APPENDIX F

TRAFFIC IMPACT ANALYSIS

Marina Plaza

Final Transportation Impact Analysis

Prepared for:
City of Cupertino

April 2016

DC16-0009

FEHR PEERS

Table of Contents

EXECUTIVE SUMMARY ..... **V**

1. INTRODUCTION **1**

1.1 Project Description 1
1.2 Study Area 4
1.2.1 Study Intersections 4
1.2.2 Freeway Segments 5
1.2.3 Pedestrian, Bicycle, and Transit Facilities 5
1.3 Analysis Scenarios 5
1.4 Analysis Methods 6
1.4.1 Signalized Intersections 6
1.4.2 Unsignalized Intersections 7
1.4.3 Freeway Segments 7
1.5 Level of Service Standards and Impact Criteria 8
1.5.1 Signalized Intersections 8
1.5.2 Freeway Segments 9
1.6 Report Organization 10

2. EXISTING CONDITIONS **11**

2.1 Existing Roadway Network 11
2.2 Pedestrian Facilities 12
2.3 Bicycle Facilities 12
2.4 Transit Service 17
2.4.1 VTA Bus Service 17
2.4.2 Commuter Rail Service 18
2.5 Existing Intersection Volumes and Lane Configurations 21
2.6 Existing Intersection Level of Service 21
2.7 Existing Freeway Segment Level of Service 24

3. PROJECT TRAFFIC ESIMATES **26**

3.1 Trip Generation 26
3.1.1 MainStreet Mixed-Use Trip Generation 26

3.1.2 Pass-by and Diverted Trip Reductions 27
3.1.3 Trip Estimates 28
3.2 Trip Distribution and Trip Assignment 30

4. EXISTING PLUS PROJECT CONDITIONS 33

4.1 Existing plus Project Volumes 33
4.2 Existing plus Project Intersection Level of Service 33
4.3 Existing plus Project Intersection Impacts and Mitigation measures 36
4.4 Existing plus Project Freeway Segment Level of Service 36
4.5 Existing plus Project Freeway Segment Impacts and Mitigation Measures 36

5. BACKGROUND CONDITIONS 38

5.1 Background Traffic Volumes 38
5.2 Background plus Project Traffic Volumes 38
5.3 Background Intersection Level of Service 38
5.4 Background Intersection Impacts and Mitigation Measures 38

6. SITE ACCESS, ON-SITE CIRCULATION, MULTI-MODAL TRANSPORTATION, AND PARKING ASSESSMENT 43

6.1 Vehicle Access and Circulation Review 43
6.2 Pedestrian Access and Circulation 43
6.3 Bicycle Access and Circulation 44
6.4 Transit Network 44
6.5 Transit Evaluation 46
6.5.1 Transit Site Access 46
6.5.2 Transit Vehicle Capacity 46
6.5.3 Transit Vehicle Delay (For Informational Purposes) 46
6.6 Parking Assessment 47
6.6.1 Vehicle Parking 47
6.6.2 Bicycle Parking 48

Appendices

Appendix A: Existing Traffic Counts

Appendix B: Existing And Existing Plus Project Intersection Level of Service Calculations

Appendix C: Mainstreet MXD Reductions

Appendix D: Background and Background Plus Project Intersection Level Of Service Calculations

List of Figures

Figure 1-1: Study Area 2

Figure 1-2: Site Plan 3

Figure 2-1: Existing Pedestrian and Bicycle Facilities 16

Figure 2-2: Existing Transit Facilities 20

Figure 2-3: Existing Peak Hour Traffic Volumes and Lane Configurations 23

Figure 3-1: Project Trip Distribution 31

Figure 3-2: Project Trip Assignment 32

Figure 4-1: Existing plus Project Peak Hour Traffic Volumes and Lane Configurations 34

Figure 5-1: Background Peak Hour Traffic Volumes and Lane Configurations 40

Figure 5-2: Background plus Project Peak Hour Traffic Volumes and Lane Configurations 41

List of Tables

Table 1-1: Study Intersections 4

Table 1-2: Signalized Intersection Level of Service Definitions 6

Table 1-3: Unsignalized Intersection Level of Service Definitions 7

Table 1-4: Freeway Segment Level of Service Definitions 8

Table 1-5: Signalized Intersection LOS Standards 8

Table 2-1: Existing Transit Service 19

Table 2-2: Existing Intersection Level of Service Results 22

Table 2-3: Existing Freeway Level of Service Results 25

Table 3-1: Vehicle Trip Generation Estimates 29

Table 4-1: Existing Plus Project Intersection Level of Service Results 35

Table 4-2: Existing Plus Project Freeway Level of Service Results 37

Table 5-1: Background Plus Project Intersection Level of Service Results 42
Table 6-1: Transit Vehicle Delay 46
Table 6-2: Summary of Vehicle Parking at the Project Site 48

EXECUTIVE SUMMARY

This report presents the results of the transportation impact analysis (TIA) for the proposed redevelopment of the Marina Plaza mixed use development (the Project) located at 10122 Bandley Drive. The existing uses on the site include neighborhood retail, commercial and restaurant land uses. The Project proposes a mix of land uses, including approximately 122 hotel rooms, 188 apartment units and approximately 22,600square feet of commercial uses. The proposed site plan shows three buildings. Building A will provide the 122 hotel rooms, while Buildings B and C, both providing a combination of apartment, ground floor retail and restaurant uses, are connected by a common subterranean parking garage.

The proposed Project was recently evaluated as part of the City of Cupertino's General Plan Amendment and associated Environmental Impact Report (EIR). Thus this analysis tiers off of the General Plan EIR and focuses on Existing and Background Conditions with and without the Project.

PROJECT TRAFFIC ESTIMATES

The Project is estimated to generate 107 net new AM peak hour vehicle trips (29 inbound and 77 outbound) and in the PM peak hour will generate 82 fewer trips compared to the existing uses (31 fewer inbound and 51 fewer outbound).

INTERSECTION IMPACTS AND MITIGATION MEASURES

Intersection impacts were evaluated for Existing and for Background Conditions.

EXISTING PLUS PROJECT CONDITIONS

Based on the impact criteria presented in Section 1.5, the Project is expected to have a **less-than-significant** impact at all 9 study intersections evaluated in this TIA under Existing plus Project conditions.

BACKGROUND PLUS PROJECT CONDITIONS

Based on the impact criteria presented in Section 1.5, the Project is expected to have a **less-than-significant** impact at all 9 study intersections evaluated in this TIA under Background plus Project conditions.

FREEWAY IMPACTS AND MITIGATION MEASURES

Freeway impacts are evaluated under the Existing plus Project Conditions only. Under this scenario, the Project would not degrade acceptable operating segments to unacceptable levels and would not add trips greater than one percent of the freeway capacity to the freeway study segments operating unacceptably during the AM and PM peak hours. Therefore, the Project would have a **less-than-significant** freeway impact based on VTA's impact criteria.

SITE ACCESS AND CIRCULATION

The site plan, dated March 2016, illustrates the locations of the Project driveway and internal circulation system for auto, pedestrian, and bicycle traffic. The Project provides access via two driveways on Alves Drive, one driveway on Bandley Drive, and one driveway on Stevens Creek Boulevard. All driveways provide full access with the exception of the driveway on Stevens Creek Boulevard which is right-turn only inbound and outbound. The Project includes three buildings, Building A, Building B, and Building C. Building A has access from a driveway on Alves Drive. Buildings B and C share a common subterranean parking garage and therefore vehicles may access them from three out of the four driveways. Vehicle circulation in the parking structure will consist of ramps that allow for residents/visitors to access all levels of the garage. Emergency vehicle access for the Project perimeters will be provided by a dual use road off Alves Drive.

PEDESTRIAN AND BICYCLE FACILITIES

Sidewalks are provided along the frontage of the Project site along Alves Drive north of the Project site and Bandley Drive west of the Project site. There are crosswalks at all four approaches at the intersection of Alves Drive and Bandley Drive, northwest of the Project site, and at the Bandley Drive and Stevens Creek Boulevard intersection, south of the Project site. Pedestrian walkways are also proposed within the site plan for safe connections between buildings, particularly between the hotel and nearby retail and restaurants on Stevens Creek Boulevard. Bicycle access to the Marina Plaza development is accommodated by bicycle lanes (Class II) on surrounding roadways such as De Anza Boulevard and Stevens Creek Boulevard and bike routes (Class III) on Bandley Drive and Alves Drive.

VEHICLE AND BICYCLE PARKING

Based on the requirements of City of Cupertino, the Project is required to provide 666 vehicle parking spaces. The Project proposes to provide 667 vehicle parking spaces, which is slightly more than the required amount. It is noted that the City's Municipal Code does allow for shared parking adjustments for mixed-use developments and as a result there could be opportunities to reduce the Project's parking provision on this basis.

Marina Plaza is required to provide 164 bicycle parking spaces. The proposed site plan provides both Class I and Class II bicycle parking, including 7 hotel bicycle parking spaces, 9 retail bicycle parking spaces and 148 residential bicycle parking spaces. This combination of short and long term storage facilities will benefit all users of the site, including hotel guests, residents, and retail customers.

1. INTRODUCTION

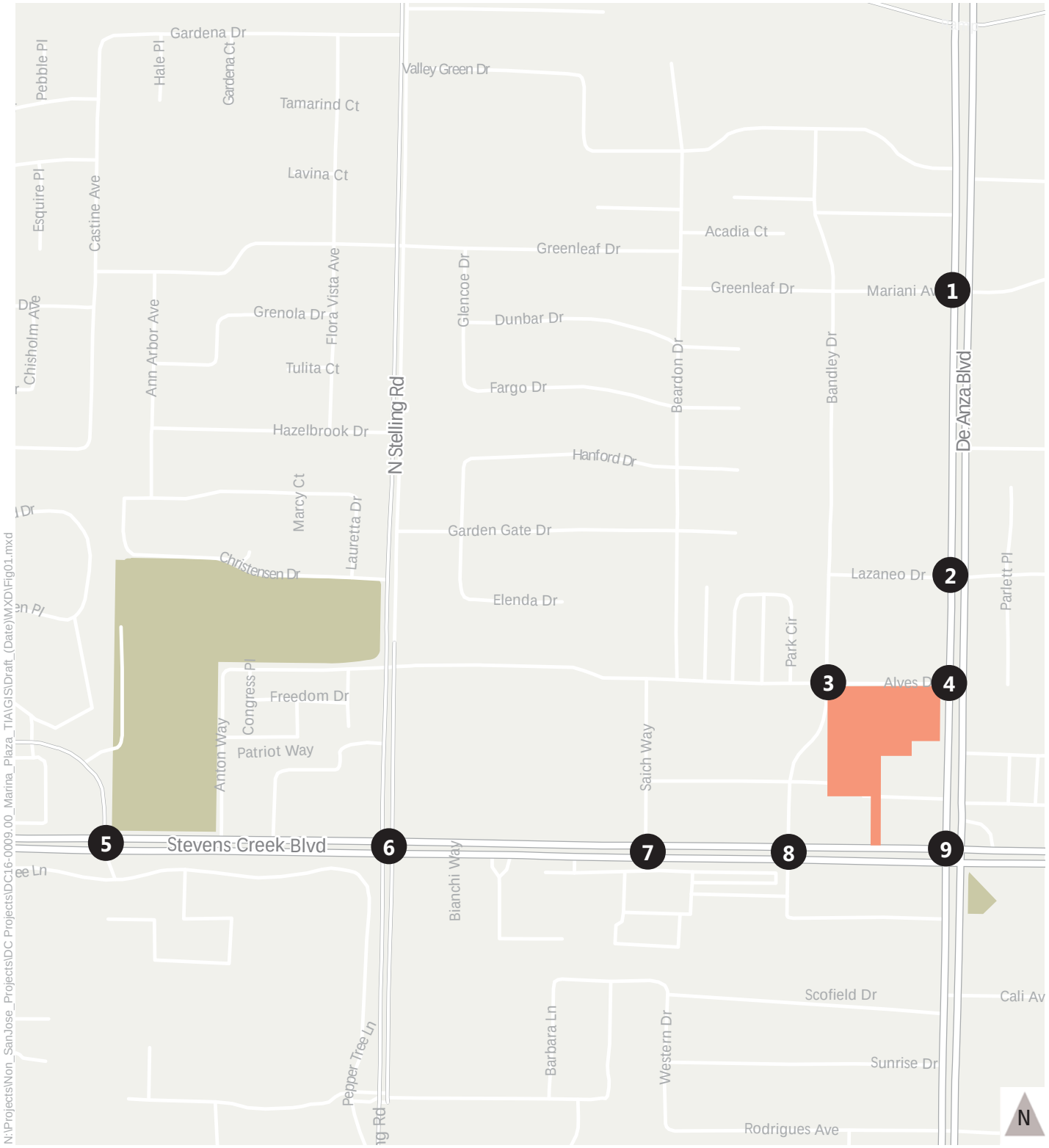
This report presents the findings of the Marina Plaza mixed-use development (Project) transportation impact analysis (TIA). The 5.12-acre development site is located in Cupertino, California at the southeast corner of the Bandley Drive/Alves Drive intersection. The purpose of this analysis is to identify potentially significant adverse impacts of the Project on the surrounding transportation system and to recommend measures to mitigate significant impacts. The proposed Project was recently evaluated as part of the City of Cupertino's General Plan Amendment and associated Environmental Impact Report (EIR). Thus this analysis tiers off of the General Plan EIR and focuses on Existing and Background Conditions with and without the Project.

The TIA was prepared following the guidelines of the City of Cupertino and Santa Clara Valley Transportation Authority (VTA), the congestion management agency for Santa Clara County. The VTA Congestion Management Program (CMP) TIA Guidelines (last updated in October 2014) present guidelines for assessing the transportation impacts of development projects and identifying whether improvements are needed to adjacent roadways, bike facilities, sidewalks, and transit services affected by the Project. The TIA guidelines have been adopted by local agencies within Santa Clara County, and are applied to analyze both the local and regional transportation systems.

1.1 PROJECT DESCRIPTION

The Marina Plaza site is approximately 5.12 acres and is located at the southeast corner of the Bandley Drive/Alves Drive intersection. The site currently has a mix of neighborhood retail uses, including a large grocery store, and a small medical office. The Project entails removing the existing uses and redeveloping the site to include a mix of hotel, residential, and commercial (retail and restaurant) uses. The Project will maintain the four existing driveways, two on Alves Drive, one on Bandley Drive, and one driveway which provides direct access to and from Stevens Creek Boulevard. The proposed site plan shows three buildings. Building A will provide 122 hotel rooms, while Buildings B and C will provide 188 apartment units and 22,600 square feet of restaurant and retail uses combined. Building B and C have a common subterranean garage which residents and patrons may access from either Alves Drive, Bandley Drive, or Stevens Creek Boulevard.

The site is generally bounded by Alves Drive to the north, De Anza Boulevard to the east, Stevens Creek Boulevard to the south, and Bandley Drive to the west. The site location and study area are shown in **Figure 1-1**. The proposed site plan is presented in **Figure 1-2**.



Intersections

Project Site

Figure 1-1

Study Area

Site Plan Source: DAHLIN

W:\DC N Drive\Projects\2016\DC16-0009.00_Marina_Plaza_TIA\Graphics\Other\Fig2_SitePlan.ai

Figure 1-2

Site Plan

1.2 STUDY AREA

The study area generally extends along De Anza Boulevard between I-280 and Stevens Creek Boulevard and along Stevens Creek Boulevard between SR 85 and De Anza Boulevard. The roadway impacts of the proposed Project were evaluated for the intersections and freeway segments discussed below.

1.2.1 STUDY INTERSECTIONS

The list of study intersections is presented in **Table 1-1**. Study intersections were selected in consultation with the City of Cupertino and generally determined based on VTA's 10 trips per lane guideline, which indicates that intersections should be included if the Project adds 10 or more peak hour vehicles per lane to any intersection movement.

TABLE 1-1: STUDY INTERSECTIONS

ID #	Intersection	Jurisdiction / CMP[1]
1	De Anza Boulevard and Mariani Avenue	Cupertino
2	De Anza Boulevard and Lazaneo Drive	Cupertino
3	Bandley Drive and Alves Drive	Cupertino
4	De Anza Boulevard and Alves Drive	Cupertino
5	Mary Avenue and Stevens Creek Boulevard	Cupertino
6	N. Stelling Road and Stevens Creek Boulevard	Cupertino/CMP
7	Saich Way and Stevens Creek Boulevard	Cupertino
8	Bandley Drive and Stevens Creek Boulevard	Cupertino
9	De Anza Boulevard and Stevens Creek Boulevard	Cupertino/CMP

Notes:

1. Congestion Management Program (CMP) indicates the intersection is part of VTA's CMP monitoring program.

Source: Fehr & Peers, 2016.

1.2.2 FREEWAY SEGMENTS

Freeway segments were also selected in consultation with the City of Cupertino following VTA guidelines. The following segments on I-280 and SR 85 were selected for analysis because the Project site is adjacent to these routes.

I-280 (Eastbound and Westbound)

- SR-85 to De Anza Boulevard
- De Anza Boulevard to Wolfe Road

SR-85 (Northbound and Southbound)

- Saratoga-Sunnyvale Road to Stevens Creek Boulevard
- Stevens Creek Boulevard to I-280

1.2.3 PEDESTRIAN, BICYCLE, AND TRANSIT FACILITIES

Project impacts to pedestrian facilities within approximately a quarter-mile radius and bicycle facilities and transit service within approximately a half-mile radius from the Project site are also addressed.

1.3 ANALYSIS SCENARIOS

The operations of the study intersections were evaluated during the weekday morning (AM) and weekday evening (PM) peak hours for the following scenarios:

Scenario 1: Existing Conditions – Existing volumes obtained from counts.

Scenario 2: Existing plus Project Conditions – Scenario 1 volumes plus net-added traffic generated by the proposed Project.

Scenario 3: Background Conditions – Existing volumes plus traffic from "approved but not yet built" and "not occupied" developments in the area.

Scenario 4: Background plus Project Conditions – Scenario 3 volumes plus traffic generated by the proposed Project.

Freeway segments were analyzed following the VTA guidelines under the Existing plus Project scenario.

1.4 ANALYSIS METHODS

The operations of roadway facilities are described with the term *level of service*. Level of Service (LOS) is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, the best operating conditions, to LOS F, the worst operating conditions. LOS E represents "at-capacity" operations. When traffic volumes exceed the intersection capacity, stop-and-go conditions result, and operations are designated as LOS F.

1.4.1 SIGNALIZED INTERSECTIONS

The method described in Chapter 16 of the 2000 *Highway Capacity Manual* (2000 HCM) (Special Report 209, Transportation Research Board) was used to prepare the level of service calculations for the study intersections. This level of service method analyzes a signalized intersection's operation based on average control delay per vehicle. Control delay includes the initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using TRAFFIX analysis software and is correlated to a LOS designation as shown in **Table 1-2**.

TABLE 1-2: SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Average Control Delay per Vehicle (seconds)
A	Operations with very low delay occurring with favorable progression and / or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and / or short cycle lengths.	10.1 to 20.0
C	Operations with average delays resulting from fair progression and / or longer cycle lengths. Individual cycle failures begin to appear.	20.1 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high volume-to-capacity (V / C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V / C ratios. Individual cycle failures are frequent occurrences.	55.1 to 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Traffic Level of Service Analysis Guidelines*, VTA Congestion Management Program, June 2003; and *Highway Capacity Manual*, Transportation Research Board, 2000.

1.4.2 UNSIGNALIZED INTERSECTIONS

The operations of the unsignalized intersections were evaluated using the method contained in Chapter 17 of the *2000 HCM*. Only two of the study intersections are unsignalized, including an all-way stop controlled intersection at Bandley Drive and Alves Drive, and a side-street stop controlled intersection at De Anza Boulevard and Alves Drive. LOS ratings for all-way stop-controlled intersections are based on the average control delay expressed in seconds per vehicle. **Table 1-3** summarizes the relationship between delay and LOS for unsignalized intersections. Additionally, the City of Cupertino applies the 2014 *California Manual on Uniform Traffic Control Devices* (MUTCD) peak-hour volume signal warrant to evaluate operations at unsignalized intersections operating at LOS F.

TABLE 1-3: UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
B	Short traffic delay.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Sources: *Traffic Level of Service Analysis Guidelines*, October 2014; VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

1.4.3 FREEWAY SEGMENTS

Freeway segments were evaluated using VTA's analysis procedure, which is based on the density of the traffic flow using methods described in the 2000 HCM. Density is expressed in passenger cars per mile per lane. The Congestion Management Program ranges of densities for each freeway segment level of service designation are shown in

Table 1-4.

TABLE 1-4: FREEWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

Level of Service	Density (passenger cars per mile per lane)
A	≤ 11
B	11.1 to 18.0
C	18.1 to 26.0
D	26.1 to 46.0
E	46.1 to 58.0
F	> 58.0

Sources: *Traffic Level of Service Analysis Guidelines*, VTA Congestion Management Program, June 2003; *Highway Capacity Manual*, Transportation Research Board, 2000.

1.5 LEVEL OF SERVICE STANDARDS AND IMPACT CRITERIA

The determination of significance for Project impacts is based on applicable policies, regulations, goals, and guidelines defined by the City of Cupertino and VTA. The impact criteria presented below focuses on elements of the CEQA checklist pertaining to roadway system operations and its effects on users, including drivers, pedestrians, bicyclists, transit passengers, and first responders in emergency access vehicles.

1.5.1 SIGNALIZED INTERSECTIONS

Signalized intersection operations and impacts are evaluated based on the appropriate jurisdiction's LOS standards (i.e., minimum threshold for acceptable operations) as shown in **Table 1-5**.

TABLE 1-5: SIGNALIZED INTERSECTION LOS STANDARDS

Jurisdiction	Intersection LOS Standards
City of Cupertino	LOS D for all City-controlled signalized intersections except at the N. Stelling Rd./Stevens Creek Blvd. and De Anza Blvd./Stevens Creek Blvd. intersections. The threshold for these intersections is LOS E+ (with no more than 60 seconds of weighted average control delay).
VTA Congestion Management Program (CMP)	LOS E for all CMP intersections.

Source: Fehr & Peers, 2016

City of Cupertino

Significant impacts at signalized City of Cupertino intersections would occur when the addition of Project traffic causes one of the following:

- Intersection operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- Exacerbates unacceptable operations (LOS E or F) by increasing the critical delay by more than four seconds and increasing the volume-to-capacity (V/C) ratio by 0.01 or more; or
- An increase in the V/C ratio of 0.01 or more at an intersection with unacceptable operations (LOS E or F) when the change in critical delay is negative (i.e., decreases). This can occur if the critical movements change.

Congestion Management Program (CMP)

The LOS standard for CMP intersections is LOS E+. Traffic impacts at these intersections would occur when the addition of traffic associated with a Project causes:

- Intersection operations to deteriorate from an acceptable level (LOS E+ or better) to an unacceptable level (LOS F); or
- The V/C ratio increases by 0.01 or more at an intersection with unacceptable operations (LOS E+) when the change in critical delay is negative (i.e., decreases). This can occur if the critical movements change.

Unsignalized Intersections

Unsignalized study intersections are only located within the City of Cupertino. The City of Cupertino does not have an officially adopted significance criteria for unsignalized intersections. For purposes of this TIA and per the request of City of Cupertino staff, significant impacts are defined to occur when the addition of Project traffic causes the average intersection delay for all-way stop-controlled intersections to degrade to LOS F and the intersection satisfies the peak hour warrant from the California Manual of Uniform Traffic Control Devices (CA MUTCD).

1.5.2 FREEWAY SEGMENTS

Caltrans has authority over the State highway system including freeways, interchanges, and arterial State Routes. Caltrans operates and maintains the State Highways in Santa Clara. The *Guide for the Preparation of Traffic Impact Studies* (Caltrans, 2001) includes the information needed for Caltrans to review the impact on State highway facilities, including freeway segments. However, as the Congestion Management Agency, VTA is responsible for monitoring operations on Caltrans facilities within Santa Clara County.

Significant impacts on freeway segments in Santa Clara County are determined according to VTA criteria and would occur when the addition of Project traffic causes under Existing Conditions:

- Freeway segment operations to deteriorate from an acceptable level (LOS E or better) to an unacceptable level (LOS F); or
- An increase in traffic of more than one percent of the capacity of the segments that operate at LOS F.

1.6 REPORT ORGANIZATION

The remainder of this report is divided into the following chapters:

- ***Chapter 1*** describes the study area, analysis scenarios, analysis methods, level of service standards, and impact criteria.
- ***Chapter 2*** describes the existing transportation system near the Project site and the current operating conditions of the key intersections and freeway segments.
- ***Chapter 3*** describes the Project traffic estimates which include trip generation, trip distribution, and trip assignment.
- ***Chapter 4*** describes Existing plus Project Conditions and related Project impacts on the transportation system.
- ***Chapter 5*** describes Background and Background plus Project Conditions and related Project impacts on the transportation system.
- ***Chapter 6*** provides an assessment of site access, on-site circulation, multi-modal transportation, and parking.

2. EXISTING CONDITIONS

This chapter describes the existing conditions of the surrounding roadway facilities, pedestrian and bicycle facilities, and transit service. It also presents existing traffic volumes and operations for the study intersections and freeway segments with the results of the level of service calculations.

The existing Marina Plaza development is surrounded primarily by low density residential land uses to the north, and retail uses to the west and south along Stevens Creek Boulevard.

2.1 EXISTING ROADWAY NETWORK

Interstate 280 (I-280) and State Route 85 (SR-85) provide regional access to the Project site. The following streets provide local access: De Anza Boulevard, Stevens Creek Boulevard, Stelling Road, Mariani Avenue, Lazaneo Drive, Alves Drive and Bandley Drive. Descriptions of these roadways are presented below. **Figure 1-1** shows the locations of these facilities in relation to the Project site.

I-280 is located immediately north of the Project site and provides regional freeway access between the cities of San Francisco and San Jose. Near the Project site, I-280 is a north-south freeway with three mixed-flow lanes and one high occupancy vehicle (HOV) lane in each direction. HOV lanes, also known as diamond or carpool lanes, restrict use to vehicles with two or more persons (carpools, vanpools, and buses) or motorcycles during the morning (5:00 am to 9:00 am) and evening (3:00 pm to 7:00 pm) commute periods. An extended deceleration lane is provided for the De Anza Boulevard off-ramp from northbound I-280. Access to/from I-280 is provided via its interchanges with De Anza Boulevard and Stevens Creek Boulevard.

SR-85 is located west of the Project site and extends north through Mountain View to US 101 and south through San Jose to connect again with US 101. The freeway has two mixed-flow lanes and one HOV lane in each direction. Interchanges with I-280, Stevens Creek Boulevard and De Anza Boulevard provide access to the Project site.

De Anza Boulevard is a north-south eight-lane divided arterial that connects I-280 with Stevens Creek Boulevard and continues south to Brookvale Chantel, where it becomes Saratoga Sunnyvale Road south of Prospect Road. De Anza Boulevard provides access between the Project and I-280 via the on and off ramps north of the Project site. This roadway connects to the Project site via Alves Drive. There is a Class II bike facility along the roadway on both sides, and the posted speed limit is 40 miles per hour.

Stevens Creek Boulevard is an east-west six-lane divided arterial that connects western Cupertino to downtown San Jose (via West San Carlos Street). Stevens Creek Boulevard provides access to SR 85 and I-280 via interchanges. The roadway connects to the Project site via Bandley Drive. There is a Class II bike facility along the roadway on both sides, and the posted speed limit is 35 miles per hour.

Stelling Road is a four-lane roadway traveling north-south adjacent to De Anza College. The roadway is divided by a raised median, and offers Class II bike lanes. The posted speed limit is 35 miles per hour.

Lazaneo Drive is a two-lane street between Bandley Drive to the west and Vista Drive to the east at which point it becomes Forest Avenue. It provides a connection between residential land uses east of De Anza Boulevard and commercial uses west of De Anza Boulevard. The posted speed limit is 25 miles per hour.

Mariani Avenue is a two-lane street between Bandley Drive and De Anza Boulevard, and a four-lane street east of De Anza Boulevard until it terminates at the Apple campus. There are Class II bike lanes west of De Anza Boulevard and the posted speed limit is 25 miles per hour.

Alves Drive is a two-lane street that connects De Anza Boulevard to Anton Way to the west. The south side of Alves Drive fronts the Project site. There are no bike facilities on this roadway. The posted speed limit is 25 miles per hour.

Bandley Drive is a north-south two-lane roadway that runs from Valley Green Drive south to Stevens Creek Boulevard. Bandley Drive is the western frontage for the Project site south of the Alves Drive / Bandley Drive intersection. There is a Class III bike facility along the roadway, with a posted speed limit of 30 miles per hour.

2.2 PEDESTRIAN FACILITIES

Pedestrian connectivity immediately surrounding the Project site is provided by a mostly complete network of sidewalks and crosswalks. Sidewalks are provided along the frontage of the Project site along Alves Drive and Bandley Drive. Pedestrian facilities are displayed in **Figure 2-1**.

All study intersections provide marked crosswalks on at least one approach, and the Bandley Drive/Alves Drive and Bandley Drive/Stevens Creek Boulevard intersections provide crosswalks on all four approaches.

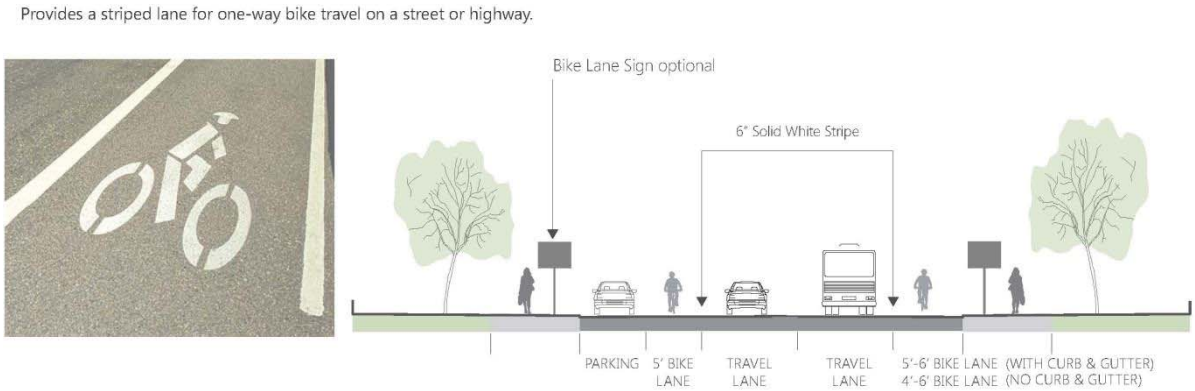
Heavy pedestrian volumes at the Bandley Drive/Stevens Creek Boulevard intersection result in safety conflicts with vehicles turning left out of the Crossroads Shopping Center or from Bandley Drive. This can result in additional vehicular delays and queuing at this location.

2.3 BICYCLE FACILITIES

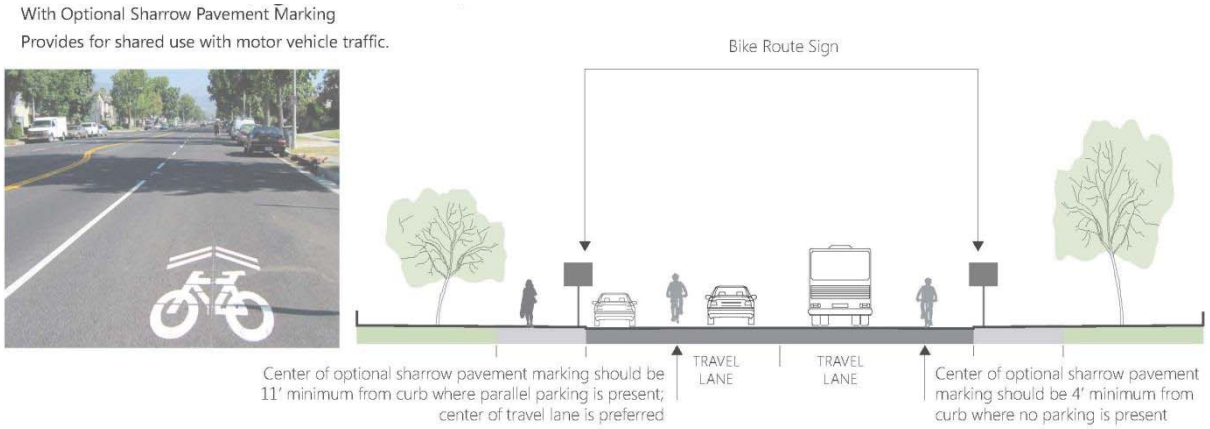
Bikeway planning and design in California typically relies on guidelines and design standards established by California Department of Transportation (Caltrans) in the *Highway Design Manual* (Chapter 1000: Bikeway Planning and Design and other design documents). Relevant bicycle facilities are described below and **Figure 2-1** displays facilities within ½ mile of the Project site.

- *Class I Bikeway (Bike Path)* provides a completely separate right-of-way and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized. In general, bike paths serve corridors not served by streets and highways or where sufficient right-of-way exists to allow such facilities to be constructed away from the influence of parallel streets and vehicle conflicts.

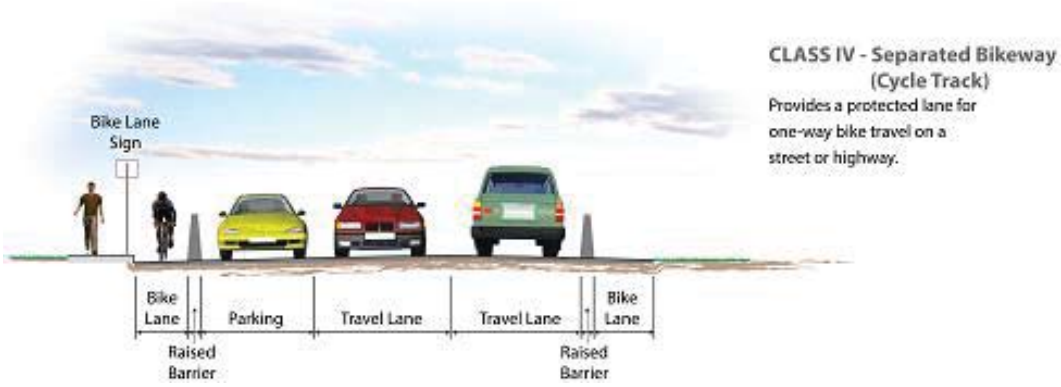
- *Class II Bikeways (Bike Lanes)* are lanes for bicyclists generally adjacent to the outer vehicle travel lanes. These lanes have special lane markings, pavement legends, and signage. Bicycle lanes are generally five (5) feet wide. Adjacent vehicle parking and vehicle/pedestrian cross-flow are permitted.



- *Class III Bikeway (Bike Route)* are designated by signs or pavement markings for shared use with pedestrians or motor vehicles, but have no separated bike right-of-way or lane striping. Bike routes serve either to: a) provide continuity to other bicycle facilities, or b) designate preferred routes through high demand corridors.



- *Class IV Bikeways (Cycle tracks or Protected Bike Lanes)* provide a right-of-way designated exclusively for bicycle travel within a roadway and which are protected from other vehicle traffic with devices, including, but not limited to, grade separation, flexible posts, inflexible physical barriers, or parked cars



The *VTA Bicycle Technical Guidelines* (December 2007) recommends that Caltrans standards regarding bicycle facility dimension be used as a minimum and provides supplemental information and guidance on when and how to better accommodate the many types of bicyclists.

Near the Project site, bicycle lanes (Class II) are provided on De Anza Boulevard, Mariani Avenue (east of De Anza Boulevard) and Stevens Creek Boulevard.

Class III bike routes exist along Bandley Drive, Lazaneo Drive and Mariani Avenue (west of De Anza Boulevard).

In early 2016, the City of Cupertino adopted its Bicycle Transportation Plan, which illustrates Cupertino's current bicycle network, identifies gaps in the network, and proposes improvement projects to address the identified gaps. The Plan presents a review of existing bicycling access conditions in the City of Cupertino, and states that out of 20,643 households in Cupertino, just under four percent, or 782 households, do not have access to a vehicle for their daily transportation needs. An additional 23.9 percent have access to only

one vehicle. Therefore, households with only one car may rely more heavily on non-motorized transportation. The existing bicycle network inventory shows that 25.5 percent of the roadway networks in Cupertino have bikeways. Class I facilities consist of 4.75 miles of bikeways, Class II facilities consist of 27.41 miles of bikeways and Class III facilities consist of 8.56 miles of bikeways.

For these reasons, the Plan recommends the development of a comprehensive bicycle wayfinding program that offers guidance to key destinations including schools, parks, regional trails, landmarks, and civic buildings, passive detection of bicyclists at all signalized intersections, and bicycle parking to include bicycle racks, bike lockers, bike rooms and secure enclosures. Recommended improvements in the study area include a Class IV separated bike way along Stevens Creek Boulevard, a Class II buffered bike lane along De Anza Boulevard and along Lazaneo Drive west of De Anza Boulevard, and a Class III bike route along Alves Drive from Alton Way to Bandley Drive. Bicycle parking facilities in Cupertino are available at many shopping centers, schools and some parks, mostly in the form of short-term bicycle racks.

VTA adopted the Santa Clara Countywide Bicycle Plan (CBP) in August 2008. It is currently be updated. The CBP guides the development of major bicycle facilities in the County by identifying Cross County Bicycle Corridors and other bicycle projects of countywide or intercity significance. Several of the Cross County Bicycle Corridors travel through the study area, including routes along N. Stelling Road and Stevens Creek Boulevard.

