	0.60	0.00	0.00	0.00
Uniform Del:	38.4	6.0	0.0	64.9	29.8	29.8	62.8	0.0	63.8	0.0	0.0	0.0
IncremntDel:	1.5	0.1	0.0	0.0	0.4	0.4	0.5	0.0	2.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	39.9	6.1	0.0	64.9	30.2	30.2	63.3	0.0	65.9	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:	39.9	6.1	0.0	64.9	30.2	30.2	63.3	0.0	65.9	0.0	0.0	0.0
LOS by Move:	D	A	A	E	C	C	E	A	E	A	A	A
HCM2kAvgQ:	15	8	0	0	16	16	4	0	6	0	0	0

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	0.872
Loss Time (sec):	12	Average Delay (sec/veh):	58.0
Optimal Cycle:	115	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	207	734	188	176	534	355	300	647	184
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:	728	1057	407	207	734	188	176	534	355	300	647	184
Added Vol:	6	53	38	36	-3	-2	98	87	64	33	35	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	734	1110	445	243	731	186	274	621	419	333	682	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	760	1149	461	251	756	192	302	685	462	351	719	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	760	1149	461	251	756	192	302	685	462	351	719	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:	760	1149	461	251	756	192	302	685	462	351	719	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.22	0.32	0.29	0.07	0.15	0.13	0.17	0.19	0.30	0.10	0.20	0.15
Crit Moves:		****		****					****	****		
Green/Cycle:	0.27	0.37	0.37	0.08	0.18	0.18	0.21	0.35	0.35	0.12	0.25	0.25
Volume/Cap:	0.81	0.87	0.79	0.87	0.81	0.70	0.81	0.56	0.87	0.87	0.81	0.61
Uniform Del:	50.9	43.7	41.9	67.9	58.7	57.4	56.2	39.8	45.9	65.1	52.7	49.6
IncremntDel:	5.4	6.6	7.3	23.8	5.4	7.7	12.2	0.6	14.6	18.3	5.5	2.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	56.3	50.3	49.1	91.7	64.1	65.1	68.4	40.4	60.5	83.4	58.2	52.5
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:	56.3	50.3	49.1	91.7	64.1	65.1	68.4	40.4	60.5	83.4	58.2	52.5
LOS by Move:	E	D	D	F	E	E	E	D	E	F	E	D
HCM2kAvgQ:	19	28	20	8	14	9	15	13	22	11	18	10

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	0.874
Loss Time (sec):	12	Average Delay (sec/veh):	40.9
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2 1	0	1 0	2 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
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:	33	1758	164	192	1117	54	82	68	35	137	56	210
Added Vol:	0	95	0	0	93	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	33	1853	164	192	1210	54	82	68	35	137	56	210
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	36	1995	177	208	1311	59	89	74	38	163	67	250
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	1995	177	208	1311	59	89	74	38	163	67	250
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	1995	177	208	1311	59	89	74	38	163	67	250
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.76	0.24	1.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4614	408	1769	4835	216	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.02	0.43	0.43	0.12	0.27	0.27	0.09	0.09	0.03	0.13	0.13	0.16
Crit Moves:		****		****			****					****
Green/Cycle:	0.06	0.49	0.49	0.13	0.57	0.57	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.36	0.87	0.87	0.87	0.47	0.47	0.87	0.87	0.24	0.68	0.68	0.87
Uniform Del:	68.2	33.8	33.8	63.7	18.8	18.8	66.4	66.4	62.0	56.6	56.6	59.1
IncremntDel:	2.2	3.8	3.8	28.1	0.1	0.1	33.8	33.8	0.8	5.4	5.4	24.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	70.3	37.5	37.5	91.8	18.9	18.9	100.1	100	62.8	62.0	62.0	83.6
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:	70.3	37.5	37.5	91.8	18.9	18.9	100.1	100	62.8	62.0	62.0	83.6
LOS by Move:	E	D	D	F	B	B	F	F	E	E	E	F
HCM2kAvgQ:	2	35	35	12	13	13	10	10	2	11	11	14

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.585
Loss Time (sec):	0	Average Delay (sec/veh):	14.7
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 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
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:	5	268	45	209	318	2	2	2	3	34	3	204
Added Vol:	0	49	4	0	93	0	0	0	0	7	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	5	317	49	209	411	2	2	2	3	41	3	204
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	5	343	53	215	423	2	5	5	7	52	4	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	343	53	215	423	2	5	5	7	52	4	261
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	343	53	215	423	2	5	5	7	52	4	261
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	1.71	0.26	0.67	1.32	0.01	0.28	0.29	0.43	0.93	0.07	1.00
Final Sat.:	15	937	147	368	752	4	127	127	190	429	31	546
Capacity Analysis Module:												
Vol/Sat:	0.37	0.37	0.36	0.59	0.56	0.55	0.04	0.04	0.04	0.12	0.12	0.48
Crit Moves:	****			****				****				****
Delay/Veh:	12.8	12.6	12.3	17.6	16.3	15.9	10.6	10.6	10.6	11.2	11.2	14.2
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:	12.8	12.6	12.3	17.6	16.3	15.9	10.6	10.6	10.6	11.2	11.2	14.2
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	12.5			16.8			10.6			13.6		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.5			16.8			10.6			13.6		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	0.5	0.5	0.5	1.3	1.1	1.1	0.0	0.0	0.0	0.1	0.1	0.8

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 #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.635
Loss Time (sec):	12	Average Delay (sec/veh):	31.9
Optimal Cycle:	52	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:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
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:	126	336	107	48	358	77	52	187	59	119	207	57
Added Vol:	6	3	0	4	2	0	0	20	7	0	17	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	339	107	52	360	77	52	207	66	119	224	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:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	141	362	114	57	396	85	62	247	79	149	281	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	141	362	114	57	396	85	62	247	79	149	281	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:	141	362	114	57	396	85	62	247	79	149	281	80
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.78	0.22
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1358	433	1769	1397	399
Capacity Analysis Module:												
Vol/Sat:	0.08	0.19	0.07	0.03	0.21	0.05	0.04	0.18	0.18	0.08	0.20	0.20
Crit Moves:	****			****			****			****		
Green/Cycle:	0.13	0.38	0.38	0.08	0.34	0.34	0.07	0.29	0.29	0.13	0.35	0.35
Volume/Cap:	0.64	0.51	0.19	0.41	0.64	0.16	0.50	0.64	0.64	0.64	0.57	0.57
Uniform Del:	41.6	23.7	20.6	43.9	28.1	23.4	44.9	31.1	31.1	41.1	26.5	26.5
IncremntDel:	5.9	0.6	0.2	2.0	2.2	0.1	3.3	2.6	2.6	5.6	1.3	1.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	47.5	24.3	20.8	45.9	30.2	23.5	48.2	33.7	33.7	46.7	27.8	27.8
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:	47.5	24.3	20.8	45.9	30.2	23.5	48.2	33.7	33.7	46.7	27.8	27.8
LOS by Move:	D	C	C	D	C	C	D	C	C	D	C	C
HCM2kAvgQ:	5	9	2	2	11	2	2	9	9	5	9	9

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 0.9 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 1 0		1 0	0 1 1		0 0	0 0 0		0 0	0 0 1!		0 0
Volume Module:												
Base Vol:	1	288	9	14	352	0	0	0	0	41	0	17
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:	1	288	9	14	352	0	0	0	0	41	0	17
Added Vol:	0	82	0	2	55	0	0	0	0	0	0	4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1	370	9	16	407	0	0	0	0	41	0	21
User Adj:	0.88	0.88	0.88	0.84	0.84	0.84	0.00	0.00	0.00	0.61	0.61	0.61
PHF Adj:	0.90	0.90	0.90	0.87	0.87	0.87	1.00	1.00	1.00	0.76	0.76	0.76
PHF Volume:	1	361	9	15	393	0	0	0	0	33	0	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	1	361	9	15	393	0	0	0	0	33	0	17
Critical Gap Module:												
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.8	6.5	6.9
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Module:												
Cnflict Vol:	393	xxxx	xxxxx	369	xxxx	xxxxx	xxxx	xxxx	xxxxx	594	790	185
Potent Cap.:	1163	xxxx	xxxxx	1186	xxxx	xxxxx	xxxx	xxxx	xxxxx	436	321	826
Move Cap.:	1163	xxxx	xxxxx	1186	xxxx	xxxxx	xxxx	xxxx	xxxxx	432	316	826
Volume/Cap:	0.00	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.08	0.00	0.02
Level Of Service Module:												
2Way95thQ:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	8.1	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	515	xxxxx
SharedQueue:	0.0	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx
Shrd ConDel:	8.1	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.7	xxxxx
Shared LOS:	A	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			12.7		
ApproachLOS:	*			*			*			B		

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.681
Loss Time (sec):	9	Average Delay (sec/veh):	29.2
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	1 0	0	1 0	1 1	1 0	2	0 0	0	1 0	1 0
Volume Module:												
Base Vol:	0	0	0	72	0	304	300	793	0	0	696	81
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	72	0	304	300	793	0	0	696	81
Added Vol:	0	3	3	1	7	47	77	23	0	6	15	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3	3	73	7	351	377	816	0	6	711	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:	1.00	1.00	1.00	0.87	0.87	0.87	0.96	0.96	0.96	0.88	0.88	0.88
PHF Volume:	0	3	3	84	8	403	395	854	0	7	809	94
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	3	84	8	403	395	854	0	7	809	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:	0	3	3	84	8	403	395	854	0	7	809	94
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.91	0.90	0.81	0.81	0.81	0.93	0.93	1.00	0.87	0.87	0.87
Lanes:	0.00	0.50	0.50	0.91	0.09	2.00	1.00	2.00	0.00	0.01	1.78	0.21
Final Sat.:	0	863	863	1406	135	3081	1769	3538	0	25	2930	342
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.06	0.06	0.13	0.22	0.24	0.00	0.28	0.28	0.28
Crit Moves:		****				****	****				****	
Green/Cycle:	0.00	0.01	0.01	0.19	0.19	0.19	0.33	0.73	0.00	0.41	0.41	0.41
Volume/Cap:	0.00	0.68	0.68	0.31	0.31	0.68	0.68	0.33	0.00	0.68	0.68	0.68
Uniform Del:	0.0	64.6	64.6	45.1	45.1	48.8	37.8	6.1	0.0	31.8	31.8	31.8
IncremntDel:	0.0	121	121.1	0.1	0.1	2.6	3.3	0.1	0.0	1.5	1.5	1.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	186	185.7	45.2	45.2	51.4	41.1	6.2	0.0	33.2	33.2	33.2
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	186	185.7	45.2	45.2	51.4	41.1	6.2	0.0	33.2	33.2	33.2
LOS by Move:	A	F	F	D	D	D	D	A	A	C	C	C
HCM2kAvgQ:	0	1	1	3	3	9	14	6	0	15	15	15

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 3.8 Worst Case Level Of Service: E[39.2]

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	1!	0	0	
Volume Module:																								
Base Vol:	0	893	169				43	455	0				0	0	0				108	0	62			
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	893	169				43	455	0				0	0	0				108	0	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:	0	893	169				43	455	0				0	0	0				108	0	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:	0.90	0.90	0.90				0.84	0.84	0.84				1.00	1.00	1.00				0.99	0.99	0.99			
PHF Volume:	0	992	188				51	544	0				0	0	0				109	0	63			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	992	188				51	544	0				0	0	0				109	0	63			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.8	6.5	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1180	xxxx	xxxxx				xxxx	xxxx	xxxxx				1461	1733	590			
Potent Cap.:	xxxx	xxxx	xxxxx				588	xxxx	xxxxx				xxxx	xxxx	xxxxx				120	87	451			
Move Cap.:	xxxx	xxxx	xxxxx				588	xxxx	xxxxx				xxxx	xxxx	xxxxx				112	79	451			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				237	156	xxxxx				219	192	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.09	xxxx	xxxx				xxxx	xxxx	xxxx				0.50	0.00	0.14			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				0.3	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				11.7	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	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	270	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	4.0	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	39.2	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	E	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						39.2					
ApproachLOS:	*						*						*						E					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.782
Loss Time (sec):	6	Average Delay (sec/veh):	10.5
Optimal Cycle:	46	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			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0 0	0	2	0 0	0 1	0	0 2	0 1	0	0 2	0 0
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	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	595	0	710	0	854	566	0	1616	0
Added Vol:	0	0	0	47	0	0	0	24	0	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	642	0	710	0	878	566	0	1639	0
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:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	701	0	0	0	922	0	0	1713	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	701	0	0	0	922	0	0	1713	0
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:	0	0	0	701	0	0	0	922	0	0	1713	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.26	0.00	0.00	0.48	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.42	0.00	0.00	0.78	0.00
Uniform Del:	0.0	0.0	0.0	17.2	0.0	0.0	0.0	4.9	0.0	0.0	7.0	0.0
IncremntDel:	0.0	0.0	0.0	4.5	0.0	0.0	0.0	0.1	0.0	0.0	1.9	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	21.7	0.0	0.0	0.0	5.0	0.0	0.0	8.9	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:	0.0	0.0	0.0	21.7	0.0	0.0	0.0	5.0	0.0	0.0	8.9	0.0
LOS by Move:	A	A	A	C	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	8	0	0	0	4	0	0	13	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.009
Loss Time (sec):	12	Average Delay (sec/veh):	65.4
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
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:	982	683	196	142	241	121	174	834	203	203	1216	218
Added Vol:	0	0	47	0	0	0	0	71	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	982	683	243	142	241	121	174	905	203	250	1286	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:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1010	703	250	178	302	152	182	946	212	276	1418	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1010	703	250	178	302	152	182	946	212	276	1418	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1010	703	250	178	302	152	182	946	212	276	1418	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.83
Lanes:	2.09	1.41	0.50	1.00	2.00	1.00	1.00	1.63	0.37	1.00	2.00	1.00
Final Sat.:	3428	2385	848	1769	3538	1583	1769	2812	631	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.10	0.09	0.10	0.10	0.34	0.34	0.16	0.40	0.15
Crit Moves:	****			****				****		****		
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.33	0.33	0.15	0.39	0.49
Volume/Cap:	1.01	1.01	1.01	1.01	0.86	0.96	1.03	1.01	1.01	1.01	1.03	0.31
Uniform Del:	35.4	35.4	35.4	45.0	44.3	44.8	45.0	33.3	33.3	42.3	30.6	15.4
IncremntDel:	22.5	22.5	22.5	70.0	18.2	59.6	76.4	28.7	28.7	56.6	32.9	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	57.9	57.9	57.9	115.0	62.5	104.4	121.5	62.0	62.0	98.9	63.5	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:	57.9	57.9	57.9	115.0	62.5	104.4	121.5	62.0	62.0	98.9	63.5	15.7
LOS by Move:	E	E	E	F	E	F	F	E	E	F	E	B
HCM2kAvgQ:	23	23	23	10	7	8	10	26	26	14	32	4

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Note: Queue reported is the number of cars per lane.

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Cumulative Traffic Conditions Analysis

Scenario Report

Scenario:	Cumulative AM
Command:	Cumulative AM
Volume:	Cumulative AM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	None
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cumulative AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	F	176.5	1.259	F	176.5	1.259	+ 0.000 D/V
# 2 El Camino Real / McLellan Dr	E	62.8	1.032	E	62.8	1.032	+ 0.000 D/V
# 3 El Camino Real / Arroyo Dr	D	37.7	0.749	D	37.7	0.749	+ 0.000 D/V
# 4 El Camino Real / Chestnut Ave	F	127.4	1.251	F	127.4	1.251	+ 0.000 D/V
# 5 El Camino Real / W. Orange Ave	E	72.6	1.017	E	72.6	1.017	+ 0.000 D/V
# 6 Mission Rd / Grand Ave	C	22.4	0.766	C	22.4	0.766	+ 0.000 V/C
# 7 Grand Ave / Chestnut Ave	D	49.7	0.934	D	49.7	0.934	+ 0.000 D/V
# 8 Mission Rd / Oak Ave	D	30.8	0.504	D	30.8	0.504	+ 0.000 D/V
# 9 Mission Rd / Chestnut Ave	C	27.6	0.761	C	27.6	0.761	+ 0.000 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	674.1	2.190	F	674.1	2.190	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	B	10.6	0.897	B	10.6	0.897	+ 0.000 D/V
# 12 I-280 NB Ramps / Westborough B	F	265.1	1.552	F	265.1	1.552	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.259
Loss Time (sec):	12	Average Delay (sec/veh):	176.5
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1 1	0	1 0	1 1	0	1 1	0 0	2	0 0	1! 0	0
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	812	434	8	6	815	95	222	17	1201	30	42	11
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:	812	434	8	6	815	95	222	17	1201	30	42	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:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	966	516	10	6	891	103	249	19	1348	36	52	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	966	516	10	6	891	103	249	19	1348	36	52	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:	966	516	10	6	891	103	249	19	1348	36	52	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.96	0.04	1.00	1.79	0.21	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3460	68	1769	3119	362	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.28	0.15	0.15	0.00	0.29	0.29	0.08	0.08	0.48	0.06	0.06	0.06
Crit Moves:	****				****				****	****		
Green/Cycle:	0.20	0.32	0.32	0.09	0.21	0.21	0.35	0.35	0.35	0.12	0.12	0.12
Volume/Cap:	1.38	0.46	0.46	0.04	1.38	1.38	0.22	0.22	1.38	0.47	0.47	0.47
Uniform Del:	39.8	26.9	26.9	41.8	39.7	39.7	22.9	22.9	32.5	41.0	41.0	41.0
IncremntDel:	181.2	0.3	0.3	0.1	181	181.0	0.1	0.1	178.8	1.6	1.6	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	221.1	27.2	27.2	42.0	221	220.7	22.9	22.9	211.3	42.7	42.7	42.7
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:	221.1	27.2	27.2	42.0	221	220.7	22.9	22.9	211.3	42.7	42.7	42.7
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	32	6	6	0	36	36	3	3	51	3	3	3

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	1.032
Loss Time (sec):	12	Average Delay (sec/veh):	62.8
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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1 1	0	0 1	0 0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	44	664	171	557	1536	41	47	35	71	301	40	516
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:	44	664	171	557	1536	41	47	35	71	301	40	516
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	48	735	189	636	1753	47	57	43	86	382	50	654
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	735	189	636	1753	47	57	43	86	382	50	654
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	48	735	189	636	1753	47	57	43	86	382	50	654
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.79	0.90	0.93	0.93	0.95	0.95	0.74	0.88	0.88	0.87
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	0.57	0.43	1.00	1.33	0.09	1.58
Final Sat.:	1769	5083	1502	3432	3432	92	1030	780	1407	2223	146	2607
Capacity Analysis Module:												
Vol/Sat:	0.03	0.14	0.13	0.19	0.51	0.51	0.06	0.06	0.06	0.17	0.34	0.25
Crit Moves:	****				****		****				****	
Green/Cycle:	0.03	0.22	0.53	0.28	0.46	0.46	0.10	0.10	0.10	0.31	0.31	0.31
Volume/Cap:	0.89	0.67	0.24	0.67	1.10	1.10	0.55	0.55	0.61	0.55	1.10	0.80
Uniform Del:	62.8	46.6	16.5	41.5	34.8	34.8	55.7	55.7	56.1	37.2	44.7	41.1
IncremntDel:	82.7	1.6	0.2	1.8	54.5	54.5	3.7	3.7	7.8	0.3	59.6	3.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	145.5	48.1	16.6	43.3	89.3	89.3	59.4	59.4	63.9	37.5	104	44.7
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:	145.5	48.1	16.6	43.3	89.3	89.3	59.4	59.4	63.9	37.5	104	44.7
LOS by Move:	F	D	B	D	F	F	E	E	E	D	F	D
HCM2kAvgQ:	2	10	4	11	46	46	5	5	4	10	33	17