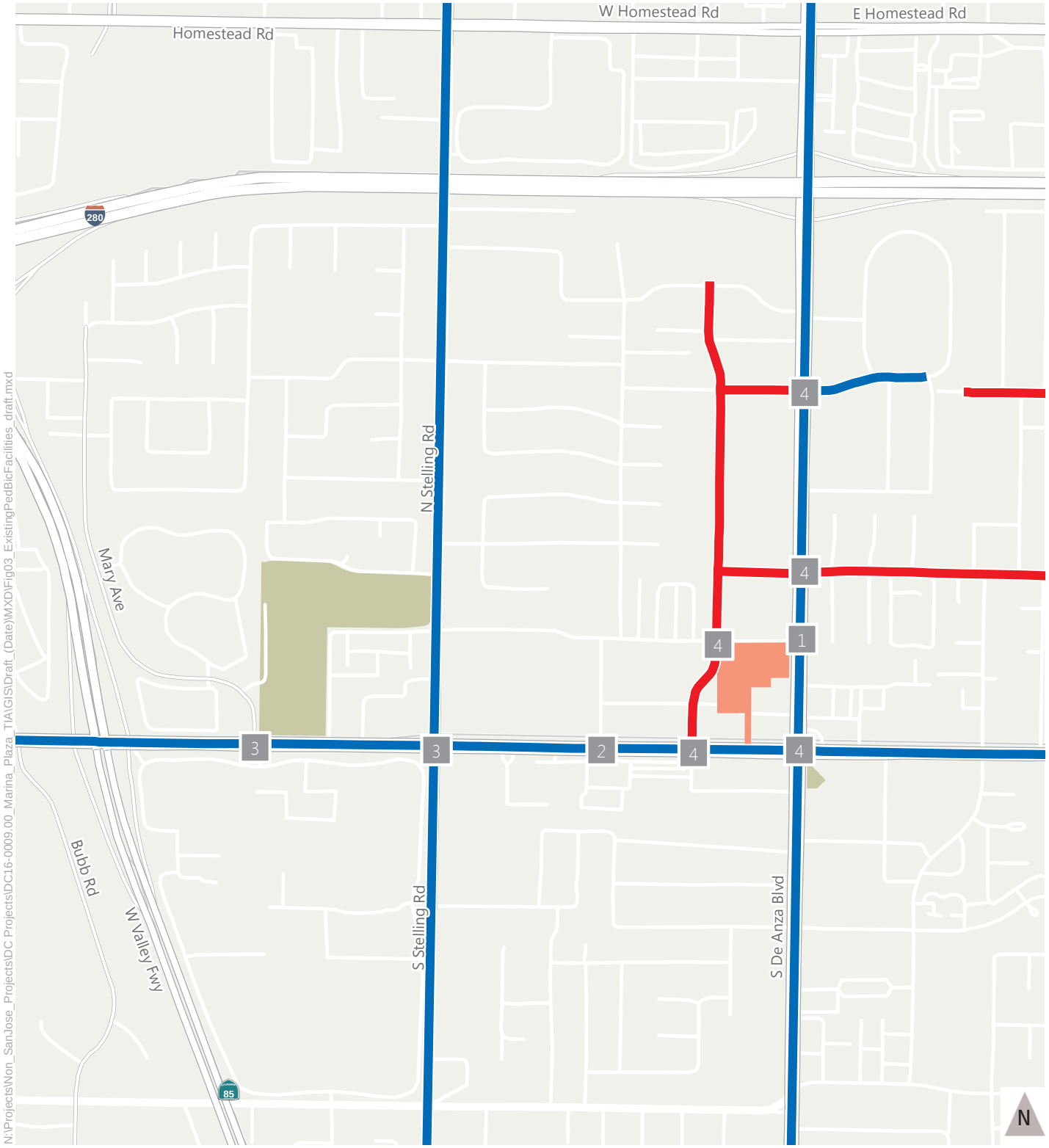


Figure 2-1

Existing Pedestrian and Bicycle Facilities

2.4 TRANSIT SERVICE

This section summarizes local and regional transit connectivity in the study area, including bus, light rail, commuter rail, and public and private shuttles. The greater San Francisco Bay Area is served by an extensive public transit network of rail, buses, and ferries. Many of these transit providers offer service in the study area, providing regional transit mobility to employees, residents, and visitors in Cupertino. **Figure 2-2:** Existing Transit Facilities

illustrates the existing transit facilities and routes in the study area which include shuttles, buses, light rail, and heavy rail services. Nearby transit services are described below and **Table 2-1** summarizes the destinations, closest stop to the Project site, hours/days of operation, and service frequencies for transit services within a 2,000-foot walking distance of the Project site.

2.4.1 VTA BUS SERVICE

Bus Route 23 provides local bus service between Sunnyvale/Lockheed Martin Transit Center and the Eastridge Transit Center. Route 23 follows major arterials and travels through Sunnyvale, Cupertino, San Jose, and Campbell on Fair Oaks Avenue, Wolfe Road, Campbell Avenue, and Tully Road. Bus stops for Route 23 are provided immediately north of the Project site along Wolfe Road.

Bus Route 25 provides local bus service between De Anza College and Alum Rock Transit Center via Valley Medical Center. This route operates on Stevens Creek Boulevard, Saich Way, Alves Drive and De Anza Boulevard, with nearby stops at Stevens Creek Boulevard and Saich Way.

Bus Route 53 provides local bus service between West Valley College and the Sunnyvale Transit Center. This route operates along Stelling Road through Stevens Creek Boulevard, with a nearby stop near the intersection of Stelling Road and Stevens Creek Boulevard.

Bus Route 54 provides local bus service between De Anza College and the Sunnyvale/Lockheed Martin Transit Center. This route operates along Stelling Road and terminates at Stelling Road and Stevens Creek Boulevard, with connecting bus service provided from routes 25, 53, 55 and 323.

Bus Route 55 provides local bus service from De Anza College to Great America. This route operates along Stelling Road south of Stevens Creek Boulevard, west on McClellan Road, and north on De Anza Boulevard, with nearby stops at Stelling Road and Stevens Creek Boulevard.

Bus Route 81 provides local service between San Jose State University and Vallco via the Santa Clara Transit Center and Downtown San Jose. This route operates going east on Stevens Creek Boulevard and north on Stelling Road, with nearby stops at Stelling Road and Stevens Creek Boulevard.

Bus Route 101 provides express bus service that operates on I-280, Stevens Creek Boulevard, and Lawrence Expressway; it connects a Park & Ride lot at the Camden Avenue interchange along SR 85 to Palo Alto. This route passes through the Winchester Transit Center and has a bus stop east of the Project site at Wolfe Road/Vallco Mall which provides connections to Routes 26, 23, and 323.

Bus Route 182 provides express bus service that operates on I-280, Wolfe Road, Vallco Parkway, and Stevens Creek Boulevard; it connects the Park & Ride lot at El Camino Real and Page Mill Road in Palo Alto with the IBM Santa Teresa Facility at Bailey Avenue. One Route 182 run departs Palo Alto in the morning. In the evening, one Route 182 run travels northbound. Route 182 has stops at the Vallco shopping plaza, east of the Project site.

Bus Route 323 provides limited stop bus service between Downtown San Jose and De Anza College. This route operates along Stevens Creek Boulevard from Stelling Road through De Anza Boulevard, with nearby stops at Stelling Road and Stevens Creek Boulevard, and De Anza Boulevard and Stevens Creek Boulevard.

2.4.2 COMMUTER RAIL SERVICE

Caltrain is a commuter heavy rail service that runs from downtown San Francisco (4th and King Streets) to downtown San Jose (Diridon Station), with a limited number of commute period trains running farther south to Gilroy. During commute periods, Caltrain offers express service ("Baby Bullet") between downtown San Jose and San Francisco, which allows the trip between San Francisco and San Jose to be made in one hour. This service stops at a limited number of stations, including the Mountain View and Sunnyvale stations. Currently, Baby Bullet service is provided both in the northbound and southbound direction during the morning and evening commute periods at the Mountain View Caltrain station. Baby Bullet trains serve the Sunnyvale Caltrain station in the northbound direction during the morning peak and in the southbound direction during the evening peak.

The nearest station to the Project site is the Lawrence Station and is approximately five miles from the Project site. During the weekdays, service in the northbound direction begins at 4:40 AM and ends at 10:40 PM. In the southbound direction, service at this station begins at 6:14 AM and ends at 1:20 AM. During the weekends, northbound service begins at 7:10 AM and ends at 10:40 PM. Southbound service begins at 9:40 AM and ends at 1:26 AM. For passengers arriving by bicycle, there are 18 bike racks and 24 bicycle lockers. Vehicle parking at this location includes 122 parking spaces.

TABLE 2-1: EXISTING TRANSIT SERVICE

Route	From	To	Distance to Nearest Stop[1]	Weekdays			Saturdays	
				Average Peak Load Factor[2]	Operating Hours[4]	Peak Headway[3]	Operating Hours[4]	Peak Headway[3]
VTA Bus Service								
25	De Anza College	Alum Rock Transit Center	0.20	N/A	5:52 a – 11:31 p	11	6:46 a – 10:40 p	15
53	West Valley College	Sunnyvale Transit Center	0.50	N/A	6:56 a – 6:56 p	28	No Service	
54	De Anza College	Sunnyvale/Lock-heed Martin Transit Center	0.50	N/A	5:37 a – 11:12 p	30	7:58 a – 7:52 p	60
55	De Anza College	Great America	0.30	N/A	5:52 a – 11:31 p	29	7:55 a – 9:11 p	60
81	San Jose State University	Ames Center	0.20	0.07	6:17 a – 8:19 p	30	9:30 a – 4:30 p	60
101	Camden & Highway 85	Palo Alto	1.4	0.23	6:51 a – 7:48 a 4:52 p – 5:55 p	2 NB Runs – AM 2 SB Runs – PM	No Service	
182	Palo Alto	IBM/Bailey Avenue	1.4	0.07	7:27 a – 8:34 a 5:05 p – 6:14 p	1 SB Run – AM 1 NB Run – PM	No Service	
323	Downtown San Jose	De Anza College	0.2	N/A	7:02 a – 10:53 p	151	8:03 a – 10:26 p	20
Commuter Rail Service								
Caltrain	San Francisco	San Jose Diridon	3.00	N/A	4:40 a – 1:20 a	30 (local) / 15 (express)	7:10 a – 1:26 a	60

Notes:

1. Approximate distance in miles from nearest stop to Marina Plaza driveway.
2. Average peak load factor is the ratio of the average peak number of on-board passengers aboard during the peak period to supply of seats.
3. Headways are defined as the time interval between two transit vehicles traveling in the same direction over the same route.
4. Operating hours consider earliest and latest stop at each bus lines closest stop to the Marina Plaza.
5. AM = morning commuter period; PM = evening commute period

Source: VTA, March 2016.

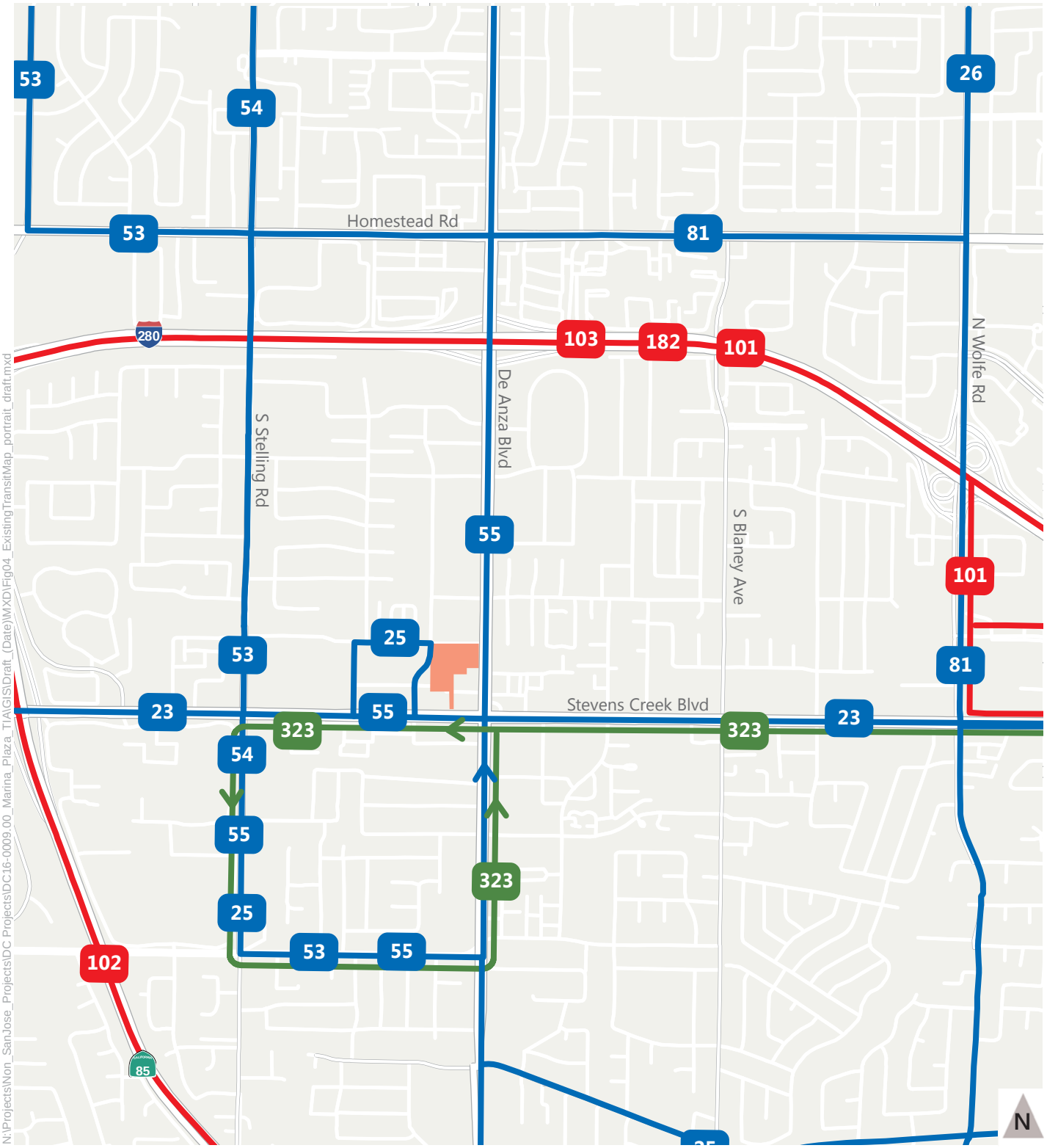


Figure 2-2

Existing Transit Facilities

2.5 EXISTING INTERSECTION VOLUMES AND LANE CONFIGURATIONS

The existing operations of the study intersections were evaluated with the highest one-hour volumes during the weekday morning and evening peak periods. In general, AM and PM peak period intersection turning movement counts were conducted in March 2016, with the exception of De Anza Boulevard/Stevens Creek Boulevard and Stelling Road/Stevens Creek Boulevard intersections which were collected in April 2015. **Figure 2-3** presents the existing AM and PM peak-hour turning movement volumes, lane configurations, and traffic control devices at the study intersections. **Appendix A** contains the traffic count data.

2.6 EXISTING INTERSECTION LEVEL OF SERVICE

Existing lane configurations, signal timings, and peak-hour turning movement volumes were used to calculate the levels of service for the key intersections during each peak hour. The results of the LOS analysis using the TRAFFIX software program for Existing Conditions are presented in **Table 2-2**. **Appendix B** contains the corresponding calculation sheets. The results indicate that all study intersections operate at acceptable service levels (LOS D or better for City intersections and LOS E+ or better for regionally significant and CMP intersections) during the AM and PM peak hours. Existing congestion and conflict points observed in the field include pedestrian crossings at the Bandley Drive and Stevens Creek Boulevard intersections. Vehicles turning left out of the Crossroads Shopping Center or from Bandley Drive present a safety issue for pedestrians crossing Stevens Creek Boulevard. The heavy pedestrian volumes create delays for left-turning vehicles and as a result, vehicle queues along Bandley and the Crossroads driveway are not able to dissipate within the appropriated green time. Vehicles often have to wait through more than one cycle length during the mid-day and evening peak periods.

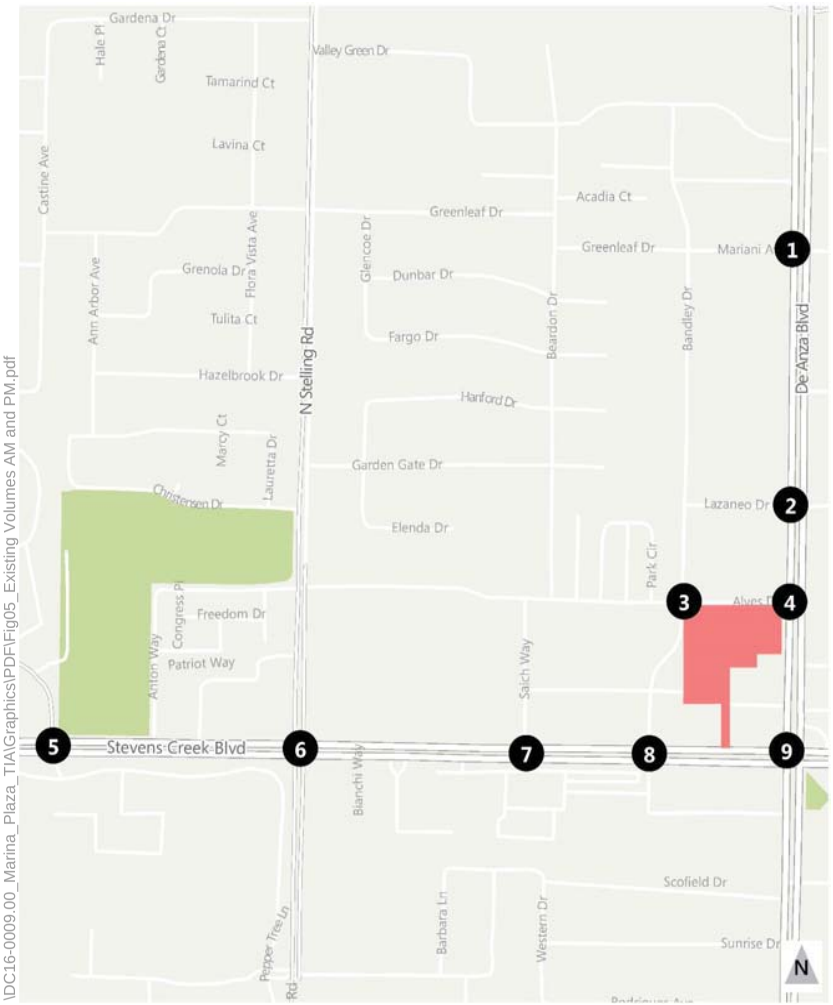
TABLE 2-2: EXISTING INTERSECTION LEVEL OF SERVICE RESULTS

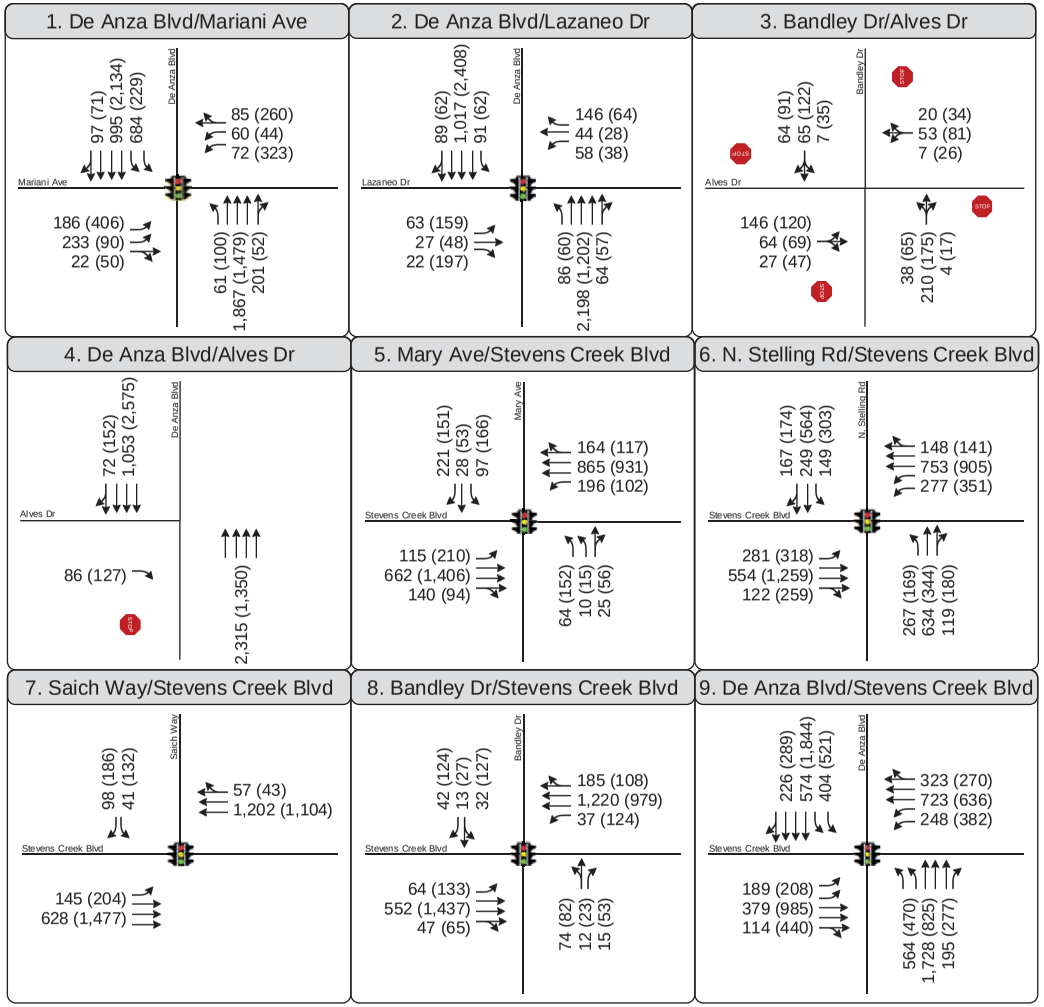
ID #	Intersection	Control Type	Jurisdiction / CMP[1]	LOS Threshold	Peak Hour[2]	Delay[3]	LOS[4]
1	De Anza Boulevard and Mariani Avenue	Signal	Cupertino	D	AM PM	36.4 42.2	D+ D
2	De Anza Boulevard and Lazaneo Drive	Signal	Cupertino	D	AM PM	17.5 19.8	B B-
3	Bandley Drive and Alves Drive	AWSC	Cupertino	D	AM PM	10.6 11.3	B B
4	De Anza Boulevard and Alves Drive	SSSC	Cupertino	D	AM PM	11.0 20.3	B C
5	Mary Avenue and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	34.0 33.3	C- C-
6	N. Stelling Road and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	39.0 46.0	D+ D
7	Saich Way and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.7 21.7	B C+
8	Bandley Drive and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.0 24.5	B C
9	De Anza Boulevard and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	34.1 44.1	C- D

Notes:

1. Intersection jurisdiction and identification of CMP (Congestion Management Program) intersections.
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which apply the methods described in the 2000 *Highway Capacity Manual*.
5. Signal = Signalized intersection, AWSC = All way stop controlled intersection, SSSC = Side-street stop controlled intersection

Source: Fehr & Peers, 2016.





\DC16-0009.00_Marina_Plaza_TIA\Graphics\PDF\Fig05_Existing Volumes AM and PM.pdf

XX(YY) AM(PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop-controlled Intersection

Project Site

Study Intersection

Figure 2-3

Existing Peak Hour Traffic Volumes and Lane Configurations

2.7 EXISTING FREEWAY SEGMENT LEVEL OF SERVICE

For freeway segments, Existing Conditions are defined as existing volumes and geometry as stated in the *2014 VTA Monitoring and Conformance Report*. **Table 2-3** contains the existing freeway segment levels of service for the mixed-flow and HOV lanes based on the segment densities. During the AM peak hour, the northbound HOV and mixed-flow freeway segments on SR 85 from Saratoga-Sunnyvale Road to I-280 exceed the VTA's LOS E standard and operate at LOS F. The mixed-flow lanes on the westbound segments on I-280 from Wolfe Road to SR 85 also operate at LOS F during the AM peak hour. During the PM peak hour the HOV lane on the southbound segment of SR 85 between I-280 and Steven Creek Boulevard and the mixed-flow lanes on the southbound segment of SR 85 between Stevens Creek Boulevard and Saratoga-Sunnyvale Road operate at LOS F. The mixed-flow lanes on the eastbound segments on I-280 from SR 85 to Wolfe Road also operate at LOS F during the PM peak hour.

TABLE 2-3: EXISTING FREEWAY LEVEL OF SERVICE RESULTS

Freeway Segment	Peak Hour	Number of Lanes		Density		LOS	
		Mixed	HOV	Mixed	HOV	Mixed	HOV
SR 85 Northbound							
Saratoga-Sunnyvale Rd to Stevens Creek Blvd	AM PM	2 2	1 1	65 22	64 9	**F** C	**F** A
Stevens Creek Blvd to I-280	AM PM	2 2	1 1	124 13	108 6	**F** B	**F** A
SR 85 Southbound							
I-280 to Stevens Creek Blvd	AM PM	2 2	1 1	21 52	5 66	C E	A **F**
Stevens Creek Blvd to Saratoga-Sunnyvale Rd	AM PM	2 2	1 1	18 90	5 47	B **F**	A E
I-280 Eastbound							
SR-85 to De Anza Blvd	AM PM	3 3	1 1	24 103	9 19	C **F**	A E
De Anza Blvd to Wolfe Rd	AM PM	3 3	1 1	36 77	10 30	D **F**	A E
I-280 Westbound							
Wolfe Rd to De Anza Blvd	AM PM	3 3	1 1	62 25	57 7	**F** C	E A
De Anza Blvd to SR-85	AM PM	3 3	1 1	73 23	45 7	**F** C	D A

Notes: **Bold text** indicates intersection operates at unacceptable level of service.
Source: VTA Monitoring and Conformance Report, 2014; Fehr & Peers, 2016

3. PROJECT TRAFFIC ESIMATES

The amount of traffic added to the roadway system by the proposed Project is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of traffic added to the roadway network. The second estimates the direction of travel to and from the Project site. The new vehicle trips are assigned to specific street segments and intersection turning movements during the third step. The results of the process for the Project are described in the following sections.

3.1 TRIP GENERATION

The trip generation estimates were developed using rates from the Institute of Transportation Engineers (ITE) rates published in *Trip Generation Manual* (9th Edition) and the Fehr & Peers MainStreet tool to account for the mixed-use nature of both the existing and proposed uses. For further clarification, MainStreet in this study refers to the Fehr & Peers MainStreet mixed-use trip generation tool, and not the development project commonly referred to as "Main Street" in Cupertino. The MainStreet tool incorporates MXD+, a method developed by Fehr & Peers for the US EPA and continuously refined through consulting for other state, regional and local clients. It is based on pooled household survey data for 239 mixed-use developments (MXDs) in six diverse US regions, statistically derived equations on internal trip capture and mode shares, and validated at 27 existing MXD sites across the US, and peer reviewed. The MXD+ tool accurately estimates trip generation by accounting for the smart growth characteristics of projects.

3.1.1 MAINSTREET MIXED-USE TRIP GENERATION

Methods commonly used by traffic engineers overestimate the impacts of infill and mixed-use developments (MXDs) because they do not accurately reflect the amount of internal trip linking or the level of trips made by transit, biking, and/or walking. This may result in oversized infrastructure, skewed public perception, and resistance to approving infill, mixed-use, and transit-oriented development. The Institute of Transportation Engineers (ITE) *Trip Generation Handbook* provides a methodology to account for mixed uses, but this resource does not adequately account for key variables that influence travel such as development density and scale, location efficiency, land use mix, urban design, and transit orientation. As part of a recent validation effort, 27 mixed-use sites were surveyed and the results showed the ITE Handbook methodology overestimated daily traffic generation by approximately 24 percent and peak hour traffic by up to 37 percent.

MainStreet recognizes that traffic generation by mixed-use and other forms of sustainable development relate closely to the density, diversity, design, destination accessibility, transit proximity, and scale of development. The MainStreet method explains 97 percent of the variation in trip generation among mixed-use developments, compared to 65 percent for the methods previously recommended by ITE. While

remaining slightly conservative (two to four percent) to avoid systematically understating impacts, it substantially reduces the overestimation of traffic generation produced by conventional ITE methods.

MainStreet improves the accuracy of impact estimation and gives planners a tool to rationally balance land use mix and to incorporate urban design, context compatibility, and transit orientation to create lower impact development. MainStreet has been approved for use by the EPA[1], peer-reviewed in the ASCE *Journal of Urban Planning and Development*[2], peer-reviewed in a 2012 Transportation Research Board (TRB) paper evaluating various smart growth trip generation methodologies[3], recommended by SANDAG for use on mixed-use smart growth developments[4], and has been used successfully in multiple certified Environmental Impact Reports in California. Further explanation regarding the MainStreet tool can be found in **Appendix C.**

In the case of this project, the MainStreet tool was used to evaluate the MXD reductions for both the existing and proposed land uses to accurately estimate the net new Project trip generation. The existing land uses are mostly retail and not very diverse. The associated MXD reductions are 9 percent for daily trips, 15 percent for morning peak hour trips, and 16 percent for evening peak hour trips. Based on the MainStreet model, the proposed uses would have an MXD reduction of 11 percent for daily trips, 18 percent for morning peak hour trips, and 25 percent for evening peak hour trips. These MXD reductions account for the mix of uses within the Project and its location in proximity to the surrounding residential and employment land uses, transit accessibility (including VTA buses on Steven Creek Boulevard and shuttle access), and bike/pedestrian access. The difference in reductions between existing and proposed land uses is due to the mix of residential, retail, and hotel land uses proposed which maximizes the internal trip captures between land uses, as opposed to the mostly retail land uses currently at the site.

3.1.2 PASS-BY AND DIVERTED TRIP REDUCTIONS

Pass-by trips are trips that are attracted from the traffic volumes on roads adjacent to the commercial/shopping center land uses and do not require a diversion from the current travel path to gain access to the site. Diverted trips are similar to pass-by trips but require a route deviation to gain access to the site. Pass-by and diverted trip reductions can often be applied to commercial/shopping center uses. However, we do not propose to apply any pass-by trip reductions for several reasons:

[1] Trip Generation Tool for Mixed-Use Developments (2012). www.epa.gov/dced/mxd_tripgeneration.html
[2] "Traffic Generated by Mixed-Use Developments—Six-Region Study Using Consistent Built Environmental Measures." Journal of Urban Planning and Development, 137(3), 248–261.
[3] Shafizadeh, Kevan et al. "Evaluation of the Operation and Accuracy of Available Smart Growth Trip Generation Methodologies for Use in California". Presented at 91st Annual Meeting of the Transportation Research Board, Washington, D.C., 2012.
[4] SANDAG Smart Growth Trip Generation and Parking Study.
http://www.sandag.org/index.asp?projectid=378&fuseaction=projects.detail

i. Most of the trips would likely be diverted trips from the freeways, and would have negligible effect on the operations of the study intersections.

ii. The existing uses also include a level of pass-by trips, thus the total number of actual new pass-by trips would be relatively low and have a negligible effect on the intersection operations.

3.1.3 TRIP ESTIMATES

As outlined above, trip generation estimates were determined using ITE's rates and MainStreet reductions. The existing trip estimates were subtracted from the Project trips to develop net new Project trips. The Marina Plaza vehicle trip generation estimates are presented in **Table 3-1**.

TABLE 3-1: VEHICLE TRIP GENERATION ESTIMATES

ITE Category	ITE Land Use	ITE Code	Size	Units	Daily	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
Existing Land Uses											
Retail	Variety Store	814	1.24	KSF	79	3	2	5	4	4	8
Retail	Supermarket	850	34	KSF	3,476	72	44	116	164	158	322
Office	Medical-Dental	720	1.95	KSF	70	4	1	5	2	5	7
Restaurant	High-Turnover Restaurant	932	11.5	KSF	1,467	69	56	125	68	46	114
				Total Existing Trips	5,092	148	103	251	238	213	451
				Existing MainStreet Trip Reduction	-459	-23	-16	-38	-39	-35	-73
				Net Existing External Vehicle Trips	**4,633**	**125**	**87**	**213**	**199**	**178**	**378**
Proposed Land Uses											
Hotel	Hotel	310	122	Rooms	997	38	27	65	37	36	73
Residential	Apartment	220	188	DU	1,263	19	77	96	79	42	121
Retail	Shopping Center	820	10.8	KSF	462	6	4	10	19	21	40
Restaurant	Fast Food w/o Drive-Thru	933	2.8	KSF	1,983	73	49	122	37	35	72
Restaurant	High-Turnover Restaurant	932	9.0	KSF	1,144	53	44	97	53	36	89
				Proposed Total Trips	5,849	189	201	391	225	170	395
				Proposed MainStreet Trip Reduction	-644	-35	-37	-71	-57	-43	-99
				Net Proposed External Vehicle Trips	**5,205**	**154**	**164**	**320**	**168**	**127**	**296**
				Net New Project Trips	***572***	***29***	***77***	***107***	***-31***	***-51***	***-82***

Source: ITE *Trip Generation Manual*, 9th edition, 2012; Fehr & Peers, March 2016

3.2 TRIP DISTRIBUTION AND TRIP ASSIGNMENT

The distribution of the traffic generated by the Project onto the roadway system was based on the locations of complementary land uses, prevailing travel patterns, surrounding population densities, and recent TIAs completed in the area. Input from the City of Cupertino staff was used to refine the trip distribution patterns. The trip distribution pattern is shown in **Figure 3-1**.

Project trips were assigned to the roadway network based on the trip distribution patterns discussed above. **Figure 3-2** shows the AM and PM peak hour Project trips assigned to each turning movement at the study intersections.

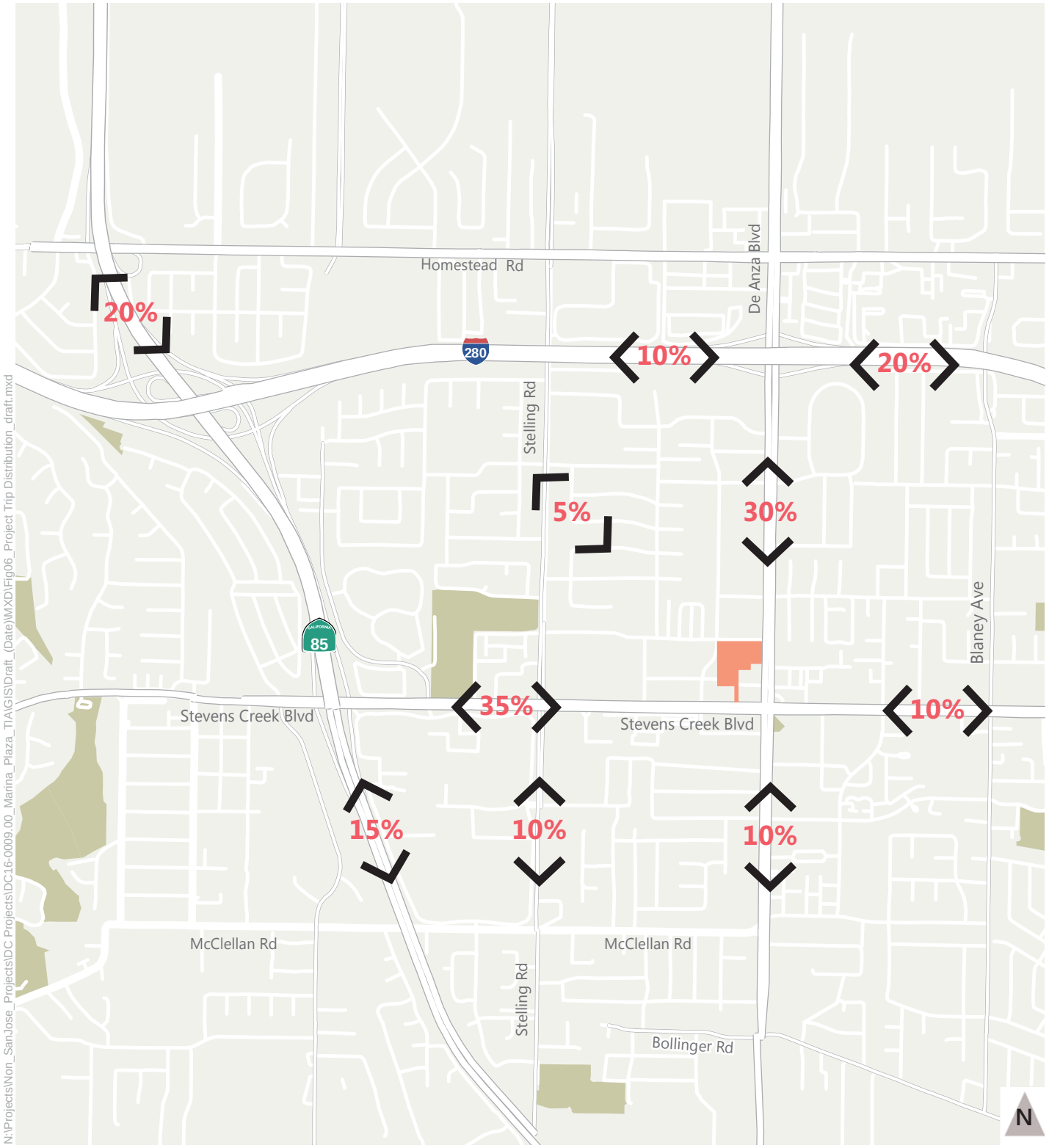
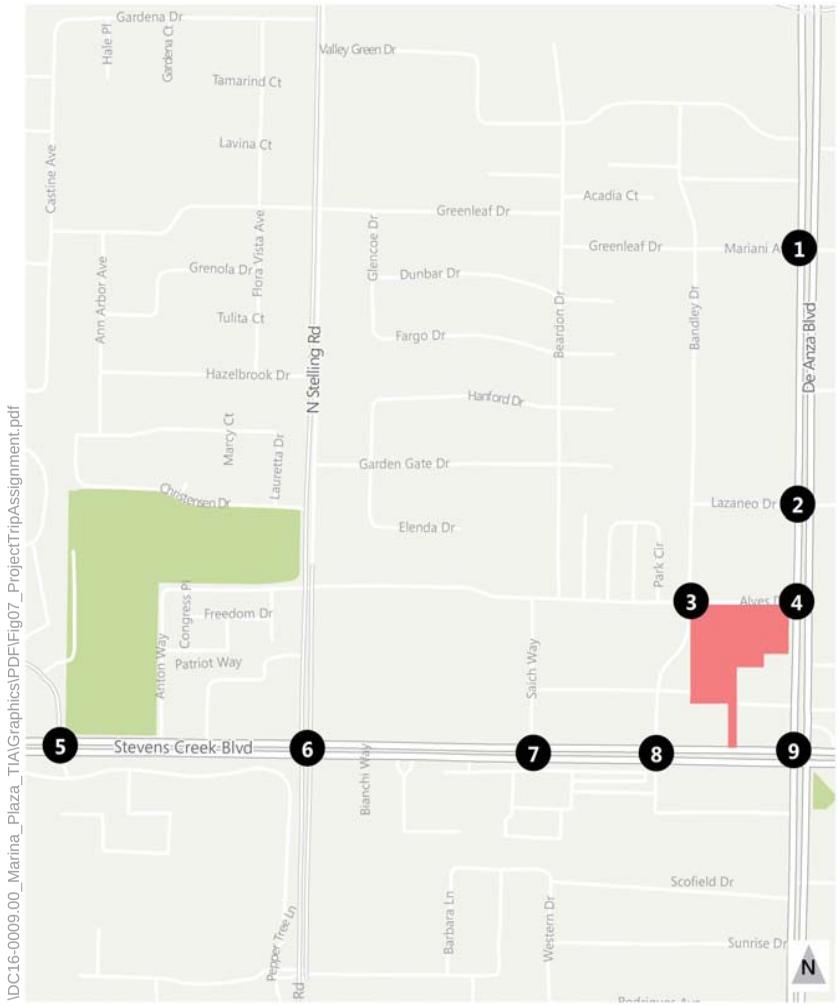
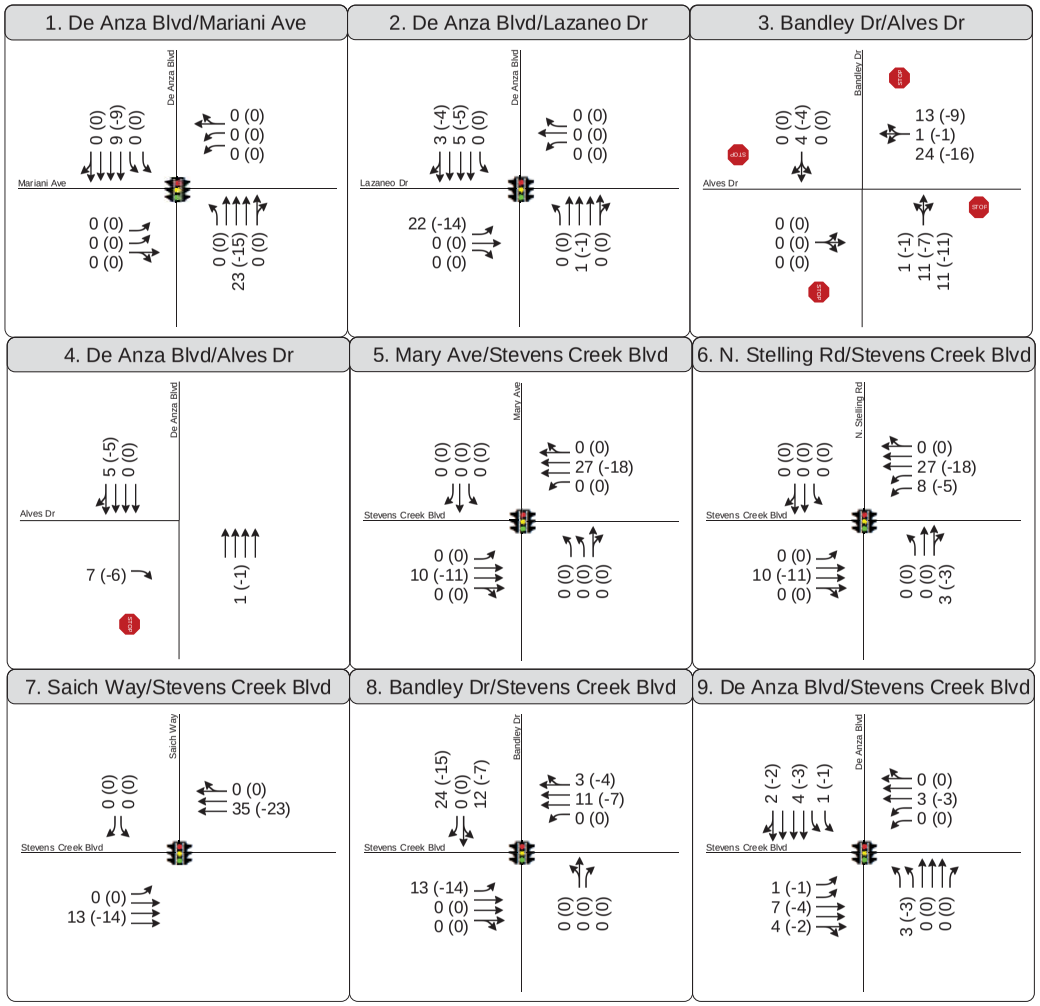


Figure 3-1

Project Trip Distribution



\DC16-0009.00_Marina_Plaza_TIA\Graphics\PDF\Fig07_ProjectTripAssignment.pdf



XX(YY) AM(PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop-controlled Intersection

Project Site

Study Intersection

Figure 3-2

Project Trip Assignment

4. EXISTING PLUS PROJECT CONDITIONS

This section presents the operations of the surrounding transportation system under Existing plus Project Conditions. Existing plus Project Conditions are defined as Existing Conditions with build-out of the Project. The peak hour vehicle trip estimates to and from the Project site are based on the trip estimates discussed in **Chapter 3: Project Traffic Estimates**. Potential impacts to the roadway system under this scenario are identified by comparing the level of service results under Existing plus Project Conditions to those under Existing Conditions without the Project.

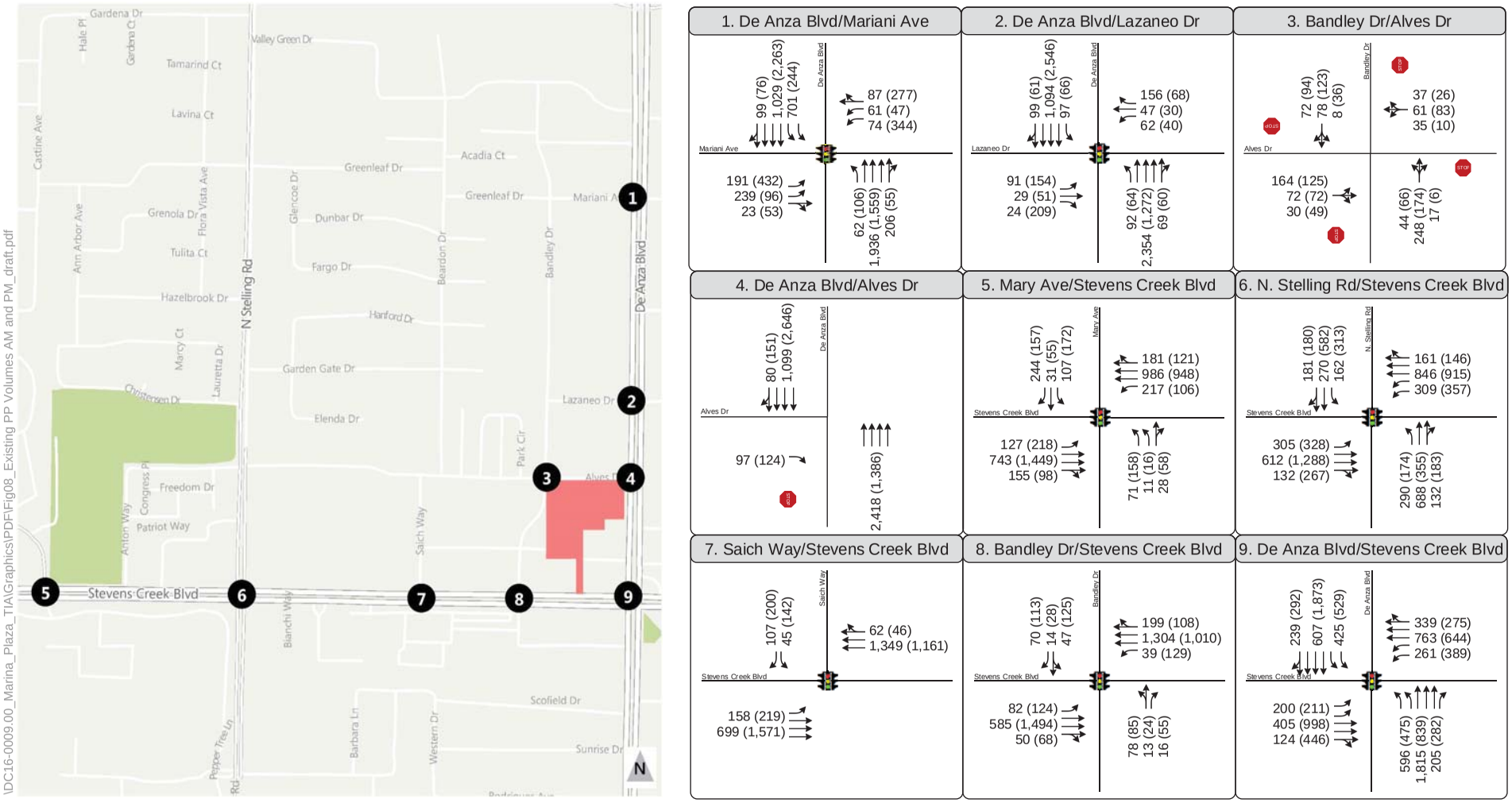
4.1 EXISTING PLUS PROJECT VOLUMES

Trips generated from the proposed Project were added to the existing traffic to develop traffic volumes for the Existing plus Project Conditions. The resulting volumes are shown on **Figure 4-1**.

4.2 EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE

Intersection levels of service were calculated with the new traffic added by the Project to evaluate the operating conditions of the intersections and identify potential impacts to the roadway system. The results of the intersection level of service calculations for Existing plus Project Conditions are presented in **Table 4-1**. **Appendix B** contains the corresponding calculation sheets. The results for Existing Conditions are included for comparison purpose, along with the projected increases in critical delay and critical volume-to-capacity (V/C) ratios. Critical delay represents the delay associated with the critical movements of the intersection, or the movements that require the most "green time" and have the greatest effect on overall intersection operations. The changes in critical delay and critical V/C ratio between Existing and Existing plus Project Conditions are used to identify significant impacts.

The results of the LOS calculations indicate that all study intersections operate at acceptable service levels (LOS D or better for City intersections and LOS E+ or better for regionally significant) during the AM and PM peak hours under Existing plus Project Conditions.



XX(YY) AM(PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop-controlled Intersection

Project Site

Study Intersection

Figure 4-1

Existing Plus Project Peak Hour Traffic Volumes and Lane Configurations

\DC16-0009.00_Marina_Plaza_TIA\Graphics\PDF\Fig08_Existing PP Volumes AM and PM_draft.pdf

TABLE 4-1: EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Control Type	Jurisdiction / CMP	LOS Threshold[1]	Peak Hour[2]	Existing		Existing plus Project			
						Delay[3]	LOS[4]	Delay[3]	LOS[4]	Δ in Crit. V/C[5]	Δ in Crit. Delay[6]
1	De Anza Boulevard and Mariani Avenue	Signal	Cupertino	D	AM PM	36.4 42.2	D+ D	36.3 42.3	D+ D	0.003 0.001	0.0 0.0
2	De Anza Boulevard and Lazaneo Drive	Signal	Cupertino	D	AM PM	17.5 19.8	B B-	17.6 19.7	B B-	0.000 0.001	0.0 -0.0
3	Bandley Drive and Alves Drive	AWSC	Cupertino	D	AM PM	10.6 11.3	B B	11.2 10.9	B B	0.050 0.033	0.6 -0.4
4	De Anza Boulevard and Alves Drive	SSSC	Cupertino	D	AM PM	11.0 20.3	B C	11.1 19.9	B C	0.011 0.018	0.0 0.0
5	Mary Avenue and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	34.0 33.3	C- C-	33.9 33.4	C- C-	0.002 0.002	-0.1 0.1
6	N. Stelling Road and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	39.0 46.0	D+ D	39.0 45.9	D+ D	0.006 0.005	-0.1 -0.2
7	Saich Way and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.7 21.7	B C+	15.5 21.8	B C+	0.007 0.005	-0.3 0.2
8	Bandley Drive and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.0 24.5	B C	16.1 23.6	B C	0.011 0.004	0.9 -0.4
9	De Anza Boulevard and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	34.1 44.1	C- D	34.2 43.9	C- D	0.001 0.003	0.1 -0.8

Notes:

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which apply the methods described in the 2000 *Highway Capacity Manual*.
5. Change in critical volume to capacity ratio between Existing and Existing plus Project Conditions
6. Change in average critical movement delay between Existing and Existing plus Project Conditions.
7. Signal = Signalized intersection, AWSC = All way stop controlled intersection, SSSC = Side-street stop controlled intersection

Source: Fehr & Peers, 2016.

4.3 EXISTING PLUS PROJECT INTERSECTION IMPACTS AND MITIGATION MEASURES

This section of the report evaluates the intersection LOS results presented in **Table 4-1** against the impact criteria discussed in Chapter 2.5 and presents mitigation measures for identified impacts. Based on the identified appropriate impact criteria, the Project has **less-than-significant** impact at all study intersections under the Existing plus Project scenario and no mitigation measures are required.

4.4 EXISTING PLUS PROJECT FREEWAY SEGMENT LEVEL OF SERVICE

Freeway segments of I-280 and SR-85 were analyzed during the AM and PM peak hours by calculating the amount of Project traffic projected to be added to these freeway segments. To be conservative, no Project trips were assigned to the HOV lanes. **Table 4-2** presents the estimated number of trips added to the freeway segments under Existing plus Project Conditions and the estimated densities and service levels.

4.5 EXISTING PLUS PROJECT FREEWAY SEGMENT IMPACTS AND MITIGATION MEASURES

Traffic impacts on CMP freeway segments would occur when the addition of Project traffic causes the freeway segment operations to deteriorate from an acceptable level (LOS E or better) under Existing Conditions to an unacceptable level (LOS F) or an increase in traffic of more than one percent of the capacity of the segments that operate at LOS F under Existing Conditions.

As shown in **Table 4-2**, the Project would not add trips greater than one percent of the freeway segment capacity to the freeway study segments during the AM and PM peak hours. Therefore, the Project would have a **less-than-significant** freeway impact at the identified freeway study segments under Existing plus Project Conditions and no mitigation measures are proposed.

TABLE 4-2: EXISTING PLUS PROJECT FREEWAY LEVEL OF SERVICE RESULTS

Freeway Segment	Capacity[1]	Peak Hour [2]	Existing Conditions		Existing plus Project Conditions			
			Density[3]	LOS[4]	Trips[5]	Density[3]	LOS[4]	% Impact[6]
SR-85 Northbound								
Saratoga-Sunnyvale Rd to Stevens Creek Blvd	4,600	AM PM	**65** 22	**F** C	**3** -4	**65** 22	**F** C	<0.01 <0.01
Stevens Creek Blvd to I-280	4,600	AM PM	**124** 13	**F** B	13 -8	**125** 13	**F** B	<0.01 <0.01
SR-85 Southbound								
I-280 to Stevens Creek Blvd	4,600	AM PM	21 52	C E	5 -5	25 **62**	C **F**	<0.01 <0.01
Stevens Creek Blvd to Saratoga-Sunnyvale Rd	4,600	AM PM	18 90	B B	11 -7	18 **90**	C **F**	<0.01 <0.01
I-280 Eastbound								
SR-85 to De Anza Blvd	6,900	AM PM	24 **103**	C **F**	3 -3	24 **103**	C **F**	<0.01 <0.01
De Anza Blvd to Wolfe Rd	6,900	AM PM	36 77	D F	14 -8	36 **77**	D **F**	<0.01 <0.01
I-280 Westbound								
Wolfe Rd to De Anza Blvd	6,900	AM PM	**62** 25	**F** C	5 -5	**62** 25	**F** D	<0.01 <0.01
De Anza Blvd to SR-85	6,900	AM PM	**73** 23	**F** C	7 -5	**73** 23	**F** C	<0.01 <0.01

Notes: **Bold text** indicates intersection operates at unacceptable level of service.

1. Measured in vehicles per hour per lane.
2. AM = morning peak hour, PM = evening peak hour.
3. Measured in passenger cars per mile per lane.
4. LOS = level of service
5. Project trips added to individual freeway segments.
6. Percent Contribution determined by dividing the number of Project trips by the freeway segment's capacity.

Source: VTA Monitoring and Conformance Report, 2014; Fehr & Peers, 2016

5. BACKGROUND CONDITIONS

This chapter presents the results of the level of service calculations under Background Conditions with and without the Project. Traffic volumes for Background No Project Conditions comprise existing volumes plus traffic generated by "approved but not yet built" and "not occupied" developments to account for local growth in the study area. Background plus Project Conditions are defined as Background Conditions plus traffic generated by the Project.

5.1 BACKGROUND TRAFFIC VOLUMES

Background projects were identified in consultation with City staff:

- Apple Campus 2, Apple campus expansion for additional employees and office square footage
- Main Street, office development with supporting retail
- Hyatt House, hotel development with associated restaurant, meeting rooms, and boardrooms
- Hamptons, apartment redevelopment for increased residential density
- Nineteen 800, mixed-use retail and residential development

Vehicle trips from "approved but not yet built" and "not occupied" development projects in the study area were added to existing volumes. Trip generation estimates from these development projects were obtained from their respective traffic reports. Background traffic volumes are presented in **Figure 5-1**.

5.2 BACKGROUND PLUS PROJECT TRAFFIC VOLUMES

Trips generated from the Project were added to the Background traffic projections to develop traffic volumes for Background plus Project Conditions. The resulting volumes are shown on **Figure 5-2**.

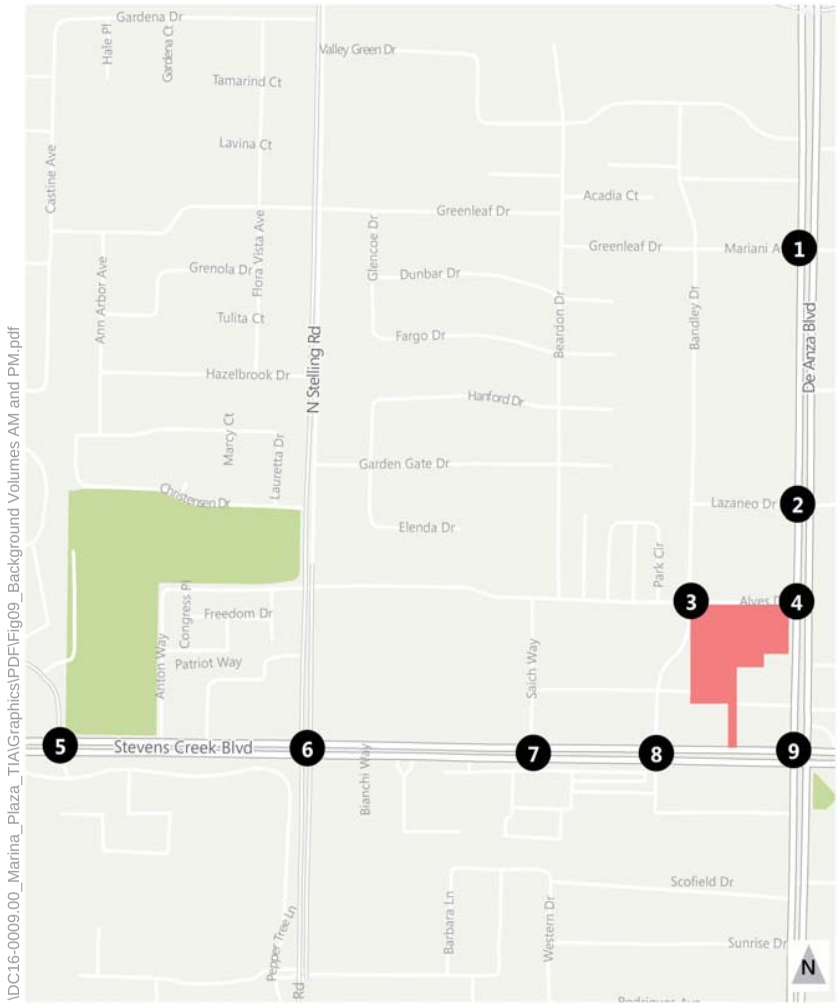
5.3 BACKGROUND INTERSECTION LEVEL OF SERVICE

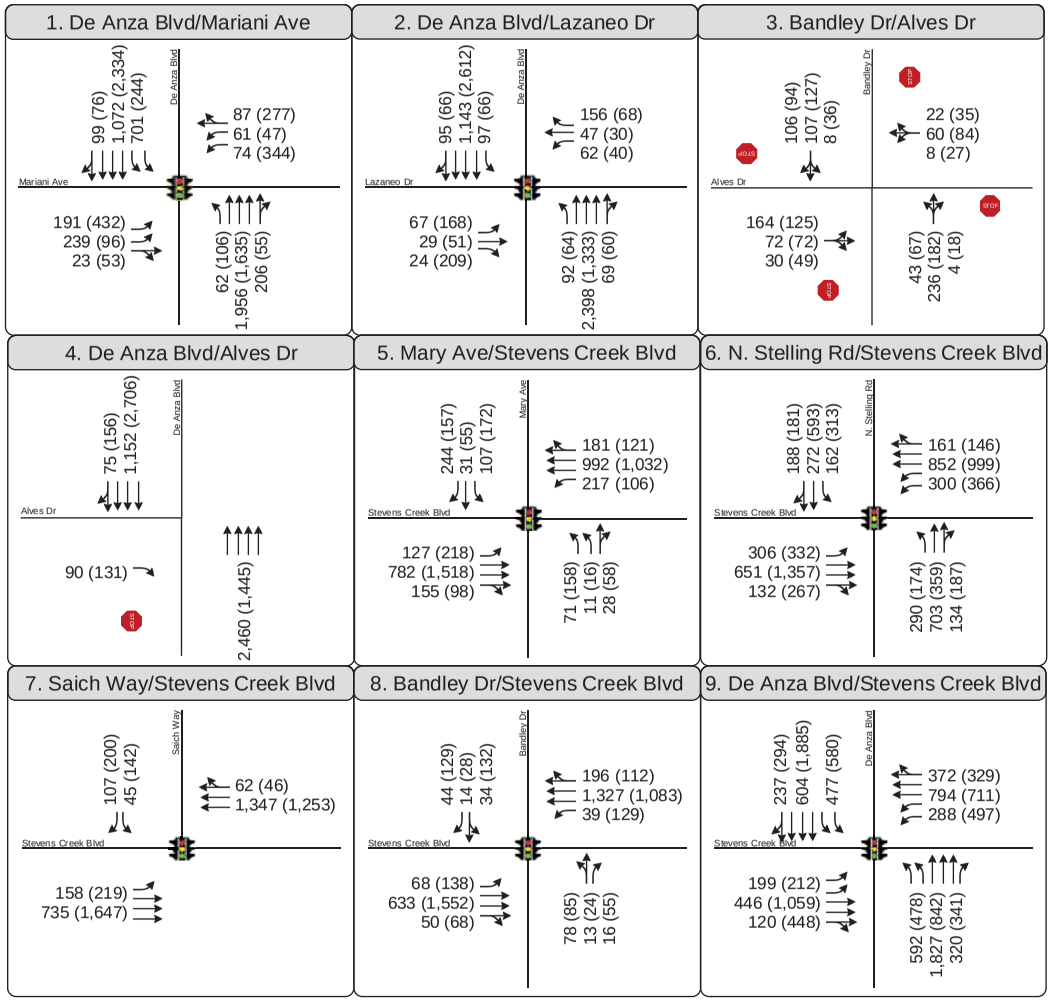
LOS calculations were conducted to evaluate signalized intersection operations under Background plus Project Conditions. The LOS analysis results for Background without and with the Project are summarized in **Table 5-1**. The corresponding LOS calculation sheets are included in **Appendix D**.

5.4 BACKGROUND INTERSECTION IMPACTS AND MITIGATION MEASURES

The results presented in **Table 5-1** show that one study intersection would operate unacceptably during the PM peak hour under Background Conditions and Background plus Project Conditions. This occurs at the De Anza Boulevard/Stevens Creek Boulevard intersection which is included in the Congestion

Management Program. Based on the impact criteria identified in Chapter 1.5, the Project would have a **less-than-significant** impact. Therefore, no mitigation measures are required.





XX(YY) AM(PM) Peak Hour Traffic Volumes

Signalized Intersection

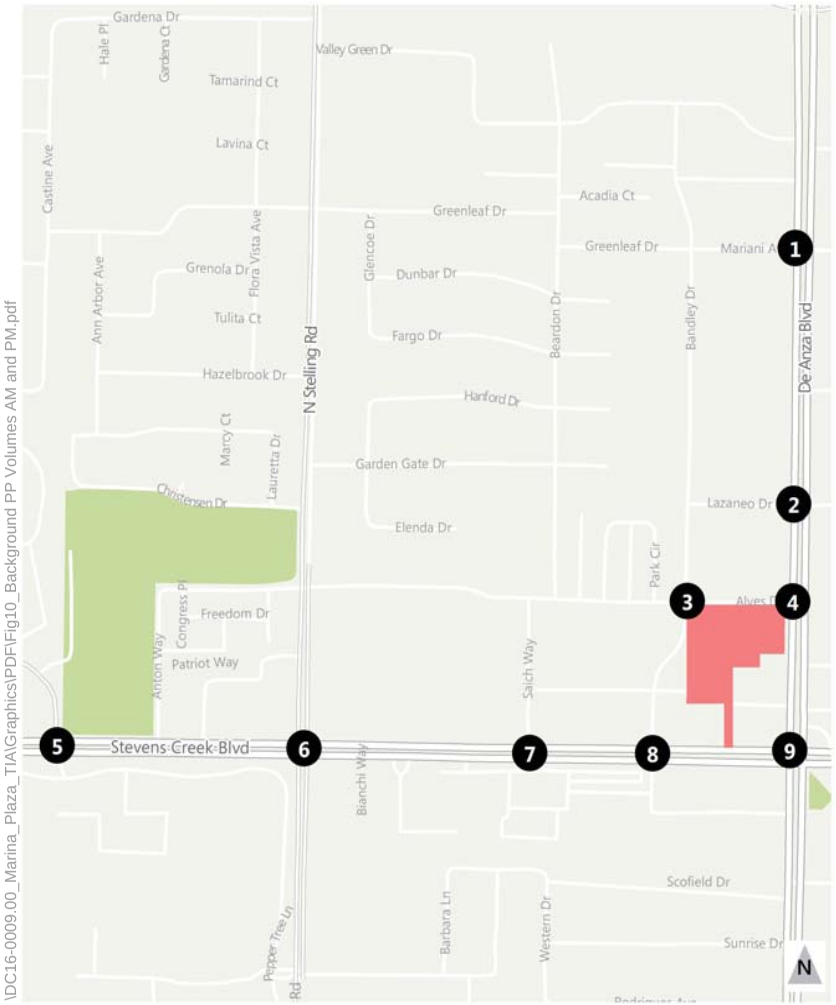
Stop-controlled Intersection

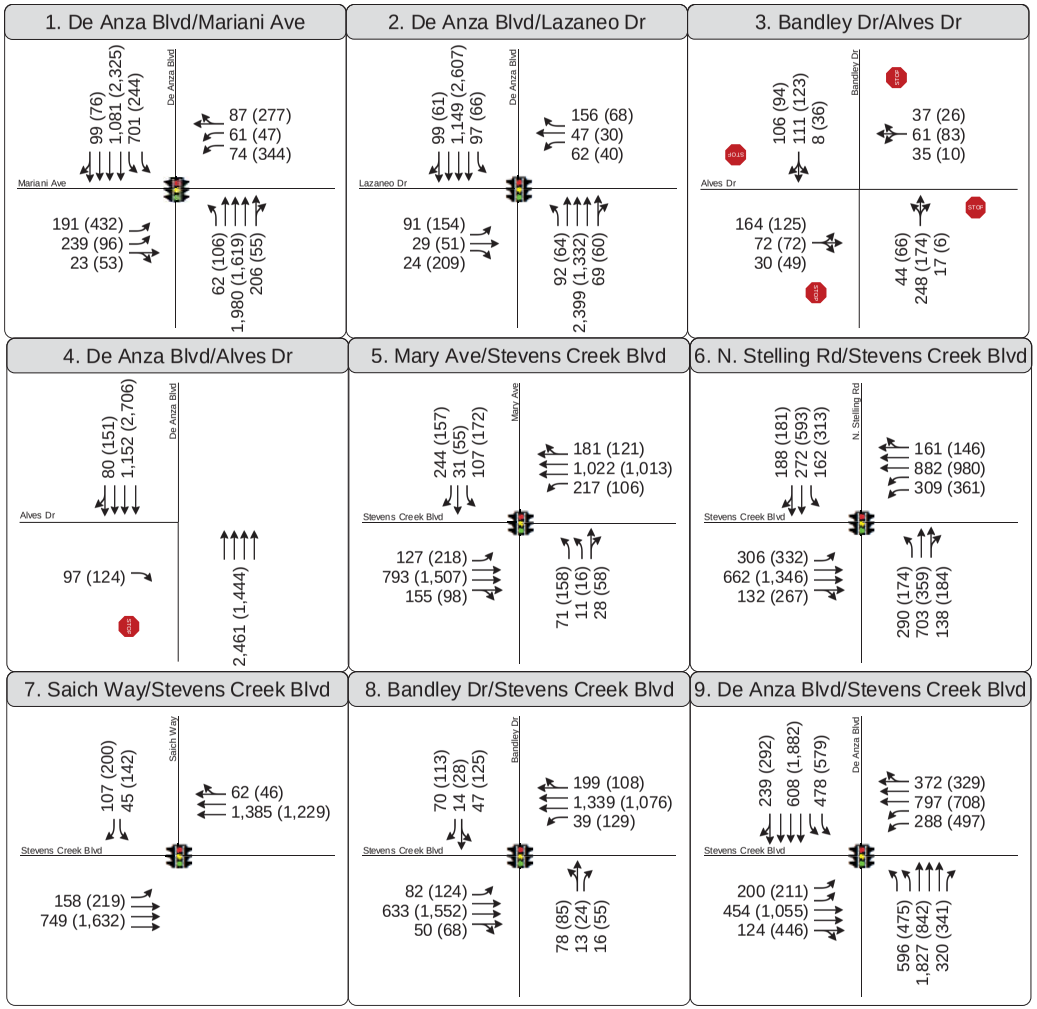
Project Site

Study Intersection

Figure 5-1

Background Peak Hour Traffic Volumes and Lane Configurations





\DC16-0009.00_Marina_Plaza_TIA\Graphics\PDF\Fig10_Background PP Volumes AM and PM.pdf

XX(YY) AM(PM) Peak Hour Traffic Volumes

Signalized Intersection

Stop-controlled Intersection

Project Site

Study Intersection

Figure 5-2

Background Plus Project Peak Hour Traffic Volumes and Lane Configurations

TABLE 5-1: BACKGROUND PLUS PROJECT INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Control Type	Jurisdiction / CMP	LOS Threshold[1]	Peak Hour[2]	Existing		Background		Background plus Project			
						Delay[3]	LOS[4]	Delay[3]	LOS[4]	Delay[3]	LOS[4]	Δ in Crit. V/C[5]	Δ in Crit. Delay[6]
1	De Anza Boulevard and Mariani Avenue	Signal	Cupertino	D	AM PM	36.4 42.2	D+ D	36.2 42.1	D+ D	36.2 42.1	D+ D	0.003 0.001	0.0 0.0
2	De Anza Boulevard and Lazaneo Drive	Signal	Cupertino	D	AM PM	17.5 19.8	B B-	17.2 19.5	B B-	17.4 19.5	B B-	0.000 0.001	0.0 0.0
3	Bandley Drive and Alves Drive	AWSC	Cupertino	D	AM PM	10.6 11.3	B B	11.0 11.3	B B	11.7 10.9	B B	0.053 0.033	0.7 -0.4
4	De Anza Boulevard and Alves Drive	SSSC	Cupertino	D	AM PM	11.0 20.3	B C	11.1 20.9	B C	11.2 20.4	B C	0.011 0.019	0.0 0.0
5	Mary Avenue and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	34.0 33.3	C- C-	33.7 32.9	C- C-	33.5 33.0	C- C-	0.002 0.002	-0.1 0.1
6	N. Stelling Road and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	39.0 46.0	D+ D	38.9 46.2	D+ D	38.9 46.1	D+ D	0.006 0.005	-0.1 -0.2
7	Saich Way and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.7 21.7	B C+	15.3 21.3	B C+	15.1 21.4	B C+	0.007 0.005	-0.3 0.2
8	Bandley Drive and Stevens Creek Boulevard	Signal	Cupertino	D	AM PM	15.0 24.5	B C	14.6 23.9	B C	15.7 23.0	B C	0.011 0.004	0.9 -0.4
9	De Anza Boulevard and Stevens Creek Boulevard	Signal	Cupertino/CMP	E+	AM PM	34.1 44.1	C- D	35.5 48.9	D+ D	35.6 48.6	D+ D	0.001 0.003	0.1 -1.1

Notes: **Bold text** indicates intersection operates at unacceptable level of service.

1. LOS Threshold is the lowest acceptable LOS (the threshold between acceptable and unacceptable level of service).
2. AM = morning peak hour, PM = evening peak hour.
3. Whole intersection weighted average control delay expressed in seconds per vehicle calculated using methods described in the 2000 *Highway Capacity Manual*, with adjusted saturation flow rates to reflect Santa Clara County Conditions for signalized intersections.
4. LOS = Level of Service. LOS calculations conducted using the TRAFFIX analysis software packages, which apply the methods described in the 2000 *Highway Capacity Manual*.
5. Change in critical volume to capacity ratio between Background and Background plus Project Conditions
6. Change in average critical movement delay between Background and Background plus Project Conditions.
7. Signal = Signalized intersection, AWSC = All way stop controlled intersection, SSSC = Side-street stop controlled intersection

Source: Fehr & Peers, 2016.

6. SITE ACCESS, ON-SITE CIRCULATION, MULTI-MODAL TRANSPORTATION, AND PARKING ASSESSMENT

This chapter of the report discusses transportation impacts related to accessing and navigating the Project site and impacts to pedestrians, bicyclists, and transit. Topics discussed include vehicular site access and on-site circulation, pedestrian and bicycle site access and circulation, and transit vehicle delay and site access.

6.1 VEHICLE ACCESS AND CIRCULATION REVIEW

The site plan for the proposed Project is presented in **Figure 1-2**. The site plan indicates the location of the Project driveways and the internal circulation system for automobile, pedestrian, and bicycle traffic. The Project provides access via two driveways on Alves Drive, one driveway on Bandley Drive, and one driveway on Stevens Creek Boulevard. All driveways provide full access with the exception of the driveway on Stevens Creek Boulevard which is right-turn only inbound and outbound.

The hotel at Building A can only be accessed from Alves Drive while buildings B and C can be accessed from three of the four driveways. A common subterranean parking facility for buildings B and C allows for enhanced circulation within the site so that residents and patrons may use various access points.

Vehicle circulation in the parking structure will consist of ramps that allow for residents/visitors to access all levels of the garage. Emergency vehicle access for the Project perimeters will be provided by a dual use road off Alves Drive between buildings A and B. This road is currently expected to accommodate emergency vehicles like fire trucks but will also permit use for moving trucks and garbage trucks. Loading zone and garbage pick-up zone locations however will be located off-road which allows emergency vehicles to have complete access.

6.2 PEDESTRIAN ACCESS AND CIRCULATION

Pedestrian access to the Project site is provided by a mostly complete network of sidewalks and crosswalks. Sidewalks are provided along the frontage of the Project site along Alves Drive to the north and Bandley Drive to the west. There are crosswalks at all four approaches at the intersections of Alves Drive and Bandley Drive, northwest of the Project site, and at Bandley Drive and Stevens Creek Boulevard, south of the Project site. Pedestrian walkways are also proposed within the site plan for safe connections between buildings and between the hotel and nearby retail and restaurants on Stevens Creek Boulevard.

6.3 BICYCLE ACCESS AND CIRCULATION

Bicycle access to the Marina Plaza development is accommodated by bicycle lanes (Class II) on surrounding roadways such as De Anza Boulevard and Stevens Creek Boulevard and bike routes on Bandley Drive and Alves Drive.

6.4 TRANSIT NETWORK

The VTA TIA Guidelines Section 9.2 requires analysis of transit network performance including transit access and facilities and transit vehicle delay; therefore it is provided in this TIA for informational purposes. An assessment of transit access and facilities near the Project site is provided in **Chapter 2**. The Guidelines state that the transit vehicle delay analysis includes the following components:

- ***A qualitative assessment*** *of additional transit vehicle delay caused by any roadway or intersection geometry changes proposed by the Project, taking into account unique considerations of transit vehicles compared to autos (e.g., pulling into and out of stops, longer gaps needed for left turns). These qualitative considerations may also inform the assessment of transit vehicle delay caused by auto congestion;*
- ***A quantitative estimate*** *of additional seconds of transit vehicle delay that will result from automobile congestion caused by the Project and any changes to signal operations proposed by the Project. This analysis may utilize information produced by the intersection Auto Level of Service (LOS) analysis or other sources, if available.*

There is not a well-established national methodology for quantitatively evaluating transit network performance due to roadway congestion. Increased roadway congestion can affect transit vehicle travel time/speed and service reliability. For the purposes of this study, transit network performance is analyzed during the AM and PM peak hour based on the average transit vehicle delay associated with congestion at signalized intersections along a specified corridor with and without the Project. The change in average transit vehicle delay will be determined using the following process:

- Review TRAFFIX analysis software output for intersection delay. The average delay, by movement, at each intersection within a study corridor in the transit vehicle path of travel will be determined.
- The transit vehicle average delay due to congestion at intersections will be determined by summing the movement delay for each signalized intersection along the study transit corridor.
- Without and With Project average transit vehicle delay associated with congestion at intersections will be compared. Note that the transit vehicle dwell time at transit stops is not included in the analysis.

The agencies do not have a documented method for determining which transit corridors should be analyzed. For purposes of this study (based on coordination with agency staff), the following routes within one mile of the Project site and that have full day service with a frequency of 30 minutes or less are analyzed:

- Route 25 - De Anza College to Alum Rock Transit Center via Valley Medical Center
- Route 53 - West Valley College to Sunnyvale Transit Center
- Route 55 - De Anza College to Great America

The City of Cupertino and the VTA do not have documented standards related to transit corridor performance associated with congestion resulting from new development projects. Per the VTA TIA Guidelines, *if increased transit vehicle delay is found, the Lead Agency* [City of Cupertino] *should work with VTA to identify feasible transit priority measures near the affected facility and include contributions to any applicable projects that improve transit speed and reliability in the TIA*.

Transit capacity is often measured in terms of the average peak load factor, a ratio of the average peak number of passengers on-aboard during the peak period to supply of seats (capacity). The transit capacity analysis evaluates if the net new AM and PM peak hour trips added by the Project would exceed the available capacity on the public transit routes that serve the Project site. The analysis makes use of VTA's guidelines for capacity and peak load, by service type, detailed in the Peak Vehicle Load Factors established in the *Title VI: System-Wide Service Standards & Policies* (OPS PL-0059, dated November 8, 2014).[5] VTA regularly monitors the performance of its fixed bus and light rates per FTA Title VI requirements. The peak load factor is a ratio between the standard passenger load and the seated capacity of a route, per vehicle, during the peak period. If the passenger standard is greater than the seated capacity, some passengers are assumed to be standing in the vehicle rather than seated. If a route exceeds its respective load factor standard due to the addition of project-related transit passengers, a significant impact would occur. The Peak Vehicle Load Factor standards and seat capacity (passengers per vehicle) for VTA bus service types are as follows:

- Local and Core Bus Routes:
  - Seated Capacity: 37 passengers per vehicle
  - Passengers (seated plus standees): 44.4 passengers
  - Load Factor Standard: 1.2
- Express and Limited Stop Routes[6]
  - Seated Capacity: 39 passengers per vehicle
  - Load Factor Standard: 1.0

[5] OPS-PL-0059 Title VI System Wide Service Standards Policies, VTA, 2013.

[6] Express and Limited Stop routes on VTA are subject to a reduced load factor standard of 1.0 to determine if additional capacity should be provided (VTA, OPS PL-0059, dated November 8, 2014).

6.5 TRANSIT EVALUATION

This section discusses transit vehicle delay and transit access within the study area.

6.5.1 TRANSIT SITE ACCESS

Transit stops are available immediately south of the Project site. VTA bus routes 25, 53, and 55 for both the northbound and southbound direction stop less than 0.15 miles north of the Project. Pedestrians can access these transit routes using sidewalks and crosswalks along Alves Drive, Bandley Drive, Stevens Creek Boulevard and De Anza Boulevard.

6.5.2 TRANSIT VEHICLE CAPACITY

Transit routes near the Project site have low average peak load factors ranging from 0.07 to 0.25, which indicate that only about 25 percent or less of the seats on the buses on these transit routes are occupied. Because of the limited number of transit stops in the area, it is unlikely that the Project will generate transit demand that would exceed to the available transit vehicle capacity.

6.5.3 TRANSIT VEHICLE DELAY (FOR INFORMATIONAL PURPOSES)

Transit vehicles operating on the roadways in the Project vicinity could incur additional delay due to increased traffic congestion. The primary corridors near the Project site are De Anza Boulevard and Stevens Creek Boulevard. The differences between the No Project and Plus Project through movement delays along these primary corridors were used to determine the potential added transit vehicle delay. In many cases there is an expected decrease in delay along these transit corridors due to more efficient signal operations anticipated with the Project in place. The analysis results are shown in **Table 6-1**.

TABLE 6-1: TRANSIT VEHICLE DELAY

Route		Peak Hour	Projected Additional Delay (sec)			
			Existing plus Project		Background plus Project	
			NB / EB	SB / WB	NB / EB	SB / WB
25	Stevens Creek Boulevard from Stelling Road to Bandley Drive	AM PM	-0.1 -0.4	-0.1 -1.3	-0.1 -0.5	0.0 -1.2
53	De Anza Boulevard from Mariani Avenue to Stevens Creek Boulevard	AM PM	0.4 -0.3	0.4 -0.2	0.1 0.0	-0.2 -1.0
55	Stevens Creek at Stelling Road	AM PM	-0.1 0.1	-0.2 -0.8	0.3 -0.4	0.4 -0.2

Source: Fehr & Peers, 2016

6.6 PARKING ASSESSMENT

The City of Cupertino has vehicle and bicycle requirements for new developments.