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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 #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.749
Loss Time (sec):	9	Average Delay (sec/veh):	37.7
Optimal Cycle:	63	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:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	2 1	0	1 0	2 1	0	1 0	1! 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	139	934	35	18	894	154	200	3	241	71	2	13
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	196	1320	49	25	1263	218	283	4	341	100	3	18
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:	196	1320	49	25	1263	218	283	4	341	100	3	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	1.00
PHF Adj:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	232	1558	58	26	1285	221	318	5	383	100	3	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	232	1558	58	26	1285	221	318	5	383	100	3	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	232	1558	58	26	1285	221	318	5	383	100	3	18
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.89	0.93	0.87	0.87	0.88	0.88	0.88	0.93	0.85	0.84
Lanes:	1.00	2.89	0.11	1.00	2.56	0.44	1.45	0.01	1.54	1.00	0.13	0.87
Final Sat.:	1769	4875	183	1769	4238	730	2421	22	2567	1769	214	1390
Capacity Analysis Module:												
Vol/Sat:	0.13	0.32	0.32	0.01	0.30	0.30	0.13	0.21	0.15	0.06	0.01	0.01
Crit Moves:	****				****			****		****		
Green/Cycle:	0.18	0.54	0.54	0.04	0.40	0.40	0.28	0.28	0.28	0.08	0.08	0.08
Volume/Cap:	0.75	0.60	0.60	0.33	0.75	0.75	0.46	0.75	0.53	0.75	0.17	0.17
Uniform Del:	58.7	23.8	23.8	69.5	38.1	38.1	44.2	48.8	45.2	67.9	64.9	64.9
IncremntDel:	9.7	0.4	0.4	2.4	1.6	1.6	0.2	3.4	0.4	20.6	0.7	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	68.5	24.2	24.2	71.9	39.7	39.7	44.4	52.2	45.5	88.6	65.6	65.6
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:	68.5	24.2	24.2	71.9	39.7	39.7	44.4	52.2	45.5	88.6	65.6	65.6
LOS by Move:	E	C	C	E	D	D	D	D	D	F	E	E
HCM2kAvgQ:	12	18	18	1	20	20	8	16	10	6	1	1

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.251
Loss Time (sec):	12	Average Delay (sec/veh):	127.4
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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	187	922	112	349	624	475	331	567	133
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	633	844	401	264	1303	158	493	882	671	468	801	188
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:	633	844	401	264	1303	158	493	882	671	468	801	188
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	682	909	432	301	1482	180	538	963	733	626	1073	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	682	909	432	301	1482	180	538	963	733	626	1073	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	682	909	432	301	1482	180	538	963	733	626	1073	252
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.80	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1559	3432	5083	1529	1769	3538	1534	3432	3538	1546
Capacity Analysis Module:												
Vol/Sat:	0.20	0.26	0.28	0.09	0.29	0.12	0.30	0.27	0.48	0.18	0.30	0.16
Crit Moves:	****				****				****	****		
Green/Cycle:	0.16	0.30	0.30	0.09	0.23	0.23	0.26	0.38	0.38	0.15	0.26	0.26
Volume/Cap:	1.25	0.86	0.93	0.93	1.25	0.51	1.15	0.71	1.25	1.25	1.15	0.62
Uniform Del:	63.1	49.7	51.1	67.5	57.5	50.0	55.2	39.3	46.3	64.1	55.2	48.6
IncremntDel:	127.3	7.4	25.5	32.6	120	1.2	90.0	1.8	126.4	128.5	80.3	2.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	190.4	57.2	76.6	100.0	177	51.2	145.2	41.2	172.8	192.6	136	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:	190.4	57.2	76.6	100.0	177	51.2	145.2	41.2	172.8	192.6	136	51.5
LOS by Move:	F	E	E	F	F	D	F	D	F	F	F	D
HCM2kAvgQ:	27	23	23	10	40	7	36	20	53	25	38	11

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.017
Loss Time (sec):	12	Average Delay (sec/veh):	72.6
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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2	1 0	1 0	2	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	89	1267	168	268	2016	109	213	89	64	155	89	278
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:	89	1267	168	268	2016	109	213	89	64	155	89	278
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	116	1655	220	283	2129	115	257	107	77	168	96	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1655	220	283	2129	115	257	107	77	168	96	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:	116	1655	220	283	2129	115	257	107	77	168	96	301
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.88	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4402	584	1769	4783	258	1269	530	1497	1147	657	1527
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.16	0.45	0.45	0.20	0.20	0.05	0.15	0.15	0.20
Crit Moves:		****		****			****					****
Green/Cycle:	0.07	0.37	0.37	0.16	0.46	0.46	0.20	0.20	0.20	0.19	0.19	0.19
Volume/Cap:	0.97	1.02	1.02	1.02	0.97	0.97	1.02	1.02	0.26	0.76	0.76	1.02
Uniform Del:	69.8	47.3	47.3	63.2	39.5	39.5	60.1	60.1	50.7	57.1	57.1	60.5
IncremntDel:	72.3	25.3	25.3	58.3	12.3	12.3	52.0	52.0	0.5	9.1	9.1	56.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	142.0	72.6	72.6	121.5	51.8	51.8	112.0	112	51.2	66.2	66.2	117.2
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:	142.0	72.6	72.6	121.5	51.8	51.8	112.0	112	51.2	66.2	66.2	117.2
LOS by Move:	F	E	E	F	D	D	F	F	D	E	E	F
HCM2kAvgQ:	8	39	38	18	42	42	22	22	3	13	13	19

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.766
Loss Time (sec):	0	Average Delay (sec/veh):	22.4
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 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	4	386	27	227	472	1	6	3	3	71	3	271
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:	4	386	27	227	472	1	6	3	3	71	3	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	5	476	33	246	510	2	8	4	4	92	4	351
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	476	33	246	510	2	8	4	4	92	4	351
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	476	33	246	510	2	8	4	4	92	4	351
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	1.85	0.13	0.65	1.34	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	10	910	64	321	688	2	197	98	98	415	17	511
Capacity Analysis Module:												
Vol/Sat:	0.53	0.52	0.52	0.77	0.74	0.73	0.04	0.04	0.04	0.22	0.22	0.69
Crit Moves:	****			****				****				****
Delay/Veh:	17.4	17.2	17.0	29.2	26.6	25.6	11.9	11.9	11.9	12.9	12.9	22.5
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:	17.4	17.2	17.0	29.2	26.6	25.6	11.9	11.9	11.9	12.9	12.9	22.5
LOS by Move:	C	C	C	D	D	D	B	B	B	B	B	C
ApproachDel:	17.2			27.4			11.9			20.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	17.2			27.4			11.9			20.4		
LOS by Appr:	C			D			B			C		
AllWayAvgQ:	1.0	1.0	1.0	2.7	2.3	2.3	0.0	0.0	0.0	0.3	0.3	1.8

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.934
Loss Time (sec):	12	Average Delay (sec/veh):	49.7
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			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	90	568	195	54	461	107	122	304	114	185	246	72
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:	90	568	195	54	461	107	122	304	114	185	246	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	100	628	216	64	548	128	169	423	159	214	285	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	628	216	64	548	128	169	423	159	214	285	83
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	100	628	216	64	548	128	169	423	159	214	285	83
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.72	0.28	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1293	487	1769	1389	407
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.14	0.04	0.29	0.09	0.10	0.33	0.33	0.12	0.20	0.20
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.36	0.36	0.04	0.34	0.34	0.15	0.35	0.35	0.13	0.33	0.33
Volume/Cap:	0.88	0.94	0.38	0.90	0.88	0.25	0.63	0.94	0.94	0.94	0.63	0.63
Uniform Del:	46.4	30.8	23.7	47.8	31.2	24.1	39.7	31.4	31.4	43.1	28.5	28.5
IncremntDel:	48.0	20.4	0.4	74.3	13.2	0.3	4.6	21.5	21.5	41.8	2.2	2.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	94.3	51.3	24.1	122.1	44.4	24.3	44.3	53.0	53.0	84.9	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:	94.3	51.3	24.1	122.1	44.4	24.3	44.3	53.0	53.0	84.9	30.7	30.7
LOS by Move:	F	D	C	F	D	C	D	D	D	F	C	C
HCM2kAvgQ:	6	23	5	4	19	3	5	19	19	10	10	10

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 5.8 Worst Case Level Of Service: D[30.8]

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	1	0	1	0		0	1	0	1	0		1	0	0	1	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	13	266		4			7	305		71			35		3		18		60		2		24	
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41		1.41		1.41		1.41		1.41	
Initial Bse:	18	376		6			10	431		100			49		4		25		85		3		34	
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	376		6			10	431		100			49		4		25		85		3		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:	0.88	0.88		0.88			0.84	0.84		0.84			1.00		1.00		1.00		0.61		0.61		0.61	
PHF Volume:	21	430		6			12	513		119			49		4		25		138		5		55	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	21	430		6			12	513		119			49		4		25		138		5		55	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5	6.5			6.9		7.5	6.5			6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5	4.0			3.3		3.5	4.0			3.3	
Capacity Module:																								
Cnflict Vol:	632	xxxx	xxxxx				436	xxxx	xxxxx				855	1074			316		757	1131			218	
Potent Cap.:	946	xxxx	xxxxx				1120	xxxx	xxxxx				252	218			680		297	202			786	
Move Cap.:	946	xxxx	xxxxx				1120	xxxx	xxxxx				224	211			680		274	195			786	
Volume/Cap:	0.02	xxxx	xxxx				0.01	xxxx	xxxx				0.22	0.02			0.04		0.50	0.02			0.07	
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				0.8	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	8.9	xxxx	xxxxx				8.2	xxxx	xxxxx				25.6	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	A	*		*			A	*		*			D	*		*			*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			516		xxxx		331		xxxxx	
SharedQueue:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx			0.2		xxxxx		3.7		xxxxx	
Shrd ConDel:	8.9	xxxx	xxxxx				8.2	xxxx	xxxxx				xxxxx	xxxx			12.4		xxxxx		30.8		xxxxx	
Shared LOS:	A	*		*			A	*		*			*	*			B		*		D		*	
ApproachDel:	xxxxxx						xxxxxx						20.6						30.8					
ApproachLOS:	*						*						C						D					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.761
Loss Time (sec):	9	Average Delay (sec/veh):	27.6
Optimal Cycle:	64	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			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0	0	1! 0	0	1	0	0 1	1	0	1	0	1 1 0
Volume Module:												
Base Vol:	0	0	0	94	0	299	188	870	0	0	720	97
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	133	0	422	266	1229	0	0	1017	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:	0	0	0	133	0	422	266	1229	0	0	1017	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:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	0	0	164	0	520	297	1374	0	0	1151	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	164	0	520	297	1374	0	0	1151	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	0	164	0	520	297	1374	0	0	1151	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.83	0.93	0.93	0.95	1.00	0.91	0.91
Lanes:	0.00	1.00	0.00	1.00	0.00	2.00	1.00	2.00	0.00	1.00	1.76	0.24
Final Sat.:	0	1900	0	1769	0	3165	1769	3538	0	1900	3061	412
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.16	0.17	0.39	0.00	0.00	0.38	0.38
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.22	0.00	0.22	0.22	0.71	0.00	0.00	0.49	0.49
Volume/Cap:	0.00	0.00	0.00	0.43	0.00	0.76	0.76	0.54	0.00	0.00	0.76	0.76
Uniform Del:	0.0	0.0	0.0	44.0	0.0	47.8	47.5	8.6	0.0	0.0	26.7	26.7
IncremntDel:	0.0	0.0	0.0	0.8	0.0	5.0	8.5	0.2	0.0	0.0	2.0	2.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	44.8	0.0	52.8	56.0	8.9	0.0	0.0	28.7	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	0.0	0.0	44.8	0.0	52.8	56.0	8.9	0.0	0.0	28.7	28.7
LOS by Move:	A	A	A	D	A	D	E	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	11	13	13	0	0	22	22

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 76.5 Worst Case Level Of Service: F[674.1]

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 1!	0 0	
Volume Module:																
Base Vol:	0	622	68		45	909	0		0	0	0		158	0	33	
Growth Adj:	1.41	1.41	1.41		1.41	1.41	1.41		1.41	1.41	1.41		1.41	1.41	1.41	
Initial Bse:	0	879	96		64	1284	0		0	0	0		223	0	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:	0	879	96		64	1284	0		0	0	0		223	0	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:	0.71	0.71	0.71		0.92	0.92	0.92		1.00	1.00	1.00		0.75	0.75	0.75	
PHF Volume:	0	1233	135		69	1401	0		0	0	0		299	0	63	
Reduct Vol:	0	0	0		0	0	0		0	0	0		0	0	0	
FinalVolume:	0	1233	135		69	1401	0		0	0	0		299	0	63	
Critical Gap Module:																
Critical Gp:	xxxxx	xxxx	xxxxx		4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx		6.8	6.5	6.9	
FollowUpTim:	xxxxx	xxxx	xxxxx		2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx		3.5	4.0	3.3	
Capacity Module:																
Cnflict Vol:	xxxx	xxxx	xxxxx		1367	xxxx	xxxxx		xxxx	xxxx	xxxxx		2139	2839	684	
Potent Cap.:	xxxx	xxxx	xxxxx		498	xxxx	xxxxx		xxxx	xxxx	xxxxx		42	17	391	
Move Cap.:	xxxx	xxxx	xxxxx		498	xxxx	xxxxx		xxxx	xxxx	xxxxx		37	15	391	
Total Cap:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		77	73	xxxxx		137	90	xxxxx	
Volume/Cap:	xxxx	xxxx	xxxx		0.14	xxxx	xxxx		xxxx	xxxx	xxxx		2.19	0.00	0.16	
Level Of Service Module:																
2Way95thQ:	xxxx	xxxx	xxxxx		0.5	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx	
Control Del:	xxxxx	xxxx	xxxxx		13.4	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	
Shared Cap.:	xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	xxxx	xxxxx		xxxx	154	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	30.4	xxxxx	
Shrd ConDel:	xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	xxxx	xxxxx		xxxxx	674	xxxxx	
Shared LOS:	*	*	*		*	*	*		*	*	*		*	F	*	
ApproachDel:	xxxxxx				xxxxxx				xxxxxx				674.1			
ApproachLOS:	*				*				*				F			

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 #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.897
Loss Time (sec):	6	Average Delay (sec/veh):	10.6
Optimal Cycle:	68	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			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0	0 0	2	0	0 0 1	0	0	2 0 1	0	0	2 0 0
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	370	0	261	0	2224	1616	0	1431	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	370	0	261	0	2224	1616	0	1431	0
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:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	447	0	0	0	2331	0	0	1758	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	447	0	0	0	2331	0	0	1758	0
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:	0	0	0	447	0	0	0	2331	0	0	1758	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.66	0.00	0.00	0.50	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.90	0.00	0.00	0.68	0.00
Uniform Del:	0.0	0.0	0.0	21.0	0.0	0.0	0.0	5.2	0.0	0.0	3.5	0.0
IncremntDel:	0.0	0.0	0.0	18.7	0.0	0.0	0.0	4.6	0.0	0.0	0.7	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	39.7	0.0	0.0	0.0	9.7	0.0	0.0	4.2	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	39.7	0.0	0.0	0.0	9.7	0.0	0.0	4.2	0.0
LOS by Move:	A	A	A	D	A	A	A	A	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	0	0	20	0	0	9	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.552
Loss Time (sec):	12	Average Delay (sec/veh):	265.1
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0	2 0	1	1 0	1 1	0	1 0	2 0	1
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	83
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1105	369	360	394	928	148	160	1512	226	206	1851	117
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:	1105	369	360	394	928	148	160	1512	226	206	1851	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	1282	428	418	465	1095	175	175	1660	248	249	2238	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1282	428	418	465	1095	175	175	1660	248	249	2238	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:	1282	428	418	465	1095	175	175	1660	248	249	2238	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.44	0.79	0.77	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3946	1317	1287	1769	3538	1583	1769	3018	451	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.32	0.32	0.32	0.26	0.31	0.11	0.10	0.55	0.55	0.14	0.63	0.09
Crit Moves:	****			****			****				****	
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.06	0.38	0.38	0.10	0.41	0.61
Volume/Cap:	1.55	1.55	1.55	1.32	1.55	0.55	1.55	1.47	1.47	1.47	1.55	0.15
Uniform Del:	39.5	39.5	39.5	40.0	40.0	36.0	46.8	31.2	31.2	45.2	29.6	8.5
IncremntDel:	252.2	252	252.2	162.0	256	2.2	287.3	214	213.8	238.7	252	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	291.7	292	291.7	202.0	296	38.2	334.1	245	245.0	283.9	282	8.6
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:	291.7	292	291.7	202.0	296	38.2	334.1	245	245.0	283.9	282	8.6
LOS by Move:	F	F	F	F	F	D	F	F	F	F	F	A
HCM2kAvgQ:	44	44	44	30	44	6	15	71	71	19	88	2

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Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Cumulative PM
Command:	Cumulative PM
Volume:	Cumulative PM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	None
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cumulative PM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	F	178.6	1.286	F	178.6	1.286	+ 0.000 D/V
# 2 El Camino Real / McLellan Dr	D	45.2	0.883	D	45.2	0.883	+ 0.000 D/V
# 3 El Camino Real / Arroyo Dr	C	30.8	0.711	C	30.8	0.711	+ 0.000 D/V
# 4 El Camino Real / Chestnut Ave	F	97.2	1.095	F	97.2	1.095	+ 0.000 D/V
# 5 El Camino Real / W. Orange Ave	F	105.5	1.205	F	105.5	1.205	+ 0.000 D/V
# 6 Mission Rd / Grand Ave	C	23.1	0.781	C	23.1	0.781	+ 0.000 V/C
# 7 Grand Ave / Chestnut Ave	D	42.1	0.861	D	42.1	0.861	+ 0.000 D/V
# 8 Mission Rd / Oak Ave	B	14.1	0.107	B	14.1	0.107	+ 0.000 D/V
# 9 Mission Rd / Chestnut Ave	C	28.2	0.762	C	28.2	0.762	-0.006 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	322.7	1.252	F	322.7	1.252	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	D	41.9	1.070	D	41.9	1.070	+ 0.000 D/V
# 12 I-280 NB Ramps / Westborough B	F	196.0	1.396	F	196.0	1.396	+ 0.000 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.286
Loss Time (sec):	12	Average Delay (sec/veh):	178.6
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:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1571	1061	27	11	663	162	259	24	811	14	23	3
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:	1571	1061	27	11	663	162	259	24	811	14	23	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1717	1160	29	12	712	175	306	28	960	18	29	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1717	1160	29	12	712	175	306	28	960	18	29	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1717	1160	29	12	712	175	306	28	960	18	29	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.90	0.89	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.95	0.05	1.00	1.60	0.40	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3437	87	1769	2751	674	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.50	0.34	0.34	0.01	0.26	0.26	0.09	0.09	0.34	0.03	0.03	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.34	0.47	0.47	0.06	0.18	0.18	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.45	0.72	0.72	0.12	1.45	1.45	0.40	0.40	1.45	0.23	0.23	0.23
Uniform Del:	32.8	21.4	21.4	44.9	41.1	41.1	32.1	32.1	38.1	39.8	39.8	39.8
IncremntDel:	208.3	1.6	1.6	0.6	213	212.6	0.3	0.3	211.9	0.6	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	241.1	23.0	23.0	45.5	254	253.7	32.4	32.4	250.1	40.4	40.4	40.4
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:	241.1	23.0	23.0	45.5	254	253.7	32.4	32.4	250.1	40.4	40.4	40.4
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	59	14	14	0	34	34	5	5	39	2	2	2