6.6.1 VEHICLE PARKING

Per the City of Cupertino requirements, developments are required to provide parking based on the number of spaces needed for each specific land use. The total required parking for the proposed development is 666 spaces, which is slightly exceeded by the number of spaces on the Project site plan (667 spaces). **Table 6-2** summarizes the required and provided vehicle parking at the Project site. It is noted that the City's Municipal Code does allow for shared parking adjustments for mixed-use developments and as a result there could be opportunities to reduce the Project's parking provision on this basis.

TABLE 6-2: SUMMARY OF VEHICLE PARKING AT THE PROJECT SITE

Land Use	Parking Ratio		Units	Required Parking	Proposed Parking
Hotel	1.1 stall/room 1 stall/employee		122 rooms 12 employees	135	135
Retail/ Restaurant	Restaurant w/o Bar	1 stall/4 chairs 1 stall/employee	215 chairs 20 employees	162	162
	Fast Food Restaurant	1 stall/3 chairs 1 stall/employee	55 chairs 5 employees		
	Retail	1 stall/250 SF 1 stall/employee	9,356 SF 14 employees		
	Retail Service	1 stall/175 SF 1 stall/employee	1,466 SF 2 employees		
Residential - Apartment	Affordable Housing Units	1 stall/1-bedroom DU 2 stall/2 or 3-bedroom DU	16 DU	369	370
	Market Rate	2 stalls/2-bedroom DU	172 DU		
TOTAL				666	667

6.6.2 BICYCLE PARKING

The City of Cupertino has bicycle parking requirements based on land use. Two types of bicycle parking facilities are required: Class I and Class II storage facilities. Class I facilities protect the entire bicycle from theft, vandalism, and inclement weather and are appropriate for long-term storage. Examples include bike lockers, rooms with key access, guarded parking areas, and valet/check-in parking. Class II parking facilities are for more temporary bike parking and include bicycle racks to which the frame and at least one wheel can be secured with a user-provided lock.

For hotels, lodging, restaurant without bar and other commercial general use, the number of bicycle parking spaces must be at least 5% of auto parking spaces. Meanwhile, high density apartments are required to provide 0.4 bicycle storage spaces per dwelling unit. In total, Marina Plaza is required to provide 164 bicycle parking spaces. The proposed site plan includes 7 hotel bicycle parking spaces, 9 retail bicycle parking spaces, and 148 residential bicycle parking spaces, for a total of 164 bicycle parking spaces.

APPENDIX A: EXISTING TRAFFIC COUNTS

Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

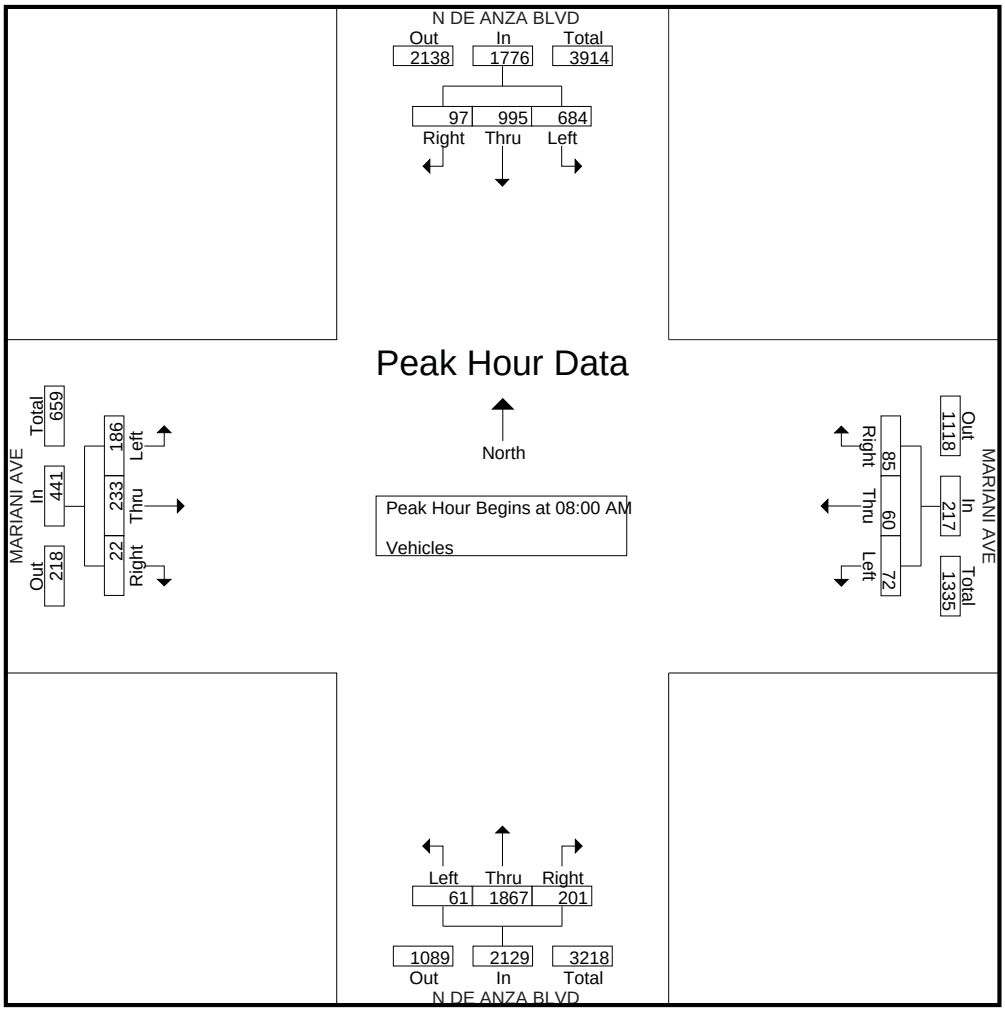
	N DE ANZA BLVD Southbound					MARIANI AVE Westbound					N DE ANZA BLVD Northbound					MARIANI AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	11	145	59	5	220	6	11	2	0	19	12	238	6	3	259	0	17	22	5	44	542
07:15 AM	11	141	50	7	209	13	12	8	2	35	22	338	13	2	375	2	22	14	3	41	660
07:30 AM	10	138	64	5	217	12	6	5	0	23	17	394	6	8	425	0	15	36	9	60	725
07:45 AM	12	182	91	4	289	16	19	14	0	49	51	431	13	31	526	3	50	29	2	84	948
Total	44	606	264	21	935	47	48	29	2	126	102	1401	38	44	1585	5	104	101	19	229	2875
08:00 AM	18	254	165	11	448	42	39	38	9	128	49	426	13	18	506	3	81	39	3	126	1208
08:15 AM	19	268	145	18	450	13	8	7	3	31	47	562	10	11	630	5	32	53	3	93	1204
08:30 AM	23	222	187	24	456	10	6	12	6	34	47	454	16	24	541	5	51	51	2	109	1140
08:45 AM	37	251	187	31	506	20	7	15	13	55	58	425	22	30	535	9	69	43	4	125	1221
Total	97	995	684	84	1860	85	60	72	31	248	201	1867	61	83	2212	22	233	186	12	453	4773
Grand Total	141	1601	948	105	2795	132	108	101	33	374	303	3268	99	127	3797	27	337	287	31	682	7648
Apprch %	5	57.3	33.9	3.8		35.3	28.9	27	8.8		8	86.1	2.6	3.3		4	49.4	42.1	4.5		
Total %	1.8	20.9	12.4	1.4	36.5	1.7	1.4	1.3	0.4	4.9	4	42.7	1.3	1.7	49.6	0.4	4.4	3.8	0.4	8.9	

	N DE ANZA BLVD Southbound				MARIANI AVE Westbound				N DE ANZA BLVD Northbound				MARIANI AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	18	254	165	437	**42**	**39**	**38**	**119**	49	426	13	488	3	**81**	39	**123**	1167
08:15 AM	19	**268**	145	432	13	8	7	28	47	**562**	10	**619**	5	32	**53**	90	**1169**
08:30 AM	23	222	**187**	432	10	6	12	28	47	454	16	517	5	51	51	107	1084
08:45 AM	**37**	251	187	**475**	20	7	15	42	**58**	425	**22**	505	**9**	69	43	121	1143
Total Volume	97	995	684	1776	85	60	72	217	201	1867	61	2129	22	233	186	441	4563
% App. Total	5.5	56	38.5		39.2	27.6	33.2		9.4	87.7	2.9		5	52.8	42.2		
PHF	.655	.928	.914	.935	.506	.385	.474	.456	.866	.831	.693	.860	.611	.719	.877	.896	.976

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

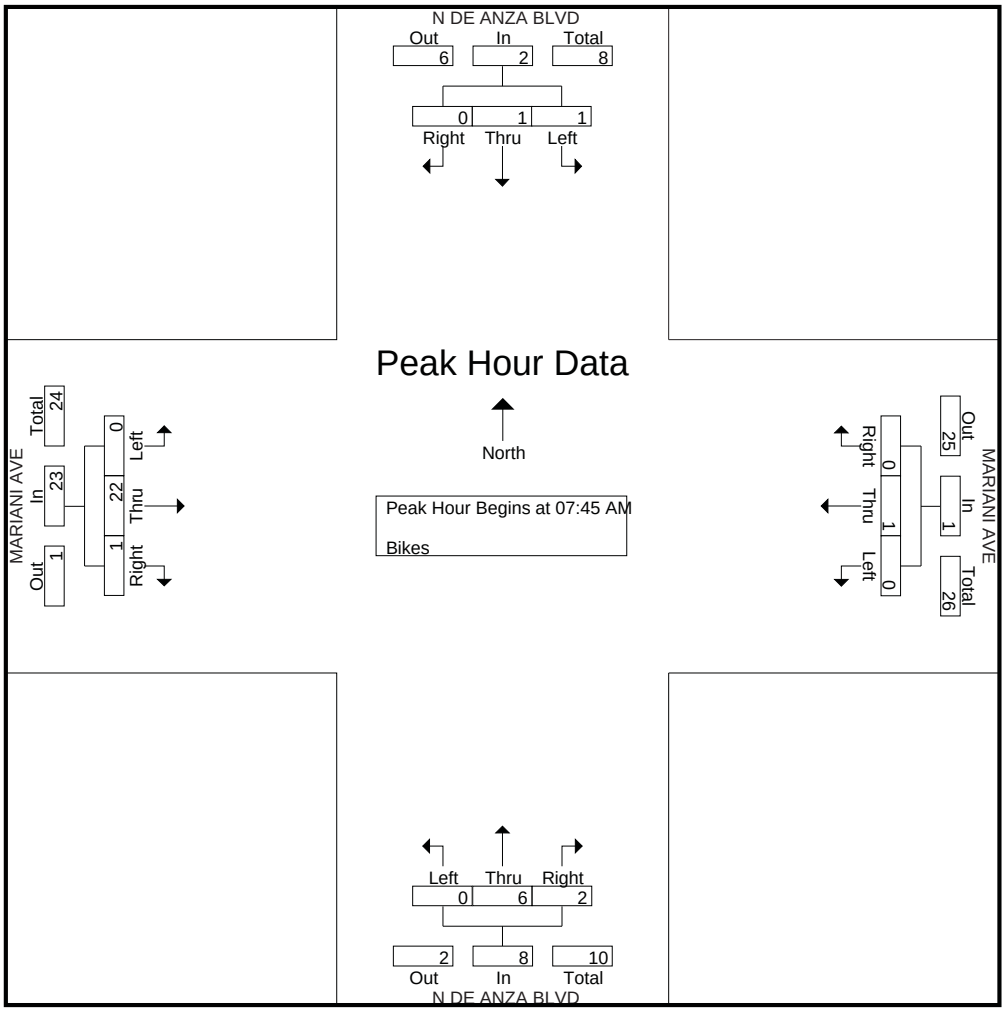
	N DE ANZA BLVD Southbound					MARIANI AVE Westbound					N DE ANZA BLVD Northbound					MARIANI AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:45 AM	0	1	0	0	1	0	1	0	0	1	1	2	0	0	3	0	6	0	0	6	11
Total	0	2	0	0	2	0	1	0	0	1	1	2	0	0	3	0	9	2	0	11	17
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	12	12
08:15 AM	0	0	1	0	1	0	0	0	0	0	0	3	0	0	3	0	2	0	0	2	6
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1	2	0	0	3	5
08:45 AM	0	0	0	0	0	0	0	0	0	0	1	4	0	0	5	0	4	0	0	4	9
Total	0	0	1	0	1	0	0	0	0	0	2	8	0	0	10	1	20	0	0	21	32
Grand Total	0	2	1	0	3	0	1	0	0	1	3	10	0	0	13	1	29	2	0	32	49
Apprch %	0	66.7	33.3	0		0	100	0	0		23.1	76.9	0	0		3.1	90.6	6.2	0		
Total %	0	4.1	2	0	6.1	0	2	0	0	2	6.1	20.4	0	0	26.5	2	59.2	4.1	0	65.3	

	N DE ANZA BLVD Southbound				MARIANI AVE Westbound				N DE ANZA BLVD Northbound				MARIANI AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**1**	0	**1**	0	**1**	0	**1**	**1**	2	0	**3**	0	6	0	6	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**12**	0	**12**	**12**
08:15 AM	0	0	**1**	1	0	0	0	0	0	**3**	0	3	0	2	0	2	6
08:30 AM	0	0	0	0	0	0	0	0	1	1	0	2	**1**	2	0	3	5
Total Volume	0	1	1	2	0	1	0	1	2	6	0	8	1	22	0	23	34
% App. Total	0	50	50		0	100	0		25	75	0		4.3	95.7	0		
PHF	.000	.250	.250	.500	.000	.250	.000	.250	.500	.500	.000	.667	.250	.458	.000	.479	.708

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 1AM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 1PM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	N DE ANZA BLVD Southbound					MARIANI AVE Westbound					N DE ANZA BLVD Northbound					MARIANI AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	11	344	76	51	482	35	13	48	15	111	17	278	14	61	370	13	30	63	8	114	1077
04:15 PM	13	416	64	24	517	36	17	23	5	81	15	270	19	34	338	6	23	39	8	76	1012
04:30 PM	5	440	82	25	552	46	12	51	8	117	12	264	13	23	312	7	14	64	3	88	1069
04:45 PM	23	417	53	29	522	39	11	58	4	112	19	302	10	40	371	8	18	73	7	106	1111
Total	52	1617	275	129	2073	156	53	180	32	421	63	1114	56	158	1391	34	85	239	26	384	4269
05:00 PM	18	560	69	37	684	61	10	66	6	143	15	379	26	35	455	8	23	95	6	132	1414
05:15 PM	20	535	58	26	639	66	15	99	4	184	15	323	36	38	412	14	28	95	1	138	1373
05:30 PM	21	578	44	27	670	69	10	84	1	164	13	416	20	24	473	14	20	105	7	146	1453
05:45 PM	12	461	58	32	563	64	9	74	7	154	9	361	18	29	417	14	19	111	0	144	1278
Total	71	2134	229	122	2556	260	44	323	18	645	52	1479	100	126	1757	50	90	406	14	560	5518
Grand Total	123	3751	504	251	4629	416	97	503	50	1066	115	2593	156	284	3148	84	175	645	40	944	9787
Apprch %	2.7	81	10.9	5.4		39	9.1	47.2	4.7		3.7	82.4	5	9		8.9	18.5	68.3	4.2		
Total %	1.3	38.3	5.1	2.6	47.3	4.3	1	5.1	0.5	10.9	1.2	26.5	1.6	2.9	32.2	0.9	1.8	6.6	0.4	9.6	

	N DE ANZA BLVD Southbound				MARIANI AVE Westbound				N DE ANZA BLVD Northbound				MARIANI AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	560	**69**	**647**	61	10	66	137	**15**	379	26	420	8	23	95	126	1330
05:15 PM	20	535	58	613	66	**15**	**99**	**180**	15	323	**36**	374	**14**	**28**	95	137	1304
05:30 PM	**21**	**578**	44	643	**69**	10	84	163	13	**416**	20	**449**	14	20	105	139	**1394**
05:45 PM	12	461	58	531	64	9	74	147	9	361	18	388	14	19	**111**	**144**	1210
Total Volume	71	2134	229	2434	260	44	323	627	52	1479	100	1631	50	90	406	546	5238
% App. Total	2.9	87.7	9.4		41.5	7	51.5		3.2	90.7	6.1		9.2	16.5	74.4		
PHF	.845	.923	.830	.940	.942	.733	.816	.871	.867	.889	.694	.908	.893	.804	.914	.948	.939

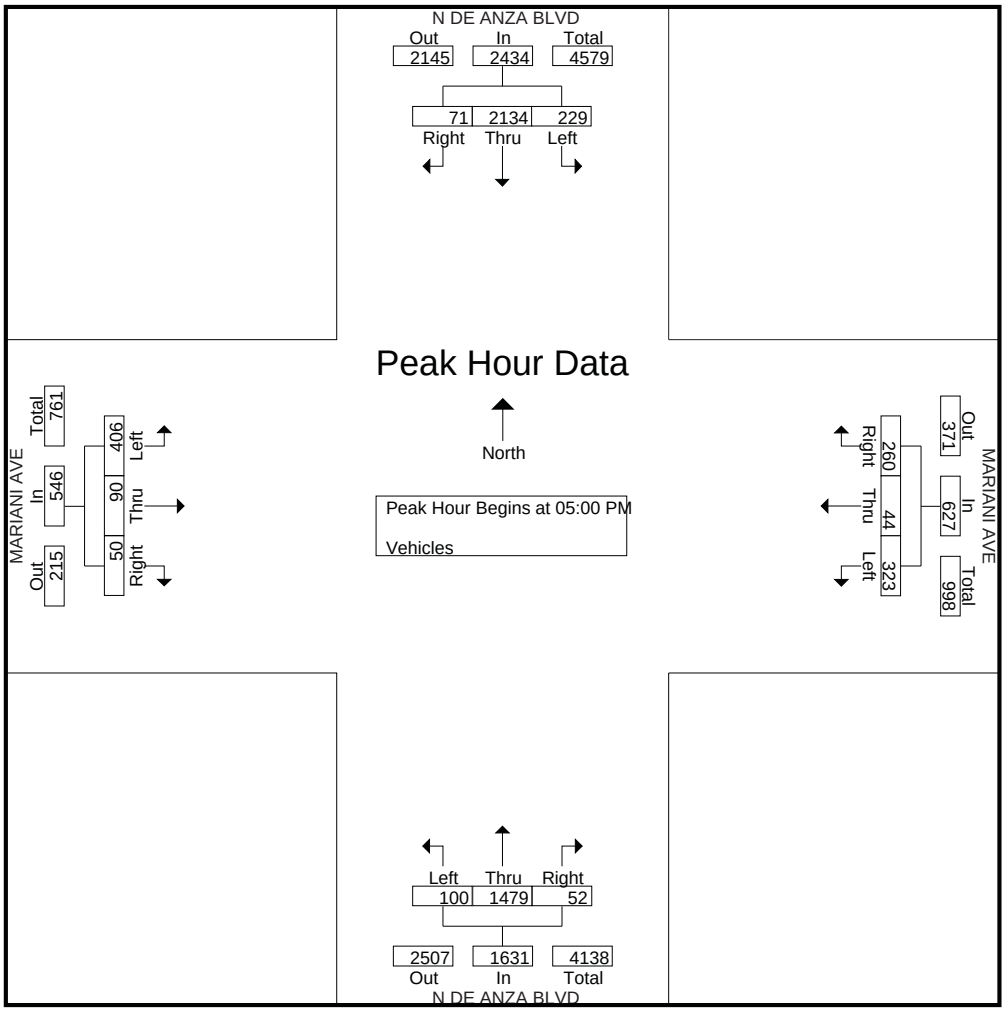
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 1PM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 1PM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

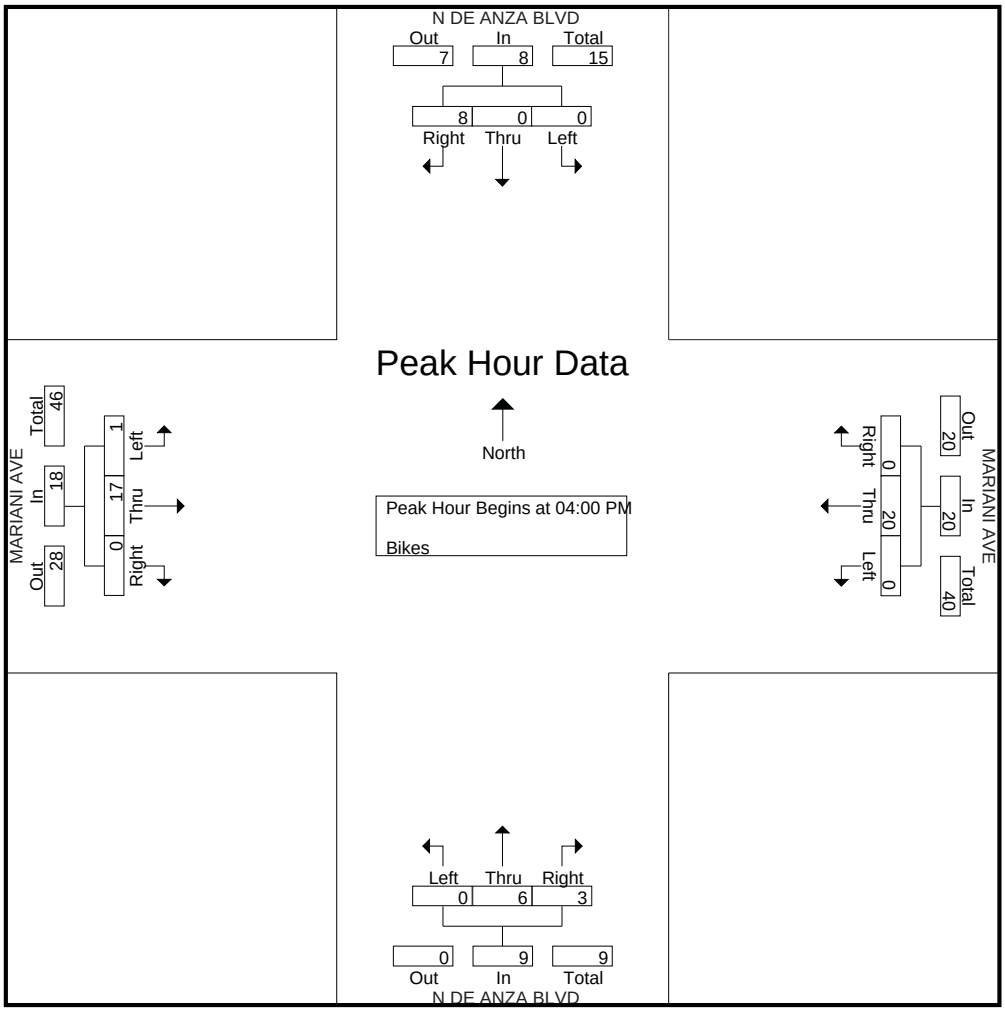
	N DE ANZA BLVD Southbound					MARIANI AVE Westbound					N DE ANZA BLVD Northbound					MARIANI AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	5	0	0	0	5	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	13
04:15 PM	2	0	0	0	2	0	4	0	0	4	0	2	0	0	2	0	0	1	0	1	9
04:30 PM	1	0	0	0	1	0	10	0	0	10	2	4	0	0	6	0	5	0	0	5	22
04:45 PM	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	0	6	0	0	6	11
Total	8	0	0	0	8	0	20	0	0	20	3	6	0	0	9	0	17	1	0	18	55
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	0	4	0	0	4	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	5
05:30 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	1	2	0	0	3	6
05:45 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	6	0	0	6	10
Total	0	0	0	0	0	1	0	0	0	1	1	10	0	0	11	1	16	0	0	17	29
Grand Total	8	0	0	0	8	1	20	0	0	21	4	16	0	0	20	1	33	1	0	35	84
Apprch %	100	0	0	0		4.8	95.2	0	0		20	80	0	0		2.9	94.3	2.9	0		
Total %	9.5	0	0	0	9.5	1.2	23.8	0	0	25	4.8	19	0	0	23.8	1.2	39.3	1.2	0	41.7	

	N DE ANZA BLVD Southbound				MARIANI AVE Westbound				N DE ANZA BLVD Northbound				MARIANI AVE Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**5**	0	0	**5**	0	2	0	2	0	0	0	0	0	**6**	0	**6**	13
04:15 PM	2	0	0	2	0	4	0	4	0	2	0	2	0	0	**1**	1	9
04:30 PM	1	0	0	1	0	**10**	0	**10**	**2**	**4**	0	**6**	0	5	0	5	**22**
04:45 PM	0	0	0	0	0	4	0	4	1	0	0	1	0	6	0	6	11
Total Volume	8	0	0	8	0	20	0	20	3	6	0	9	0	17	1	18	55
% App. Total	100	0	0		0	100	0		33.3	66.7	0		0	94.4	5.6		
PHF	.400	.000	.000	.400	.000	.500	.000	.500	.375	.375	.000	.375	.000	.708	.250	.750	.625

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 1PM FINAL
Site Code : 00000001
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 2AM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

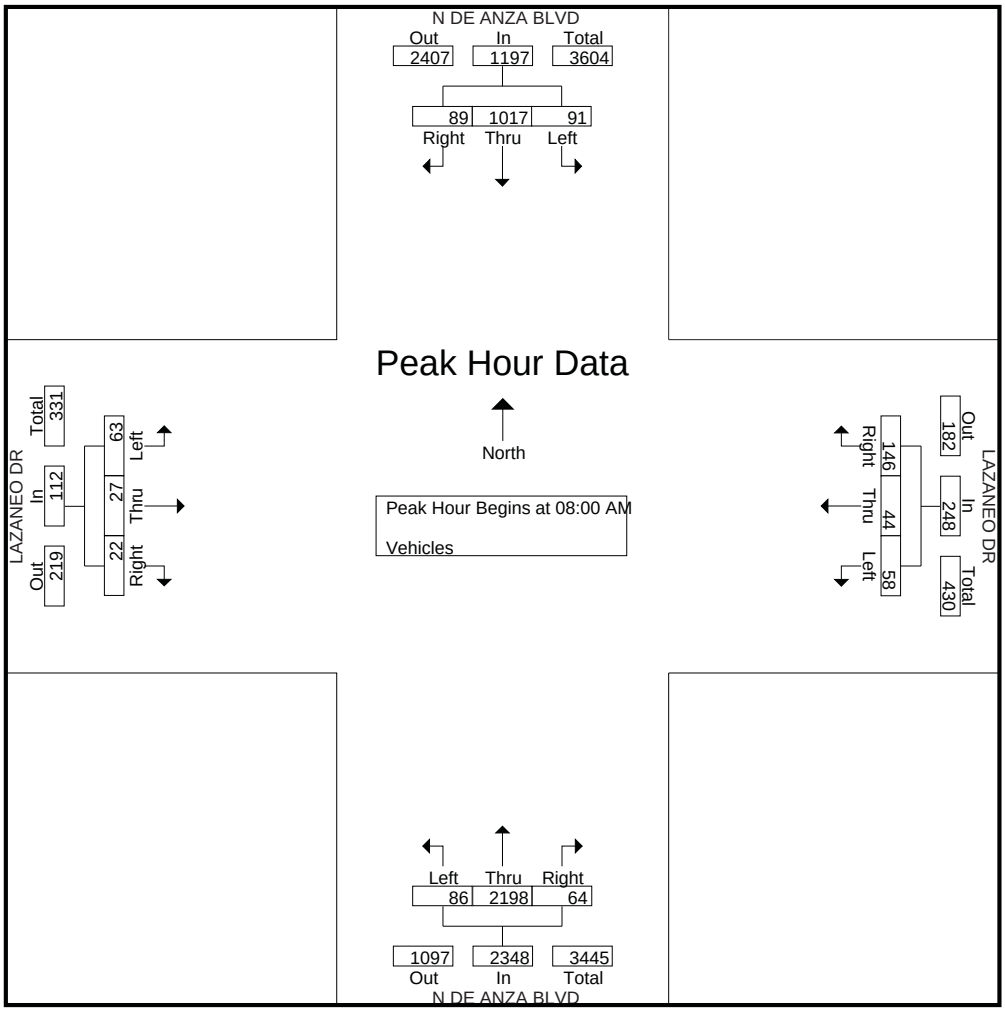
	N DE ANZA BLVD Southbound					LAZANEO DR Westbound					N DE ANZA BLVD Northbound					LAZANEO DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	8	131	9	0	148	26	4	11	0	41	20	234	2	2	258	3	12	5	3	23	470
07:15 AM	9	140	10	0	159	31	10	15	2	58	18	345	7	0	370	2	5	4	5	16	603
07:30 AM	6	136	13	1	156	25	3	4	0	32	16	403	14	2	435	5	5	11	6	27	650
07:45 AM	8	193	20	2	223	28	10	12	3	53	39	525	13	3	580	3	15	8	8	34	890
Total	31	600	52	3	686	110	27	42	5	184	93	1507	36	7	1643	13	37	28	22	100	2613
08:00 AM	18	275	10	1	304	43	10	15	4	72	26	508	13	1	548	5	10	12	3	30	954
08:15 AM	18	306	14	3	341	37	8	18	10	73	9	589	20	1	619	5	8	13	6	32	1065
08:30 AM	29	198	35	1	263	30	12	12	9	63	10	585	28	2	625	3	7	16	6	32	983
08:45 AM	24	238	32	3	297	36	14	13	6	69	19	516	25	5	565	9	2	22	6	39	970
Total	89	1017	91	8	1205	146	44	58	29	277	64	2198	86	9	2357	22	27	63	21	133	3972
Grand Total	120	1617	143	11	1891	256	71	100	34	461	157	3705	122	16	4000	35	64	91	43	233	6585
Apprch %	6.3	85.5	7.6	0.6		55.5	15.4	21.7	7.4		3.9	92.6	3	0.4		15	27.5	39.1	18.5		
Total %	1.8	24.6	2.2	0.2	28.7	3.9	1.1	1.5	0.5	7	2.4	56.3	1.9	0.2	60.7	0.5	1	1.4	0.7	3.5	

	N DE ANZA BLVD Southbound				LAZANEO DR Westbound				N DE ANZA BLVD Northbound				LAZANEO DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	18	275	10	303	**43**	10	15	**68**	**26**	508	13	547	5	**10**	12	27	945
08:15 AM	18	**306**	14	**338**	37	8	**18**	63	9	**589**	20	618	5	8	13	26	**1045**
08:30 AM	**29**	198	**35**	262	30	12	12	54	10	585	**28**	**623**	3	7	16	26	965
08:45 AM	24	238	32	294	36	**14**	13	63	19	516	25	560	**9**	2	**22**	**33**	950
Total Volume	89	1017	91	1197	146	44	58	248	64	2198	86	2348	22	27	63	112	3905
% App. Total	7.4	85	7.6		58.9	17.7	23.4		2.7	93.6	3.7		19.6	24.1	56.2		
PHF	.767	.831	.650	.885	.849	.786	.806	.912	.615	.933	.768	.942	.611	.675	.716	.848	.934

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 2AM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 2AM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	N DE ANZA BLVD Southbound					LAZANEO DR Westbound					N DE ANZA BLVD Northbound					LAZANEO DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
07:45 AM	0	0	0	0	0	1	1	0	0	2	1	1	0	0	2	0	0	0	0	0	4
Total	0	4	0	0	4	1	2	0	0	3	1	1	0	0	2	0	0	0	0	0	9
08:00 AM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3
08:15 AM	0	2	1	0	3	0	1	0	0	1	0	5	0	0	5	0	0	0	0	0	9
08:30 AM	2	3	0	0	5	0	3	0	0	3	0	2	0	0	2	0	0	0	0	0	10
08:45 AM	2	3	0	0	5	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	10
Total	4	9	1	0	14	0	5	0	0	5	0	12	0	0	12	0	1	0	0	1	32
Grand Total	4	13	1	0	18	1	7	0	0	8	1	13	0	0	14	0	1	0	0	1	41
Apprch %	22.2	72.2	5.6	0		12.5	87.5	0	0		7.1	92.9	0	0		0	100	0	0		
Total %	9.8	31.7	2.4	0	43.9	2.4	17.1	0	0	19.5	2.4	31.7	0	0	34.1	0	2.4	0	0	2.4	

	N DE ANZA BLVD Southbound				LAZANEO DR Westbound				N DE ANZA BLVD Northbound				LAZANEO DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
08:15 AM	0	2	**1**	3	0	1	0	1	0	**5**	0	**5**	0	0	0	0	9
08:30 AM	**2**	**3**	0	**5**	0	**3**	0	**3**	0	2	0	2	0	0	0	0	**10**
08:45 AM	2	3	0	5	0	0	0	0	0	4	0	4	0	**1**	0	**1**	10
Total Volume	4	9	1	14	0	5	0	5	0	12	0	12	0	1	0	1	32
% App. Total	28.6	64.3	7.1		0	100	0		0	100	0		0	100	0		
PHF	.500	.750	.250	.700	.000	.417	.000	.417	.000	.600	.000	.600	.000	.250	.000	.250	.800

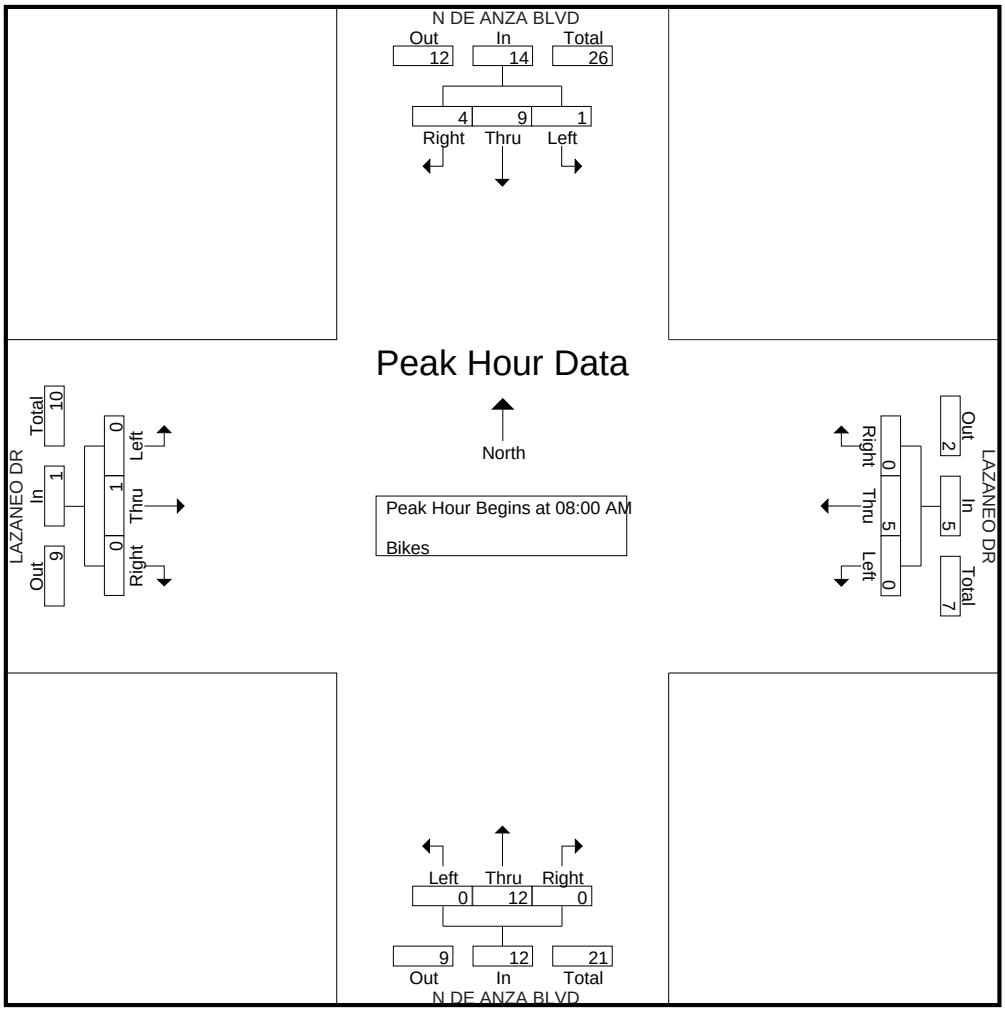
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 2AM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 2PM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

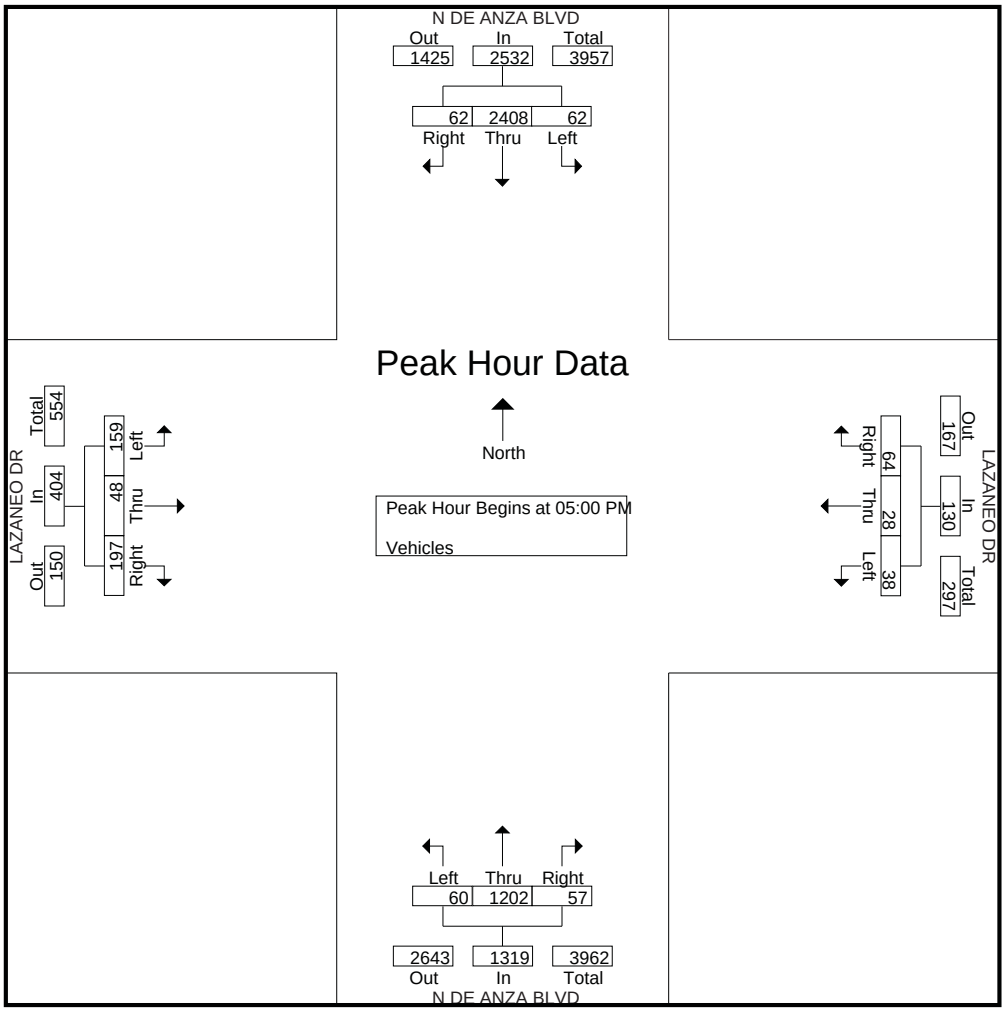
	N DE ANZA BLVD Southbound					LAZANEO DR Westbound					N DE ANZA BLVD Northbound					LAZANEO DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	10	478	15	3	506	16	7	15	17	55	13	276	10	0	299	17	8	25	5	55	915
04:15 PM	8	472	12	1	493	12	8	8	8	36	7	215	9	1	232	18	13	26	3	60	821
04:30 PM	20	575	12	0	607	7	3	4	8	22	14	243	6	0	263	14	9	18	7	48	940
04:45 PM	15	517	14	2	548	15	10	9	10	44	14	270	12	0	296	31	10	34	8	83	971
Total	53	2042	53	6	2154	50	28	36	43	157	48	1004	37	1	1090	80	40	103	23	246	3647
05:00 PM	18	561	11	1	591	10	3	10	12	35	13	315	24	1	353	36	5	41	9	91	1070
05:15 PM	20	668	12	2	702	30	11	11	9	61	10	277	18	1	306	55	16	33	6	110	1179
05:30 PM	10	556	15	0	581	14	6	11	4	35	10	295	10	1	316	51	14	41	2	108	1040
05:45 PM	14	623	24	5	666	10	8	6	15	39	24	315	8	0	347	55	13	44	3	115	1167
Total	62	2408	62	8	2540	64	28	38	40	170	57	1202	60	3	1322	197	48	159	20	424	4456
Grand Total	115	4450	115	14	4694	114	56	74	83	327	105	2206	97	4	2412	277	88	262	43	670	8103
Apprch %	2.4	94.8	2.4	0.3		34.9	17.1	22.6	25.4		4.4	91.5	4	0.2		41.3	13.1	39.1	6.4		
Total %	1.4	54.9	1.4	0.2	57.9	1.4	0.7	0.9	1	4	1.3	27.2	1.2	0	29.8	3.4	1.1	3.2	0.5	8.3	

	N DE ANZA BLVD Southbound				LAZANEO DR Westbound				N DE ANZA BLVD Northbound				LAZANEO DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	18	561	11	590	10	3	10	23	13	**315**	**24**	**352**	36	5	41	82	1047
05:15 PM	**20**	**668**	12	**700**	**30**	**11**	**11**	**52**	10	277	18	305	**55**	**16**	33	104	**1161**
05:30 PM	10	556	15	581	14	6	11	31	10	295	10	315	51	14	41	106	1033
05:45 PM	14	623	**24**	661	10	8	6	24	**24**	315	8	347	55	13	**44**	**112**	1144
Total Volume	62	2408	62	2532	64	28	38	130	57	1202	60	1319	197	48	159	404	4385
% App. Total	2.4	95.1	2.4		49.2	21.5	29.2		4.3	91.1	4.5		48.8	11.9	39.4		
PHF	.775	.901	.646	.904	.533	.636	.864	.625	.594	.954	.625	.937	.895	.750	.903	.902	.944

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 2PM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 2PM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

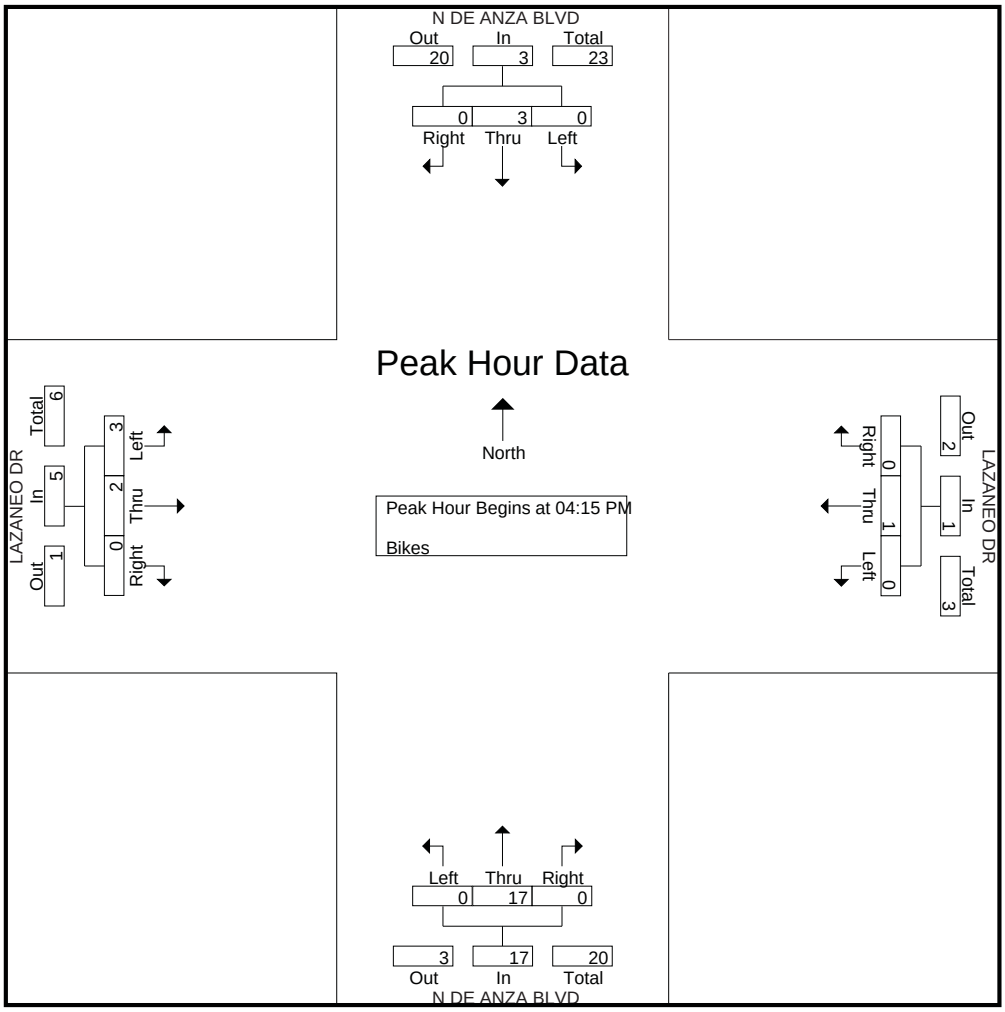
	N DE ANZA BLVD Southbound					LAZANEO DR Westbound					N DE ANZA BLVD Northbound					LAZANEO DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	1	0	1	0	2	0	0	2	0	1	0	0	1	0	0	1	0	1	5
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	0	1	0	1	4
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	1	0	0	1	9
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	2	0	2	7
Total	0	3	1	0	4	0	3	0	0	3	0	13	0	0	13	0	1	4	0	5	25
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	1	0	0	1	6
05:15 PM	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	1	0	0	1	4
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
05:45 PM	0	0	0	0	0	0	1	1	0	2	0	3	0	0	3	0	0	1	0	1	6
Total	0	0	0	0	0	1	1	1	0	3	0	12	0	0	12	0	4	1	0	5	20
Grand Total	0	3	1	0	4	1	4	1	0	6	0	25	0	0	25	0	5	5	0	10	45
Apprch %	0	75	25	0		16.7	66.7	16.7	0		0	100	0	0		0	50	50	0		
Total %	0	6.7	2.2	0	8.9	2.2	8.9	2.2	0	13.3	0	55.6	0	0	55.6	0	11.1	11.1	0	22.2	

	N DE ANZA BLVD Southbound				LAZANEO DR Westbound				N DE ANZA BLVD Northbound				LAZANEO DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	**1**	0	**1**	0	2	0	2	0	0	1	1	4
04:30 PM	0	1	0	1	0	0	0	0	0	**7**	0	**7**	0	**1**	0	1	**9**
04:45 PM	0	**2**	0	**2**	0	0	0	0	0	3	0	3	0	0	**2**	**2**	7
05:00 PM	0	0	0	0	0	0	0	0	0	5	0	5	0	1	0	1	6
Total Volume	0	3	0	3	0	1	0	1	0	17	0	17	0	2	3	5	26
% App. Total	0	100	0		0	100	0		0	100	0		0	40	60		
PHF	.000	.375	.000	.375	.000	.250	.000	.250	.000	.607	.000	.607	.000	.500	.375	.625	.722

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 2PM FINAL
Site Code : 00000002
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

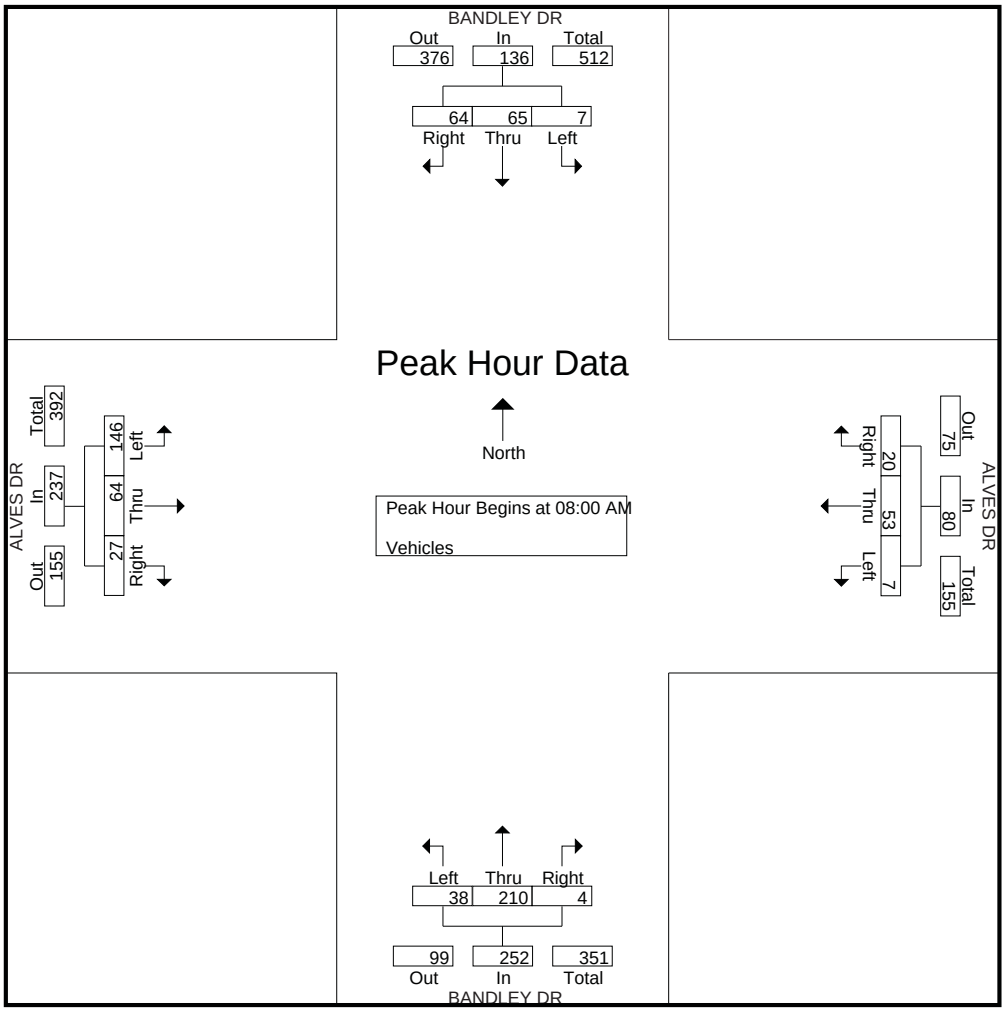
	BANDLEY DR Southbound					ALVES DR Westbound					BANDLEY DR Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	8	2	2	4	16	2	10	1	0	13	0	6	2	0	8	5	5	17	1	28	65
07:15 AM	16	9	1	1	27	2	10	2	0	14	2	15	4	1	22	0	7	14	1	22	85
07:30 AM	3	3	2	4	12	3	6	0	0	9	1	26	3	1	31	3	9	17	3	32	84
07:45 AM	10	8	3	1	22	1	19	2	1	23	2	23	10	3	38	8	9	34	2	53	136
Total	37	22	8	10	77	8	45	5	1	59	5	70	19	5	99	16	30	82	7	135	370
08:00 AM	23	17	2	2	44	3	15	2	1	21	2	31	7	1	41	9	20	40	4	73	179
08:15 AM	13	20	2	0	35	3	12	3	1	19	1	37	11	0	49	4	16	30	1	51	154
08:30 AM	10	10	1	5	26	10	14	2	3	29	0	75	12	1	88	6	8	36	4	54	197
08:45 AM	18	18	2	3	41	4	12	0	0	16	1	67	8	0	76	8	20	40	3	71	204
Total	64	65	7	10	146	20	53	7	5	85	4	210	38	2	254	27	64	146	12	249	734
Grand Total	101	87	15	20	223	28	98	12	6	144	9	280	57	7	353	43	94	228	19	384	1104
Apprch %	45.3	39	6.7	9		19.4	68.1	8.3	4.2		2.5	79.3	16.1	2		11.2	24.5	59.4	4.9		
Total %	9.1	7.9	1.4	1.8	20.2	2.5	8.9	1.1	0.5	13	0.8	25.4	5.2	0.6	32	3.9	8.5	20.7	1.7	34.8	

	BANDLEY DR Southbound				ALVES DR Westbound				BANDLEY DR Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**23**	17	**2**	**42**	3	**15**	2	20	**2**	31	7	40	**9**	**20**	**40**	**69**	171
08:15 AM	13	**20**	2	35	3	12	**3**	18	1	37	11	49	4	16	30	50	152
08:30 AM	10	10	1	21	**10**	14	2	**26**	0	**75**	**12**	**87**	6	8	36	50	184
08:45 AM	18	18	2	38	4	12	0	16	1	67	8	76	8	20	40	68	**198**
Total Volume	64	65	7	136	20	53	7	80	4	210	38	252	27	64	146	237	705
% App. Total	47.1	47.8	5.1		25	66.2	8.8		1.6	83.3	15.1		11.4	27	61.6		
PHF	.696	.813	.875	.810	.500	.883	.583	.769	.500	.700	.792	.724	.750	.800	.913	.859	.890

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

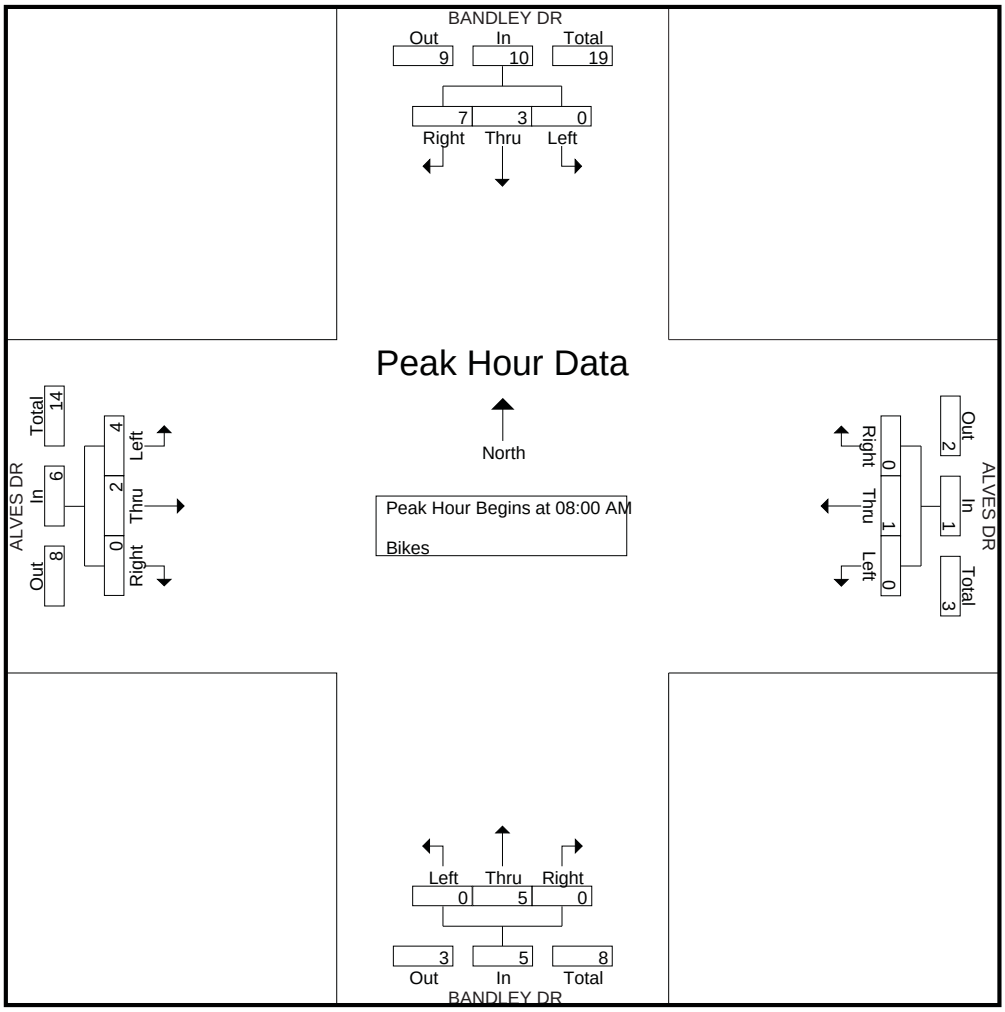
	BANDLEY DR Southbound					ALVES DR Westbound					BANDLEY DR Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	3
Total	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	1	3	0	4	9
08:00 AM	1	2	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	5
08:15 AM	1	0	0	0	1	0	1	0	0	1	0	3	0	0	3	0	1	0	0	1	6
08:30 AM	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
08:45 AM	3	0	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	2	0	2	7
Total	7	3	0	0	10	0	1	0	0	1	0	5	0	0	5	0	2	4	0	6	22
Grand Total	7	5	0	0	12	0	1	0	0	1	0	8	0	0	8	0	3	7	0	10	31
Apprch %	58.3	41.7	0	0		0	100	0	0		0	100	0	0		0	30	70	0		
Total %	22.6	16.1	0	0	38.7	0	3.2	0	0	3.2	0	25.8	0	0	25.8	0	9.7	22.6	0	32.3	

	BANDLEY DR Southbound				ALVES DR Westbound				BANDLEY DR Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	1	**2**	0	**3**	0	0	0	0	0	0	0	0	0	**1**	1	**2**	5
08:15 AM	1	0	0	1	0	**1**	0	**1**	0	**3**	0	**3**	0	1	0	1	6
08:30 AM	2	1	0	3	0	0	0	0	0	0	0	0	0	0	1	1	4
08:45 AM	**3**	0	0	3	0	0	0	0	0	2	0	2	0	0	**2**	2	**7**
Total Volume	7	3	0	10	0	1	0	1	0	5	0	5	0	2	4	6	22
% App. Total	70	30	0		0	100	0		0	100	0		0	33.3	66.7		
PHF	.583	.375	.000	.833	.000	.250	.000	.250	.000	.417	.000	.417	.000	.500	.500	.750	.786

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

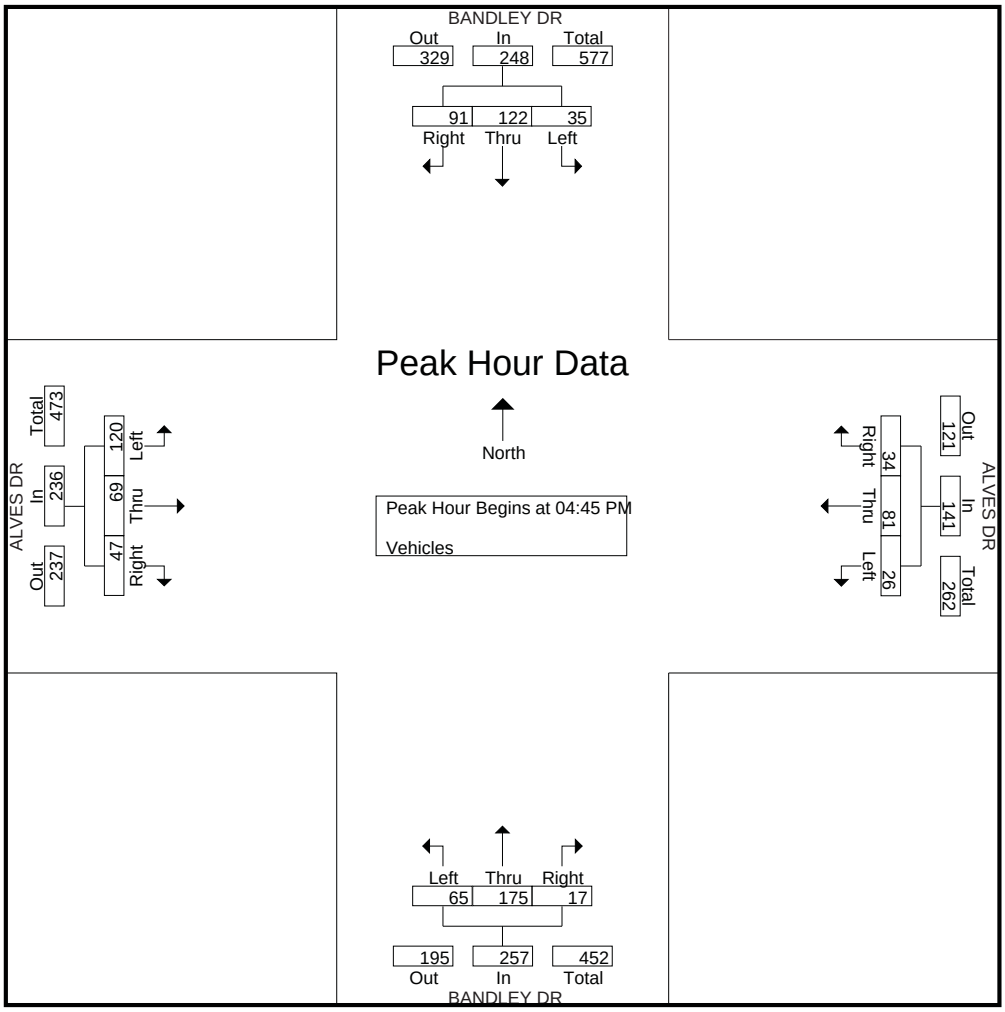
	BANDLEY DR Southbound					ALVES DR Westbound					BANDLEY DR Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	16	11	2	4	33	6	11	5	11	33	2	40	15	3	60	9	14	28	6	57	183
04:15 PM	16	16	6	7	45	2	7	4	4	17	4	25	18	6	53	10	24	25	7	66	181
04:30 PM	18	25	3	1	47	3	14	2	6	25	1	31	23	6	61	4	11	19	4	38	171
04:45 PM	18	33	5	8	64	8	21	11	5	45	5	44	15	4	68	12	25	29	4	70	247
Total	68	85	16	20	189	19	53	22	26	120	12	140	71	19	242	35	74	101	21	231	782
05:00 PM	22	28	12	12	74	8	24	3	4	39	4	36	15	2	57	12	11	26	1	50	220
05:15 PM	25	27	8	9	69	11	20	3	0	34	4	50	17	6	77	7	15	39	2	63	243
05:30 PM	26	34	10	6	76	7	16	9	5	37	4	45	18	2	69	16	18	26	0	60	242
05:45 PM	17	33	6	5	61	4	27	10	1	42	6	40	19	2	67	11	18	32	5	66	236
Total	90	122	36	32	280	30	87	25	10	152	18	171	69	12	270	46	62	123	8	239	941
Grand Total	158	207	52	52	469	49	140	47	36	272	30	311	140	31	512	81	136	224	29	470	1723
Apprch %	33.7	44.1	11.1	11.1		18	51.5	17.3	13.2		5.9	60.7	27.3	6.1		17.2	28.9	47.7	6.2		
Total %	9.2	12	3	3	27.2	2.8	8.1	2.7	2.1	15.8	1.7	18	8.1	1.8	29.7	4.7	7.9	13	1.7	27.3	

	BANDLEY DR Southbound				ALVES DR Westbound				BANDLEY DR Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	18	33	5	56	8	21	**11**	**40**	**5**	44	15	64	12	**25**	29	**66**	226
05:00 PM	22	28	**12**	62	8	**24**	3	35	4	36	15	55	12	11	26	49	201
05:15 PM	25	27	8	60	**11**	20	3	34	4	**50**	17	**71**	7	15	**39**	61	226
05:30 PM	**26**	**34**	10	**70**	7	16	9	32	4	45	**18**	67	**16**	18	26	60	**229**
Total Volume	91	122	35	248	34	81	26	141	17	175	65	257	47	69	120	236	882
% App. Total	36.7	49.2	14.1		24.1	57.4	18.4		6.6	68.1	25.3		19.9	29.2	50.8		
PHF	.875	.897	.729	.886	.773	.844	.591	.881	.850	.875	.903	.905	.734	.690	.769	.894	.963

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	BANDLEY DR Southbound					ALVES DR Westbound					BANDLEY DR Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	0	0	0	1	0	0	0	0	0	0	2	0	0	2	1	0	2	0	3	6
04:15 PM	1	1	0	0	2	0	0	0	0	0	0	1	1	0	2	0	0	2	0	2	6
04:30 PM	2	0	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
04:45 PM	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	4
Total	6	1	1	0	8	0	1	0	0	1	0	4	1	0	5	1	0	5	0	6	20
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	8
Total	6	2	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	13
Grand Total	12	3	1	0	16	0	1	0	0	1	0	4	1	0	5	1	0	10	0	11	33
Apprch %	75	18.8	6.2	0		0	100	0	0		0	80	20	0		9.1	0	90.9	0		
Total %	36.4	9.1	3	0	48.5	0	3	0	0	3	0	12.1	3	0	15.2	3	0	30.3	0	33.3	

	BANDLEY DR Southbound				ALVES DR Westbound				BANDLEY DR Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	0	0	1	0	0	0	0	0	**2**	0	**2**	**1**	0	**2**	**3**	**6**
04:15 PM	1	**1**	0	2	0	0	0	0	0	1	**1**	2	0	0	2	2	6
04:30 PM	**2**	0	**1**	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
04:45 PM	2	0	0	2	0	**1**	0	**1**	0	0	0	0	0	0	1	1	4
Total Volume	6	1	1	8	0	1	0	1	0	4	1	5	1	0	5	6	20
% App. Total	75	12.5	12.5		0	100	0		0	80	20		16.7	0	83.3		
PHF	.750	.250	.250	.667	.000	.250	.000	.250	.000	.500	.250	.625	.250	.000	.625	.500	.833

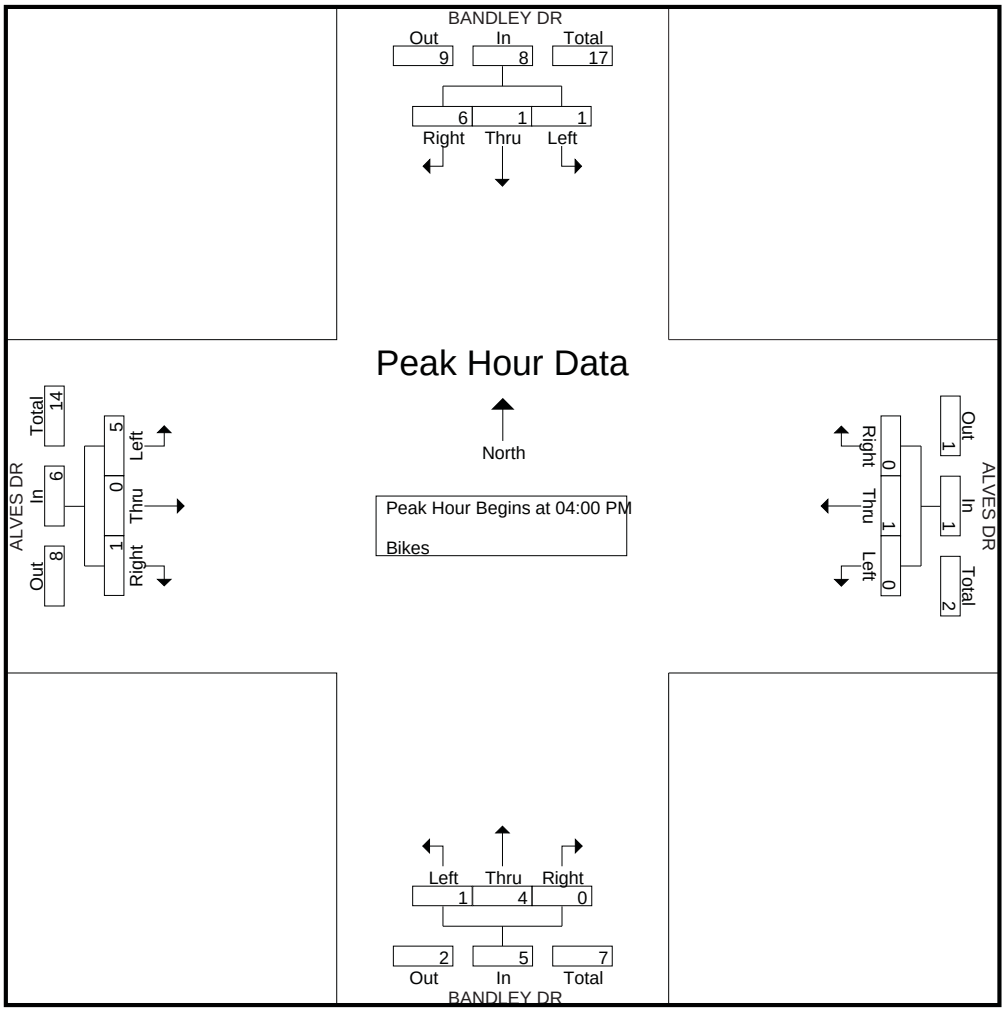
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4AM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	N DE ANZA BLVD Southbound					Westbound					N DE ANZA BLVD Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	13	133	0	0	146	0	0	0	0	0	0	237	0	0	237	10	0	0	3	13	396
07:15 AM	12	154	0	0	166	0	0	0	0	0	0	347	0	0	347	10	0	0	5	15	528
07:30 AM	9	141	0	0	150	0	0	0	0	0	0	426	0	0	426	13	0	0	10	23	599
07:45 AM	18	191	0	0	209	0	0	0	0	0	0	576	0	0	576	13	0	0	2	15	800
Total	52	619	0	0	671	0	0	0	0	0	0	1586	0	0	1586	46	0	0	20	66	2323
08:00 AM	18	312	0	0	330	0	0	0	0	0	0	538	0	0	538	26	0	0	1	27	895
08:15 AM	17	293	0	0	310	0	0	0	0	0	0	585	0	0	585	25	0	0	5	30	925
08:30 AM	19	196	0	0	215	0	0	0	0	0	0	629	0	0	629	13	0	0	5	18	862
08:45 AM	18	252	0	0	270	0	0	0	0	0	0	563	0	0	563	22	0	0	3	25	858
Total	72	1053	0	0	1125	0	0	0	0	0	0	2315	0	0	2315	86	0	0	14	100	3540
Grand Total	124	1672	0	0	1796	0	0	0	0	0	0	3901	0	0	3901	132	0	0	34	166	5863
Apprch %	6.9	93.1	0	0		0	0	0	0		0	100	0	0		79.5	0	0	20.5		
Total %	2.1	28.5	0	0	30.6	0	0	0	0	0	0	66.5	0	0	66.5	2.3	0	0	0.6	2.8	

	N DE ANZA BLVD Southbound				Westbound				N DE ANZA BLVD Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	18	**312**	0	**330**	0	0	0	0	0	538	0	538	**26**	0	0	**26**	894
08:15 AM	17	293	0	310	0	0	0	0	0	585	0	585	25	0	0	25	**920**
08:30 AM	**19**	196	0	215	0	0	0	0	0	**629**	0	**629**	13	0	0	13	857
08:45 AM	18	252	0	270	0	0	0	0	0	563	0	563	22	0	0	22	855
Total Volume	72	1053	0	1125	0	0	0	0	0	2315	0	2315	86	0	0	86	3526
% App. Total	6.4	93.6	0		0	0	0		0	100	0		100	0	0		
PHF	.947	.844	.000	.852	.000	.000	.000	.000	.000	.920	.000	.920	.827	.000	.000	.827	.958

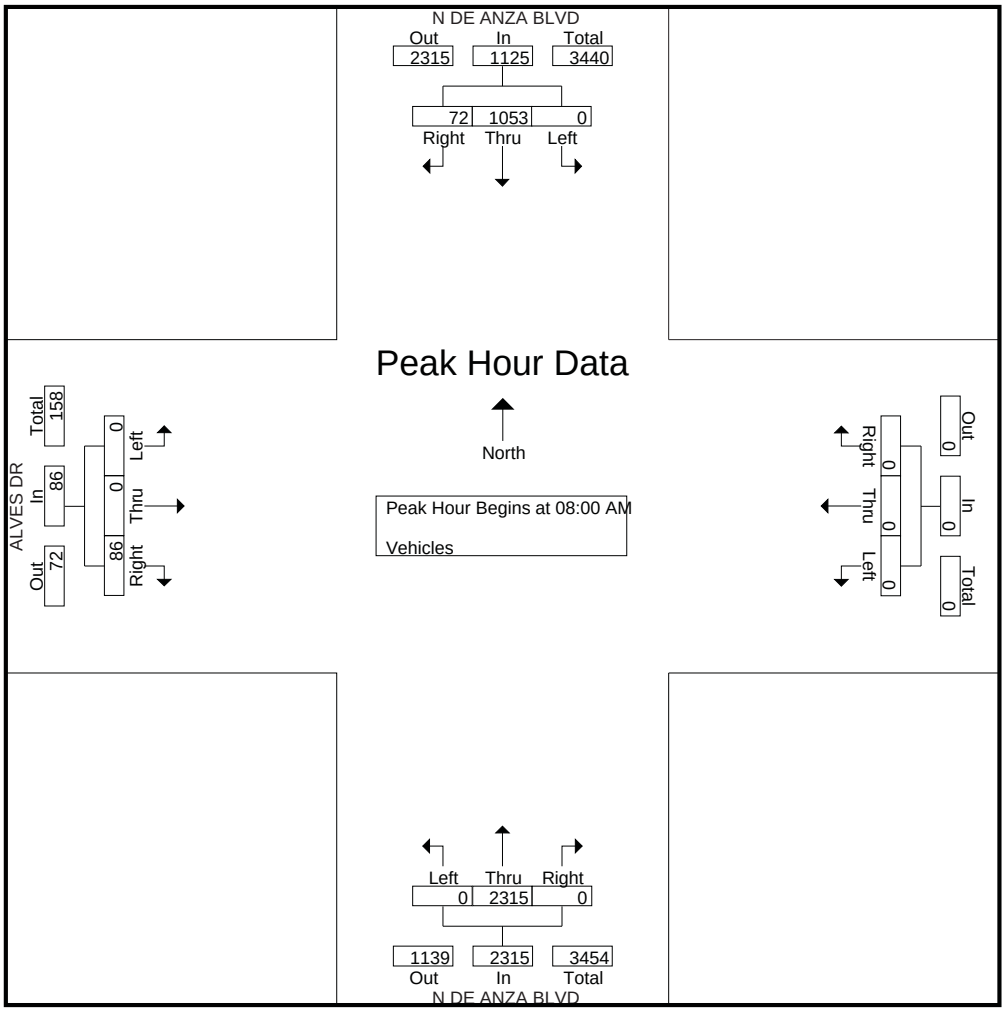
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4AM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4AM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	N DE ANZA BLVD Southbound					Westbound					N DE ANZA BLVD Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	2
07:30 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
08:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
08:15 AM	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5
08:30 AM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
Total	1	11	0	0	12	0	0	0	0	0	0	8	0	0	8	1	0	0	0	1	21
Grand Total	1	15	0	0	16	0	0	0	0	0	0	8	0	0	8	2	0	0	0	2	26
Apprch %	6.2	93.8	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
Total %	3.8	57.7	0	0	61.5	0	0	0	0	0	0	30.8	0	0	30.8	7.7	0	0	0	7.7	

	N DE ANZA BLVD Southbound				Westbound				N DE ANZA BLVD Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:15 AM	**1**	2	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
08:30 AM	0	**4**	0	**4**	0	0	0	0	0	0	0	0	**1**	0	0	**1**	5
08:45 AM	0	3	0	3	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**8**
Total Volume	1	11	0	12	0	0	0	0	0	8	0	8	1	0	0	1	21
% App. Total	8.3	91.7	0		0	0	0		0	100	0		100	0	0		
PHF	.250	.688	.000	.750	.000	.000	.000	.000	.000	.400	.000	.400	.250	.000	.000	.250	.656

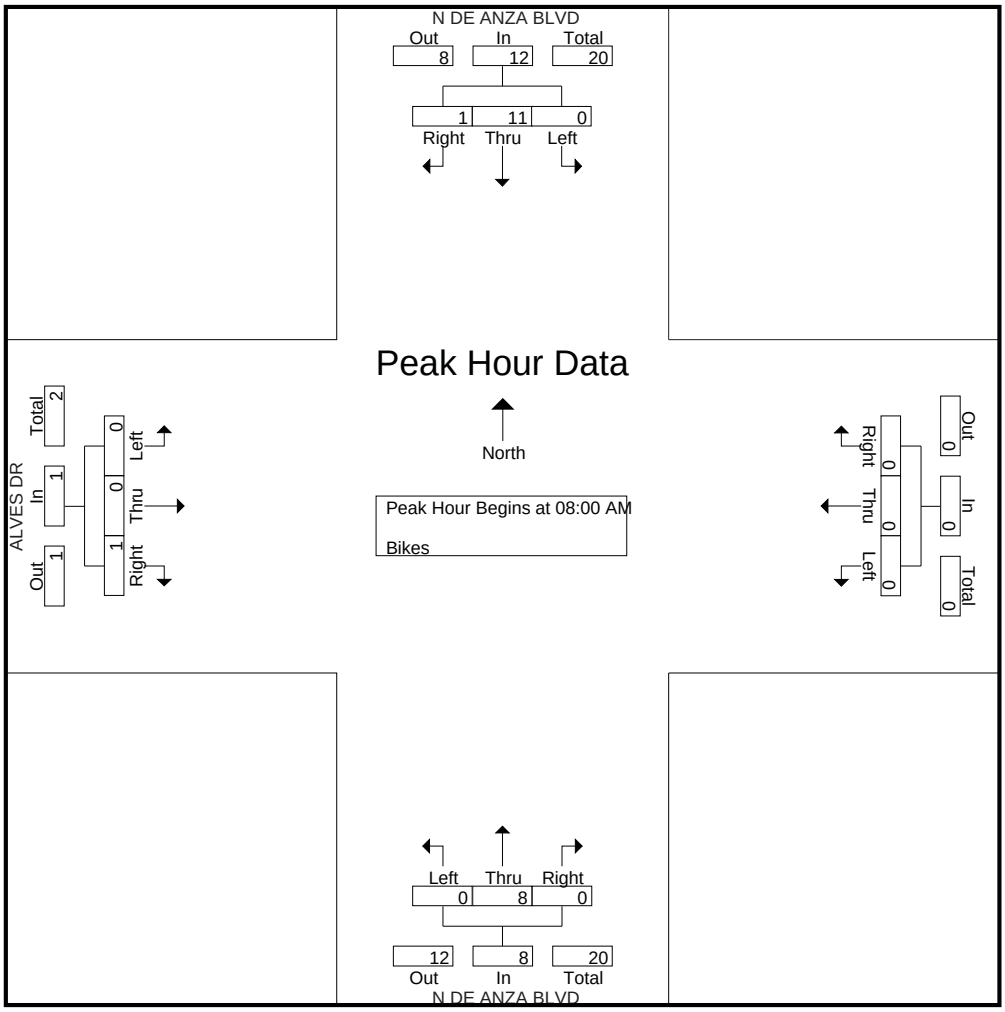
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4AM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4PM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	N DE ANZA BLVD Southbound					Westbound					N DE ANZA BLVD Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	18	467	0	0	485	0	0	0	0	0	0	286	0	0	286	16	0	0	1	17	788
04:15 PM	13	522	0	0	535	0	0	0	0	0	0	235	0	0	235	30	0	0	2	32	802
04:30 PM	22	552	0	0	574	0	0	0	0	0	0	273	0	0	273	15	0	0	4	19	866
04:45 PM	43	517	0	0	560	0	0	0	0	0	0	282	0	0	282	31	0	0	10	41	883
Total	96	2058	0	0	2154	0	0	0	0	0	0	1076	0	0	1076	92	0	0	17	109	3339
05:00 PM	36	637	0	0	673	0	0	0	0	0	0	371	0	0	371	36	0	0	3	39	1083
05:15 PM	41	675	0	0	716	0	0	0	0	0	0	295	0	0	295	27	0	0	7	34	1045
05:30 PM	40	656	0	0	696	0	0	0	0	0	0	342	0	0	342	30	0	0	6	36	1074
05:45 PM	35	607	0	0	642	0	0	0	0	0	0	342	0	0	342	34	0	0	2	36	1020
Total	152	2575	0	0	2727	0	0	0	0	0	0	1350	0	0	1350	127	0	0	18	145	4222
Grand Total	248	4633	0	0	4881	0	0	0	0	0	0	2426	0	0	2426	219	0	0	35	254	7561
Apprch %	5.1	94.9	0	0		0	0	0	0		0	100	0	0		86.2	0	0	13.8		
Total %	3.3	61.3	0	0	64.6	0	0	0	0	0	0	32.1	0	0	32.1	2.9	0	0	0.5	3.4	