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.883
Loss Time (sec):	12	Average Delay (sec/veh):	45.2
Optimal Cycle:	115	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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1	1 0	0 1	0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	59	1676	261	321	920	68	37	30	71	307	38	581
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:	59	1676	261	321	920	68	37	30	71	307	38	581
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	1737	271	364	1045	77	39	32	76	331	41	628
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1737	271	364	1045	77	39	32	76	331	41	628
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	61	1737	271	364	1045	77	39	32	76	331	41	628
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.72	0.90	0.92	0.92	0.95	0.95	0.78	0.87	0.87	0.87
Lanes:	1.00	3.00	1.00	2.00	1.86	0.14	0.55	0.45	1.00	1.32	0.08	1.60
Final Sat.:	1769	5083	1377	3432	3261	240	1002	809	1482	2188	131	2658
Capacity Analysis Module:												
Vol/Sat:	0.03	0.34	0.20	0.11	0.32	0.32	0.04	0.04	0.05	0.15	0.31	0.24
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.36	0.70	0.11	0.43	0.43	0.10	0.10	0.10	0.33	0.33	0.33
Volume/Cap:	0.75	0.94	0.28	0.94	0.75	0.75	0.39	0.39	0.51	0.46	0.94	0.71
Uniform Del:	61.2	40.2	7.5	57.3	31.3	31.3	54.8	54.8	55.5	34.1	42.2	37.9
IncremntDel:	31.1	10.5	0.2	31.5	2.1	2.1	1.4	1.4	3.0	0.2	15.8	1.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	92.3	50.6	7.7	88.8	33.4	33.4	56.2	56.2	58.5	34.2	58.0	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:	92.3	50.6	7.7	88.8	33.4	33.4	56.2	56.2	58.5	34.2	58.0	39.6
LOS by Move:	F	D	A	F	C	C	E	E	E	C	E	D
HCM2kAvgQ:	3	27	4	7	18	18	3	3	4	8	25	15

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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 #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.711
Loss Time (sec):	9	Average Delay (sec/veh):	30.8
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	2 1	0	1 0	2 1	0	1 0	1! 0	1	1 0	0 1	0
Volume Module:												
Base Vol:	170	1213	28	21	905	260	110	2	155	69	3	12
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	240	1714	40	30	1279	367	155	3	219	97	4	17
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:	240	1714	40	30	1279	367	155	3	219	97	4	17
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	250	1785	41	30	1306	375	175	3	246	97	4	17
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	250	1785	41	30	1306	375	175	3	246	97	4	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:	250	1785	41	30	1306	375	175	3	246	97	4	17
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.89	0.93	0.86	0.86	0.88	0.88	0.87	0.93	0.86	0.83
Lanes:	1.00	2.93	0.07	1.00	2.33	0.67	1.41	0.01	1.58	1.00	0.19	0.81
Final Sat.:	1769	4954	114	1769	3812	1095	2344	25	2607	1769	317	1269
Capacity Analysis Module:												
Vol/Sat:	0.14	0.36	0.36	0.02	0.34	0.34	0.07	0.13	0.09	0.06	0.01	0.01
Crit Moves:	****				****			****		****		
Green/Cycle:	0.20	0.63	0.63	0.05	0.48	0.48	0.18	0.18	0.18	0.08	0.08	0.08
Volume/Cap:	0.71	0.57	0.57	0.37	0.71	0.71	0.41	0.71	0.52	0.71	0.17	0.17
Uniform Del:	56.0	15.7	15.7	69.3	30.6	30.6	54.3	57.7	55.5	67.5	64.7	64.7
IncremntDel:	6.6	0.2	0.2	2.7	1.0	1.0	0.3	4.0	0.6	15.9	0.7	0.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	62.7	15.9	15.9	72.0	31.6	31.6	54.6	61.7	56.1	83.5	65.4	65.4
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:	62.7	15.9	15.9	72.0	31.6	31.6	54.6	61.7	56.1	83.5	65.4	65.4
LOS by Move:	E	B	B	E	C	C	D	E	E	F	E	E
HCM2kAvgQ:	12	17	17	1	21	21	5	10	7	6	1	1

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.095
Loss Time (sec):	12	Average Delay (sec/veh):	97.2
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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	184	767	224	204	506	355	267	611	169
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1029	1494	575	260	1084	317	288	715	502	377	863	239
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:	1029	1494	575	260	1084	317	288	715	502	377	863	239
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	1065	1546	595	269	1121	327	318	789	554	398	910	252
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1065	1546	595	269	1121	327	318	789	554	398	910	252
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1065	1546	595	269	1121	327	318	789	554	398	910	252
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.31	0.44	0.38	0.08	0.22	0.22	0.18	0.22	0.36	0.12	0.26	0.16
Crit Moves:	****				****				****	****		
Green/Cycle:	0.28	0.41	0.41	0.07	0.20	0.20	0.18	0.33	0.33	0.11	0.26	0.26
Volume/Cap:	1.10	1.06	0.93	1.06	1.10	1.08	1.00	0.68	1.10	1.10	1.00	0.64
Uniform Del:	53.8	44.2	42.0	69.5	59.9	59.9	61.6	43.4	50.3	67.1	55.8	49.6
IncremntDel:	58.5	42.5	19.7	74.4	57.8	75.9	51.5	1.6	68.5	75.3	30.8	3.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	112.2	86.7	61.8	143.8	118	135.8	113.1	45.0	118.8	142.4	86.6	53.1
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:	112.2	86.7	61.8	143.8	118	135.8	113.1	45.0	118.8	142.4	86.6	53.1
LOS by Move:	F	F	E	F	F	F	F	D	F	F	F	D
HCM2kAvgQ:	35	47	30	10	27	22	20	17	35	15	28	11

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.205
Loss Time (sec):	12	Average Delay (sec/veh):	105.5
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2 1	0	1 0	2 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	47	2484	232	271	1578	76	116	96	49	194	79	297
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:	47	2484	232	271	1578	76	116	96	49	194	79	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	50	2674	249	294	1710	83	125	104	53	230	94	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2674	249	294	1710	83	125	104	53	230	94	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	50	2674	249	294	1710	83	125	104	53	230	94	353
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.74	0.26	1.00	2.86	0.14	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4589	428	1769	4813	233	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.03	0.58	0.58	0.17	0.36	0.36	0.13	0.13	0.04	0.18	0.18	0.23
Crit Moves:		****		****			****					****
Green/Cycle:	0.05	0.48	0.48	0.14	0.58	0.58	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.62	1.20	1.20	1.20	0.62	0.62	1.20	1.20	0.34	0.93	0.93	1.20
Uniform Del:	70.3	38.7	38.7	64.7	21.0	21.0	67.1	67.1	62.3	59.5	59.5	60.5
IncremntDel:	13.5	96.3	96.3	124.3	0.4	0.4	131.2	131	1.3	31.5	31.5	119.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	83.7	135	135.0	189.0	21.4	21.4	198.4	198	63.6	91.0	91.0	180.4
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:	83.7	135	135.0	189.0	21.4	21.4	198.4	198	63.6	91.0	91.0	180.4
LOS by Move:	F	F	F	F	C	C	F	F	E	F	F	F
HCM2kAvgQ:	3	72	72	22	20	19	18	18	3	18	18	26

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.781
Loss Time (sec):	0	Average Delay (sec/veh):	23.1
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 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	7	379	64	295	449	3	3	3	4	48	4	288
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	379	64	295	449	3	3	3	4	48	4	288
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	8	410	69	304	462	3	6	6	10	61	5	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	410	69	304	462	3	6	6	10	61	5	369
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	410	69	304	462	3	6	6	10	61	5	369
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	1.69	0.28	0.79	1.20	0.01	0.28	0.29	0.43	0.92	0.08	1.00
Final Sat.:	15	830	142	389	619	4	114	114	172	399	35	513
Capacity Analysis Module:												
Vol/Sat:	0.50	0.49	0.49	0.78	0.75	0.74	0.06	0.06	0.06	0.15	0.15	0.72
Crit Moves:	****			****			****					****
Delay/Veh:	16.7	16.3	15.9	30.6	26.8	26.0	11.8	11.8	11.8	12.1	12.1	24.1
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:	16.7	16.3	15.9	30.6	26.8	26.0	11.8	11.8	11.8	12.1	12.1	24.1
LOS by Move:	C	C	C	D	D	D	B	B	B	B	B	C
ApproachDel:	16.3			28.3			11.8			22.3		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	16.3			28.3			11.8			22.3		
LOS by Appr:	C			D			B			C		
AllWayAvgQ:	0.9	0.9	0.9	2.8	2.4	2.4	0.1	0.1	0.1	0.2	0.2	2.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.861
Loss Time (sec):	12	Average Delay (sec/veh):	42.1
Optimal Cycle:	94	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:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	178	475	151	68	506	109	73	264	83	168	292	81
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:	178	475	151	68	506	109	73	264	83	168	292	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:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	190	507	162	75	557	120	88	316	100	211	367	101
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	190	507	162	75	557	120	88	316	100	211	367	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
FinalVolume:	190	507	162	75	557	120	88	316	100	211	367	101
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.78	0.22
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1362	430	1769	1410	388
Capacity Analysis Module:												
Vol/Sat:	0.11	0.27	0.10	0.04	0.30	0.08	0.05	0.23	0.23	0.12	0.26	0.26
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.41	0.41	0.06	0.35	0.35	0.07	0.27	0.27	0.14	0.34	0.34
Volume/Cap:	0.86	0.67	0.26	0.67	0.86	0.22	0.76	0.86	0.86	0.86	0.76	0.76
Uniform Del:	42.9	24.0	19.5	45.8	30.4	23.0	46.0	34.8	34.8	42.1	29.2	29.2
IncremntDel:	27.3	2.3	0.2	14.2	11.3	0.2	24.9	14.6	14.6	25.2	5.5	5.5
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	70.2	26.3	19.7	60.0	41.7	23.3	70.9	49.3	49.3	67.4	34.7	34.7
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:	70.2	26.3	19.7	60.0	41.7	23.3	70.9	49.3	49.3	67.4	34.7	34.7
LOS by Move:	E	C	B	E	D	C	E	D	D	E	C	C
HCM2kAvgQ:	9	13	3	4	19	3	3	13	13	9	14	14

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[14.1]

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 1 0	1	0	0 1 0	1	0	1 0 0	1	0	0 0 1!	0	0
Volume Module:												
Base Vol:	12 260	7		14 283	69		28 2	21		38	3	17
Growth Adj:	1.41 1.41	1.41		1.41 1.41	1.41		1.41 1.41	1.41		1.41 1.41	1.41	
Initial Bse:	17 367	10		20 400	97		40 3	30		54	4	24
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:	17 367	10		20 400	97		40 3	30		54	4	24
User Adj:	0.88 0.88	0.88		0.84 0.84	0.84		0.00 0.00	0.00		0.61 0.61	0.61	
PHF Adj:	0.90 0.90	0.90		0.87 0.87	0.87		1.00 1.00	1.00		0.76 0.76	0.76	
PHF Volume:	17 358	10		19 386	94		0 0	0		43	3	19
Reduct Vol:	0 0	0		0 0	0		0 0	0		0	0	0
FinalVolume:	17 358	10		19 386	94		0 0	0		43	3	19
Critical Gap Module:												
Critical Gp:	4.1 xxxx xxxxx			4.1 xxxx xxxxx			7.5 6.5	6.9		6.8 6.5	6.9	
FollowUpTim:	2.2 xxxx xxxxx			2.2 xxxx xxxxx			3.5 4.0	3.3		3.5 4.0	3.3	
Capacity Module:												
Cnflict Vol:	480 xxxx xxxxx			368 xxxx xxxxx			685 871	240		627 914	184	
Potent Cap.:	1079 xxxx xxxxx			1188 xxxx xxxxx			334 288	761		416 272	827	
Move Cap.:	1079 xxxx xxxxx			1188 xxxx xxxxx			315 278	761		405 263	827	
Volume/Cap:	0.02 xxxx xxxx			0.02 xxxx xxxx			0.00 0.00	0.00		0.11 0.01	0.02	
Level Of Service Module:												
2Way95thQ:	0.0 xxxx xxxxx			0.0 xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx xxxxx		
Control Del:	8.4 xxxx xxxxx			8.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx xxxx xxxxx		
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT			LT - LTR - RT			LT - LTR - RT			LT - LTR - RT		
Shared Cap.:	xxxx xxxx xxxxx			xxxx xxxx xxxxx			xxxx xxxx		0	xxxx	461	xxxxx
SharedQueue:	0.0 xxxx xxxxx			0.0 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	0.5	xxxxx
Shrd ConDel:	8.4 xxxx xxxxx			8.1 xxxx xxxxx			xxxxx xxxx xxxxx			xxxxx	14.1	xxxxx
Shared LOS:	A	*	*	A	*	*	*	*	*	*	B	*
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			14.1		
ApproachLOS:	*			*			*			B		

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 #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.762
Loss Time (sec):	9	Average Delay (sec/veh):	28.2
Optimal Cycle:	64	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			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0	0	0	1	1	0	0	1	1	0	1	0
Volume Module:												
Base Vol:	0	0	0	93	0	242	270	772	0	0	684	93
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	131	0	342	382	1091	0	0	966	131
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	-1	0	0	0	0	1	-1	0	0	0
Initial Fut:	0	0	-1	131	0	342	382	1092	-1	0	966	131
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	0.87	0.87	0.87	0.96	0.96	0.00	0.88	0.88	0.88
PHF Volume:	0	0	0	151	0	393	399	1143	0	0	1100	149
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	151	0	393	399	1143	0	0	1100	149
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	151	0	393	399	1143	0	0	1100	149
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.93	1.00	0.83	0.93	0.93	0.95	1.00	0.91	0.91
Lanes:	0.00	0.00	1.00	1.00	0.00	2.00	1.00	2.00	0.00	1.00	1.76	0.24
Final Sat.:	0	0	1900	1769	0	3165	1769	3538	0	1900	3058	416
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.00	0.12	0.23	0.32	0.00	0.00	0.36	0.36
Crit Moves:						****	****				****	
Green/Cycle:	0.00	0.00	0.00	0.16	0.00	0.16	0.30	0.77	0.00	0.00	0.47	0.47
Volume/Cap:	0.00	0.00	0.00	0.52	0.00	0.76	0.76	0.42	0.00	0.00	0.76	0.76
Uniform Del:	0.0	0.0	0.0	49.8	0.0	52.0	41.6	5.2	0.0	0.0	28.3	28.3
IncremntDel:	0.0	0.0	0.0	1.8	0.0	6.6	6.5	0.1	0.0	0.0	2.2	2.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Delay/Veh:	0.0	0.0	0.0	51.6	0.0	58.6	48.1	5.3	0.0	0.0	30.5	30.5
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	0.0	0.0	51.6	0.0	58.6	48.1	5.3	0.0	0.0	30.5	30.5
LOS by Move:	A	A	A	D	A	E	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	9	16	8	0	0	21	21

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 28.9 Worst Case Level Of Service: F[322.7]

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	0	1!	0	0	
Volume Module:																								
Base Vol:	0	893	169				43	455	0				0	0	0				108	0	62			
Growth Adj:	1.41	1.41	1.41				1.41	1.41	1.41				1.41	1.41	1.41				1.41	1.41	1.41			
Initial Bse:	0	1262	239				61	643	0				0	0	0				153	0	88			
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	1262	239				61	643	0				0	0	0				153	0	88			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.84	0.84	0.84				1.00	1.00	1.00				0.99	0.99	0.99			
PHF Volume:	0	1402	265				73	769	0				0	0	0				154	0	89			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	1402	265				73	769	0				0	0	0				154	0	89			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.8	6.5	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1667	xxxx	xxxxx				xxxx	xxxx	xxxxx				2065	2449	834			
Potent Cap.:	xxxx	xxxx	xxxxx				382	xxxx	xxxxx				xxxx	xxxx	xxxxx				47	31	312			
Move Cap.:	xxxx	xxxx	xxxxx				382	xxxx	xxxxx				xxxx	xxxx	xxxxx				40	25	312			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				121	62	xxxxx				123	110	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.19	xxxx	xxxx				xxxx	xxxx	xxxx				1.25	0.00	0.28			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				0.7	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				16.6	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	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	158	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	16.2	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	323	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	F	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						322.7					
ApproachLOS:	*						*						*						F					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	1.070
Loss Time (sec):	6	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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	4.5	4.5	4.5	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0	0	0	2	0	0	0	1	0	0	2	0
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	841	0	1003	0	1207	800	0	2283	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	841	0	1003	0	1207	800	0	2283	0
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:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	918	0	0	0	1268	0	0	2386	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	918	0	0	0	1268	0	0	2386	0
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:	0	0	0	918	0	0	0	1268	0	0	2386	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.36	0.00	0.00	0.67	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.63	0.00	0.00	0.63	0.00
Volume/Cap:	0.00	0.00	0.00	1.07	0.00	0.00	0.00	0.57	0.00	0.00	1.07	0.00
Uniform Del:	0.0	0.0	0.0	18.8	0.0	0.0	0.0	5.3	0.0	0.0	9.2	0.0
IncremntDel:	0.0	0.0	0.0	51.3	0.0	0.0	0.0	0.4	0.0	0.0	41.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	70.1	0.0	0.0	0.0	5.7	0.0	0.0	50.4	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	70.1	0.0	0.0	0.0	5.7	0.0	0.0	50.4	0.0
LOS by Move:	A	A	A	E	A	A	A	A	A	A	D	A
HCM2kAvgQ:	0	0	0	16	0	0	0	7	0	0	36	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.396
Loss Time (sec):	12	Average Delay (sec/veh):	196.0
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1	0	1 0	1	0	2 0 1	1	0	1 1 0	1	0	2 0 1
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1388	965	277	201	341	171	246	1178	287	287	1718	308
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:	1388	965	277	201	341	171	246	1178	287	287	1718	308
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1428	993	285	252	427	215	257	1231	300	316	1894	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1428	993	285	252	427	215	257	1231	300	316	1894	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1428	993	285	252	427	215	257	1231	300	316	1894	340
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.89	0.89	0.93	0.93	0.83	0.93	0.90	0.90	0.93	0.93	0.83
Lanes:	2.15	1.44	0.41	1.00	2.00	1.00	1.00	1.61	0.39	1.00	2.00	1.00
Final Sat.:	3521	2449	703	1769	3538	1583	1769	2763	672	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.14	0.12	0.14	0.15	0.45	0.45	0.18	0.54	0.21
Crit Moves:		****		****			****				****	
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.35	0.35	0.14	0.38	0.49
Volume/Cap:	1.40	1.40	1.40	1.40	1.18	1.33	1.40	1.28	1.28	1.28	1.40	0.44
Uniform Del:	35.5	35.5	35.5	44.9	44.9	44.9	44.8	32.6	32.6	43.0	30.8	16.9
IncremntDel:	181.4	181	181.4	208.3	108	184.5	207.8	133	132.9	153.7	183	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	216.9	217	216.9	253.2	153	229.4	252.6	165	165.5	196.7	214	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:	216.9	217	216.9	253.2	153	229.4	252.6	165	165.5	196.7	214	17.3
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	B
HCM2kAvgQ:	49	49	49	19	14	15	19	48	48	21	66	7

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Note: Queue reported is the number of cars per lane.