	N DE ANZA BLVD Southbound				Westbound				N DE ANZA BLVD Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	36	637	0	673	0	0	0	0	0	**371**	0	**371**	**36**	0	0	**36**	**1080**
05:15 PM	**41**	**675**	0	**716**	0	0	0	0	0	295	0	295	27	0	0	27	1038
05:30 PM	40	656	0	696	0	0	0	0	0	342	0	342	30	0	0	30	1068
05:45 PM	35	607	0	642	0	0	0	0	0	342	0	342	34	0	0	34	1018
Total Volume	152	2575	0	2727	0	0	0	0	0	1350	0	1350	127	0	0	127	4204
% App. Total	5.6	94.4	0		0	0	0		0	100	0		100	0	0		
PHF	.927	.954	.000	.952	.000	.000	.000	.000	.000	.910	.000	.910	.882	.000	.000	.882	.973

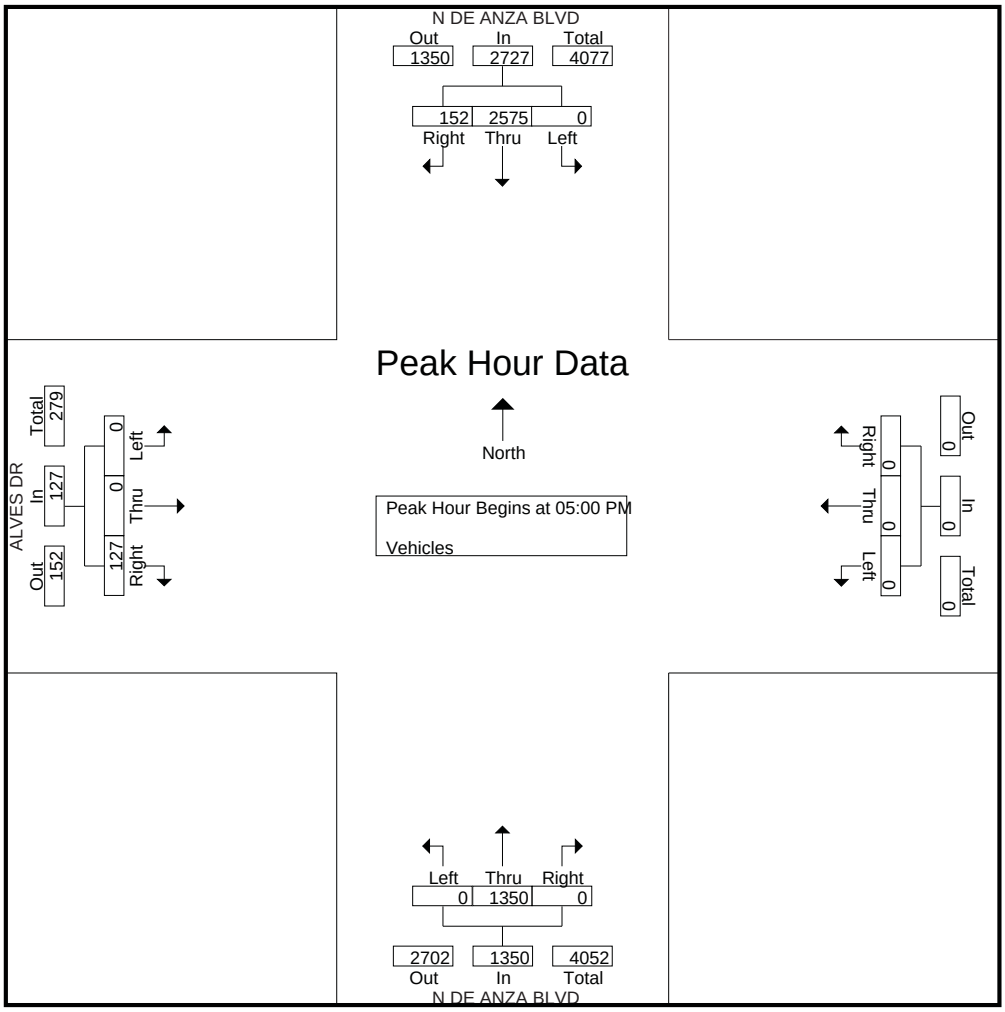
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4PM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4PM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	N DE ANZA BLVD Southbound					Westbound					N DE ANZA BLVD Northbound					ALVES DR Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	1	0	0	0	1	7
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
Total	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	16
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	7	0	0	7	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	9
Grand Total	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	1	0	0	0	1	25
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		100	0	0	0		
Total %	0	48	0	0	48	0	0	0	0	0	0	48	0	0	48	4	0	0	0	4	

	N DE ANZA BLVD Southbound				Westbound				N DE ANZA BLVD Northbound				ALVES DR Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	1	0	1	0	0	0	0	0	**5**	0	**5**	**1**	0	0	**1**	**7**
04:45 PM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
Total Volume	0	5	0	5	0	0	0	0	0	10	0	10	1	0	0	1	16
% App. Total	0	100	0		0	0	0		0	100	0		100	0	0		
PHF	.000	.417	.000	.417	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.571

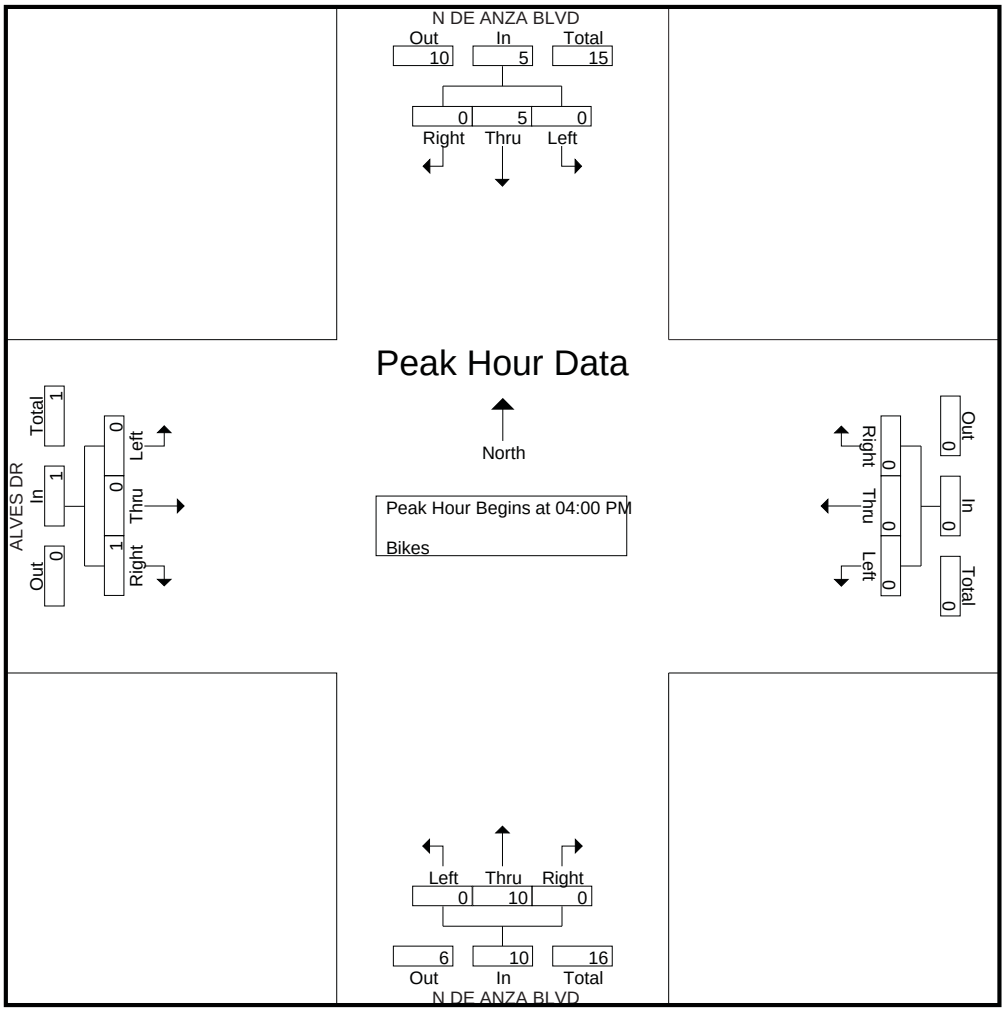
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 4PM FINAL
Site Code : 00000004
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 5AM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	MARY AVE Southbound					STEVENS CREEK BLVD Westbound					MARY AVE Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	40	2	11	3	56	11	143	15	9	178	1	0	9	0	10	21	70	18	0	109	353
07:15 AM	73	6	5	5	89	17	225	42	11	295	5	1	7	0	13	33	106	34	0	173	570
07:30 AM	37	3	10	1	51	24	186	37	1	248	2	1	16	0	19	17	145	57	0	219	537
07:45 AM	63	3	42	3	111	36	181	30	7	254	4	1	13	3	21	27	118	19	0	164	550
Total	213	14	68	12	307	88	735	124	28	975	12	3	45	3	63	98	439	128	0	665	2010
08:00 AM	63	5	21	14	103	53	191	40	6	290	4	0	16	0	20	29	153	24	0	206	619
08:15 AM	52	14	20	18	104	60	225	88	36	409	5	4	19	0	28	38	157	33	0	228	769
08:30 AM	48	4	26	14	92	40	241	32	23	336	7	3	18	1	29	42	174	37	0	253	710
08:45 AM	58	5	30	6	99	11	208	36	7	262	9	3	11	0	23	31	178	21	0	230	614
Total	221	28	97	52	398	164	865	196	72	1297	25	10	64	1	100	140	662	115	0	917	2712
Grand Total	434	42	165	64	705	252	1600	320	100	2272	37	13	109	4	163	238	1101	243	0	1582	4722
Apprch %	61.6	6	23.4	9.1		11.1	70.4	14.1	4.4		22.7	8	66.9	2.5		15	69.6	15.4	0		
Total %	9.2	0.9	3.5	1.4	14.9	5.3	33.9	6.8	2.1	48.1	0.8	0.3	2.3	0.1	3.5	5	23.3	5.1	0	33.5	

	MARY AVE Southbound				STEVENS CREEK BLVD Westbound				MARY AVE Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**63**	5	21	89	53	191	40	284	4	0	16	20	29	153	24	206	599
08:15 AM	52	**14**	20	86	**60**	225	**88**	**373**	5	**4**	**19**	**28**	38	157	33	228	**715**
08:30 AM	48	4	26	78	40	**241**	32	313	7	3	18	28	**42**	174	**37**	**253**	672
08:45 AM	58	5	**30**	**93**	11	208	36	255	**9**	3	11	23	31	**178**	21	230	601
Total Volume	221	28	97	346	164	865	196	1225	25	10	64	99	140	662	115	917	2587
% App. Total	63.9	8.1	28		13.4	70.6	16		25.3	10.1	64.6		15.3	72.2	12.5		
PHF	.877	.500	.808	.930	.683	.897	.557	.821	.694	.625	.842	.884	.833	.930	.777	.906	.905

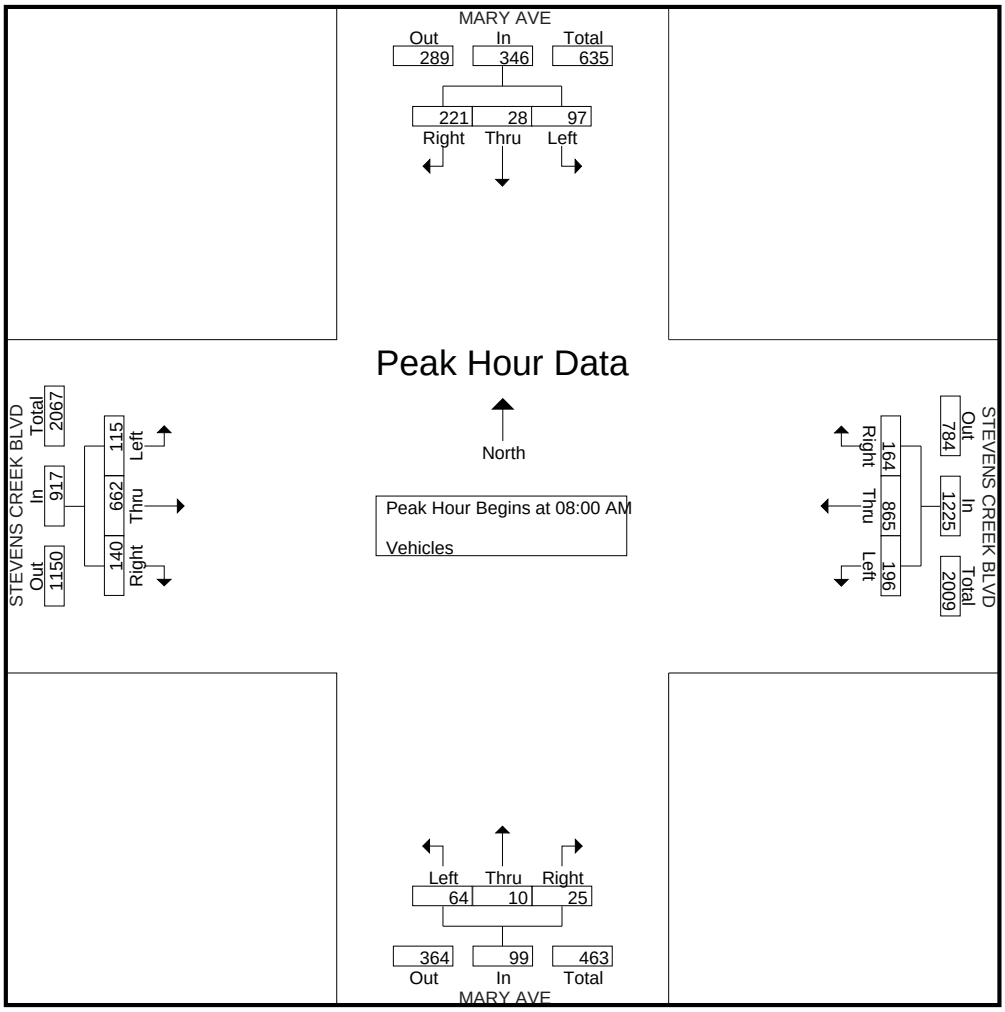
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 5AM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 5AM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	MARY AVE Southbound					STEVENS CREEK BLVD Westbound					MARY AVE Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	4
07:15 AM	0	2	0	0	2	0	2	0	0	2	0	2	0	0	2	0	1	1	0	2	8
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
07:45 AM	0	1	0	0	1	0	1	0	0	1	0	2	1	0	3	0	0	1	0	1	6
Total	1	3	1	0	5	0	4	0	0	4	0	6	1	0	7	0	1	3	0	4	20
08:00 AM	1	1	0	0	2	2	1	1	0	4	0	0	0	0	0	2	2	0	0	4	10
08:15 AM	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	1	0	0	0	1	5
08:30 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	3
Total	1	4	2	0	7	3	2	1	0	6	0	1	0	0	1	3	3	1	0	7	21
Grand Total	2	7	3	0	12	3	6	1	0	10	0	7	1	0	8	3	4	4	0	11	41
Apprch %	16.7	58.3	25	0		30	60	10	0		0	87.5	12.5	0		27.3	36.4	36.4	0		
Total %	4.9	17.1	7.3	0	29.3	7.3	14.6	2.4	0	24.4	0	17.1	2.4	0	19.5	7.3	9.8	9.8	0	26.8	

	MARY AVE Southbound				STEVENS CREEK BLVD Westbound				MARY AVE Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**2**	0	**2**	0	**2**	0	2	0	**2**	0	2	0	1	**1**	2	8
07:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
07:45 AM	0	1	0	1	0	1	0	1	0	2	**1**	**3**	0	0	1	1	6
08:00 AM	**1**	1	0	2	**2**	1	**1**	**4**	0	0	0	0	**2**	**2**	0	**4**	**10**
Total Volume	1	4	0	5	2	4	1	7	0	6	1	7	2	3	2	7	26
% App. Total	20	80	0		28.6	57.1	14.3		0	85.7	14.3		28.6	42.9	28.6		
PHF	.250	.500	.000	.625	.250	.500	.250	.438	.000	.750	.250	.583	.250	.375	.500	.438	.650

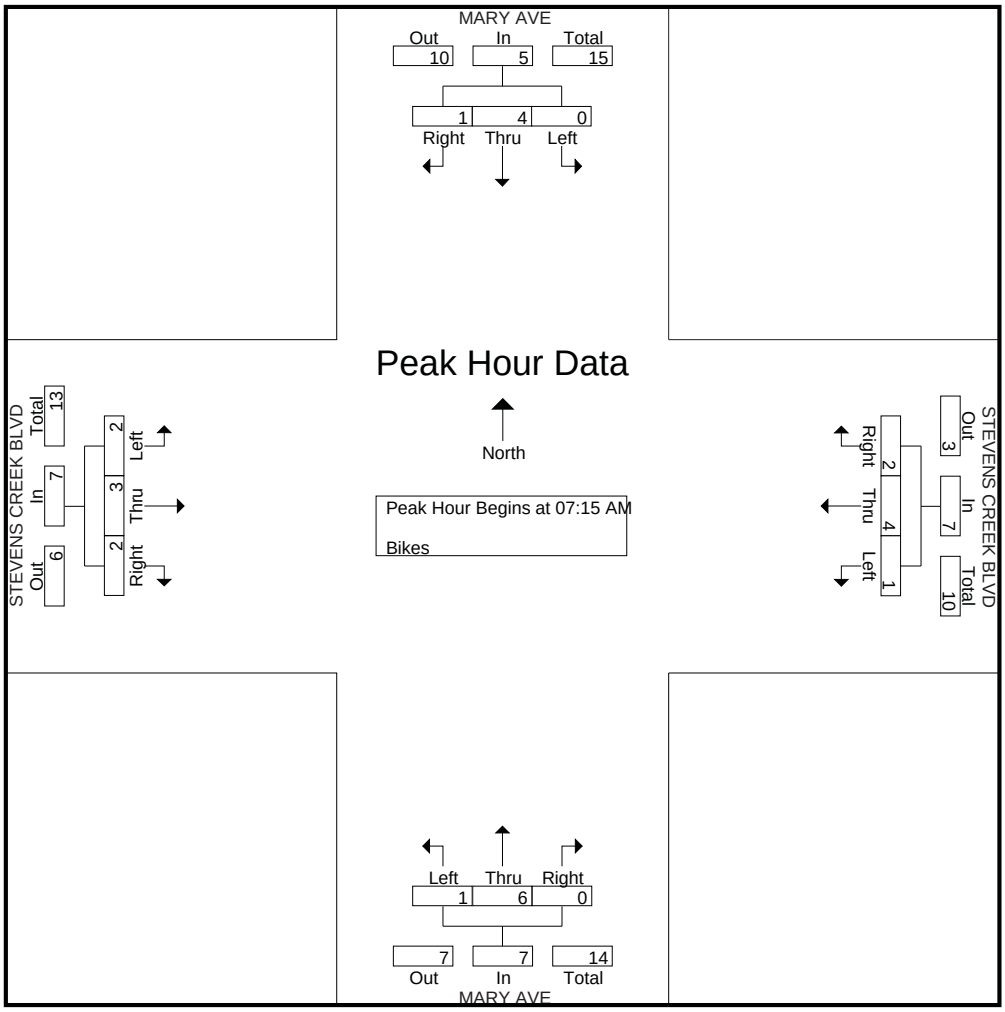
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 5AM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 5PM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	MARY AVE Southbound					STEVENS CREEK BLVD Westbound					MARY AVE Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	38	9	31	17	95	28	204	30	31	293	10	4	46	3	63	16	291	37	1	345	796
04:15 PM	27	6	41	15	89	35	189	30	31	285	5	4	28	1	38	20	223	52	0	295	707
04:30 PM	31	5	42	11	89	23	218	15	15	271	13	3	31	1	48	18	260	49	0	327	735
04:45 PM	17	6	40	17	80	24	188	22	25	259	6	3	37	2	48	14	268	35	0	317	704
Total	113	26	154	60	353	110	799	97	102	1108	34	14	142	7	197	68	1042	173	1	1284	2942
05:00 PM	30	5	32	15	82	26	232	25	26	309	13	5	34	5	57	22	331	52	0	405	853
05:15 PM	42	9	48	6	105	29	234	26	33	322	15	5	47	1	68	22	364	55	0	441	936
05:30 PM	51	28	50	20	149	34	207	29	37	307	13	5	32	1	51	17	343	55	0	415	922
05:45 PM	28	11	36	15	90	28	258	22	33	341	15	0	39	3	57	33	368	48	0	449	937
Total	151	53	166	56	426	117	931	102	129	1279	56	15	152	10	233	94	1406	210	0	1710	3648
Grand Total	264	79	320	116	779	227	1730	199	231	2387	90	29	294	17	430	162	2448	383	1	2994	6590
Apprch %	33.9	10.1	41.1	14.9		9.5	72.5	8.3	9.7		20.9	6.7	68.4	4		5.4	81.8	12.8	0		
Total %	4	1.2	4.9	1.8	11.8	3.4	26.3	3	3.5	36.2	1.4	0.4	4.5	0.3	6.5	2.5	37.1	5.8	0	45.4	

	MARY AVE Southbound				STEVENS CREEK BLVD Westbound				MARY AVE Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	30	5	32	67	26	232	25	283	13	**5**	34	52	22	331	52	405	807
05:15 PM	42	9	48	99	29	234	26	289	**15**	5	**47**	**67**	22	364	**55**	441	**896**
05:30 PM	**51**	**28**	**50**	**129**	**34**	207	**29**	270	13	5	32	50	17	343	55	415	864
05:45 PM	28	11	36	75	28	**258**	22	**308**	15	0	39	54	**33**	**368**	48	**449**	886
Total Volume	151	53	166	370	117	931	102	1150	56	15	152	223	94	1406	210	1710	3453
% App. Total	40.8	14.3	44.9		10.2	81	8.9		25.1	6.7	68.2		5.5	82.2	12.3		
PHF	.740	.473	.830	.717	.860	.902	.879	.933	.933	.750	.809	.832	.712	.955	.955	.952	.963

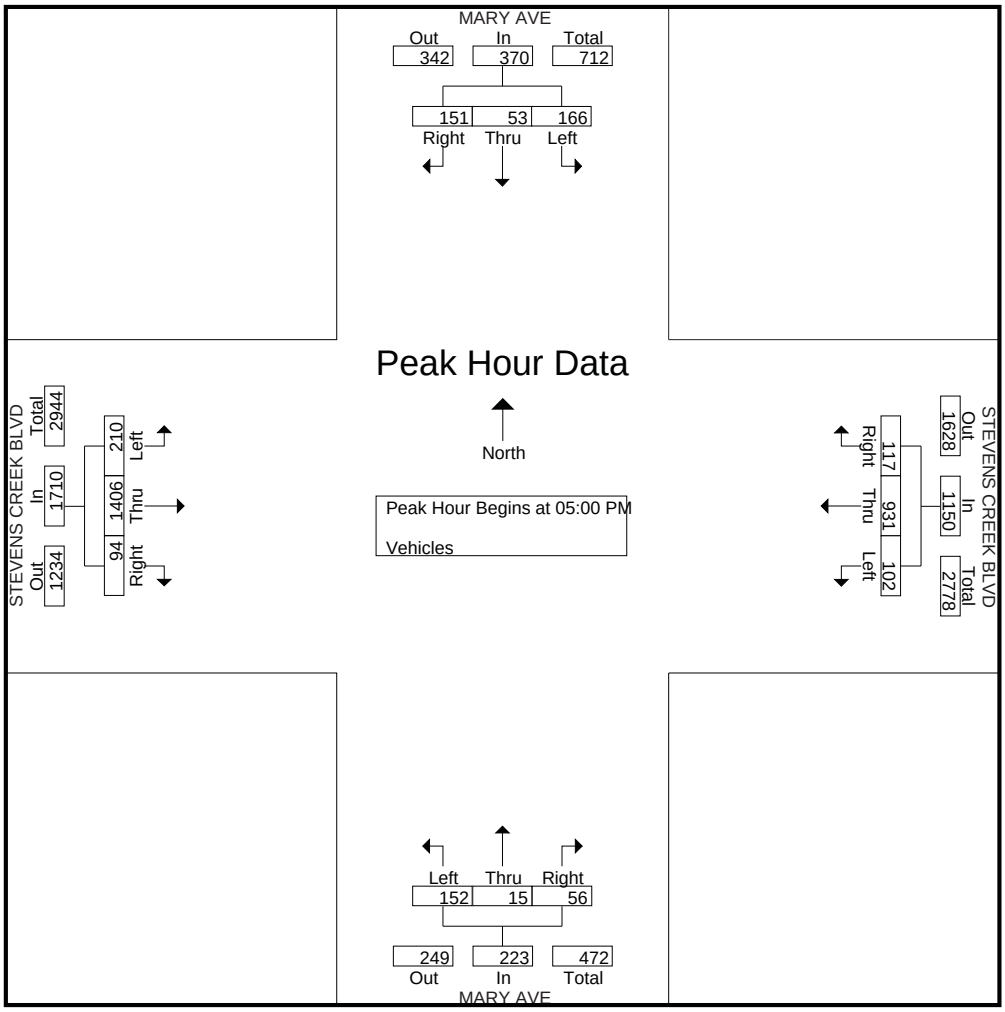
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 5PM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 5PM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	MARY AVE Southbound					STEVENS CREEK BLVD Westbound					MARY AVE Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
04:30 PM	0	2	0	0	2	2	1	0	0	3	1	0	0	0	1	0	0	0	0	0	6
04:45 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
Total	0	4	1	0	5	2	3	0	0	5	1	0	0	0	1	0	0	0	0	0	11
05:00 PM	0	2	0	0	2	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	4
05:15 PM	0	2	1	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
05:30 PM	1	4	3	0	8	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	9
05:45 PM	2	0	0	0	2	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	5
Total	3	8	4	0	15	0	4	0	0	4	0	3	0	0	3	0	0	0	0	0	22
Grand Total	3	12	5	0	20	2	7	0	0	9	1	3	0	0	4	0	0	0	0	0	33
Apprch %	15	60	25	0		22.2	77.8	0	0		25	75	0	0		0	0	0	0		
Total %	9.1	36.4	15.2	0	60.6	6.1	21.2	0	0	27.3	3	9.1	0	0	12.1	0	0	0	0	0	

	MARY AVE Southbound				STEVENS CREEK BLVD Westbound				MARY AVE Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	2	0	2	0	**2**	0	**2**	0	0	0	0	0	0	0	0	4
05:15 PM	0	2	1	3	0	1	0	1	0	0	0	0	0	0	0	0	4
05:30 PM	1	**4**	**3**	**8**	0	0	0	0	0	1	0	1	0	0	0	0	**9**
05:45 PM	**2**	0	0	2	0	1	0	1	0	**2**	0	**2**	0	0	0	0	5
Total Volume	3	8	4	15	0	4	0	4	0	3	0	3	0	0	0	0	22
% App. Total	20	53.3	26.7		0	100	0		0	100	0		0	0	0		
PHF	.375	.500	.333	.469	.000	.500	.000	.500	.000	.375	.000	.375	.000	.000	.000	.000	.611

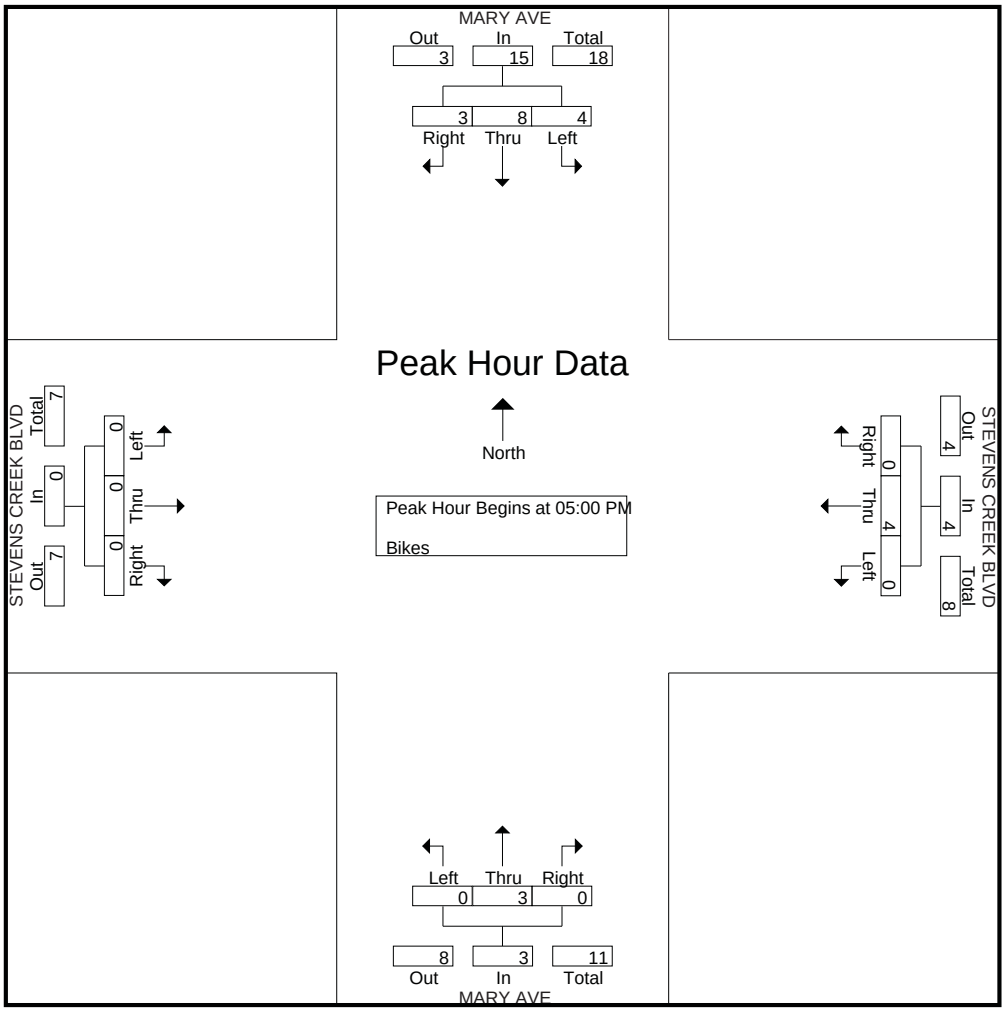
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 5PM FINAL
Site Code : 00000005
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 1

Groups Printed- Vehicles

	N STELLING RD Southbound					STEVENS CREEK BLVD Westbound					S STELLING RD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	25	17	13	3	58	7	75	19	2	103	11	23	40	1	75	4	38	25	7	74	310
07:15 AM	32	30	10	0	72	9	122	29	2	162	15	69	56	1	141	3	58	33	3	97	472
07:30 AM	22	22	13	1	58	22	130	25	3	180	14	77	71	8	170	11	69	63	2	145	553
07:45 AM	37	32	27	4	100	31	171	28	4	234	15	77	44	7	143	17	108	44	11	180	657
Total	116	101	63	8	288	69	498	101	11	679	55	246	211	17	529	35	273	165	23	496	1992
08:00 AM	39	42	34	20	135	22	180	14	1	217	19	93	64	0	176	23	103	41	10	177	705
08:15 AM	37	62	29	7	135	35	177	31	5	248	26	170	83	8	287	28	116	60	16	220	890
08:30 AM	44	48	24	18	134	33	164	60	8	265	22	168	70	2	262	26	125	77	20	248	909
08:45 AM	45	60	45	11	161	43	223	77	3	346	43	157	52	18	270	38	153	73	5	269	1046
Total	165	212	132	56	565	133	744	182	17	1076	110	588	269	28	995	115	497	251	51	914	3550
09:00 AM	41	79	51	14	185	37	189	109	2	337	28	139	62	0	229	30	160	71	8	269	1020
09:15 AM	42	49	43	11	145	37	168	51	10	266	32	109	43	0	184	28	168	75	18	289	884
09:30 AM	37	39	45	11	132	25	168	46	4	243	31	81	53	0	165	16	167	65	5	253	793
09:45 AM	32	29	46	10	117	27	160	48	3	238	43	84	50	0	177	23	153	58	11	245	777
Total	152	196	185	46	579	126	685	254	19	1084	134	413	208	0	755	97	648	269	42	1056	3474
Grand Total	433	509	380	110	1432	328	1927	537	47	2839	299	1247	688	45	2279	247	1418	685	116	2466	9016
Apprch %	30.2	35.5	26.5	7.7		11.6	67.9	18.9	1.7		13.1	54.7	30.2	2		10	57.5	27.8	4.7		
Total %	4.8	5.6	4.2	1.2	15.9	3.6	21.4	6	0.5	31.5	3.3	13.8	7.6	0.5	25.3	2.7	15.7	7.6	1.3	27.4	

	N STELLING RD Southbound				STEVENS CREEK BLVD Westbound				S STELLING RD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:15 AM																	
08:15 AM	37	62	29	128	35	177	31	243	26	**170**	**83**	**279**	28	116	60	204	854
08:30 AM	44	48	24	116	33	164	60	257	22	168	70	260	26	125	**77**	228	861
08:45 AM	**45**	60	45	150	**43**	**223**	77	**343**	**43**	157	52	252	**38**	153	73	**264**	**1009**
09:00 AM	41	**79**	**51**	**171**	37	189	**109**	335	28	139	62	229	30	**160**	71	261	996
Total Volume	167	249	149	565	148	753	277	1178	119	634	267	1020	122	554	281	957	3720
% App. Total	29.6	44.1	26.4		12.6	63.9	23.5		11.7	62.2	26.2		12.7	57.9	29.4		
PHF	.928	.788	.730	.826	.860	.844	.635	.859	.692	.932	.804	.914	.803	.866	.912	.906	.922

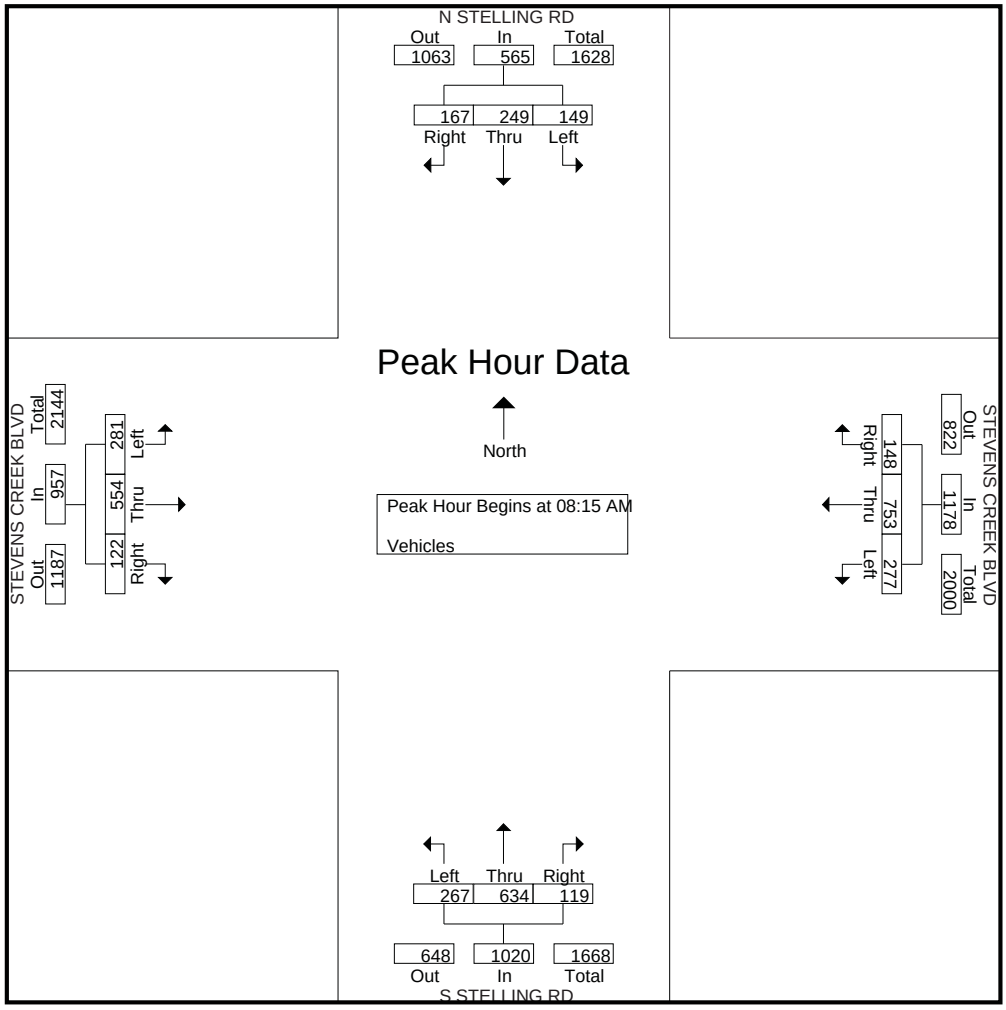
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3AM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 1