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Cumulative Plus Project Traffic Conditions Analysis

Scenario Report

Scenario:	Cum + Project AM
Command:	Cum + Project AM
Volume:	Cumulative AM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cum + Project AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	F	176.5	1.259	F	187.4	1.295	+10.919 D/V
# 2 El Camino Real / McLellan Dr	E	62.8	1.032	E	67.4	1.056	+ 4.638 D/V
# 3 El Camino Real / Arroyo Dr	D	37.7	0.749	D	42.0	0.796	+ 4.303 D/V
# 4 El Camino Real / Chestnut Ave	F	127.4	1.251	F	139.3	1.283	+11.906 D/V
# 5 El Camino Real / W. Orange Ave	E	72.6	1.017	E	75.7	1.021	+ 3.115 D/V
# 6 Mission Rd / Grand Ave	C	22.4	0.766	D	25.1	0.801	+ 0.034 V/C
# 7 Grand Ave / Chestnut Ave	D	49.7	0.934	D	52.8	0.955	+ 3.140 D/V
# 8 Mission Rd / Oak Ave	D	30.8	0.504	E	39.6	0.571	+ 8.765 D/V
# 9 Mission Rd / Chestnut Ave	C	27.6	0.761	C	30.3	0.791	+ 2.654 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	674.1	2.190	F	674.1	2.190	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	B	10.6	0.897	B	10.9	0.901	+ 0.320 D/V
# 12 I-280 NB Ramps / Westborough B	F	265.1	1.552	F	278.9	1.578	+13.806 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.295
Loss Time (sec):	12	Average Delay (sec/veh):	187.4
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:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	812	434	8	6	815	95	222	17	1201	30	42	11
Added Vol:	62	103	0	0	19	0	0	0	11	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	874	537	8	6	834	95	222	17	1212	30	42	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:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	1040	638	10	6	912	103	249	19	1360	36	52	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1040	638	10	6	912	103	249	19	1360	36	52	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:	1040	638	10	6	912	103	249	19	1360	36	52	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3476	55	1769	3129	355	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.30	0.18	0.18	0.00	0.29	0.29	0.08	0.08	0.49	0.06	0.06	0.06
Crit Moves:	****				****				****	****		
Green/Cycle:	0.21	0.34	0.34	0.07	0.20	0.20	0.34	0.34	0.34	0.12	0.12	0.12
Volume/Cap:	1.42	0.54	0.54	0.05	1.42	1.42	0.22	0.22	1.42	0.47	0.47	0.47
Uniform Del:	39.4	26.5	26.5	43.0	39.8	39.8	23.4	23.4	32.9	41.0	41.0	41.0
IncremntDel:	199.0	0.5	0.5	0.1	199	199.2	0.1	0.1	197.2	1.6	1.6	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	238.4	26.9	26.9	43.1	239	239.0	23.4	23.4	230.1	42.7	42.7	42.7
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:	238.4	26.9	26.9	43.1	239	239.0	23.4	23.4	230.1	42.7	42.7	42.7
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	36	8	8	0	38	38	3	3	53	3	3	3

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	1.056
Loss Time (sec):	12	Average Delay (sec/veh):	67.4
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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1 1	0	0 1	0 0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	44	664	171	557	1536	41	47	35	71	301	40	516
Added Vol:	0	125	13	10	20	0	0	0	0	-1	0	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	789	184	567	1556	41	47	35	71	300	40	556
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	48	873	204	647	1776	47	57	43	86	381	50	705
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	873	204	647	1776	47	57	43	86	381	50	705
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	48	873	204	647	1776	47	57	43	86	381	50	705
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.79	0.90	0.93	0.93	0.95	0.95	0.74	0.87	0.87	0.87
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	0.57	0.43	1.00	1.32	0.08	1.60
Final Sat.:	1769	5083	1502	3432	3433	90	1030	780	1407	2192	140	2631
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.14	0.19	0.52	0.52	0.06	0.06	0.06	0.17	0.36	0.27
Crit Moves:	****				****		****				****	
Green/Cycle:	0.03	0.23	0.55	0.26	0.46	0.46	0.10	0.10	0.10	0.32	0.32	0.32
Volume/Cap:	0.89	0.74	0.25	0.74	1.13	1.13	0.55	0.55	0.61	0.55	1.13	0.84
Uniform Del:	62.8	46.1	15.1	44.3	35.2	35.2	55.7	55.7	56.1	36.6	44.3	41.3
IncremntDel:	82.7	2.4	0.2	3.3	66.0	66.0	3.7	3.7	7.8	0.3	70.3	5.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	145.5	48.6	15.3	47.6	101	101.2	59.4	59.4	63.9	36.9	115	46.3
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:	145.5	48.6	15.3	47.6	101	101.2	59.4	59.4	63.9	36.9	115	46.3
LOS by Move:	F	D	B	D	F	F	E	E	E	D	F	D
HCM2kAvgQ:	2	12	4	11	49	49	5	5	4	10	35	19

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.796
Loss Time (sec):	9	Average Delay (sec/veh):	42.0
Optimal Cycle:	74	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:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	1! 0	1	1 0	0	1 0
Volume Module:												
Base Vol:	139	934	35	18	894	154	200	3	241	71	2	13
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	196	1320	49	25	1263	218	283	4	341	100	3	18
Added Vol:	-17	77	50	8	24	-14	35	0	28	59	0	26
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	179	1397	99	33	1287	204	318	4	369	159	3	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:	0.85	0.85	0.85	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	212	1649	117	34	1309	207	358	5	415	159	3	44
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	1649	117	34	1309	207	358	5	415	159	3	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:	212	1649	117	34	1309	207	358	5	415	159	3	44
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.87	0.87	0.88	0.88	0.88	0.93	0.84	0.83
Lanes:	1.00	2.80	0.20	1.00	2.59	0.41	1.46	0.01	1.53	1.00	0.06	0.94
Final Sat.:	1769	4697	334	1769	4294	679	2440	20	2556	1769	95	1486
Capacity Analysis Module:												
Vol/Sat:	0.12	0.35	0.35	0.02	0.30	0.30	0.15	0.23	0.16	0.09	0.03	0.03
Crit Moves:	****				****			****		****		
Green/Cycle:	0.15	0.50	0.50	0.04	0.38	0.38	0.29	0.29	0.29	0.11	0.11	0.11
Volume/Cap:	0.80	0.71	0.71	0.51	0.80	0.80	0.50	0.80	0.55	0.80	0.26	0.26
Uniform Del:	61.5	29.4	29.4	70.8	41.1	41.1	43.8	48.8	44.7	64.8	60.8	60.8
IncremntDel:	15.3	1.0	1.0	6.5	2.4	2.4	0.3	4.6	0.5	19.6	0.8	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	76.8	30.4	30.4	77.3	43.5	43.5	44.1	53.5	45.1	84.4	61.6	61.6
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:	76.8	30.4	30.4	77.3	43.5	43.5	44.1	53.5	45.1	84.4	61.6	61.6
LOS by Move:	E	C	C	E	D	D	D	D	D	F	E	E
HCM2kAvgQ:	11	23	23	1	21	21	9	18	11	9	2	2

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.283
Loss Time (sec):	12	Average Delay (sec/veh):	139.3
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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	187	922	112	349	624	475	331	567	133
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	633	844	401	264	1303	158	493	882	671	468	801	188
Added Vol:	13	26	9	30	47	35	20	18	4	31	46	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	646	870	410	294	1350	193	513	900	675	499	847	208
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	696	937	442	335	1536	220	560	982	737	668	1134	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	696	937	442	335	1536	220	560	982	737	668	1134	278
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	696	937	442	335	1536	220	560	982	737	668	1134	278
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.80	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1559	3432	5083	1529	1769	3538	1534	3432	3538	1546
Capacity Analysis Module:												
Vol/Sat:	0.20	0.26	0.28	0.10	0.30	0.14	0.32	0.28	0.48	0.19	0.32	0.18
Crit Moves:	****				****				****	****		
Green/Cycle:	0.16	0.29	0.29	0.10	0.24	0.24	0.26	0.37	0.37	0.15	0.26	0.26
Volume/Cap:	1.28	0.90	0.97	0.97	1.28	0.61	1.21	0.74	1.28	1.28	1.21	0.68
Uniform Del:	63.1	51.0	52.3	67.2	57.3	51.2	55.4	40.6	46.9	63.6	55.1	49.4
IncremntDel:	140.8	11.1	33.8	39.8	134	3.1	113.5	2.3	140.1	141.3	105	4.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	203.9	62.1	86.2	107.0	191	54.3	168.9	42.9	187.0	205.0	160	54.0
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:	203.9	62.1	86.2	107.0	191	54.3	168.9	42.9	187.0	205.0	160	54.0
LOS by Move:	F	E	F	F	F	D	F	D	F	F	F	D
HCM2kAvgQ:	28	25	25	11	43	10	40	21	55	27	42	12

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.021
Loss Time (sec):	12	Average Delay (sec/veh):	75.7
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2	1 0	1 0	2	1 0	0 1	0	0 1	0 1	0	0 1
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	89	1267	168	268	2016	109	213	89	64	155	89	278
Added Vol:	0	15	0	0	82	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	1282	168	268	2098	109	213	89	64	155	89	278
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	116	1674	220	283	2216	115	257	107	77	168	96	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1674	220	283	2216	115	257	107	77	168	96	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:	116	1674	220	283	2216	115	257	107	77	168	96	301
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.65	0.35	1.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4413	579	1769	4797	249	1269	530	1497	1147	657	1527
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.16	0.46	0.46	0.20	0.20	0.05	0.15	0.15	0.20
Crit Moves:		****		****			****					****
Green/Cycle:	0.07	0.37	0.37	0.16	0.46	0.46	0.20	0.20	0.20	0.19	0.19	0.19
Volume/Cap:	1.00	1.02	1.02	1.02	1.00	1.00	1.02	1.02	0.26	0.76	0.76	1.02
Uniform Del:	70.1	47.1	47.1	63.2	40.2	40.2	60.1	60.1	50.8	57.2	57.2	60.5
IncremntDel:	82.8	26.3	26.3	59.5	18.2	18.2	53.1	53.1	0.5	9.3	9.3	57.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	152.8	73.5	73.5	122.7	58.4	58.4	113.2	113	51.3	66.5	66.5	118.4
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:	152.8	73.5	73.5	122.7	58.4	58.4	113.2	113	51.3	66.5	66.5	118.4
LOS by Move:	F	E	E	F	E	E	F	F	D	E	E	F
HCM2kAvgQ:	9	39	39	18	46	45	22	22	3	13	13	19

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.801
Loss Time (sec):	0	Average Delay (sec/veh):	25.1
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:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	273	19	161	334	1	4	2	2	50	2	192
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	4	386	27	227	472	1	6	3	3	71	3	271
Added Vol:	0	60	7	0	17	0	0	0	0	2	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	4	446	34	227	489	1	6	3	3	73	3	271
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.81	0.81	0.81	0.93	0.93	0.93	0.67	0.67	0.67	0.77	0.77	0.77
PHF Volume:	5	550	42	246	529	2	8	4	4	94	4	351
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	550	42	246	529	2	8	4	4	94	4	351
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	550	42	246	529	2	8	4	4	94	4	351
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	1.84	0.14	0.63	1.36	0.01	0.50	0.25	0.25	0.96	0.04	1.00
Final Sat.:	8	898	69	307	680	2	193	97	97	405	16	497
Capacity Analysis Module:												
Vol/Sat:	0.62	0.61	0.61	0.80	0.78	0.77	0.04	0.04	0.04	0.23	0.23	0.71
Crit Moves:	****			****				****				****
Delay/Veh:	20.6	20.4	20.0	33.1	30.0	28.9	12.1	12.1	12.1	13.3	13.3	24.1
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:	20.6	20.4	20.0	33.1	30.0	28.9	12.1	12.1	12.1	13.3	13.3	24.1
LOS by Move:	C	C	C	D	D	D	B	B	B	B	B	C
ApproachDel:	20.3			31.0			12.1			21.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	20.3			31.0			12.1			21.7		
LOS by Appr:	C			D			B			C		
AllWayAvgQ:	1.4	1.4	1.4	3.1	2.7	2.7	0.0	0.0	0.0	0.3	0.3	2.0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.955
Loss Time (sec):	12	Average Delay (sec/veh):	52.8
Optimal Cycle:	143	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:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	64	402	138	38	326	76	86	215	81	131	174	51
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	90	568	195	54	461	107	122	304	114	185	246	72
Added Vol:	1	1	0	8	4	0	0	12	4	0	2	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	91	569	195	62	465	107	122	316	118	185	248	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:	0.90	0.90	0.90	0.84	0.84	0.84	0.72	0.72	0.72	0.86	0.86	0.86
PHF Volume:	101	629	216	73	553	128	169	440	165	214	287	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	101	629	216	73	553	128	169	440	165	214	287	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	629	216	73	553	128	169	440	165	214	287	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.82	0.93	0.98	0.79	0.93	0.94	0.93	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.73	0.27	1.00	0.77	0.23
Final Sat.:	1769	1862	1563	1769	1862	1502	1769	1295	486	1769	1383	413
Capacity Analysis Module:												
Vol/Sat:	0.06	0.34	0.14	0.04	0.30	0.09	0.10	0.34	0.34	0.12	0.21	0.21
Crit Moves:		****		****				****		****		
Green/Cycle:	0.06	0.35	0.35	0.04	0.33	0.33	0.15	0.36	0.36	0.13	0.33	0.33
Volume/Cap:	0.89	0.95	0.39	0.95	0.89	0.26	0.63	0.95	0.95	0.95	0.63	0.63
Uniform Del:	46.4	31.5	24.2	47.7	31.6	24.3	39.7	31.4	31.4	43.4	28.3	28.3
IncremntDel:	52.0	24.4	0.5	87.0	15.0	0.3	4.7	25.0	25.0	47.3	2.2	2.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	98.5	55.9	24.7	134.7	46.6	24.6	44.4	56.4	56.4	90.7	30.5	30.5
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:	98.5	55.9	24.7	134.7	46.6	24.6	44.4	56.4	56.4	90.7	30.5	30.5
LOS by Move:	F	E	C	F	D	C	D	E	E	F	C	C
HCM2kAvgQ:	6	24	5	5	20	3	5	21	21	10	10	10

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 7.2 Worst Case Level Of Service: E[39.6]

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	1	0	1	0		0	1	0	1	0		1	0	0	1	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	13	266		4			7	305		71			35		3		18		60		2		24	
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41		1.41		1.41		1.41		1.41	
Initial Bse:	18	376		6			10	431		100			49		4		25		85		3		34	
Added Vol:	0	11		0			1	21		49			13		4		31		0		1		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	18	387		6			11	452		149			62		8		56		85		4		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:	0.88	0.88		0.88			0.84	0.84		0.84			1.00		1.00		1.00		0.61		0.61		0.61	
PHF Volume:	21	442		6			13	538		178			62		8		56		138		6		55	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	21	442		6			13	538		178			62		8		56		138		6		55	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5	6.5			6.9		7.5	6.5			6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5	4.0			3.3		3.5	4.0			3.3	
Capacity Module:																								
Cnflict Vol:	716	xxxx	xxxxx				449	xxxx	xxxxx				919	1143			358		786	1229			224	
Potent Cap.:	881	xxxx	xxxxx				1108	xxxx	xxxxx				226	199			639		282	177			779	
Move Cap.:	881	xxxx	xxxxx				1108	xxxx	xxxxx				199	191			639		242	170			779	
Volume/Cap:	0.02	xxxx	xxxx				0.01	xxxx	xxxx				0.31	0.04			0.09		0.57	0.04			0.07	
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				1.3	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	9.2	xxxx	xxxxx				8.3	xxxx	xxxxx				31.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx			
LOS by Move:	A	*		*			A	*		*			D	*		*			*	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			492		xxxx		294		xxxxx	
SharedQueue:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx			0.5		xxxxx		4.6		xxxxx	
Shrd ConDel:	9.2	xxxx	xxxxx				8.3	xxxx	xxxxx				xxxxx	xxxx			13.4		xxxxx		39.6		xxxxx	
Shared LOS:	A	*		*			A	*		*			*	*			B		*		E		*	
ApproachDel:	xxxxxx						xxxxxx						22.2						39.6					
ApproachLOS:	*						*						C						E					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.791
Loss Time (sec):	9	Average Delay (sec/veh):	30.3
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	1 0	1 0	0	1 1	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	0	0	0	94	0	299	188	870	0	0	720	97
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	133	0	422	266	1229	0	0	1017	137
Added Vol:	0	7	6	4	1	46	3	6	0	1	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	7	6	137	1	468	269	1235	0	1	1018	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:	1.00	1.00	1.00	0.81	0.81	0.81	0.90	0.90	0.90	0.88	0.88	0.88
PHF Volume:	0	7	6	168	1	577	300	1380	0	1	1152	155
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	7	6	168	1	577	300	1380	0	1	1152	155
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	7	6	169	1	577	300	1380	0	1	1152	155
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.92	0.91	0.93	0.83	0.83	0.93	0.93	0.95	0.11	0.91	0.91
Lanes:	0.00	0.54	0.46	1.00	0.01	1.99	1.00	2.00	0.00	1.00	1.76	0.24
Final Sat.:	0	938	804	1769	7	3159	1769	3538	0	218	3061	412
Capacity Analysis Module:												
Vol/Sat:	0.00	0.01	0.01	0.10	0.18	0.18	0.17	0.39	0.00	0.01	0.38	0.38
Crit Moves:			****			****	****				****	
Green/Cycle:	0.00	0.01	0.01	0.23	0.23	0.23	0.21	0.69	0.00	0.48	0.48	0.48
Volume/Cap:	0.00	0.79	0.79	0.41	0.79	0.79	0.79	0.57	0.00	0.01	0.79	0.79
Uniform Del:	0.0	64.3	64.3	42.5	47.0	47.0	48.3	10.2	0.0	18.0	28.6	28.6
IncremntDel:	0.0	123	122.6	0.7	5.9	5.9	10.8	0.3	0.0	0.0	2.7	2.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	187	186.8	43.2	52.9	52.9	59.1	10.5	0.0	18.0	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:	0.0	187	186.8	43.2	52.9	52.9	59.1	10.5	0.0	18.0	31.3	31.3
LOS by Move:	A	F	F	D	D	D	E	B	A	B	C	C
HCM2kAvgQ:	0	2	2	6	13	13	13	15	0	0	23	23

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 76.5 Worst Case Level Of Service: F[674.1]

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	1!	0	0	
Volume Module:																								
Base Vol:	0	622		68			45	909		0			0		0		0		158		0		33	
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41		1.41		1.41		1.41		1.41	
Initial Bse:	0	879		96			64	1284		0			0		0		0		223		0		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:	0	879		96			64	1284		0			0		0		0		223		0		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:	0.71	0.71		0.71			0.92	0.92		0.92			1.00		1.00		1.00		0.75		0.75		0.75	
PHF Volume:	0	1233		135			69	1401		0			0		0		0		299		0		63	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	0	1233		135			69	1401		0			0		0		0		299		0		63	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx		xxxxx			4.1	xxxx		xxxxx			xxxxx		xxxx		xxxxx		6.8		6.5		6.9	
FollowUpTim:	xxxxx	xxxx		xxxxx			2.2	xxxx		xxxxx			xxxxx		xxxx		xxxxx		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx		xxxxx			1367	xxxx		xxxxx			xxxx		xxxx		xxxxx		2139		2839		684	
Potent Cap.:	xxxx	xxxx		xxxxx			498	xxxx		xxxxx			xxxx		xxxx		xxxxx		42		17		391	
Move Cap.:	xxxx	xxxx		xxxxx			498	xxxx		xxxxx			xxxx		xxxx		xxxxx		37		15		391	
Total Cap:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			77		73		xxxxx		137		90		xxxxx	
Volume/Cap:	xxxx	xxxx		xxxx			0.14	xxxx		xxxx			xxxx		xxxx		xxxx		2.19		0.00		0.16	
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx		xxxxx			0.5	xxxx		xxxxx			xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Control Del:	xxxxx	xxxx		xxxxx			13.4	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	
Shared Cap.:	xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx	xxxx		xxxxx			xxxx		154		xxxxx	
SharedQueue:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		30.4		xxxxx	
Shrd ConDel:	xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx	xxxx		xxxxx			xxxxx		674		xxxxx	
Shared LOS:	*	*		*			*	*		*			*	*		*			*		F		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						674.1					
ApproachLOS:	*						*						*						F					

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 #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	0.901
Loss Time (sec):	6	Average Delay (sec/veh):	10.9
Optimal Cycle:	70	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			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0	0	0	2	0	0	0	0	2	0	0	0
Volume Module:												
Base Vol:	0	0	0	262	0	185	0	1574	1144	0	1013	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	370	0	261	0	2224	1616	0	1431	0
Added Vol:	0	0	0	8	0	0	0	4	0	0	21	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	378	0	261	0	2228	1616	0	1452	0
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:	1.00	1.00	1.00	0.83	0.83	0.00	0.95	0.95	0.00	0.81	0.81	0.81
PHF Volume:	0	0	0	457	0	0	0	2335	0	0	1784	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	457	0	0	0	2335	0	0	1784	0
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:	0	0	0	457	0	0	0	2335	0	0	1784	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.66	0.00	0.00	0.50	0.00
Crit Moves:				****				****				
Green/Cycle:	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.73	0.00	0.00	0.73	0.00
Volume/Cap:	0.00	0.00	0.00	0.90	0.00	0.00	0.00	0.90	0.00	0.00	0.69	0.00
Uniform Del:	0.0	0.0	0.0	21.0	0.0	0.0	0.0	5.3	0.0	0.0	3.6	0.0
IncremntDel:	0.0	0.0	0.0	19.1	0.0	0.0	0.0	4.8	0.0	0.0	0.8	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	40.1	0.0	0.0	0.0	10.1	0.0	0.0	4.4	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	40.1	0.0	0.0	0.0	10.1	0.0	0.0	4.4	0.0
LOS by Move:	A	A	A	D	A	A	A	B	A	A	A	A
HCM2kAvgQ:	0	0	0	7	0	0	0	20	0	0	9	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.578
Loss Time (sec):	12	Average Delay (sec/veh):	278.9
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0 2	0 1		1 0 1	1 0		1 0 2	0 1	
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	83
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1105	369	360	394	928	148	160	1512	226	206	1851	117
Added Vol:	0	0	8	0	0	0	0	11	0	41	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1105	369	368	394	928	148	160	1523	226	247	1913	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	1282	428	427	465	1095	175	175	1672	248	299	2313	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1282	428	427	465	1095	175	175	1672	248	299	2313	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:	1282	428	427	465	1095	175	175	1672	248	299	2313	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.93	0.93	0.83	0.93	0.91	0.91	0.93	0.93	0.82
Lanes:	2.43	0.79	0.78	1.00	2.00	1.00	1.00	1.74	0.26	1.00	2.00	1.00
Final Sat.:	3925	1310	1308	1769	3538	1583	1769	3021	449	1769	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.26	0.31	0.11	0.10	0.55	0.55	0.17	0.65	0.09
Crit Moves:			****		****		****				****	
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.06	0.37	0.37	0.11	0.41	0.61
Volume/Cap:	1.58	1.58	1.58	1.34	1.58	0.56	1.58	1.51	1.51	1.51	1.58	0.15
Uniform Del:	39.7	39.7	39.7	40.2	40.2	36.3	46.9	31.7	31.7	44.4	29.3	8.4
IncremntDel:	263.9	264	263.9	171.5	267	2.4	298.8	236	235.5	255.7	264	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	303.5	304	303.5	211.7	307	38.7	345.7	267	267.3	300.1	293	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:	303.5	304	303.5	211.7	307	38.7	345.7	267	267.3	300.1	293	8.4
LOS by Move:	F	F	F	F	F	D	F	F	F	F	F	A
HCM2kAvgQ:	45	45	45	31	45	6	15	74	74	23	92	2

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Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Cum + Project PM
Command:	Cum + Project PM
Volume:	Cumulative PM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cum + Project PM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	F	178.6	1.286	F	214.7	1.386	+36.067 D/V
# 2 El Camino Real / McLellan Dr	D	45.2	0.883	D	53.4	0.946	+ 8.181 D/V
# 3 El Camino Real / Arroyo Dr	C	30.8	0.711	C	33.8	0.790	+ 3.020 D/V
# 4 El Camino Real / Chestnut Ave	F	97.2	1.095	F	129.5	1.193	+32.280 D/V
# 5 El Camino Real / W. Orange Ave	F	105.5	1.205	F	110.4	1.226	+ 4.902 D/V
# 6 Mission Rd / Grand Ave	C	23.1	0.781	D	27.7	0.857	+ 0.075 V/C
# 7 Grand Ave / Chestnut Ave	D	42.1	0.861	D	44.4	0.881	+ 2.292 D/V
# 8 Mission Rd / Oak Ave	B	14.1	0.107	B	14.8	0.112	+ 0.687 D/V
# 9 Mission Rd / Chestnut Ave	C	28.2	0.762	C	33.9	0.838	+ 5.687 D/V
# 10 Juniperro Serra Blvd / Arroyo	F	322.7	1.252	F	322.7	1.252	+ 0.000 D/V
# 11 I-280 SB Ramps / Westborough B	D	41.9	1.070	D	48.9	1.095	+ 6.985 D/V
# 12 I-280 NB Ramps / Westborough B	F	196.0	1.396	F	216.0	1.429	+19.984 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.386
Loss Time (sec):	12	Average Delay (sec/veh):	214.7
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			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1571	1061	27	11	663	162	259	24	811	14	23	3
Added Vol:	70	117	0	0	118	0	0	0	71	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1641	1178	27	11	781	162	259	24	882	14	23	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1794	1288	29	12	839	175	306	28	1044	18	29	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1794	1288	29	12	839	175	306	28	1044	18	29	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1794	1288	29	12	839	175	306	28	1044	18	29	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.65	0.35	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3449	79	1769	2848	593	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.52	0.37	0.37	0.01	0.29	0.29	0.09	0.09	0.37	0.03	0.03	0.03
Crit Moves:	****				****				****	****		
Green/Cycle:	0.33	0.47	0.47	0.05	0.19	0.19	0.24	0.24	0.24	0.12	0.12	0.12
Volume/Cap:	1.57	0.79	0.79	0.14	1.57	1.57	0.39	0.39	1.57	0.23	0.23	0.23
Uniform Del:	33.3	22.4	22.4	45.4	40.6	40.6	32.0	32.0	38.1	39.8	39.8	39.8
IncremntDel:	260.0	2.7	2.7	0.7	263	263.2	0.3	0.3	263.0	0.6	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	293.3	25.1	25.1	46.1	304	303.8	32.3	32.3	301.0	40.4	40.4	40.4
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:	293.3	25.1	25.1	46.1	304	303.8	32.3	32.3	301.0	40.4	40.4	40.4
LOS by Move:	F	C	C	D	F	F	C	C	F	D	D	D
HCM2kAvgQ:	68	16	16	0	42	41	5	5	46	2	2	2

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.946
Loss Time (sec):	12	Average Delay (sec/veh):	53.4
Optimal Cycle:	162	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:	Ovl			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1	1 0	0 1	0	1	1 0	1! 0	1
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	59	1676	261	321	920	68	37	30	71	307	38	581
Added Vol:	0	166	26	39	150	0	0	0	0	13	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	1842	287	360	1070	68	37	30	71	320	38	602
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	1909	298	409	1216	77	39	32	76	346	41	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1909	298	409	1216	77	39	32	76	346	41	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	61	1909	298	409	1216	77	39	32	76	346	41	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.72	0.90	0.92	0.92	0.95	0.95	0.78	0.87	0.87	0.87
Lanes:	1.00	3.00	1.00	2.00	1.88	0.12	0.55	0.45	1.00	1.32	0.08	1.60
Final Sat.:	1769	5083	1377	3432	3296	209	1002	809	1482	2191	127	2659
Capacity Analysis Module:												
Vol/Sat:	0.03	0.38	0.22	0.12	0.37	0.37	0.04	0.04	0.05	0.16	0.33	0.24
Crit Moves:		****		****			****				****	
Green/Cycle:	0.04	0.37	0.69	0.12	0.45	0.45	0.10	0.10	0.10	0.32	0.32	0.32
Volume/Cap:	0.83	1.01	0.31	1.01	0.83	0.83	0.39	0.39	0.51	0.49	1.01	0.76
Uniform Del:	61.8	41.0	8.0	57.4	31.7	31.7	54.8	54.8	55.5	35.6	44.2	39.8
IncremntDel:	51.0	24.5	0.2	48.6	3.8	3.8	1.4	1.4	3.0	0.2	31.9	2.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	112.8	65.5	8.1	106.0	35.5	35.5	56.2	56.2	58.5	35.8	76.1	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:	112.8	65.5	8.1	106.0	35.5	35.5	56.2	56.2	58.5	35.8	76.1	42.4
LOS by Move:	F	E	A	F	D	D	E	E	E	D	E	D
HCM2kAvgQ:	3	32	4	9	22	22	3	3	4	9	28	16

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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 #3 El Camino Real / Arroyo Dr

Cycle (sec):	150	Critical Vol./Cap.(X):	0.790
Loss Time (sec):	9	Average Delay (sec/veh):	33.8
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:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	12	12	12	0	0	0
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	4.6	4.6	4.6	0.0	0.0	0.0
Lanes:	1 0	2	1 0	1 0	2	1 0	1 0	1! 0	1	1 0	0	1 0
Volume Module:												
Base Vol:	170	1213	28	21	905	260	110	2	155	69	3	12
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	240	1714	40	30	1279	367	155	3	219	97	4	17
Added Vol:	50	183	212	29	37	97	-8	0	-6	34	0	16
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	290	1897	252	59	1316	464	147	3	213	131	4	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:	0.96	0.96	0.96	0.98	0.98	0.98	0.89	0.89	0.89	1.00	1.00	1.00
PHF Volume:	302	1976	262	60	1344	474	166	3	239	131	4	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	302	1976	262	60	1344	474	166	3	239	131	4	33
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	302	1976	262	60	1344	474	166	3	239	131	4	33
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.86	0.85	0.88	0.88	0.87	0.93	0.85	0.81
Lanes:	1.00	2.65	0.35	1.00	2.21	0.79	1.40	0.02	1.58	1.00	0.11	0.89
Final Sat.:	1769	4407	584	1769	3603	1272	2331	26	2613	1769	177	1374
Capacity Analysis Module:												
Vol/Sat:	0.17	0.45	0.45	0.03	0.37	0.37	0.07	0.12	0.09	0.07	0.02	0.02
Crit Moves:	****				****			****		****		
Green/Cycle:	0.22	0.64	0.64	0.05	0.47	0.47	0.16	0.16	0.16	0.09	0.09	0.09
Volume/Cap:	0.79	0.70	0.70	0.70	0.79	0.79	0.45	0.79	0.58	0.79	0.25	0.25
Uniform Del:	55.6	17.6	17.6	70.3	33.3	33.3	57.3	60.8	58.6	66.5	63.1	63.1
IncremntDel:	10.6	0.7	0.7	22.7	1.9	1.9	0.4	8.0	1.3	22.0	0.9	0.9
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	66.1	18.3	18.3	93.0	35.2	35.2	57.7	68.9	59.9	88.5	64.0	64.0
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:	66.1	18.3	18.3	93.0	35.2	35.2	57.7	68.9	59.9	88.5	64.0	64.0
LOS by Move:	E	B	B	F	D	D	E	E	E	F	E	E
HCM2kAvgQ:	15	24	24	3	25	25	5	11	7	8	2	2

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.193
Loss Time (sec):	12	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	184	767	224	204	506	355	267	611	169
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1029	1494	575	260	1084	317	288	715	502	377	863	239
Added Vol:	6	87	4	36	16	13	127	36	16	62	100	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1035	1581	579	296	1100	330	415	751	518	439	963	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.79	0.93	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1562	3432	5083	1500	1769	3538	1534	3432	3538	1536
Capacity Analysis Module:												
Vol/Sat:	0.31	0.46	0.38	0.09	0.22	0.23	0.26	0.23	0.37	0.13	0.29	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.27	0.39	0.39	0.07	0.19	0.19	0.22	0.34	0.34	0.12	0.24	0.24
Volume/Cap:	1.17	1.19	0.99	1.19	1.15	1.17	1.19	0.70	1.11	1.11	1.19	0.80
Uniform Del:	54.9	45.9	45.6	69.4	60.4	60.4	58.7	43.2	49.8	65.9	57.0	53.5
IncremntDel:	86.7	94.4	33.9	118.7	78.9	105.5	109.8	1.8	72.8	76.9	98.5	11.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	141.6	140	79.6	188.1	139	165.9	168.5	45.0	122.6	142.8	155	64.8
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:	141.6	140	79.6	188.1	139	165.9	168.5	45.0	122.6	142.8	155	64.8
LOS by Move:	F	F	E	F	F	F	F	D	F	F	F	E
HCM2kAvgQ:	38	58	33	13	29	24	33	18	36	17	37	14

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	150	Critical Vol./Cap.(X):	1.226
Loss Time (sec):	12	Average Delay (sec/veh):	110.4
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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0 2 1 0			1 0 2 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	47	2484	232	271	1578	76	116	96	49	194	79	297
Added Vol:	0	95	0	0	93	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	2579	232	271	1671	76	116	96	49	194	79	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	50	2776	249	294	1811	83	125	104	53	230	94	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2776	249	294	1811	83	125	104	53	230	94	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	50	2776	249	294	1811	83	125	104	53	230	94	353
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.93	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.80
Lanes:	1.00	2.75	0.25	1.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4608	414	1769	4826	220	990	821	1510	1277	522	1516
Capacity Analysis Module:												
Vol/Sat:	0.03	0.60	0.60	0.17	0.38	0.38	0.13	0.13	0.04	0.18	0.18	0.23
Crit Moves:		****		****			****					****
Green/Cycle:	0.04	0.49	0.49	0.14	0.58	0.58	0.10	0.10	0.10	0.19	0.19	0.19
Volume/Cap:	0.64	1.23	1.23	1.23	0.64	0.64	1.23	1.23	0.34	0.95	0.95	1.23
Uniform Del:	70.5	38.2	38.2	64.8	20.9	20.9	67.3	67.3	62.5	60.0	60.0	60.7
IncremntDel:	17.0	106	105.6	133.0	0.5	0.5	139.8	140	1.3	35.6	35.6	128.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	87.5	144	143.8	197.8	21.4	21.4	207.1	207	63.9	95.6	95.6	189.4
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:	87.5	144	143.8	197.8	21.4	21.4	207.1	207	63.9	95.6	95.6	189.4
LOS by Move:	F	F	F	F	C	C	F	F	E	F	F	F
HCM2kAvgQ:	3	76	76	23	21	21	18	18	3	19	19	27

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #6 Mission Rd / Grand Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.857
Loss Time (sec):	0	Average Delay (sec/veh):	27.7
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:	0 1	0 1	0	0 1	0 1	0	0 0	1! 0	0	0 1	0 0	1
Volume Module:												
Base Vol:	5	268	45	209	318	2	2	2	3	34	3	204
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	7	379	64	295	449	3	3	3	4	48	4	288
Added Vol:	0	33	4	0	64	0	0	0	0	7	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	7	412	68	295	513	3	3	3	4	55	4	288
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.97	0.97	0.97	0.44	0.44	0.44	0.78	0.78	0.78
PHF Volume:	8	446	73	304	528	3	6	6	10	70	5	369
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	446	73	304	528	3	6	6	10	70	5	369
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	446	73	304	528	3	6	6	10	70	5	369
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	1.69	0.28	0.73	1.26	0.01	0.28	0.29	0.43	0.93	0.07	1.00
Final Sat.:	14	818	136	355	641	4	113	113	170	393	30	500
Capacity Analysis Module:												
Vol/Sat:	0.55	0.54	0.54	0.86	0.82	0.81	0.06	0.06	0.06	0.18	0.18	0.74
Crit Moves:	****			****			****					****
Delay/Veh:	18.5	18.1	17.6	39.5	34.5	33.1	12.0	12.0	12.0	12.6	12.6	25.9
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:	18.5	18.1	17.6	39.5	34.5	33.1	12.0	12.0	12.0	12.6	12.6	25.9
LOS by Move:	C	C	C	E	D	D	B	B	B	B	B	D
ApproachDel:	18.0			36.3			12.0			23.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	18.0			36.3			12.0			23.7		
LOS by Appr:	C			E			B			C		
AllWayAvgQ:	1.1	1.0	1.0	4.0	3.3	3.3	0.1	0.1	0.1	0.2	0.2	2.2

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 #7 Grand Ave / Chestnut Ave