Groups Printed- Vehicles

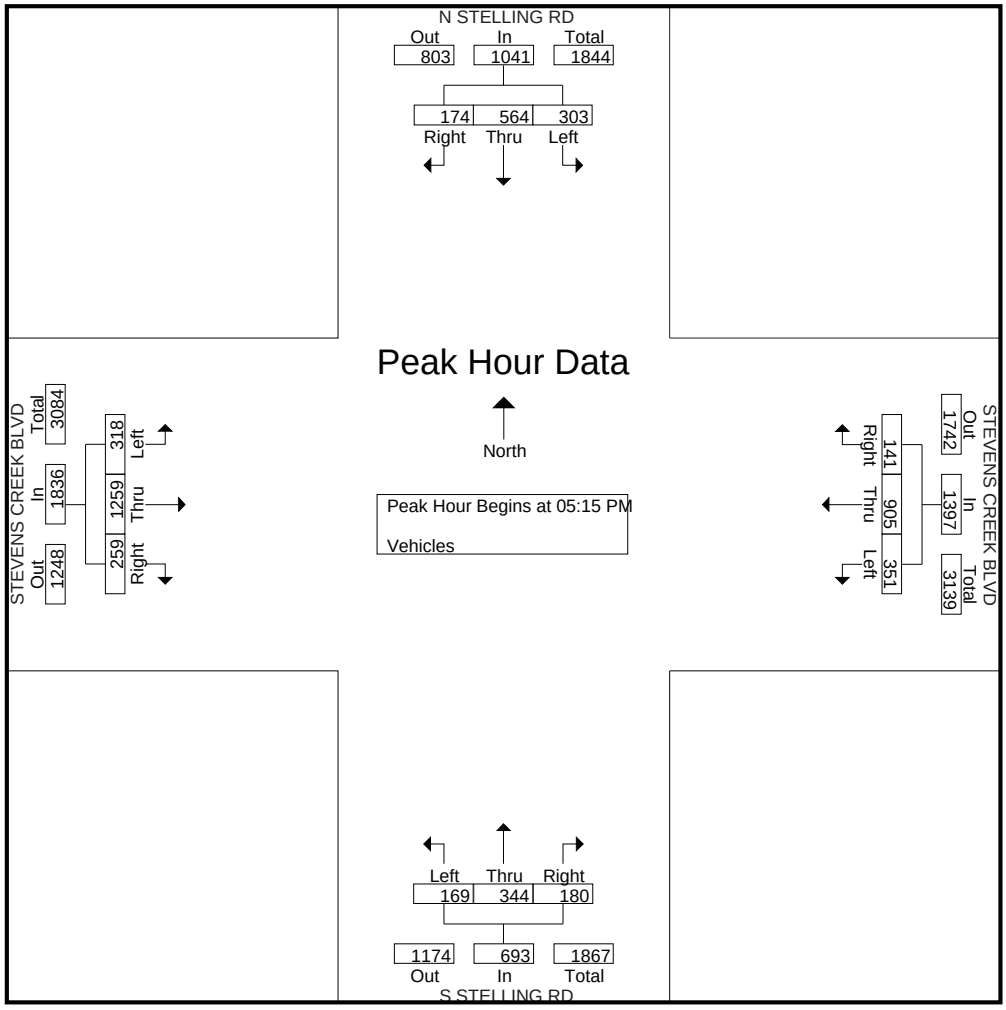
	N STELLING RD Southbound					STEVENS CREEK BLVD Westbound					S STELLING RD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	46	98	67	33	244	38	213	69	5	325	38	62	48	0	148	63	283	100	0	446	1163
04:15 PM	33	82	61	8	184	25	190	50	10	275	36	46	46	0	128	77	237	72	0	386	973
04:30 PM	41	84	54	10	189	31	189	77	10	307	26	66	38	0	130	98	280	70	0	448	1074
04:45 PM	35	71	60	20	186	29	171	71	14	285	39	54	47	0	140	75	321	72	0	468	1079
Total	155	335	242	71	803	123	763	267	39	1192	139	228	179	0	546	313	1121	314	0	1748	4289
05:00 PM	34	105	62	9	210	39	198	77	13	327	48	105	39	0	192	87	284	67	5	443	1172
05:15 PM	32	139	67	8	246	40	232	88	11	371	47	75	40	4	166	59	380	83	2	524	1307
05:30 PM	36	133	76	14	259	26	182	90	6	304	36	105	46	0	187	62	300	77	10	449	1199
05:45 PM	50	129	73	14	266	40	267	97	10	414	45	82	42	1	170	65	304	78	4	451	1301
Total	152	506	278	45	981	145	879	352	40	1416	176	367	167	5	715	273	1268	305	21	1867	4979
06:00 PM	56	163	87	12	318	35	224	76	8	343	52	82	41	0	175	73	275	80	0	428	1264
06:15 PM	48	138	75	16	277	36	241	93	14	384	26	78	30	0	134	72	244	72	11	399	1194
06:30 PM	36	109	67	10	222	32	198	73	9	312	34	64	33	5	136	82	277	78	7	444	1114
06:45 PM	39	140	74	10	263	22	186	73	10	291	33	61	32	6	132	77	163	61	4	305	991
Total	179	550	303	48	1080	125	849	315	41	1330	145	285	136	11	577	304	959	291	22	1576	4563
Grand Total	486	1391	823	164	2864	393	2491	934	120	3938	460	880	482	16	1838	890	3348	910	43	5191	13831
Apprch %	17	48.6	28.7	5.7		10	63.3	23.7	3		25	47.9	26.2	0.9		17.1	64.5	17.5	0.8		
Total %	3.5	10.1	6	1.2	20.7	2.8	18	6.8	0.9	28.5	3.3	6.4	3.5	0.1	13.3	6.4	24.2	6.6	0.3	37.5	

	N STELLING RD Southbound				STEVENS CREEK BLVD Westbound				S STELLING RD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:15 PM																	
05:15 PM	32	139	67	238	**40**	232	88	360	47	75	40	162	59	**380**	**83**	**522**	**1282**
05:30 PM	36	133	76	245	26	182	90	298	36	**105**	**46**	**187**	62	300	77	439	1169
05:45 PM	50	129	73	252	40	**267**	**97**	**404**	45	82	42	169	65	304	78	447	1272
06:00 PM	**56**	**163**	**87**	**306**	35	224	76	335	**52**	82	41	175	**73**	275	80	428	1244
Total Volume	174	564	303	1041	141	905	351	1397	180	344	169	693	259	1259	318	1836	4967
% App. Total	16.7	54.2	29.1		10.1	64.8	25.1		26	49.6	24.4		14.1	68.6	17.3		
PHF	.777	.865	.871	.850	.881	.847	.905	.864	.865	.819	.918	.926	.887	.828	.958	.879	.969

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 1

Groups Printed- Bikes

	N STELLING RD Southbound					STEVENS CREEK BLVD Westbound					S STELLING RD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
04:45 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	7
Total	0	4	0	0	4	0	1	0	0	1	0	5	0	0	5	0	1	1	0	2	12
05:00 PM	0	0	0	0	0	1	2	0	0	3	0	5	0	0	5	0	1	0	0	1	9
05:15 PM	0	1	0	0	1	1	2	0	0	3	0	1	1	0	2	0	1	0	0	1	7
05:30 PM	0	3	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
05:45 PM	1	2	0	0	3	2	2	0	0	4	0	1	0	0	1	0	0	0	0	0	8
Total	1	6	0	1	8	4	6	0	0	10	0	7	1	0	8	0	2	0	0	2	28
06:00 PM	0	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	8
06:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
06:30 PM	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	4
06:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	13	0	0	13	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	15
Grand Total	1	23	0	1	25	4	7	0	0	11	0	12	2	0	14	0	4	1	0	5	55
Apprch %	4	92	0	4		36.4	63.6	0	0		0	85.7	14.3	0		0	80	20	0		
Total %	1.8	41.8	0	1.8	45.5	7.3	12.7	0	0	20	0	21.8	3.6	0	25.5	0	7.3	1.8	0	9.1	

	N STELLING RD Southbound				STEVENS CREEK BLVD Westbound				S STELLING RD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	0	0	0	1	**2**	0	3	0	**5**	0	**5**	0	**1**	0	**1**	**9**
05:15 PM	0	1	0	1	1	2	0	3	0	1	**1**	2	0	1	0	1	7
05:30 PM	0	**3**	0	**3**	0	0	0	0	0	0	0	0	0	0	0	0	3
05:45 PM	**1**	2	0	3	**2**	2	0	**4**	0	1	0	1	0	0	0	0	8
Total Volume	1	6	0	7	4	6	0	10	0	7	1	8	0	2	0	2	27
% App. Total	14.3	85.7	0		40	60	0		0	87.5	12.5		0	100	0		
PHF	.250	.500	.000	.583	.500	.750	.000	.625	.000	.350	.250	.400	.000	.500	.000	.500	.750

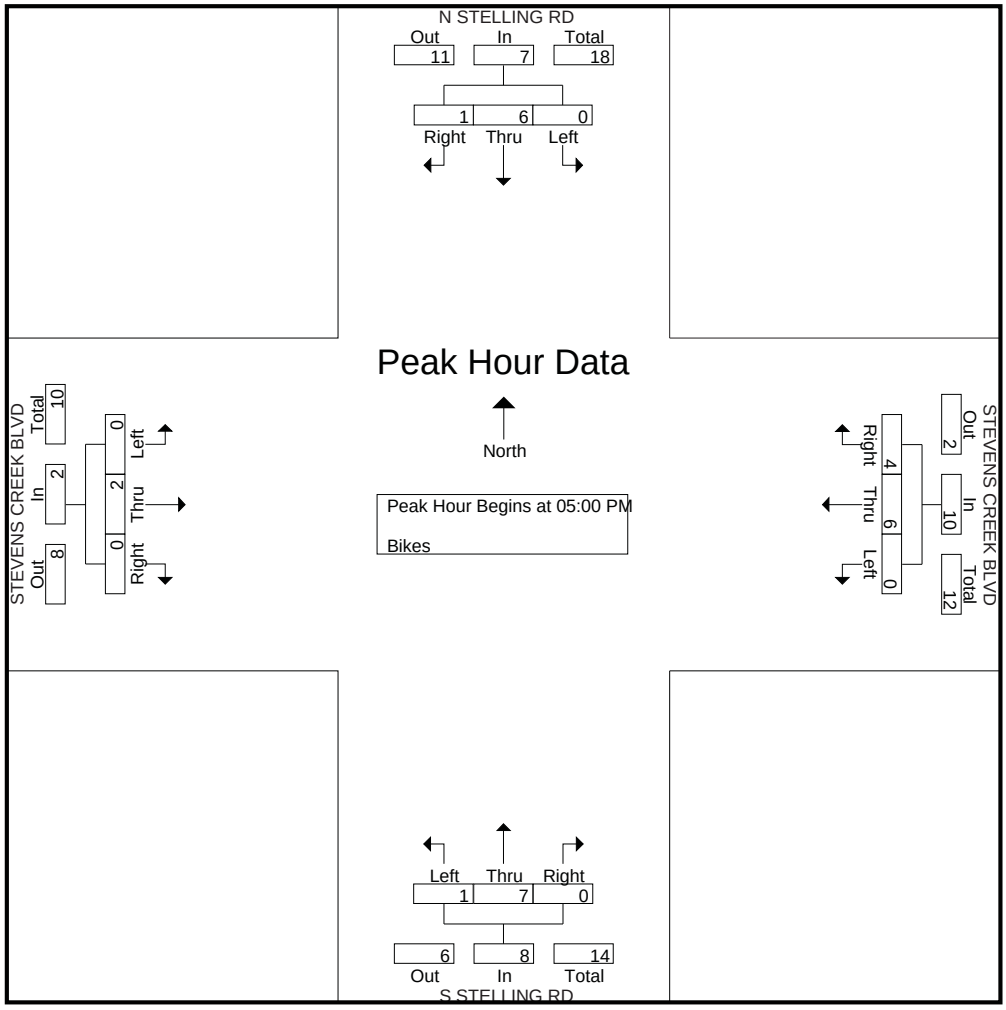
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 3PM FINAL
Site Code : 00000003
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 1

Groups Printed- Vehicles

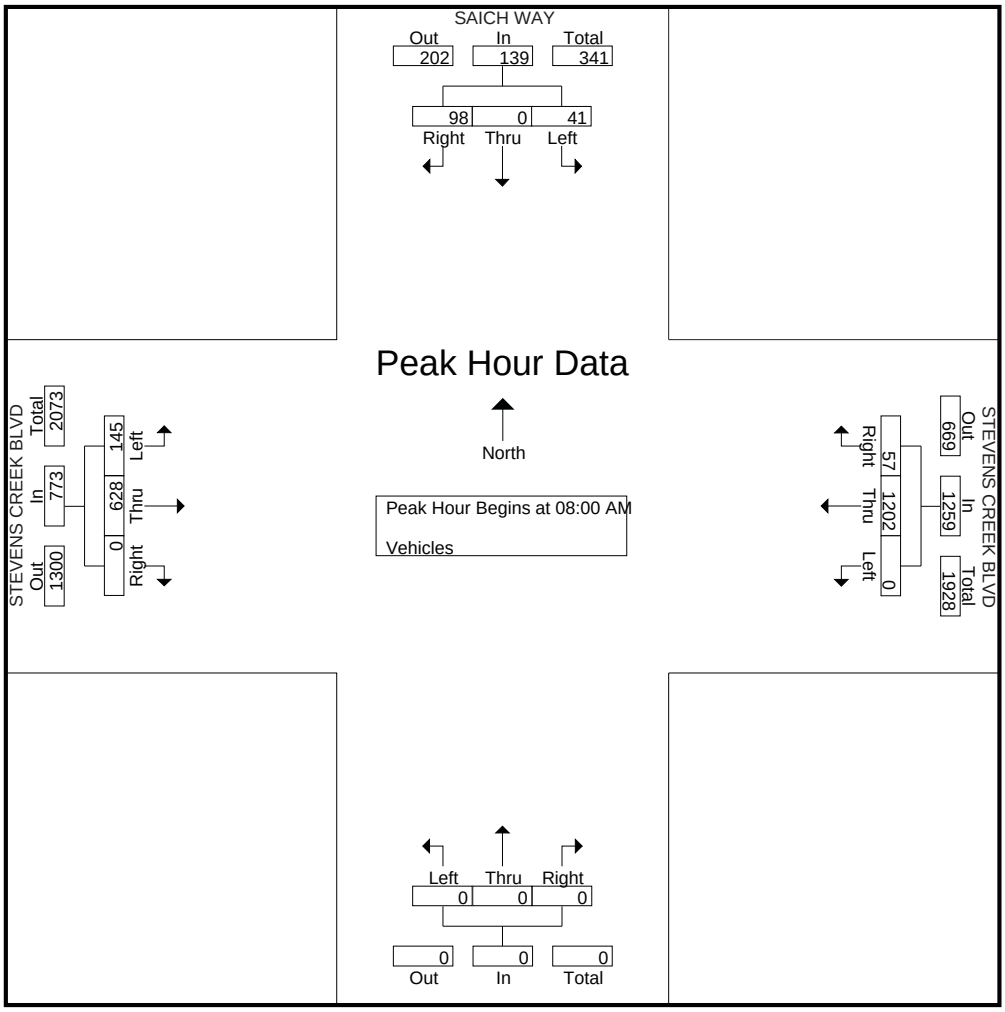
	SAICH WAY Southbound					STEVENS CREEK BLVD Westbound					Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	24	0	4	3	31	9	145	0	1	155	0	0	0	0	0	0	55	12	0	67	253
07:15 AM	25	0	3	2	30	6	186	0	0	192	0	0	0	0	0	0	61	16	0	77	299
07:30 AM	10	0	2	2	14	10	212	0	0	222	0	0	0	0	0	0	85	21	0	106	342
07:45 AM	17	0	9	3	29	13	222	0	0	235	0	0	0	0	0	0	117	20	0	137	401
Total	76	0	18	10	104	38	765	0	1	804	0	0	0	0	0	0	318	69	0	387	1295
08:00 AM	26	0	11	7	44	11	296	0	2	309	0	0	0	0	0	0	140	32	0	172	525
08:15 AM	29	0	8	2	39	16	358	0	3	377	0	0	0	0	0	0	148	33	0	181	597
08:30 AM	24	0	14	10	48	15	287	0	4	306	0	0	0	0	0	0	152	43	0	195	549
08:45 AM	19	0	8	4	31	15	261	0	5	281	0	0	0	0	0	0	188	37	0	225	537
Total	98	0	41	23	162	57	1202	0	14	1273	0	0	0	0	0	0	628	145	0	773	2208
Grand Total	174	0	59	33	266	95	1967	0	15	2077	0	0	0	0	0	0	946	214	0	1160	3503
Apprch %	65.4	0	22.2	12.4		4.6	94.7	0	0.7		0	0	0	0		0	81.6	18.4	0		
Total %	5	0	1.7	0.9	7.6	2.7	56.2	0	0.4	59.3	0	0	0	0	0	0	27	6.1	0	33.1	

	SAICH WAY Southbound				STEVENS CREEK BLVD Westbound				Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	26	0	11	37	11	296	0	307	0	0	0	0	0	140	32	172	516
08:15 AM	**29**	0	8	37	**16**	**358**	0	**374**	0	0	0	0	0	148	33	181	**592**
08:30 AM	24	0	**14**	**38**	15	287	0	302	0	0	0	0	0	152	**43**	195	535
08:45 AM	19	0	8	27	15	261	0	276	0	0	0	0	0	**188**	37	**225**	528
Total Volume	98	0	41	139	57	1202	0	1259	0	0	0	0	0	628	145	773	2171
% App. Total	70.5	0	29.5		4.5	95.5	0		0	0	0		0	81.2	18.8		
PHF	.845	.000	.732	.914	.891	.839	.000	.842	.000	.000	.000	.000	.000	.835	.843	.859	.917

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 1

Groups Printed- Bikes

	SAICH WAY Southbound					STEVENS CREEK BLVD Westbound					Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
08:00 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
08:15 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	8
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	11	0	0	11	17
Grand Total	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	14	0	0	14	20
Apprch %	0	0	0	0		0	100	0	0		0	0	0	0		0	100	0	0		
Total %	0	0	0	0	0	0	30	0	0	30	0	0	0	0	0	0	70	0	0	70	

	SAICH WAY Southbound				STEVENS CREEK BLVD Westbound				Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:15 AM	0	0	0	0	0	**4**	0	**4**	0	0	0	0	0	**4**	0	**4**	**8**
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	11	0	11	17
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.000	.000	.000	.000	.000	.688	.000	.688	.531

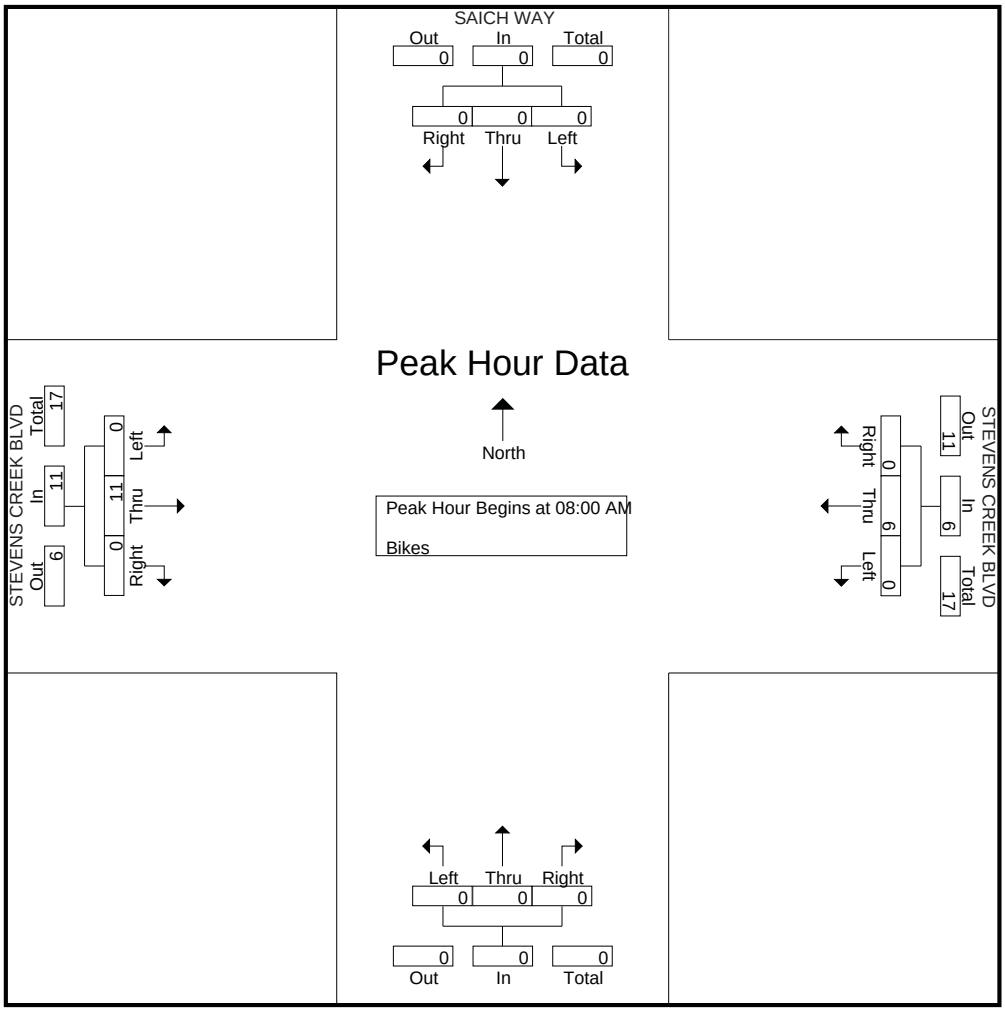
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 1

Groups Printed- Vehicles

	SAICH WAY Southbound					STEVENS CREEK BLVD Westbound					Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	41	0	28	13	82	14	256	0	11	281	0	0	0	0	0	0	333	55	0	388	751
04:15 PM	31	0	25	13	69	13	245	0	7	265	0	0	0	0	0	0	302	48	0	350	684
04:30 PM	24	0	18	11	53	4	216	0	6	226	0	0	0	0	0	0	317	35	0	352	631
04:45 PM	28	0	32	14	74	12	262	0	5	279	0	0	0	0	0	0	361	64	0	425	778
Total	124	0	103	51	278	43	979	0	29	1051	0	0	0	0	0	0	1313	202	0	1515	2844
05:00 PM	47	0	42	6	95	8	284	0	2	294	0	0	0	0	0	0	348	38	0	386	775
05:15 PM	42	0	31	9	82	6	269	0	8	283	0	0	0	0	0	0	376	50	0	426	791
05:30 PM	49	0	33	5	87	12	281	0	4	297	0	0	0	0	0	0	411	59	0	470	854
05:45 PM	48	0	26	5	79	17	270	0	3	290	0	0	0	0	0	0	342	57	0	399	768
Total	186	0	132	25	343	43	1104	0	17	1164	0	0	0	0	0	0	1477	204	0	1681	3188
Grand Total	310	0	235	76	621	86	2083	0	46	2215	0	0	0	0	0	0	2790	406	0	3196	6032
Apprch %	49.9	0	37.8	12.2		3.9	94	0	2.1		0	0	0	0		0	87.3	12.7	0		
Total %	5.1	0	3.9	1.3	10.3	1.4	34.5	0	0.8	36.7	0	0	0	0	0	0	46.3	6.7	0	53	

	SAICH WAY Southbound				STEVENS CREEK BLVD Westbound				Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	47	0	**42**	**89**	8	**284**	0	292	0	0	0	0	0	348	38	386	767
05:15 PM	42	0	31	73	6	269	0	275	0	0	0	0	0	376	50	426	774
05:30 PM	**49**	0	33	82	12	281	0	**293**	0	0	0	0	0	**411**	**59**	**470**	**845**
05:45 PM	48	0	26	74	**17**	270	0	287	0	0	0	0	0	342	57	399	760
Total Volume	186	0	132	318	43	1104	0	1147	0	0	0	0	0	1477	204	1681	3146
% App. Total	58.5	0	41.5		3.7	96.3	0		0	0	0		0	87.9	12.1		
PHF	.949	.000	.786	.893	.632	.972	.000	.979	.000	.000	.000	.000	.000	.898	.864	.894	.931

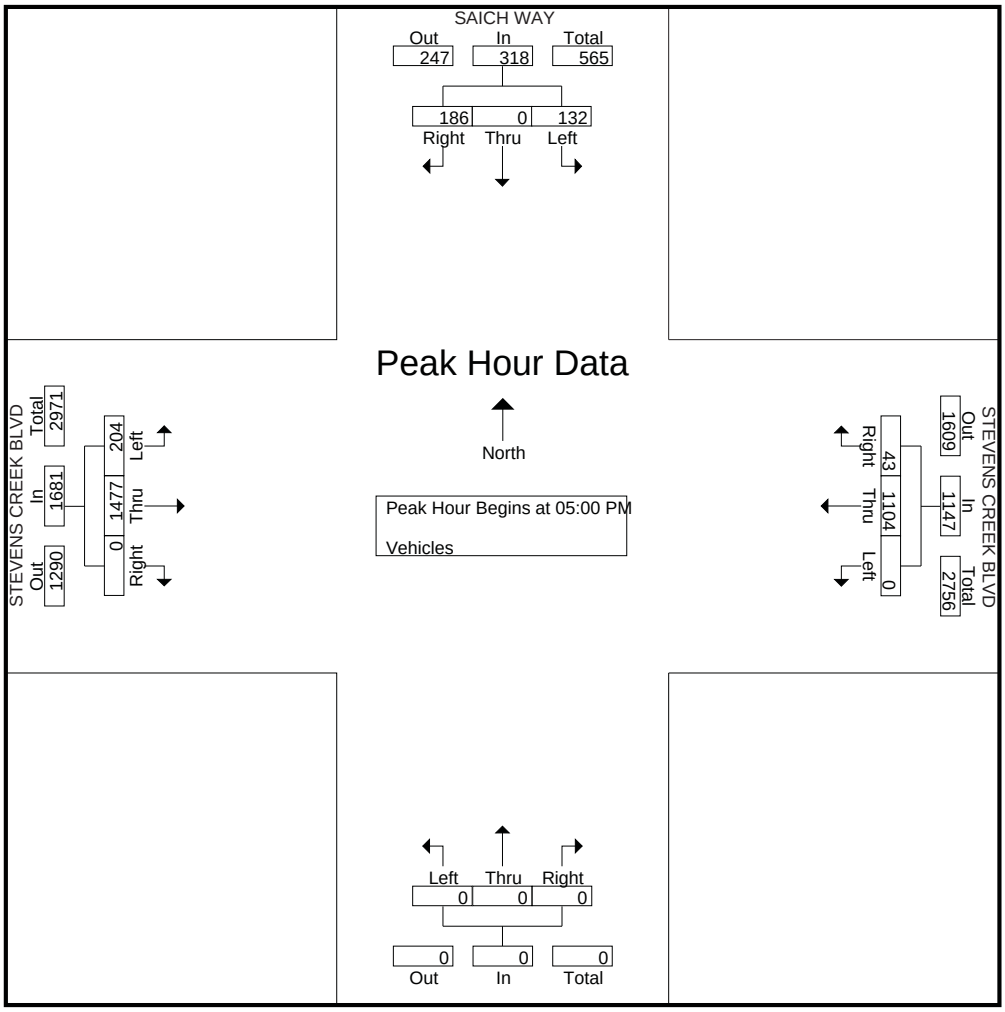
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 1

Groups Printed- Bikes

	SAICH WAY Southbound					STEVENS CREEK BLVD Westbound					Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	1	0	3	4
04:15 PM	1	0	0	0	1	1	2	0	0	3	0	0	0	0	0	0	2	0	0	2	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	0	9	1	0	10	15
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	5
Total	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	6
Grand Total	1	0	0	0	1	1	4	0	0	5	0	0	0	0	0	0	14	1	0	15	21
Apprch %	100	0	0	0		20	80	0	0		0	0	0	0		0	93.3	6.7	0		
Total %	4.8	0	0	0	4.8	4.8	19	0	0	23.8	0	0	0	0	0	0	66.7	4.8	0	71.4	

	SAICH WAY Southbound				STEVENS CREEK BLVD Westbound				Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	**1**	**3**	4
04:15 PM	**1**	0	0	**1**	**1**	**2**	0	**3**	0	0	0	0	0	2	0	2	**6**
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**3**	0	3	3
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total Volume	1	0	0	1	1	3	0	4	0	0	0	0	0	9	1	10	15
% App. Total	100	0	0		25	75	0		0	0	0		0	90	10		
PHF	.250	.000	.000	.250	.250	.375	.000	.333	.000	.000	.000	.000	.000	.750	.250	.833	.625

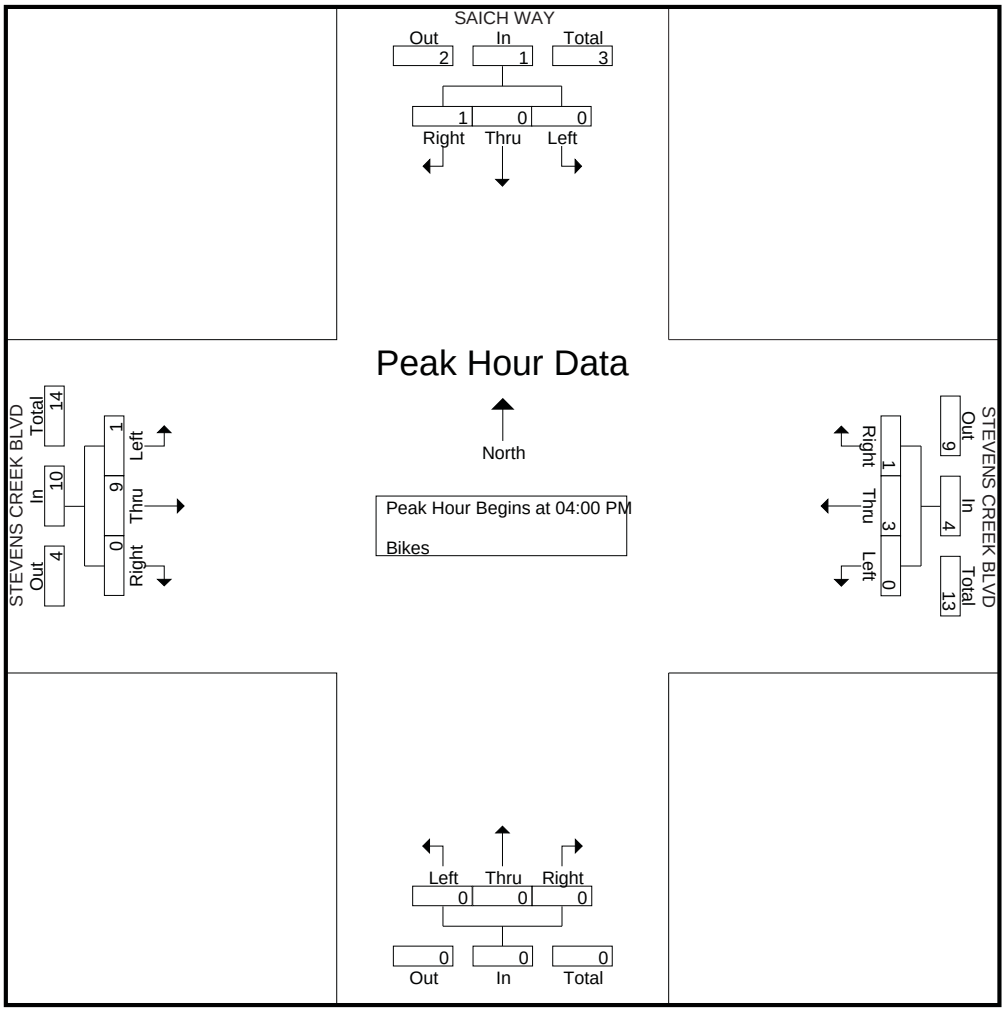
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 2/25/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7AM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	BANDLEY DR Southbound					STEVENS CREEK BLVD Westbound					DRIVEWAY Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	5	0	4	3	12	5	133	8	1	147	2	0	13	1	16	6	44	2	1	53	228
07:15 AM	5	1	2	4	12	18	192	6	1	217	3	0	6	2	11	8	65	9	0	82	322
07:30 AM	3	1	1	0	5	21	210	4	1	236	4	4	12	3	23	11	77	8	0	96	360
07:45 AM	8	0	4	0	12	26	239	6	1	272	2	4	13	2	21	8	121	7	1	137	442
Total	21	2	11	7	41	70	774	24	4	872	11	8	44	8	71	33	307	26	2	368	1352
08:00 AM	15	3	7	5	30	25	284	8	0	317	2	4	17	1	24	12	113	10	1	136	507
08:15 AM	8	3	7	7	25	47	349	5	2	403	6	1	22	5	34	7	137	15	3	162	624
08:30 AM	8	2	9	3	22	62	314	5	0	381	2	3	20	2	27	10	138	15	0	163	593
08:45 AM	11	5	9	7	32	51	273	19	3	346	5	4	15	0	24	18	164	24	0	206	608
Total	42	13	32	22	109	185	1220	37	5	1447	15	12	74	8	109	47	552	64	4	667	2332
Grand Total	63	15	43	29	150	255	1994	61	9	2319	26	20	118	16	180	80	859	90	6	1035	3684
Apprch %	42	10	28.7	19.3		11	86	2.6	0.4		14.4	11.1	65.6	8.9		7.7	83	8.7	0.6		
Total %	1.7	0.4	1.2	0.8	4.1	6.9	54.1	1.7	0.2	62.9	0.7	0.5	3.2	0.4	4.9	2.2	23.3	2.4	0.2	28.1	

	BANDLEY DR Southbound				STEVENS CREEK BLVD Westbound				DRIVEWAY Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	**15**	3	7	**25**	25	284	8	317	2	**4**	17	23	12	113	10	135	500
08:15 AM	8	3	7	18	47	**349**	5	**401**	**6**	1	**22**	**29**	7	137	15	159	**607**
08:30 AM	8	2	**9**	19	**62**	314	5	381	2	3	20	25	10	138	15	163	588
08:45 AM	11	**5**	9	25	51	273	**19**	343	5	4	15	24	**18**	**164**	**24**	**206**	598
Total Volume	42	13	32	87	185	1220	37	1442	15	12	74	101	47	552	64	663	2293
% App. Total	48.3	14.9	36.8		12.8	84.6	2.6		14.9	11.9	73.3		7.1	83.3	9.7		
PHF	.700	.650	.889	.870	.746	.874	.487	.899	.625	.750	.841	.871	.653	.841	.667	.805	.944

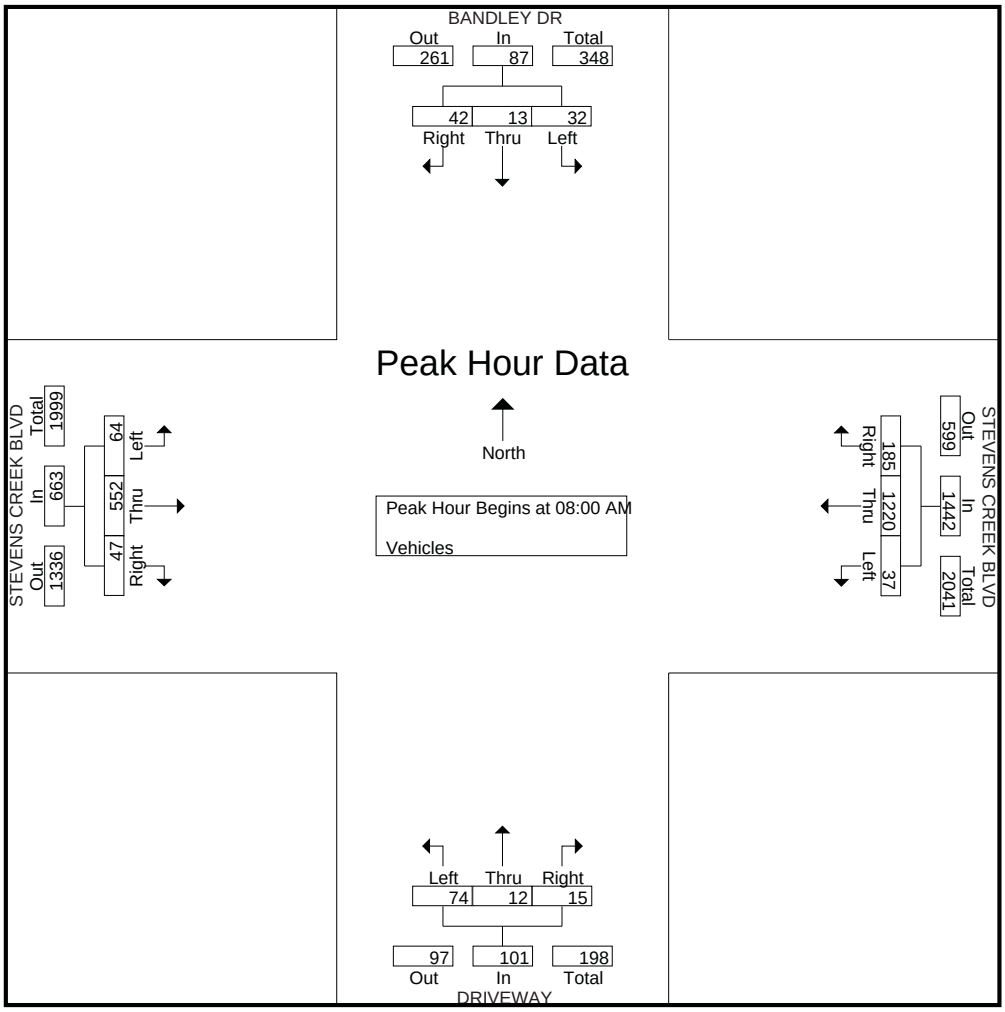
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7AM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7AM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	BANDLEY DR Southbound					STEVENS CREEK BLVD Westbound					DRIVEWAY Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	1	0	0	0	1	1	5	0	0	6	0	0	0	0	0	0	4	0	0	4	11
08:00 AM	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	7
08:15 AM	0	0	0	0	0	1	5	0	0	6	0	1	0	0	1	1	1	0	0	2	9
08:30 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	1	3
08:45 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	3	0	0	3	5
Total	0	0	1	0	1	3	10	0	0	13	1	1	0	0	2	1	7	0	0	8	24
Grand Total	1	0	1	0	2	4	15	0	0	19	1	1	0	0	2	1	11	0	0	12	35
Apprch %	50	0	50	0		21.1	78.9	0	0		50	50	0	0		8.3	91.7	0	0		
Total %	2.9	0	2.9	0	5.7	11.4	42.9	0	0	54.3	2.9	2.9	0	0	5.7	2.9	31.4	0	0	34.3	

	BANDLEY DR Southbound				STEVENS CREEK BLVD Westbound				DRIVEWAY Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	**1**	**1**	0	4	0	4	0	0	0	0	0	2	0	2	7
08:15 AM	0	0	0	0	1	**5**	0	**6**	0	**1**	0	**1**	**1**	1	0	2	**9**
08:30 AM	0	0	0	0	0	1	0	1	**1**	0	0	1	0	1	0	1	3
08:45 AM	0	0	0	0	**2**	0	0	2	0	0	0	0	0	**3**	0	**3**	5
Total Volume	0	0	1	1	3	10	0	13	1	1	0	2	1	7	0	8	24
% App. Total	0	0	100		23.1	76.9	0		50	50	0		12.5	87.5	0		
PHF	.000	.000	.250	.250	.375	.500	.000	.542	.250	.250	.000	.500	.250	.583	.000	.667	.667