Cycle (sec):	100	Critical Vol./Cap.(X):	0.881
Loss Time (sec):	12	Average Delay (sec/veh):	44.4
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:	4	4	4	4	4	4	4	8	8	4	8	8
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:	1 0	1 0	1	1 0	1 0	1	1 0	0 1	0	1 0	0 1	0
Volume Module:												
Base Vol:	126	336	107	48	358	77	52	187	59	119	207	57
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	178	475	151	68	506	109	73	264	83	168	292	81
Added Vol:	6	3	0	12	5	0	0	12	4	0	17	7
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	478	151	80	511	109	73	276	87	168	309	88
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.91	0.91	0.91	0.84	0.84	0.84	0.80	0.80	0.80
PHF Volume:	197	510	162	88	563	120	88	330	104	211	388	110
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	197	510	162	88	563	120	88	330	104	211	388	110
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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	510	162	88	563	120	88	330	104	211	388	110
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.81	0.93	0.98	0.83	0.93	0.94	0.94	0.93	0.95	0.94
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.76	0.24	1.00	0.78	0.22
Final Sat.:	1769	1862	1540	1769	1862	1570	1769	1361	430	1769	1400	396
Capacity Analysis Module:												
Vol/Sat:	0.11	0.27	0.10	0.05	0.30	0.08	0.05	0.24	0.24	0.12	0.28	0.28
Crit Moves:	****				****			****			****	
Green/Cycle:	0.13	0.40	0.40	0.07	0.34	0.34	0.06	0.28	0.28	0.14	0.35	0.35
Volume/Cap:	0.88	0.69	0.26	0.69	0.88	0.22	0.80	0.88	0.88	0.88	0.80	0.80
Uniform Del:	42.9	25.0	20.3	45.3	30.9	23.4	46.2	34.7	34.7	42.4	29.4	29.4
IncremntDel:	30.6	2.8	0.2	14.9	13.4	0.2	31.7	16.6	16.6	29.1	7.0	7.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	73.6	27.8	20.5	60.2	44.4	23.6	78.0	51.3	51.3	71.6	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:	73.6	27.8	20.5	60.2	44.4	23.6	78.0	51.3	51.3	71.6	36.4	36.4
LOS by Move:	E	C	C	E	D	C	E	D	D	E	D	D
HCM2kAvgQ:	9	14	3	4	20	3	3	14	14	9	16	16

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[14.8]

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	1	0	1	0		0	1	0	1	0		1	0	0	1	0		0	0	1!	0	0	
Volume Module:																								
Base Vol:	12	260		7			14	283		69			28		2		21		38		3		17	
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41		1.41		1.41		1.41		1.41	
Initial Bse:	17	367		10			20	400		97			40		3		30		54		4		24	
Added Vol:	0	20		0			1	20		27			50		12		138		0		2		2	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	17	387		10			21	420		124			90		15		168		54		6		26	
User Adj:	0.88	0.88		0.88			0.84	0.84		0.84			0.00		0.00		0.00		0.61		0.61		0.61	
PHF Adj:	0.90	0.90		0.90			0.87	0.87		0.87			1.00		1.00		1.00		0.76		0.76		0.76	
PHF Volume:	17	377		10			20	405		120			0		0		0		43		5		21	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	17	377		10			20	405		120			0		0		0		43		5		21	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5		6.5		6.9		6.8		6.5		6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5		4.0		3.3		3.5		4.0		3.3	
Capacity Module:																								
Cnflict Vol:	525	xxxx	xxxxx				387	xxxx	xxxxx				729		925		263		658		980		194	
Potent Cap.:	1038	xxxx	xxxxx				1168	xxxx	xxxxx				310		268		736		397		248		815	
Move Cap.:	1038	xxxx	xxxxx				1168	xxxx	xxxxx				290		258		736		387		240		815	
Volume/Cap:	0.02	xxxx	xxxx				0.02	xxxx	xxxx				0.00		0.00		0.00		0.11		0.02		0.03	
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxx		xxxx		xxxxx		xxxx		xxxx		xxxxx	
Control Del:	8.5	xxxx	xxxxx				8.1	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx		xxxx		xxxxx	
LOS by Move:	A	*		*			A	*		*			*		*		*		*		*		*	
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx		xxxx		0		xxxx		437		xxxxx	
SharedQueue:	0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx		0.6		xxxxx	
Shrd ConDel:	8.5	xxxx	xxxxx				8.1	xxxx	xxxxx				xxxxx		xxxx		xxxxx		xxxxx		14.8		xxxxx	
Shared LOS:	A	*		*			A	*		*			*		*		*		*		B		*	
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						14.8					
ApproachLOS:	*						*						*						B					

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 #9 Mission Rd / Chestnut Ave

Cycle (sec):	130	Critical Vol./Cap.(X):	0.838
Loss Time (sec):	9	Average Delay (sec/veh):	33.9
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:	Split Phase			Split Phase			Protected			Permitted		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	9	9	9	4	6	6	9	9	9
Y+R:	0.0	0.0	0.0	4.0	4.0	4.0	4.0	4.0	4.0	4.2	4.2	4.2
Lanes:	0 0	0	1 0	1	0 0	1 1	1	0 1	1 0	1	0 1	1 0
Volume Module:												
Base Vol:	0	0	0	93	0	242	270	772	0	0	684	93
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	131	0	342	382	1091	0	0	966	131
Added Vol:	0	3	3	12	7	140	15	1	0	6	15	2
PasserByVol:	0	0	-1	0	0	0	0	1	-1	0	0	0
Initial Fut:	0	3	2	143	7	482	397	1093	-1	6	981	133
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:	1.00	1.00	1.00	0.87	0.87	0.87	0.96	0.96	0.00	0.88	0.88	0.88
PHF Volume:	0	3	2	165	8	554	415	1144	0	7	1117	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	3	2	165	8	554	415	1144	0	7	1117	152
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:	0	3	2	165	8	554	415	1144	0	7	1117	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.93	0.92	0.93	0.83	0.83	0.93	0.93	0.95	0.17	0.91	0.91
Lanes:	0.00	0.60	0.40	1.00	0.03	1.97	1.00	2.00	0.00	1.00	1.76	0.24
Final Sat.:	0	1053	702	1769	45	3127	1769	3538	0	330	3058	416
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.09	0.18	0.18	0.23	0.32	0.00	0.02	0.37	0.37
Crit Moves:			****		****		****				****	
Green/Cycle:	0.00	0.00	0.00	0.21	0.21	0.21	0.28	0.72	0.00	0.44	0.44	0.44
Volume/Cap:	0.00	0.84	0.84	0.44	0.84	0.84	0.84	0.45	0.00	0.05	0.84	0.84
Uniform Del:	0.0	64.7	64.7	44.6	49.1	49.1	44.0	7.8	0.0	21.1	32.6	32.6
IncremntDel:	0.0	256	255.9	0.8	9.1	9.1	11.9	0.1	0.0	0.1	4.3	4.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Delay/Veh:	0.0	321	320.7	45.4	58.3	58.3	55.9	7.9	0.0	21.3	36.9	36.9
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	321	320.7	45.4	58.3	58.3	55.9	7.9	0.0	21.3	36.9	36.9
LOS by Move:	A	F	F	D	E	E	E	A	A	C	D	D
HCM2kAvgQ:	0	1	1	6	13	13	18	10	0	0	23	23

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #10 Juniperro Serra Blvd / Arroyo Dr

Average Delay (sec/veh): 28.9 Worst Case Level Of Service: F[322.7]

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	0	1!	0	0	
Volume Module:																								
Base Vol:	0	893	169				43	455	0				0	0	0				108	0	62			
Growth Adj:	1.41	1.41	1.41				1.41	1.41	1.41				1.41	1.41	1.41				1.41	1.41	1.41			
Initial Bse:	0	1262	239				61	643	0				0	0	0				153	0	88			
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	1262	239				61	643	0				0	0	0				153	0	88			
User Adj:	1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00				1.00	1.00	1.00			
PHF Adj:	0.90	0.90	0.90				0.84	0.84	0.84				1.00	1.00	1.00				0.99	0.99	0.99			
PHF Volume:	0	1402	265				73	769	0				0	0	0				154	0	89			
Reduct Vol:	0	0	0				0	0	0				0	0	0				0	0	0			
FinalVolume:	0	1402	265				73	769	0				0	0	0				154	0	89			
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				4.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				6.8	6.5	6.9			
FollowUpTim:	xxxxx	xxxx	xxxxx				2.2	xxxx	xxxxx				xxxxx	xxxx	xxxxx				3.5	4.0	3.3			
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1667	xxxx	xxxxx				xxxx	xxxx	xxxxx				2065	2449	834			
Potent Cap.:	xxxx	xxxx	xxxxx				382	xxxx	xxxxx				xxxx	xxxx	xxxxx				47	31	312			
Move Cap.:	xxxx	xxxx	xxxxx				382	xxxx	xxxxx				xxxx	xxxx	xxxxx				40	25	312			
Total Cap:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				121	62	xxxxx				123	110	xxxxx			
Volume/Cap:	xxxx	xxxx	xxxx				0.19	xxxx	xxxx				xxxx	xxxx	xxxx				1.25	0.00	0.28			
Level Of Service Module:																								
2Way95thQ:	xxxx	xxxx	xxxxx				0.7	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
Control Del:	xxxxx	xxxx	xxxxx				16.6	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	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	158	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	16.2	xxxxx			
Shrd ConDel:	xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	323	xxxxx			
Shared LOS:	*	*	*				*	*	*				*	*	*				*	F	*			
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						322.7					
ApproachLOS:	*						*						*						F					

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 #11 I-280 SB Ramps / Westborough Blvd

Cycle (sec):	50	Critical Vol./Cap.(X):	1.095
Loss Time (sec):	6	Average Delay (sec/veh):	48.9
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:	Split Phase			Split Phase			Permitted			Permitted		
Rights:	Include			Ignore			Ignore			Include		
Min. Green:	0	0	0	4	4	4	9	9	9	9	9	9
Y+R:	0.0	0.0	0.0	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Lanes:	0 0	0	0	2 0	0	0 1	0 0	2	0 1	0 0	2	0 0
Volume Module:												
Base Vol:	0	0	0	595	0	710	0	854	566	0	1616	0
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	0	0	0	841	0	1003	0	1207	800	0	2283	0
Added Vol:	0	0	0	47	0	0	0	24	0	0	23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	888	0	1003	0	1231	800	0	2306	0
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:	1.00	1.00	1.00	0.92	0.92	0.00	0.95	0.95	0.00	0.96	0.96	0.96
PHF Volume:	0	0	0	969	0	0	0	1293	0	0	2410	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	969	0	0	0	1293	0	0	2410	0
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:	0	0	0	969	0	0	0	1293	0	0	2410	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.93	1.00	1.00	0.93	1.00
Lanes:	0.00	0.00	0.00	2.00	0.00	1.00	0.00	2.00	1.00	0.00	2.00	0.00
Final Sat.:	0	0	0	3432	0	1900	0	3538	1900	0	3538	0
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.37	0.00	0.00	0.68	0.00
Crit Moves:				****							****	
Green/Cycle:	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.62	0.00	0.00	0.62	0.00
Volume/Cap:	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.59	0.00	0.00	1.10	0.00
Uniform Del:	0.0	0.0	0.0	18.6	0.0	0.0	0.0	5.6	0.0	0.0	9.4	0.0
IncremntDel:	0.0	0.0	0.0	59.6	0.0	0.0	0.0	0.4	0.0	0.0	50.7	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	78.1	0.0	0.0	0.0	6.0	0.0	0.0	60.2	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	78.1	0.0	0.0	0.0	6.0	0.0	0.0	60.2	0.0
LOS by Move:	A	A	A	E	A	A	A	A	A	A	E	A
HCM2kAvgQ:	0	0	0	18	0	0	0	7	0	0	39	0

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.429
Loss Time (sec):	12	Average Delay (sec/veh):	216.0
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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 0 2	0 1		1 0 1	1 0		1 0 2	0 1	
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1388	965	277	201	341	171	246	1178	287	287	1718	308
Added Vol:	0	0	47	0	0	0	0	71	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1388	965	324	201	341	171	246	1249	287	334	1788	308
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1428	993	333	252	427	215	257	1306	300	368	1972	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1428	993	333	252	427	215	257	1306	300	368	1972	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1428	993	333	252	427	215	257	1306	300	368	1972	340
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.93	0.93	0.83	0.93	0.90	0.90	0.93	0.93	0.83
Lanes:	2.10	1.42	0.48	1.00	2.00	1.00	1.00	1.63	0.37	1.00	2.00	1.00
Final Sat.:	3456	2404	807	1769	3538	1583	1769	2797	642	1769	3538	1580
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.14	0.12	0.14	0.15	0.47	0.47	0.21	0.56	0.21
Crit Moves:	****			****			****				****	
Green/Cycle:	0.29	0.29	0.29	0.10	0.10	0.10	0.10	0.34	0.34	0.15	0.39	0.49
Volume/Cap:	1.43	1.43	1.43	1.43	1.21	1.36	1.43	1.37	1.37	1.37	1.43	0.44
Uniform Del:	35.6	35.6	35.6	45.0	45.0	45.0	44.9	33.0	33.0	42.4	30.5	16.6
IncremntDel:	196.3	196	196.3	222.7	119	197.9	222.2	173	173.4	189.8	197	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	231.8	232	231.8	267.8	164	242.9	267.1	206	206.4	232.2	228	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:	231.8	232	231.8	267.8	164	242.9	267.1	206	206.4	232.2	228	17.0
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	B
HCM2kAvgQ:	51	51	51	19	15	16	19	55	55	26	71	7

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Note: Queue reported is the number of cars per lane.

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Mitigated Existing (2016) Plus Project Traffic Conditions Analysis

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Scenario Report

Scenario:	Ex + Project AM - mit
Command:	Ex + Project AM
Volume:	Existing AM
Geometry:	Existing AM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Ex + Project AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	C	34.0	0.644	C	33.2	0.655	-0.842 D/V
# 4 El Camino Real / Chestnut Ave	D	42.5	0.961	D	49.1	1.006	+ 6.515 D/V
# 12 I-280 NB Ramps / Westborough B	E	71.6	1.040	E	78.8	1.066	+ 7.202 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	130	Critical Vol./Cap.(X):	0.655
Loss Time (sec):	12	Average Delay (sec/veh):	33.2
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			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1 1	0	1 0	1 1	0	1 1	0 0	2	0 0	1! 0	0
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
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:	575	307	6	4	577	67	157	12	850	21	30	8
Added Vol:	62	103	0	0	19	0	0	0	11	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	637	410	6	4	596	67	157	12	861	21	30	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	757	488	7	4	651	73	176	13	966	26	37	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	757	488	7	4	651	73	176	13	966	26	37	10
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	757	488	7	4	651	73	176	13	966	26	37	10
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3480	51	1769	3132	352	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.22	0.14	0.14	0.00	0.21	0.21	0.05	0.05	0.35	0.04	0.04	0.04
Crit Moves:	****				****				****		****	
Green/Cycle:	0.32	0.52	0.52	0.11	0.31	0.31	0.19	0.19	0.51	0.09	0.09	0.09
Volume/Cap:	0.68	0.27	0.27	0.02	0.68	0.68	0.29	0.29	0.68	0.43	0.43	0.43
Uniform Del:	38.1	17.7	17.7	51.2	39.6	39.6	45.6	45.6	23.9	55.8	55.8	55.8
IncremntDel:	1.7	0.1	0.1	0.0	1.8	1.8	0.2	0.2	1.4	1.8	1.8	1.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	39.8	17.8	17.8	51.3	41.4	41.4	45.8	45.8	25.3	57.6	57.6	57.6
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:	39.8	17.8	17.8	51.3	41.4	41.4	45.8	45.8	25.3	57.6	57.6	57.6
LOS by Move:	D	B	B	D	D	D	D	D	C	E	E	E
HCM2kAvgQ:	13	6	6	0	14	14	3	3	17	3	3	3

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	80	Critical Vol./Cap.(X):	1.006
Loss Time (sec):	12	Average Delay (sec/veh):	49.1
Optimal Cycle:	157	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	208	887	76	314	659	475	366	603	148
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:	448	597	284	208	887	76	314	659	475	366	603	148
Added Vol:	13	17	18	30	14	9	12	30	14	54	54	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	461	614	302	238	901	85	326	689	489	420	657	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:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	497	662	325	271	1025	97	356	752	534	562	880	225
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	497	662	325	271	1025	97	356	752	534	562	880	225
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	497	662	325	271	1025	97	356	752	534	562	880	225
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.83	0.90	0.89	0.81	0.93	0.93	0.81	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1570	3432	5083	1545	1769	3538	1548	3432	3538	1554
Capacity Analysis Module:												
Vol/Sat:	0.14	0.19	0.21	0.08	0.20	0.06	0.20	0.21	0.34	0.16	0.25	0.14
Crit Moves:	****				****				****	****		
Green/Cycle:	0.14	0.25	0.25	0.09	0.20	0.20	0.23	0.34	0.34	0.16	0.28	0.28
Volume/Cap:	1.01	0.75	0.83	0.83	1.01	0.31	0.89	0.62	1.01	1.01	0.89	0.52
Uniform Del:	34.2	27.7	28.4	35.6	32.0	27.3	30.0	21.9	26.3	33.5	27.6	24.3
IncremntDel:	42.0	3.6	13.9	16.3	29.7	0.6	21.0	1.0	40.6	39.6	10.0	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	76.3	31.3	42.4	51.9	61.7	27.9	50.9	22.9	66.9	73.1	37.7	25.4
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:	76.3	31.3	42.4	51.9	61.7	27.9	50.9	22.9	66.9	73.1	37.7	25.4
LOS by Move:	E	C	D	D	E	C	D	C	E	E	D	C
HCM2kAvgQ:	11	10	10	6	15	2	12	9	20	13	15	5

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	120	Critical Vol./Cap.(X):	1.066
Loss Time (sec):	12	Average Delay (sec/veh):	78.8
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			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 1 1 0	1		2 0	1 1 0		2 0	2 0	1
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	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:	782	261	255	279	657	105	113	1070	160	146	1310	83
Added Vol:	0	0	8	0	0	0	0	11	0	41	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	782	261	263	279	657	105	113	1081	160	187	1372	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	907	303	305	329	775	124	124	1187	176	226	1659	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	907	303	305	329	775	124	124	1187	176	226	1659	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:	907	303	305	329	775	124	124	1187	176	226	1659	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.92	0.92	0.83	0.90	0.91	0.91	0.90	0.93	0.82
Lanes:	2.43	0.78	0.79	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00
Final Sat.:	3918	1308	1318	1742	3485	1583	3432	3022	447	3432	3538	1562
Capacity Analysis Module:												
Vol/Sat:	0.23	0.23	0.23	0.19	0.22	0.08	0.04	0.39	0.39	0.07	0.47	0.06
Crit Moves:	****			****			****				****	
Green/Cycle:	0.21	0.21	0.21	0.20	0.20	0.20	0.05	0.41	0.41	0.07	0.43	0.64
Volume/Cap:	1.09	1.09	1.09	0.92	1.09	0.38	0.72	0.95	0.95	0.95	1.09	0.10
Uniform Del:	47.2	47.2	47.2	46.8	47.7	41.2	56.2	34.1	34.1	55.6	34.1	8.5
IncremntDel:	50.9	50.9	50.9	11.7	54.4	0.8	14.1	13.9	13.9	44.8	50.1	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	98.1	98.1	98.1	58.5	102	41.9	70.3	48.0	48.0	100.5	84.1	8.5
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:	98.1	98.1	98.1	58.5	102	41.9	70.3	48.0	48.0	100.5	84.1	8.5
LOS by Move:	F	F	F	E	F	D	E	D	D	F	F	A
HCM2kAvgQ:	23	23	23	16	23	4	4	31	31	7	45	1

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Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Ex + Project PM - mit
Command:	Ex + Project PM
Volume:	Existing PM
Geometry:	Existing PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Ex + ProjectPM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	C	26.5	0.709	C	30.8	0.775	+ 4.237 D/V
# 4 El Camino Real / Chestnut Ave	C	33.2	0.853	D	42.0	0.951	+ 8.779 D/V
# 12 I-280 NB Ramps / Westborough B	D	42.4	0.933	D	47.9	0.966	+ 5.548 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.775
Loss Time (sec):	12	Average Delay (sec/veh):	30.8
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:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Ovl			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0	1 1	0	1 0	1 1	0	1 1	0 0	2	0 0	1! 0	0
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
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:	1112	751	19	8	469	115	183	17	574	10	16	2
Added Vol:	70	117	0	0	118	0	0	0	71	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1182	868	19	8	587	115	183	17	645	10	16	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1292	949	21	9	631	124	217	20	763	13	21	3
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1292	949	21	9	631	124	217	20	763	13	21	3
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1292	949	21	9	631	124	217	20	763	13	21	3
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.67	0.33	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3452	76	1769	2880	564	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.38	0.27	0.27	0.00	0.22	0.22	0.07	0.07	0.27	0.02	0.02	0.02
Crit Moves:	****				****			****			****	
Green/Cycle:	0.41	0.57	0.57	0.08	0.24	0.24	0.11	0.11	0.52	0.12	0.12	0.12
Volume/Cap:	0.92	0.48	0.48	0.06	0.92	0.92	0.60	0.60	0.53	0.17	0.17	0.17
Uniform Del:	27.8	12.9	12.9	42.3	37.1	37.1	42.4	42.4	15.8	39.5	39.5	39.5
IncremntDel:	9.6	0.2	0.2	0.2	14.8	14.8	2.7	2.7	0.4	0.4	0.4	0.4
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	37.4	13.1	13.1	42.5	51.9	51.9	45.1	45.1	16.2	39.9	39.9	39.9
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:	37.4	13.1	13.1	42.5	51.9	51.9	45.1	45.1	16.2	39.9	39.9	39.9
LOS by Move:	D	B	B	D	D	D	D	D	B	D	D	D
HCM2kAvgQ:	20	9	9	0	16	16	4	4	9	1	1	1

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	75	Critical Vol./Cap.(X):	0.951
Loss Time (sec):	12	Average Delay (sec/veh):	42.0
Optimal Cycle:	OPTIMIZED	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:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	1 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	207	734	188	176	534	355	300	647	184
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:	728	1057	407	207	734	188	176	534	355	300	647	184
Added Vol:	6	53	38	36	-3	-2	98	87	64	33	35	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	734	1110	445	243	731	186	274	621	419	333	682	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	760	1149	461	251	756	192	302	685	462	351	719	236
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	760	1149	461	251	756	192	302	685	462	351	719	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:	760	1149	461	251	756	192	302	685	462	351	719	236
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.83	0.90	0.89	0.81	0.93	0.93	0.82	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1572	3432	5083	1532	1769	3538	1549	3432	3538	1550
Capacity Analysis Module:												
Vol/Sat:	0.22	0.32	0.29	0.07	0.15	0.13	0.17	0.19	0.30	0.10	0.20	0.15
Crit Moves:		****		****					****	****		
Green/Cycle:	0.25	0.34	0.34	0.08	0.17	0.17	0.19	0.31	0.31	0.11	0.23	0.23
Volume/Cap:	0.88	0.95	0.86	0.95	0.88	0.75	0.89	0.62	0.95	0.95	0.89	0.67
Uniform Del:	27.1	24.1	23.0	34.5	30.5	29.7	29.5	21.9	25.2	33.3	28.0	26.3
IncremntDel:	10.8	15.6	13.0	42.0	10.9	11.3	23.4	1.1	28.8	34.2	11.7	4.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	37.9	39.7	36.0	76.5	41.3	41.0	52.9	22.9	53.9	67.5	39.7	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:	37.9	39.7	36.0	76.5	41.3	41.0	52.9	22.9	53.9	67.5	39.7	31.0
LOS by Move:	D	D	D	E	D	D	D	C	D	E	D	C
HCM2kAvgQ:	12	19	13	6	10	6	10	8	16	8	12	6

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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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	95	Critical Vol./Cap.(X):	0.966
Loss Time (sec):	12	Average Delay (sec/veh):	47.9
Optimal Cycle:	OPTIMIZED	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			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 1 1 0	1		2 0	1 1 0		2 0	2 0	1
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
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:	982	683	196	142	241	121	174	834	203	203	1216	218
Added Vol:	0	0	47	0	0	0	0	71	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	982	683	243	142	241	121	174	905	203	250	1286	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:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1010	703	250	178	302	152	182	946	212	276	1418	240
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1010	703	250	178	302	152	182	946	212	276	1418	240
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1010	703	250	178	302	152	182	946	212	276	1418	240
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.91	0.91	0.83	0.90	0.91	0.91	0.90	0.93	0.83
Lanes:	2.09	1.41	0.50	1.11	1.89	1.00	2.00	1.63	0.37	2.00	2.00	1.00
Final Sat.:	3428	2385	848	1932	3279	1583	3432	2812	631	3432	3538	1581
Capacity Analysis Module:												
Vol/Sat:	0.29	0.29	0.29	0.09	0.09	0.10	0.05	0.34	0.34	0.08	0.40	0.15
Crit Moves:	****					****	****				****	
Green/Cycle:	0.30	0.30	0.30	0.10	0.10	0.10	0.06	0.38	0.38	0.09	0.41	0.51
Volume/Cap:	0.98	0.98	0.98	0.94	0.94	0.98	0.84	0.88	0.88	0.88	0.98	0.30
Uniform Del:	32.8	32.8	32.8	42.5	42.5	42.7	44.0	27.3	27.3	42.6	27.5	13.5
IncremntDel:	14.9	14.9	14.9	25.3	25.3	64.8	24.1	7.1	7.1	23.6	18.2	0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	47.7	47.7	47.7	67.9	67.9	107.6	68.1	34.4	34.4	66.3	45.7	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:	47.7	47.7	47.7	67.9	67.9	107.6	68.1	34.4	34.4	66.3	45.7	13.7
LOS by Move:	D	D	D	E	E	F	E	C	C	E	D	B
HCM2kAvgQ:	21	21	21	8	8	8	5	20	20	7	28	4

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Note: Queue reported is the number of cars per lane.

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Mitigated Cumulative Plus Project Traffic Conditions Analysis

Scenario Report

Scenario:	Cum + Project AM - mit
Command:	Cum + Project AM
Volume:	Cumulative AM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project AM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cum + Project AM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 El Camino Real / Hickey Blvd	D	54.6	0.939	E	56.2	0.950	+ 1.577 D/V
# 2 El Camino Real / McLellan Dr	D	49.1	0.921	D	51.3	0.899	+ 2.223 D/V
# 4 El Camino Real / Chestnut Ave	E	77.2	1.060	F	87.1	1.104	+ 9.968 D/V
# 5 El Camino Real / W. Orange Ave	E	60.2	0.998	E	62.2	1.017	+ 1.979 D/V
# 8 Mission Rd / Oak Ave	C	24.9	0.504	D	30.0	0.571	+ 5.109 D/V
# 12 I-280 NB Ramps / Westborough B	F	226.3	1.430	F	236.3	1.455	+ 9.994 D/V

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	0.950
Loss Time (sec):	12	Average Delay (sec/veh):	56.2
Optimal Cycle:	139	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			Ovl			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	575	307	6	4	577	67	157	12	850	21	30	8
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	812	434	8	6	815	95	222	17	1201	30	42	11
Added Vol:	62	103	0	0	19	0	0	0	11	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	874	537	8	6	834	95	222	17	1212	30	42	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:	0.84	0.84	0.84	0.92	0.92	0.92	0.89	0.89	0.89	0.82	0.82	0.82
PHF Volume:	1040	638	10	6	912	103	249	19	1360	36	52	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1040	638	10	6	912	103	249	19	1360	36	52	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:	1040	638	10	6	912	103	249	19	1360	36	52	14
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.92	0.92	0.94	0.94	0.73	0.95	0.95	0.94
Lanes:	2.00	1.97	0.03	1.00	1.80	0.20	1.86	0.14	2.00	0.36	0.51	0.13
Final Sat.:	3432	3476	55	1769	3129	355	3307	253	2786	640	914	244
Capacity Analysis Module:												
Vol/Sat:	0.30	0.18	0.18	0.00	0.29	0.29	0.08	0.08	0.49	0.06	0.06	0.06
Crit Moves:	****				****				****	****		
Green/Cycle:	0.30	0.48	0.48	0.10	0.28	0.28	0.18	0.18	0.48	0.12	0.12	0.12
Volume/Cap:	1.03	0.39	0.39	0.03	1.03	1.03	0.42	0.42	1.03	0.47	0.47	0.47
Uniform Del:	35.2	16.8	16.8	40.3	35.8	35.8	36.3	36.3	26.2	41.0	41.0	41.0
IncremntDel:	35.1	0.1	0.1	0.1	35.4	35.4	0.4	0.4	31.5	1.6	1.6	1.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	70.3	17.0	17.0	40.4	71.2	71.2	36.7	36.7	57.7	42.7	42.7	42.7
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:	70.3	17.0	17.0	40.4	71.2	71.2	36.7	36.7	57.7	42.7	42.7	42.7
LOS by Move:	E	B	B	D	E	E	D	D	E	D	D	D
HCM2kAvgQ:	21	6	6	0	24	24	4	4	33	3	3	3

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.899
Loss Time (sec):	12	Average Delay (sec/veh):	51.3
Optimal Cycle:	OPTIMIZED	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			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1	1 0	1 0	0	1 0	1 0	0	1 1
Volume Module:												
Base Vol:	31	470	121	394	1087	29	33	25	50	213	28	365
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	44	664	171	557	1536	41	47	35	71	301	40	516
Added Vol:	0	125	13	10	20	0	0	0	0	-1	0	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	44	789	184	567	1556	41	47	35	71	300	40	556
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.88	0.88	0.88	0.82	0.82	0.82	0.79	0.79	0.79
PHF Volume:	48	873	204	647	1776	47	57	43	86	381	50	705
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	48	873	204	647	1776	47	57	43	86	381	50	705
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	48	873	204	647	1776	47	57	43	86	381	50	705
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.79	0.90	0.93	0.93	0.93	0.88	0.82	0.93	0.84	0.83
Lanes:	1.00	3.00	1.00	2.00	1.95	0.05	1.00	0.32	0.68	1.00	0.13	1.87
Final Sat.:	1769	5083	1502	3432	3433	90	1769	530	1061	1769	210	2955
Capacity Analysis Module:												
Vol/Sat:	0.03	0.17	0.14	0.19	0.52	0.52	0.03	0.08	0.08	0.22	0.24	0.24
Crit Moves:	****				****		****				****	
Green/Cycle:	0.03	0.27	0.50	0.29	0.53	0.53	0.10	0.11	0.11	0.24	0.25	0.25
Volume/Cap:	0.89	0.64	0.27	0.64	0.97	0.97	0.32	0.74	0.74	0.91	0.97	0.97
Uniform Del:	62.8	42.0	18.5	39.9	29.5	29.5	54.4	56.1	56.1	48.4	48.6	48.6
IncremntDel:	82.7	1.0	0.2	1.4	14.9	14.9	1.1	15.8	15.8	24.1	25.7	25.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	145.5	43.1	18.7	41.3	44.4	44.4	55.5	71.9	71.9	72.5	74.3	74.3
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:	145.5	43.1	18.7	41.3	44.4	44.4	55.5	71.9	71.9	72.5	74.3	74.3
LOS by Move:	F	D	B	D	D	D	E	E	E	E	E	E
HCM2kAvgQ:	2	11	4	11	35	35	2	7	7	18	20	20

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	115	Critical Vol./Cap.(X):	1.104
Loss Time (sec):	12	Average Delay (sec/veh):	87.1
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			Ovl			Include		
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	448	597	284	187	922	112	349	624	475	331	567	133
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	633	844	401	264	1303	158	493	882	671	468	801	188
Added Vol:	13	26	9	30	47	35	20	18	4	31	46	20
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	646	870	410	294	1350	193	513	900	675	499	847	208
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.88	0.88	0.88	0.92	0.92	0.92	0.75	0.75	0.75
PHF Volume:	696	937	442	335	1536	220	560	982	737	668	1134	278
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	696	937	442	335	1536	220	560	982	737	668	1134	278
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	696	937	442	335	1536	220	560	982	737	668	1134	278
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.81	0.90	0.93	0.81	0.90	0.93	0.82
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1565	3432	5083	1540	3432	3538	1541	3432	3538	1550
Capacity Analysis Module:												
Vol/Sat:	0.20	0.26	0.28	0.10	0.30	0.14	0.16	0.28	0.48	0.19	0.32	0.18
Crit Moves:	****				****		****				****	
Green/Cycle:	0.18	0.34	0.34	0.12	0.27	0.27	0.15	0.26	0.44	0.18	0.29	0.29
Volume/Cap:	1.10	0.78	0.83	0.83	1.10	0.52	1.10	1.08	1.08	1.08	1.10	0.62
Uniform Del:	46.9	34.1	34.9	49.6	41.8	35.4	49.0	42.7	32.1	47.1	40.8	35.3
IncremntDel:	67.7	3.3	10.6	13.6	57.9	1.2	71.4	52.9	59.4	58.8	61.0	2.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	114.7	37.4	45.6	63.2	99.6	36.6	120.4	95.6	91.5	105.9	102	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:	114.7	37.4	45.6	63.2	99.6	36.6	120.4	95.6	91.5	105.9	102	37.9
LOS by Move:	F	D	D	E	F	D	F	F	F	F	F	D
HCM2kAvgQ:	21	17	17	8	30	7	17	27	37	19	32	9

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	135	Critical Vol./Cap.(X):	1.017
Loss Time (sec):	12	Average Delay (sec/veh):	62.2
Optimal Cycle:	OPTIMIZED	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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0 2 1 0			2 0 2 1 0			0 1 0 0 1			0 1 0 0 1		
Volume Module:												
Base Vol:	63	897	119	190	1427	77	151	63	45	110	63	197
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	89	1267	168	268	2016	109	213	89	64	155	89	278
Added Vol:	0	15	0	0	82	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	1282	168	268	2098	109	213	89	64	155	89	278
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.77	0.77	0.77	0.95	0.95	0.95	0.83	0.83	0.83	0.93	0.93	0.93
PHF Volume:	116	1674	220	283	2216	115	257	107	77	168	96	301
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	116	1674	220	283	2216	115	257	107	77	168	96	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:	116	1674	220	283	2216	115	257	107	77	168	96	301
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.87	0.90	0.89	0.88	0.95	0.95	0.79	0.95	0.95	0.81
Lanes:	1.00	2.65	0.35	2.00	2.85	0.15	0.71	0.29	1.00	0.64	0.36	1.00
Final Sat.:	1769	4413	579	3432	4797	249	1269	530	1503	1147	657	1534
Capacity Analysis Module:												
Vol/Sat:	0.07	0.38	0.38	0.08	0.46	0.46	0.20	0.20	0.05	0.15	0.15	0.20
Crit Moves:	****				****		****					****
Green/Cycle:	0.06	0.43	0.43	0.09	0.45	0.45	0.20	0.23	0.23	0.16	0.19	0.19
Volume/Cap:	1.02	0.89	0.89	0.89	1.02	1.02	1.02	0.89	0.22	0.89	0.76	1.02
Uniform Del:	63.1	35.8	35.8	60.6	36.8	36.8	54.1	50.5	42.4	55.2	51.5	54.5
IncremntDel:	88.7	5.1	5.1	25.1	23.1	23.1	51.8	20.7	0.3	26.4	9.4	56.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	151.8	40.9	40.9	85.6	59.9	59.9	105.9	71.2	42.8	81.6	60.9	111.1
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:	151.8	40.9	40.9	85.6	59.9	59.9	105.9	71.2	42.8	81.6	60.9	111.1
LOS by Move:	F	D	D	F	E	E	F	E	D	F	E	F
HCM2kAvgQ:	8	29	29	9	43	43	21	18	3	14	12	18

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 6.0 Worst Case Level Of Service: D[30.0]

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	1	0	1	0		0	1	0	1	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	13	266		4			7	305		71			35		3		18		60		2		24	
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41		1.41		1.41		1.41		1.41	
Initial Bse:	18	376		6			10	431		100			49		4		25		85		3		34	
Added Vol:	0	11		0			1	21		49			13		4		31		0		1		0	
PasserByVol:	0	0		0			0	0		0			0		0		0		0		0		0	
Initial Fut:	18	387		6			11	452		149			62		8		56		85		4		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:	0.88	0.88		0.88			0.84	0.84		0.84			1.00		1.00		1.00		0.61		0.61		0.61	
PHF Volume:	21	442		6			13	538		178			62		8		56		138		6		55	
Reduct Vol:	0	0		0			0	0		0			0		0		0		0		0		0	
FinalVolume:	21	442		6			13	538		178			62		8		56		138		6		55	
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5	6.5			6.9		7.5	6.5			6.9	
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5	4.0			3.3		3.5	4.0			3.3	
Capacity Module:																								
Cnflict Vol:	716	xxxx	xxxxx				449	xxxx	xxxxx				919	1143			358		786	1229			224	
Potent Cap.:	881	xxxx	xxxxx				1108	xxxx	xxxxx				226	199			639		282	177			779	
Move Cap.:	881	xxxx	xxxxx				1108	xxxx	xxxxx				199	191			639		242	170			779	
Volume/Cap:	0.02	xxxx	xxxx				0.01	xxxx	xxxx				0.31	0.04			0.09		0.57	0.04			0.07	
Level Of Service Module:																								
2Way95thQ:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				1.3	xxxx	xxxxx				3.2	xxxx	xxxxx			
Control Del:	9.2	xxxx	xxxxx				8.3	xxxx	xxxxx				31.2	xxxx	xxxxx				38.0	xxxx	xxxxx			
LOS by Move:	A	*		*			A	*		*			D	*		*			E	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx			492		xxxx	xxxx			571	
SharedQueue:	0.1	xxxx	xxxxx				0.0	xxxx	xxxxx				xxxxx	xxxx			0.5		xxxxx	xxxx			0.4	
Shrd ConDel:	9.2	xxxx	xxxxx				8.3	xxxx	xxxxx				xxxxx	xxxx			13.4		xxxxx	xxxx			12.1	
Shared LOS:	A	*		*			A	*		*			*	*			B		*	*			B	
ApproachDel:	xxxxxx						xxxxxx						22.2						30.0					
ApproachLOS:	*						*						C						D					

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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	160	Critical Vol./Cap.(X):	1.455
Loss Time (sec):	12	Average Delay (sec/veh):	236.3
Optimal Cycle:	OPTIMIZED	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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1 0	1 0		1 1 1 0	1		2 0	1 1 0		2 0	2 0	1
Volume Module:												
Base Vol:	782	261	255	279	657	105	113	1070	160	146	1310	83
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1105	369	360	394	928	148	160	1512	226	206	1851	117
Added Vol:	0	0	8	0	0	0	0	11	0	41	62	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1105	369	368	394	928	148	160	1523	226	247	1913	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:	0.86	0.86	0.86	0.85	0.85	0.85	0.91	0.91	0.91	0.83	0.83	0.83
PHF Volume:	1282	428	427	465	1095	175	175	1672	248	299	2313	142
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1282	428	427	465	1095	175	175	1672	248	299	2313	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:	1282	428	427	465	1095	175	175	1672	248	299	2313	142
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.85	0.88	0.88	0.92	0.92	0.83	0.90	0.91	0.91	0.90	0.93	0.82
Lanes:	2.43	0.79	0.78	1.00	2.00	1.00	2.00	1.74	0.26	2.00	2.00	1.00
Final Sat.:	3925	1310	1308	1742	3485	1583	3432	3021	449	3432	3538	1561
Capacity Analysis Module:												
Vol/Sat:	0.33	0.33	0.33	0.27	0.31	0.11	0.05	0.55	0.55	0.09	0.65	0.09
Crit Moves:			****		****		****				****	
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.04	0.42	0.42	0.07	0.45	0.66
Volume/Cap:	1.46	1.46	1.46	1.24	1.46	0.51	1.36	1.32	1.32	1.32	1.46	0.14
Uniform Del:	62.1	62.1	62.1	62.8	62.8	55.4	77.0	46.4	46.4	74.7	44.1	10.0
IncremntDel:	210.3	210	210.3	114.5	212	1.3	204.8	148	148.3	170.9	210	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	272.4	272	272.4	177.2	274	56.7	281.8	195	194.7	245.6	254	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:	272.4	272	272.4	177.2	274	56.7	281.8	195	194.7	245.6	254	10.0
LOS by Move:	F	F	F	F	F	E	F	F	F	F	F	B
HCM2kAvgQ:	51	51	51	37	51	8	9	79	79	14	105	2

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Note: Queue reported is the number of cars per lane.

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Scenario Report

Scenario:	Cum + Project PM - mit
Command:	Cum + Project PM
Volume:	Cumulative PM
Geometry:	Ex w/ Extension PM
Impact Fee:	Default Impact Fee
Trip Generation:	Project PM
Trip Distribution:	SSF SP
Paths:	Default Path
Routes:	Default Route
Configuration:	Cum + Project PM

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Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/Veh	Base V/C	Future LOS	Future Del/Veh	Future V/C	Change in D/V
# 1 El Camino Real / Hickey Blvd	E	70.2	1.001	F	89.6	1.067	+19.427
# 2 El Camino Real / McLellan Dr	D	39.0	0.749	D	42.0	0.808	+ 2.976
# 4 El Camino Real / Chestnut Ave	E	58.7	0.983	F	80.1	1.085	+21.394
# 5 El Camino Real / W. Orange Ave	E	79.8	1.127	F	84.8	1.148	+ 4.930
# 8 Mission Rd / Oak Ave	B	13.6	0.107	B	14.1	0.112	+ 0.520
# 12 I-280 NB Ramps / Westborough B	F	150.8	1.245	F	166.2	1.276	+15.339

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 El Camino Real / Hickey Blvd

Cycle (sec):	100	Critical Vol./Cap.(X):	1.067
Loss Time (sec):	12	Average Delay (sec/veh):	89.6
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			Ovl			Include		
Min. Green:	4	10	10	4	10	10	11	11	11	12	12	12
Y+R:	3.0	4.5	4.5	3.2	4.5	4.5	4.4	4.4	4.4	3.6	3.6	3.6
Lanes:	2 0 1	1 0		1 0 1	1 0		1 1 0	0 2		0 0 1!	0 0	
Volume Module:												
Base Vol:	1112	751	19	8	469	115	183	17	574	10	16	2
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1571	1061	27	11	663	162	259	24	811	14	23	3
Added Vol:	70	117	0	0	118	0	0	0	71	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1641	1178	27	11	781	162	259	24	882	14	23	3
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.93	0.93	0.93	0.85	0.85	0.85	0.78	0.78	0.78
PHF Volume:	1794	1288	29	12	839	175	306	28	1044	18	29	4
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1794	1288	29	12	839	175	306	28	1044	18	29	4
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1794	1288	29	12	839	175	306	28	1044	18	29	4
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.93	0.93	0.91	0.90	0.94	0.94	0.73	0.95	0.95	0.95
Lanes:	2.00	1.96	0.04	1.00	1.65	0.35	1.83	0.17	2.00	0.36	0.57	0.07
Final Sat.:	3432	3449	79	1769	2848	593	3258	303	2786	646	1034	129
Capacity Analysis Module:												
Vol/Sat:	0.52	0.37	0.37	0.01	0.29	0.29	0.09	0.09	0.37	0.03	0.03	0.03
Crit Moves:	****				****			****			****	
Green/Cycle:	0.42	0.59	0.59	0.06	0.23	0.23	0.11	0.11	0.53	0.12	0.12	0.12
Volume/Cap:	1.26	0.64	0.64	0.11	1.26	1.26	0.85	0.85	0.71	0.23	0.23	0.23
Uniform Del:	29.2	13.6	13.6	44.2	38.3	38.3	43.7	43.7	18.0	39.8	39.8	39.8
IncremntDel:	121.6	0.7	0.7	0.4	126	125.8	16.5	16.5	1.7	0.6	0.6	0.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	150.8	14.3	14.3	44.6	164	164.0	60.2	60.2	19.7	40.4	40.4	40.4
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:	150.8	14.3	14.3	44.6	164	164.0	60.2	60.2	19.7	40.4	40.4	40.4
LOS by Move:	F	B	B	D	F	F	E	E	B	D	D	D
HCM2kAvgQ:	50	13	13	0	32	32	8	8	15	2	2	2

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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 #2 El Camino Real / McLellan Dr

Cycle (sec):	130	Critical Vol./Cap.(X):	0.808
Loss Time (sec):	12	Average Delay (sec/veh):	42.0
Optimal Cycle:	OPTIMIZED	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			Include			Include			Include		
Min. Green:	4	10	10	4	10	10	13	13	13	12	12	12
Y+R:	3.0	5.4	5.4	4.0	5.4	5.4	4.6	4.6	4.6	4.6	4.6	4.6
Lanes:	1 0	3 0	1	2 0	1	1 0	1 0	0	1 0	1 0	0	1 1
Volume Module:												
Base Vol:	42	1186	185	227	651	48	26	21	50	217	27	411
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	59	1676	261	321	920	68	37	30	71	307	38	581
Added Vol:	0	166	26	39	150	0	0	0	0	13	0	21
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	59	1842	287	360	1070	68	37	30	71	320	38	602
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.88	0.88	0.88	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	61	1909	298	409	1216	77	39	32	76	346	41	651
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	61	1909	298	409	1216	77	39	32	76	346	41	651
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	61	1909	298	409	1216	77	39	32	76	346	41	651
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.89	0.72	0.90	0.92	0.92	0.93	0.88	0.84	0.93	0.84	0.84
Lanes:	1.00	3.00	1.00	2.00	1.88	0.12	1.00	0.29	0.71	1.00	0.12	1.88
Final Sat.:	1769	5083	1377	3432	3296	209	1769	477	1135	1769	190	3004
Capacity Analysis Module:												
Vol/Sat:	0.03	0.38	0.22	0.12	0.37	0.37	0.02	0.07	0.07	0.20	0.22	0.22
Crit Moves:		****		****			****				****	
Green/Cycle:	0.05	0.43	0.66	0.14	0.51	0.51	0.10	0.12	0.12	0.23	0.25	0.25
Volume/Cap:	0.72	0.88	0.33	0.88	0.72	0.72	0.22	0.57	0.57	0.85	0.88	0.88
Uniform Del:	61.0	34.2	9.9	55.2	24.4	24.4	53.8	54.3	54.3	48.0	47.2	47.2
IncremntDel:	25.3	4.6	0.2	17.4	1.4	1.4	0.6	4.1	4.1	16.0	11.3	11.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	86.3	38.8	10.1	72.6	25.8	25.8	54.5	58.4	58.4	64.0	58.5	58.5
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:	86.3	38.8	10.1	72.6	25.8	25.8	54.5	58.4	58.4	64.0	58.5	58.5
LOS by Move:	F	D	B	E	C	C	D	E	E	E	E	E
HCM2kAvgQ:	2	26	5	8	19	19	2	5	5	16	16	16

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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 #4 El Camino Real / Chestnut Ave

Cycle (sec):	115	Critical Vol./Cap.(X):	1.085
Loss Time (sec):	12	Average Delay (sec/veh):	80.1
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			Ovl			Include		
Min. Green:	5	11	11	5	11	11	5	13	13	5	13	13
Y+R:	4.2	5.5	5.5	4.2	5.5	5.5	3.2	3.7	3.7	4.2	3.7	3.7
Lanes:	2 0	2 0	1	2 0	3 0	1	2 0	2 0	1	2 0	2 0	1
Volume Module:												
Base Vol:	728	1057	407	184	767	224	204	506	355	267	611	169
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1029	1494	575	260	1084	317	288	715	502	377	863	239
Added Vol:	6	87	4	36	16	13	127	36	16	62	100	40
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1035	1581	579	296	1100	330	415	751	518	439	963	279
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.91	0.91	0.91	0.95	0.95	0.95
PHF Volume:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1071	1636	599	306	1137	341	458	829	571	463	1015	294
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.90	0.93	0.82	0.90	0.89	0.80	0.90	0.93	0.81	0.90	0.93	0.81
Lanes:	2.00	2.00	1.00	2.00	3.00	1.00	2.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	3432	3538	1567	3432	5083	1521	3432	3538	1541	3432	3538	1543
Capacity Analysis Module:												
Vol/Sat:	0.31	0.46	0.38	0.09	0.22	0.22	0.13	0.23	0.37	0.13	0.29	0.19
Crit Moves:		****		****			****				****	
Green/Cycle:	0.30	0.43	0.43	0.08	0.21	0.21	0.12	0.25	0.54	0.14	0.26	0.26
Volume/Cap:	1.05	1.09	0.90	1.09	1.05	1.05	1.09	0.95	0.68	0.95	1.09	0.72
Uniform Del:	40.5	33.0	30.7	52.8	45.3	45.3	50.4	42.7	19.2	49.0	42.3	38.4
IncremntDel:	43.9	50.1	15.0	78.3	42.6	65.2	68.7	20.0	2.4	29.2	55.4	6.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	84.4	83.1	45.6	131.1	87.9	110.5	119.2	62.7	21.6	78.2	97.7	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:	84.4	83.1	45.6	131.1	87.9	110.5	119.2	62.7	21.6	78.2	97.7	44.6
LOS by Move:	F	F	D	F	F	F	F	E	C	E	F	D
HCM2kAvgQ:	28	43	23	10	22	19	14	20	15	12	28	11

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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 #5 El Camino Real / W. Orange Ave

Cycle (sec):	135	Critical Vol./Cap.(X):	1.148
Loss Time (sec):	12	Average Delay (sec/veh):	84.8
Optimal Cycle:	OPTIMIZED	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:	4	10	10	4	10	10	12	12	12	14	14	14
Y+R:	3.0	4.4	4.4	3.0	4.4	4.4	3.6	3.6	3.6	3.6	3.6	3.6
Lanes:	1 0	2 1	0	2 0	2 1	0	0 1	0 0	1	0 1	0 0	1
Volume Module:												
Base Vol:	33	1758	164	192	1117	54	82	68	35	137	56	210
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	47	2484	232	271	1578	76	116	96	49	194	79	297
Added Vol:	0	95	0	0	93	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	2579	232	271	1671	76	116	96	49	194	79	297
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.84	0.84	0.84
PHF Volume:	50	2776	249	294	1811	83	125	104	53	230	94	353
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	2776	249	294	1811	83	125	104	53	230	94	353
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	50	2776	249	294	1811	83	125	104	53	230	94	353
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.88	0.88	0.90	0.89	0.88	0.95	0.95	0.80	0.95	0.95	0.80
Lanes:	1.00	2.75	0.25	2.00	2.87	0.13	0.55	0.45	1.00	0.71	0.29	1.00
Final Sat.:	1769	4608	414	3432	4826	220	990	821	1517	1277	522	1525
Capacity Analysis Module:												
Vol/Sat:	0.03	0.60	0.60	0.09	0.38	0.38	0.13	0.13	0.04	0.18	0.18	0.23
Crit Moves:		****		****			****					****
Green/Cycle:	0.04	0.52	0.52	0.07	0.56	0.56	0.11	0.13	0.13	0.18	0.20	0.20
Volume/Cap:	0.65	1.15	1.15	1.15	0.68	0.68	1.15	0.98	0.27	0.98	0.89	1.15
Uniform Del:	63.5	32.1	32.1	62.5	21.4	21.4	60.1	58.7	53.1	54.9	52.5	53.9
IncremntDel:	17.4	71.6	71.6	102.3	0.7	0.7	109.3	54.4	0.8	45.2	23.5	97.7
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	80.9	104	103.7	164.7	22.0	22.0	169.4	113	53.9	100.1	76.0	151.6
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:	80.9	104	103.7	164.7	22.0	22.0	169.4	113	53.9	100.1	76.0	151.6
LOS by Move:	F	F	F	F	C	C	F	F	D	F	E	F
HCM2kAvgQ:	3	65	65	11	20	20	16	14	2	18	16	23

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #8 Mission Rd / Oak Ave

Average Delay (sec/veh): 1.3 Worst Case Level Of Service: B[14.1]

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	1	0	1	0		0	1	0	1	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	12	260		7			14	283		69			28		2	21			38		3	17		
Growth Adj:	1.41	1.41		1.41			1.41	1.41		1.41			1.41		1.41	1.41			1.41		1.41	1.41		
Initial Bse:	17	367		10			20	400		97			40		3	30			54		4	24		
Added Vol:	0	20		0			1	20		27			50		12	138			0		2	2		
PasserByVol:	0	0		0			0	0		0			0		0	0			0		0	0		
Initial Fut:	17	387		10			21	420		124			90		15	168			54		6	26		
User Adj:	0.88	0.88		0.88			0.84	0.84		0.84			0.00		0.00	0.00			0.61		0.61	0.61		
PHF Adj:	0.90	0.90		0.90			0.87	0.87		0.87			1.00		1.00	1.00			0.76		0.76	0.76		
PHF Volume:	17	377		10			20	405		120			0		0	0			43		5	21		
Reduct Vol:	0	0		0			0	0		0			0		0	0			0		0	0		
FinalVolume:	17	377		10			20	405		120			0		0	0			43		5	21		
Critical Gap Module:																								
Critical Gp:	4.1	xxxx	xxxxx				4.1	xxxx	xxxxx				7.5		6.5	6.9			6.8		6.5	6.9		
FollowUpTim:	2.2	xxxx	xxxxx				2.2	xxxx	xxxxx				3.5		4.0	3.3			3.5		4.0	3.3		
Capacity Module:																								
Cnflict Vol:	525	xxxx	xxxxx				387	xxxx	xxxxx				729		925	263			658		980	194		
Potent Cap.:	1038	xxxx	xxxxx				1168	xxxx	xxxxx				310		268	736			397		248	815		
Move Cap.:	1038	xxxx	xxxxx				1168	xxxx	xxxxx				290		258	736			387		240	815		
Volume/Cap:	0.02	xxxx	xxxx				0.02	xxxx	xxxx				0.00		0.00	0.00			0.11		0.02	0.03		
Level Of Service Module:																								
2Way95thQ:	0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxx	xxxx	xxxxx				0.4	xxxx	xxxxx			
Control Del:	8.5	xxxx	xxxxx				8.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				15.5	xxxx	xxxxx			
LOS by Move:	A	*		*			A	*		*			*		*	*			C	*		*		
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx				xxxx	xxxx		0			xxxx	xxxx		557		
SharedQueue:	0.0	xxxx	xxxxx				0.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		0.1		
Shrd ConDel:	8.5	xxxx	xxxxx				8.1	xxxx	xxxxx				xxxxx	xxxx	xxxxx				xxxxx	xxxx		11.8		
Shared LOS:	A	*		*			A	*		*			*		*	*			*	*		B		
ApproachDel:	xxxxxx						xxxxxx						xxxxxx						14.1					
ApproachLOS:	*						*						*						B					

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 #12 I-280 NB Ramps / Westborough Blvd

Cycle (sec):	160	Critical Vol./Cap.(X):	1.276
Loss Time (sec):	12	Average Delay (sec/veh):	166.2
Optimal Cycle:	OPTIMIZED	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:	Split Phase			Split Phase			Protected			Protected		
Rights:	Include			Include			Include			Ovl		
Min. Green:	10	10	10	8	8	8	6	8	8	6	9	9
Y+R:	5.7	5.7	5.7	5.2	5.2	5.2	3.0	5.0	5.0	3.0	5.3	5.3
Lanes:	2 1	0	1 0	1	1	1 0 1	2	0 1	1 0	2	0 2	0 1
Volume Module:												
Base Vol:	982	683	196	142	241	121	174	834	203	203	1216	218
Growth Adj:	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
Initial Bse:	1388	965	277	201	341	171	246	1178	287	287	1718	308
Added Vol:	0	0	47	0	0	0	0	71	0	47	70	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	1388	965	324	201	341	171	246	1249	287	334	1788	308
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.80	0.80	0.80	0.96	0.96	0.96	0.91	0.91	0.91
PHF Volume:	1428	993	333	252	427	215	257	1306	300	368	1972	340
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	1428	993	333	252	427	215	257	1306	300	368	1972	340
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	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:	1428	993	333	252	427	215	257	1306	300	368	1972	340
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.89	0.89	0.91	0.91	0.83	0.90	0.90	0.90	0.90	0.93	0.83
Lanes:	2.10	1.42	0.48	1.11	1.89	1.00	2.00	1.63	0.37	2.00	2.00	1.00
Final Sat.:	3456	2404	807	1932	3279	1583	3432	2797	642	3432	3538	1579
Capacity Analysis Module:												
Vol/Sat:	0.41	0.41	0.41	0.13	0.13	0.14	0.07	0.47	0.47	0.11	0.56	0.22
Crit Moves:			****			****	****				****	
Green/Cycle:	0.32	0.32	0.32	0.11	0.11	0.11	0.06	0.40	0.40	0.09	0.44	0.54
Volume/Cap:	1.28	1.28	1.28	1.23	1.23	1.28	1.28	1.16	1.16	1.16	1.28	0.40
Uniform Del:	54.1	54.1	54.1	71.5	71.5	71.5	75.3	47.8	47.8	72.6	45.1	21.3
IncremntDel:	128.1	128	128.1	117.5	117	162.3	157.1	80.1	80.1	100.9	130	0.3
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
Delay/Veh:	182.2	182	182.2	189.0	189	233.8	232.4	128	127.9	173.5	175	21.6
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:	182.2	182	182.2	189.0	189	233.8	232.4	128	127.9	173.5	175	21.6
LOS by Move:	F	F	F	F	F	F	F	F	F	F	F	C
HCM2kAvgQ:	57	57	57	19	19	18	12	57	57	15	78	9

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Note: Queue reported is the number of cars per lane.

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