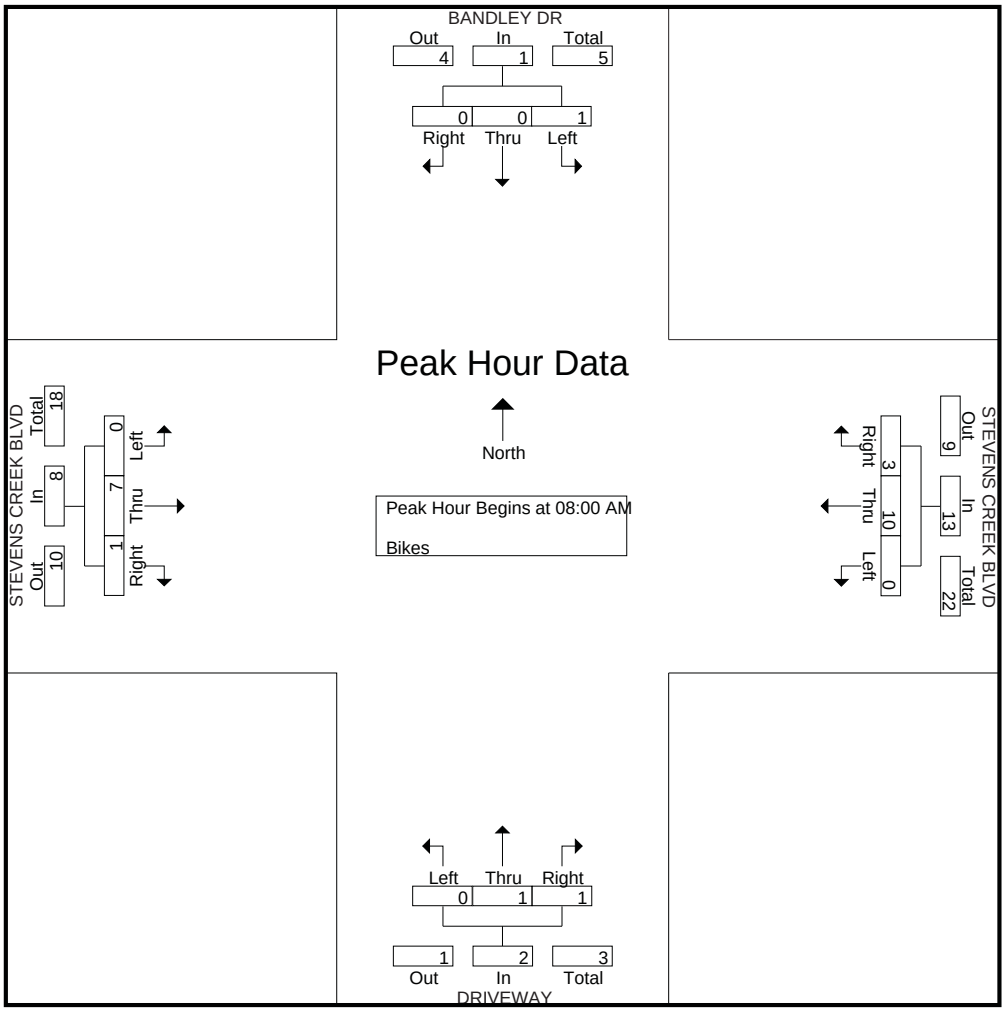
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7AM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 7PM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 1

Groups Printed- Vehicles

	BANDLEY DR Southbound					STEVENS CREEK BLVD Westbound					DRIVEWAY Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	24	5	28	8	65	24	206	29	7	266	20	4	18	3	45	10	290	31	3	334	710
04:15 PM	26	9	31	9	75	17	254	29	5	305	12	5	15	4	36	18	307	31	2	358	774
04:30 PM	19	3	27	16	65	18	201	33	9	261	8	5	20	2	35	16	291	40	4	351	712
04:45 PM	19	8	32	11	70	25	245	27	3	300	10	7	27	1	45	23	329	27	1	380	795
Total	88	25	118	44	275	84	906	118	24	1132	50	21	80	10	161	67	1217	129	10	1423	2991
05:00 PM	34	8	30	5	77	23	227	35	2	287	14	7	20	3	44	12	321	34	4	371	779
05:15 PM	24	4	21	2	51	28	253	27	3	311	12	6	18	3	39	14	379	37	0	430	831
05:30 PM	36	6	44	4	90	29	262	23	1	315	14	7	24	2	47	20	361	27	3	411	863
05:45 PM	30	9	32	5	76	28	237	39	6	310	13	3	20	2	38	19	376	35	0	430	854
Total	124	27	127	16	294	108	979	124	12	1223	53	23	82	10	168	65	1437	133	7	1642	3327
Grand Total	212	52	245	60	569	192	1885	242	36	2355	103	44	162	20	329	132	2654	262	17	3065	6318
Apprch %	37.3	9.1	43.1	10.5		8.2	80	10.3	1.5		31.3	13.4	49.2	6.1		4.3	86.6	8.5	0.6		
Total %	3.4	0.8	3.9	0.9	9	3	29.8	3.8	0.6	37.3	1.6	0.7	2.6	0.3	5.2	2.1	42	4.1	0.3	48.5	

	BANDLEY DR Southbound				STEVENS CREEK BLVD Westbound				DRIVEWAY Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	34	8	30	72	23	227	35	285	**14**	**7**	20	41	12	321	34	367	765
05:15 PM	24	4	21	49	28	253	27	308	12	6	18	36	14	**379**	**37**	**430**	823
05:30 PM	**36**	6	**44**	**86**	**29**	**262**	23	**314**	14	7	**24**	**45**	**20**	361	27	408	**853**
05:45 PM	30	**9**	32	71	28	237	**39**	304	13	3	20	36	19	376	35	430	841
Total Volume	124	27	127	278	108	979	124	1211	53	23	82	158	65	1437	133	1635	3282
% App. Total	44.6	9.7	45.7		8.9	80.8	10.2		33.5	14.6	51.9		4	87.9	8.1		
PHF	.861	.750	.722	.808	.931	.934	.795	.964	.946	.821	.854	.878	.813	.948	.899	.951	.962

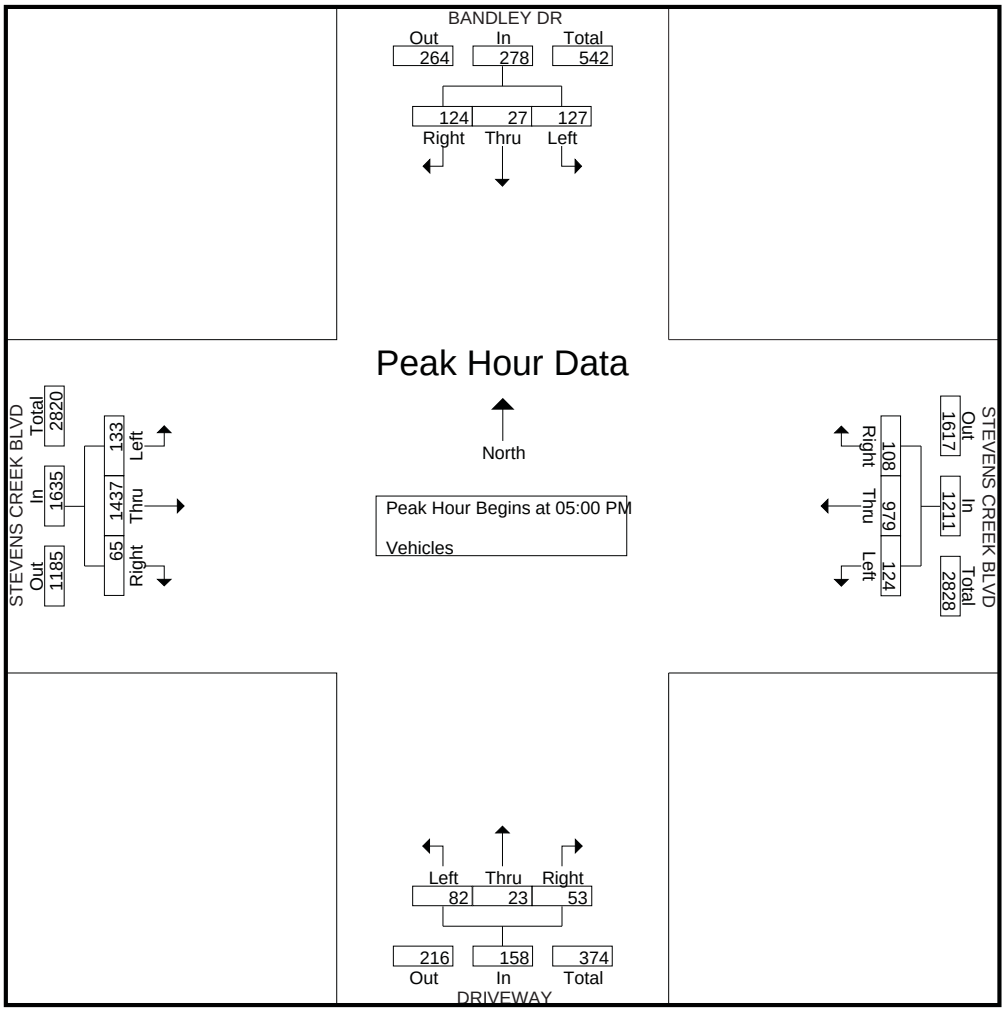
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7PM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7PM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 1

Groups Printed- Bikes

	BANDLEY DR Southbound					STEVENS CREEK BLVD Westbound					DRIVEWAY Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	4
04:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	1	2	0	0	3	7
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	4	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:30 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	4
05:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
Total	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	0	0	7	11
Grand Total	1	0	0	0	1	0	7	0	0	7	0	0	0	0	0	1	9	0	0	10	18
Apprch %	100	0	0	0		0	100	0	0		0	0	0	0		10	90	0	0		
Total %	5.6	0	0	0	5.6	0	38.9	0	0	38.9	0	0	0	0	0	5.6	50	0	0	55.6	

	BANDLEY DR Southbound				STEVENS CREEK BLVD Westbound				DRIVEWAY Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	0	0	**1**	0	**2**	0	**2**	0	0	0	0	**1**	0	0	1	**4**
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	**4**	0	**4**	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	1	0	0	1	0	3	0	3	0	0	0	0	1	6	0	7	11
% App. Total	100	0	0		0	100	0		0	0	0		14.3	85.7	0		
PHF	.250	.000	.000	.250	.000	.375	.000	.375	.000	.000	.000	.000	.250	.375	.000	.438	.688

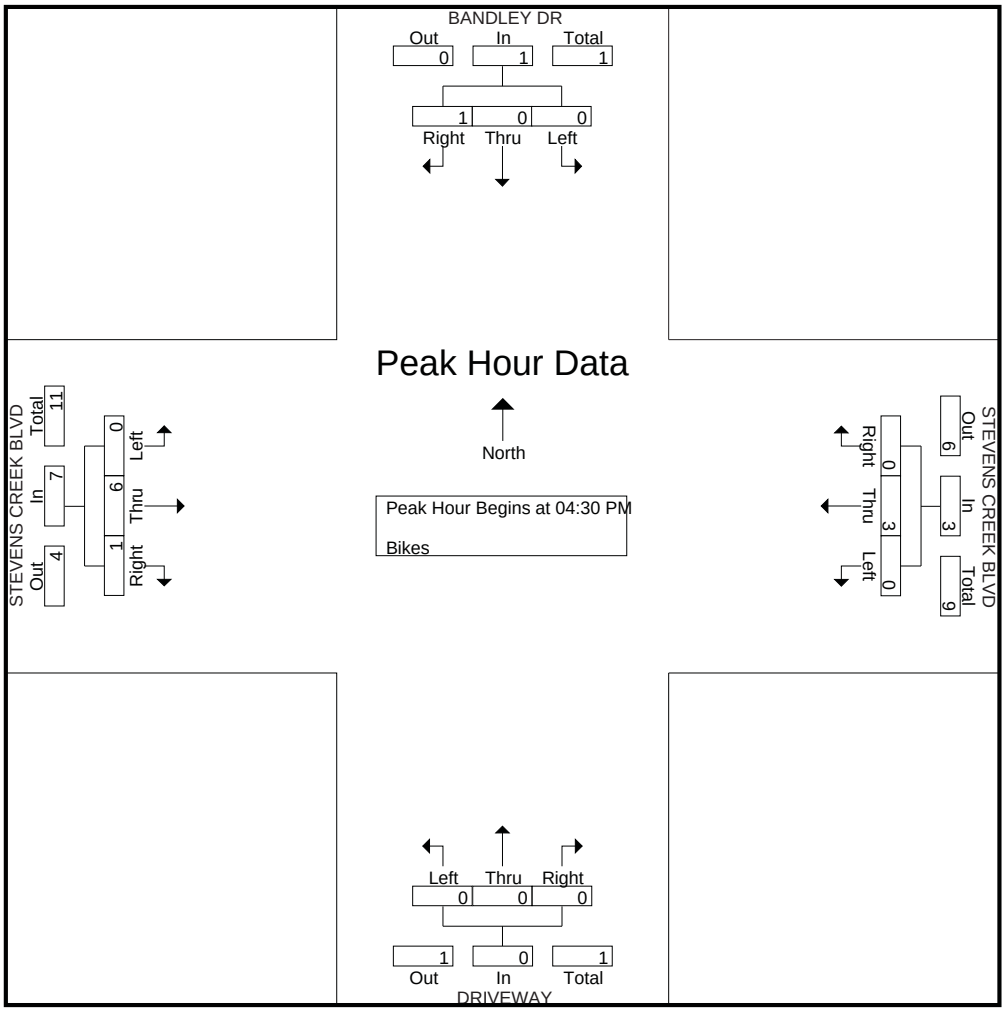
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 7PM FINAL
Site Code : 00000007
Start Date : 2/23/2016
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 1

Groups Printed- Vehicles

	N DE ANZA BLVD Southbound					STEVENS CREEK BLVD Westbound					S DE ANZA BLVD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	22	65	37	4	128	20	43	24	10	97	24	197	36	2	259	10	19	25	3	57	541
07:15 AM	34	85	36	1	156	34	76	32	0	142	22	267	69	6	364	13	36	22	7	78	740
07:30 AM	16	81	53	3	153	44	89	44	7	184	33	347	89	4	473	19	39	41	1	100	910
07:45 AM	33	139	70	2	244	62	133	49	2	246	29	426	106	14	575	24	44	48	1	117	1182
Total	105	370	196	10	681	160	341	149	19	669	108	1237	300	26	1671	66	138	136	12	352	3373
08:00 AM	47	185	104	10	346	61	133	55	7	256	38	447	111	7	603	21	70	50	6	147	1352
08:15 AM	54	187	89	7	337	53	166	78	9	306	40	393	119	11	563	24	74	43	3	144	1350
08:30 AM	44	127	102	11	284	84	155	56	10	305	56	509	162	12	739	18	85	51	6	160	1488
08:45 AM	63	159	103	8	333	94	180	53	21	348	52	460	151	16	679	35	91	47	2	175	1535
Total	208	658	398	36	1300	292	634	242	47	1215	186	1809	543	46	2584	98	320	191	17	626	5725
09:00 AM	65	101	110	11	287	92	222	61	8	383	47	366	132	12	557	37	129	48	5	219	1446
09:15 AM	33	135	96	8	272	76	143	51	4	274	54	341	133	18	546	37	97	52	0	186	1278
09:30 AM	35	137	106	10	288	72	146	37	16	271	36	275	110	7	428	41	136	51	12	240	1227
09:45 AM	53	155	95	21	324	62	111	61	10	244	39	246	101	11	397	48	113	45	6	212	1177
Total	186	528	407	50	1171	302	622	210	38	1172	176	1228	476	48	1928	163	475	196	23	857	5128
Grand Total	499	1556	1001	96	3152	754	1597	601	104	3056	470	4274	1319	120	6183	327	933	523	52	1835	14226
Apprch %	15.8	49.4	31.8	3		24.7	52.3	19.7	3.4		7.6	69.1	21.3	1.9		17.8	50.8	28.5	2.8		
Total %	3.5	10.9	7	0.7	22.2	5.3	11.2	4.2	0.7	21.5	3.3	30	9.3	0.8	43.5	2.3	6.6	3.7	0.4	12.9	

	N DE ANZA BLVD Southbound				STEVENS CREEK BLVD Westbound				S DE ANZA BLVD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:15 AM																	
08:15 AM	54	**187**	89	**330**	53	166	**78**	297	40	393	119	552	24	74	43	141	1320
08:30 AM	44	127	102	273	84	155	56	295	**56**	**509**	**162**	**727**	18	85	**51**	154	1449
08:45 AM	63	159	103	325	**94**	180	53	327	52	460	151	663	35	91	47	173	**1488**
09:00 AM	**65**	101	**110**	276	92	**222**	61	**375**	47	366	132	545	**37**	**129**	48	**214**	1410
Total Volume	226	574	404	1204	323	723	248	1294	195	1728	564	2487	114	379	189	682	5667
% App. Total	18.8	47.7	33.6		25	55.9	19.2		7.8	69.5	22.7		16.7	55.6	27.7		
PHF	.869	.767	.918	.912	.859	.814	.795	.863	.871	.849	.870	.855	.770	.734	.926	.797	.952

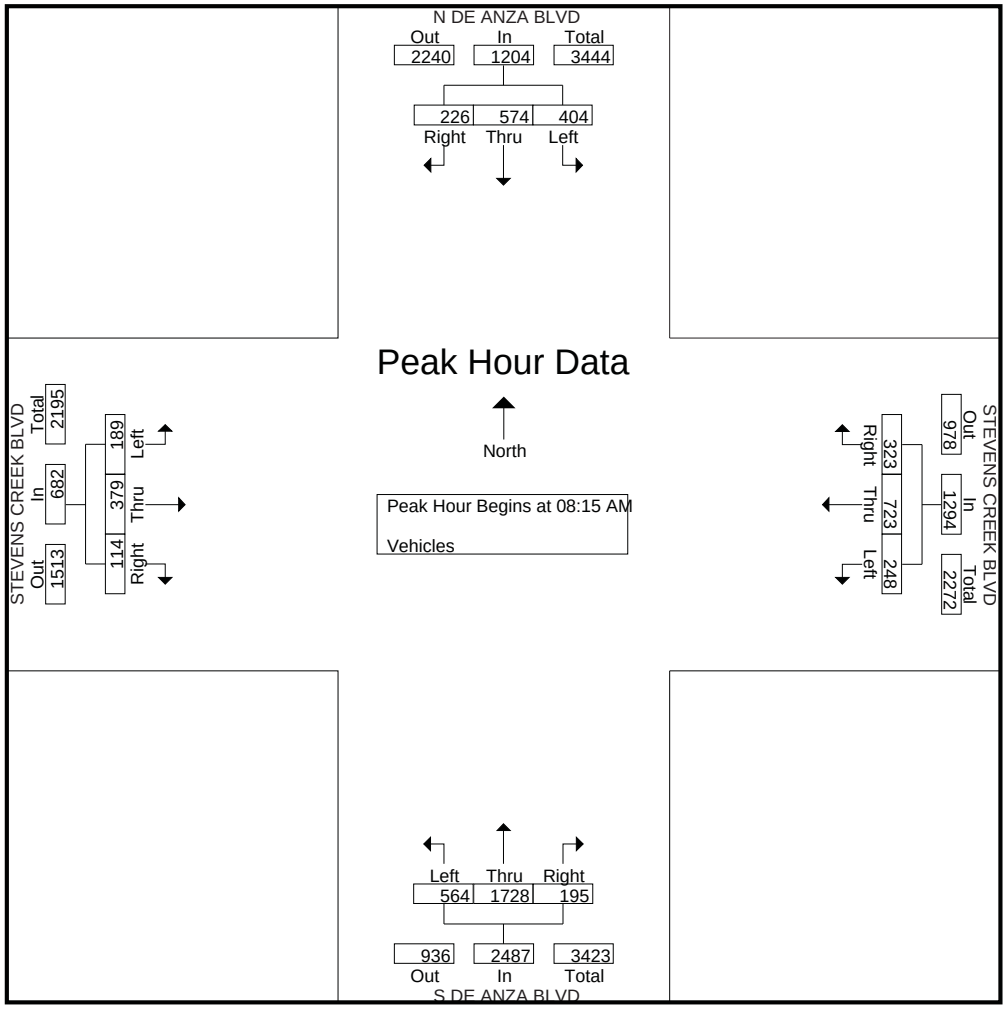
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 1

Groups Printed- Bikes

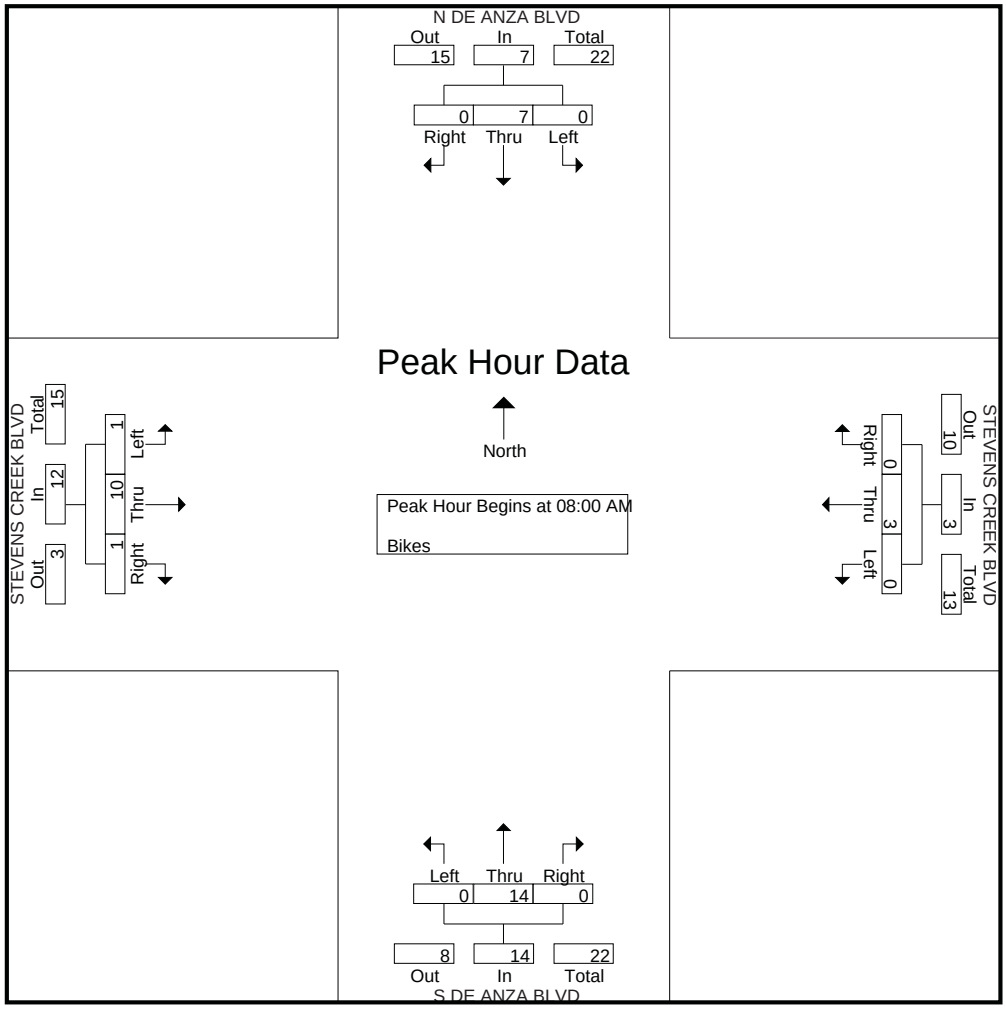
	N DE ANZA BLVD Southbound					STEVENS CREEK BLVD Westbound					S DE ANZA BLVD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	2	0	0	2	4
07:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	2
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	4
Total	0	0	0	0	0	0	3	1	0	4	0	5	0	0	5	0	4	0	0	4	13
08:00 AM	0	1	0	0	1	0	2	0	0	2	0	4	0	0	4	0	1	0	0	1	8
08:15 AM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	1	3	1	0	5	8
08:30 AM	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	0	1	0	0	1	9
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	11
Total	0	7	0	0	7	0	3	0	0	3	0	14	0	0	14	1	10	1	0	12	36
09:00 AM	0	0	2	1	3	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	5
09:15 AM	0	0	2	0	2	1	0	0	0	1	0	3	0	0	3	0	0	1	0	1	7
09:30 AM	0	0	1	0	1	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	6
09:45 AM	0	2	0	0	2	2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	5
Total	0	2	5	1	8	3	6	0	0	9	0	5	0	0	5	0	0	1	0	1	23
Grand Total	0	9	5	1	15	3	12	1	0	16	0	24	0	0	24	1	14	2	0	17	72
Apprch %	0	60	33.3	6.7		18.8	75	6.2	0		0	100	0	0		5.9	82.4	11.8	0		
Total %	0	12.5	6.9	1.4	20.8	4.2	16.7	1.4	0	22.2	0	33.3	0	0	33.3	1.4	19.4	2.8	0	23.6	

	N DE ANZA BLVD Southbound				STEVENS CREEK BLVD Westbound				S DE ANZA BLVD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	1	0	1	0	**2**	0	**2**	0	4	0	4	0	1	0	1	8
08:15 AM	0	2	0	2	0	1	0	1	0	0	0	0	**1**	3	**1**	**5**	8
08:30 AM	0	1	0	1	0	0	0	0	0	**7**	0	**7**	0	1	0	1	9
08:45 AM	0	**3**	0	**3**	0	0	0	0	0	3	0	3	0	**5**	0	5	**11**
Total Volume	0	7	0	7	0	3	0	3	0	14	0	14	1	10	1	12	36
% App. Total	0	100	0		0	100	0		0	100	0		8.3	83.3	8.3		
PHF	.000	.583	.000	.583	.000	.375	.000	.375	.000	.500	.000	.500	.250	.500	.250	.600	.818

Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 6AM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 1

Groups Printed- Vehicles

	N DE ANZA BLVD Southbound					STEVENS CREEK BLVD Westbound					S DE ANZA BLVD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	70	361	114	11	556	52	138	58	0	248	58	196	120	27	401	106	199	61	12	378	1583
04:15 PM	59	314	97	10	480	44	149	96	0	289	60	177	87	15	339	109	213	57	1	380	1488
04:30 PM	62	370	136	4	572	65	111	69	0	245	52	157	109	16	334	109	210	44	6	369	1520
04:45 PM	51	426	101	8	586	54	123	86	0	263	57	179	96	14	346	93	217	59	9	378	1573
Total	242	1471	448	33	2194	215	521	309	0	1045	227	709	412	72	1420	417	839	221	28	1505	6164
05:00 PM	62	425	137	7	631	67	153	87	7	314	61	199	113	10	383	119	252	42	6	419	1747
05:15 PM	67	529	124	7	727	57	121	75	7	260	62	244	119	9	434	105	248	48	6	407	1828
05:30 PM	57	462	126	12	657	77	154	104	15	350	64	194	94	16	368	118	274	55	12	459	1834
05:45 PM	73	506	143	10	732	58	159	93	7	317	80	204	126	18	428	103	220	52	11	386	1863
Total	259	1922	530	36	2747	259	587	359	36	1241	267	841	452	53	1613	445	994	197	35	1671	7272
06:00 PM	89	432	114	10	645	72	161	93	0	326	71	190	134	11	406	90	257	45	5	397	1774
06:15 PM	70	444	138	3	655	63	162	92	0	317	62	237	116	10	425	129	234	56	0	419	1816
06:30 PM	45	488	121	9	663	44	146	81	0	271	76	178	96	9	359	101	188	43	12	344	1637
06:45 PM	77	390	140	4	611	53	145	77	0	275	47	169	100	5	321	99	189	54	9	351	1558
Total	281	1754	513	26	2574	232	614	343	0	1189	256	774	446	35	1511	419	868	198	26	1511	6785
Grand Total	782	5147	1491	95	7515	706	1722	1011	36	3475	750	2324	1310	160	4544	1281	2701	616	89	4687	20221
Apprch %	10.4	68.5	19.8	1.3		20.3	49.6	29.1	1		16.5	51.1	28.8	3.5		27.3	57.6	13.1	1.9		
Total %	3.9	25.5	7.4	0.5	37.2	3.5	8.5	5	0.2	17.2	3.7	11.5	6.5	0.8	22.5	6.3	13.4	3	0.4	23.2	

	N DE ANZA BLVD Southbound				STEVENS CREEK BLVD Westbound				S DE ANZA BLVD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:30 PM																	
05:30 PM	57	462	126	645	**77**	154	**104**	**335**	64	194	94	352	118	**274**	55	**447**	1779
05:45 PM	73	**506**	**143**	**722**	58	159	93	310	**80**	204	126	410	103	220	52	375	**1817**
06:00 PM	**89**	432	114	635	72	161	93	326	71	190	**134**	395	90	257	45	392	1748
06:15 PM	70	444	138	652	63	**162**	92	317	62	**237**	116	**415**	**129**	234	**56**	419	1803
Total Volume	289	1844	521	2654	270	636	382	1288	277	825	470	1572	440	985	208	1633	7147
% App. Total	10.9	69.5	19.6		21	49.4	29.7		17.6	52.5	29.9		26.9	60.3	12.7		
PHF	.812	.911	.911	.919	.877	.981	.918	.961	.866	.870	.877	.947	.853	.899	.929	.913	.983

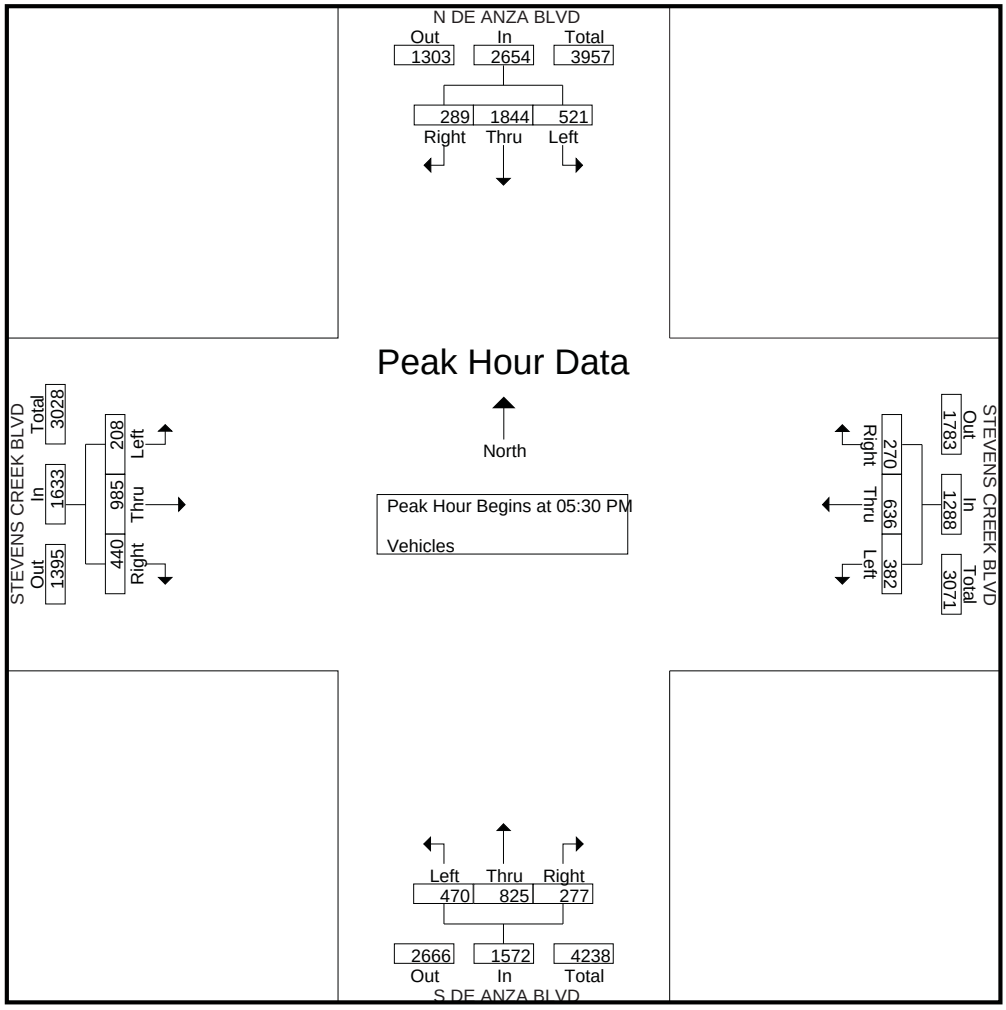
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 2



Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

File Name : 6PM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 1

Groups Printed- Bikes

	N DE ANZA BLVD Southbound					STEVENS CREEK BLVD Westbound					S DE ANZA BLVD Northbound					STEVENS CREEK BLVD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	3
04:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	2
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
04:45 PM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	5	0	0	5	8
Total	0	3	0	0	3	2	1	1	0	4	0	1	0	0	1	0	8	0	0	8	16
05:00 PM	0	1	0	0	1	0	2	0	0	2	0	0	1	0	1	0	3	0	0	3	7
05:15 PM	0	3	0	0	3	0	3	0	0	3	0	1	0	0	1	1	2	0	0	3	10
05:30 PM	1	3	0	0	4	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	7
05:45 PM	0	0	0	0	0	0	3	1	0	4	0	3	0	0	3	0	2	0	0	2	9
Total	1	7	0	0	8	0	10	1	0	11	0	4	1	0	5	1	8	0	0	9	33
06:00 PM	0	2	0	0	2	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	6
06:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
06:30 PM	0	1	1	0	2	1	0	0	0	1	0	2	0	0	2	0	0	1	0	1	6
06:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	3
Total	0	6	1	0	7	1	1	0	0	2	0	8	0	0	8	0	2	1	0	3	20
Grand Total	1	16	1	0	18	3	12	2	0	17	0	13	1	0	14	1	18	1	0	20	69
Apprch %	5.6	88.9	5.6	0		17.6	70.6	11.8	0		0	92.9	7.1	0		5	90	5	0		
Total %	1.4	23.2	1.4	0	26.1	4.3	17.4	2.9	0	24.6	0	18.8	1.4	0	20.3	1.4	26.1	1.4	0	29	

	N DE ANZA BLVD Southbound				STEVENS CREEK BLVD Westbound				S DE ANZA BLVD Northbound				STEVENS CREEK BLVD Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 06:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	0	1	0	1	0	2	0	2	0	0	**1**	1	0	**3**	0	**3**	7
05:15 PM	0	**3**	0	3	0	**3**	0	3	0	1	0	1	**1**	2	0	3	**10**
05:30 PM	**1**	3	0	**4**	0	2	0	2	0	0	0	0	0	1	0	1	7
05:45 PM	0	0	0	0	0	3	**1**	**4**	0	**3**	0	**3**	0	2	0	2	9
Total Volume	1	7	0	8	0	10	1	11	0	4	1	5	1	8	0	9	33
% App. Total	12.5	87.5	0		0	90.9	9.1		0	80	20		11.1	88.9	0		
PHF	.250	.583	.000	.500	.000	.833	.250	.688	.000	.333	.250	.417	.250	.667	.000	.750	.825

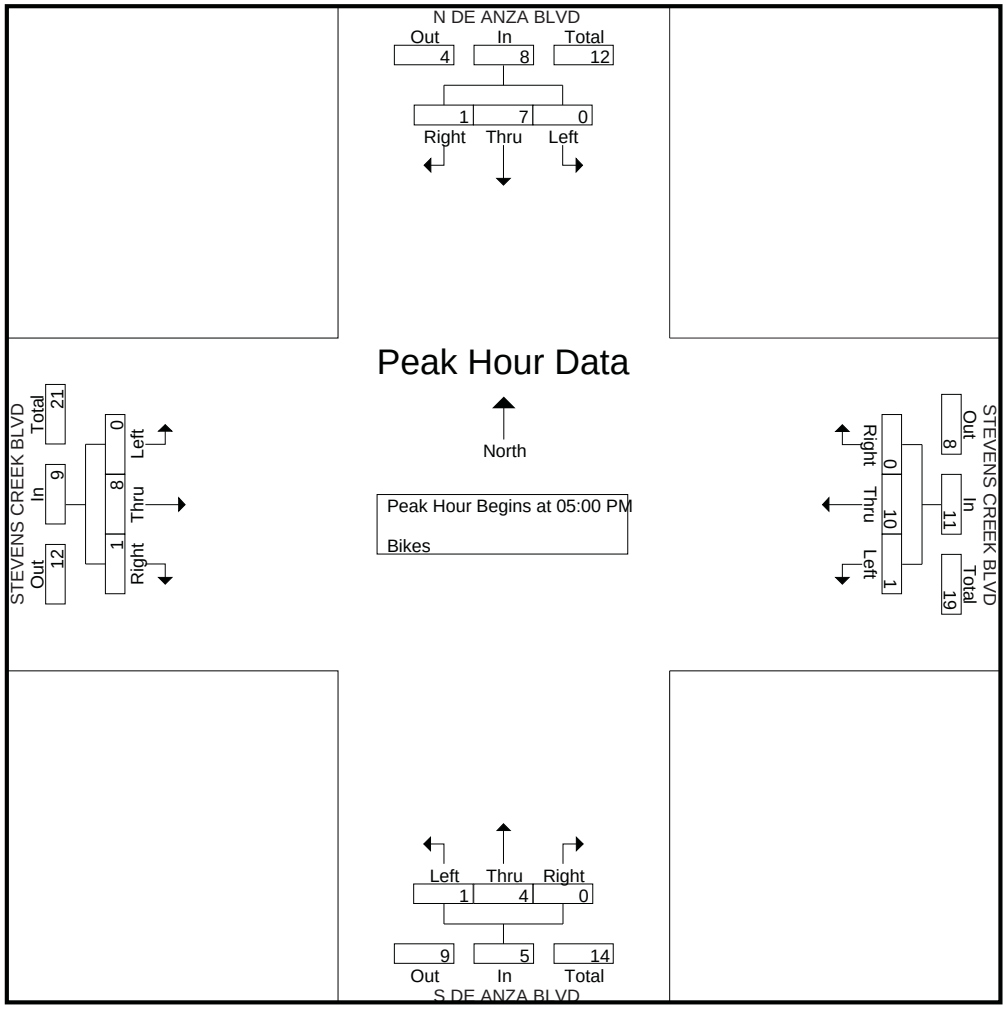
Traffic Data Service

Campbell, CA

(408) 377-2988

tdsbay@cs.com

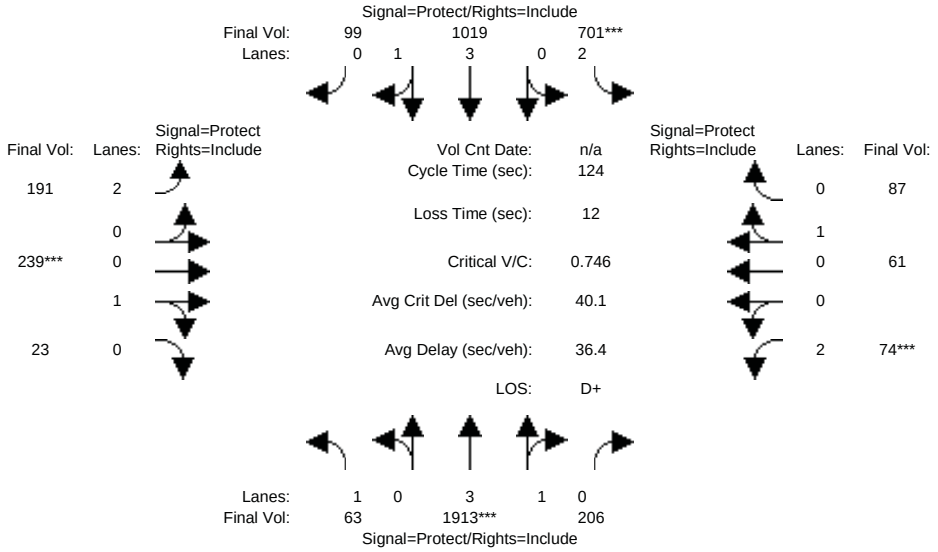
File Name : 6PM FINAL
Site Code : 00000006
Start Date : 3/26/2015
Page No : 2



APPENDIX B: EXISTING AND EXISTING PLUS PROJECT INTERSECTION LEVEL OF SERVICE CALCULATIONS

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

Intersection #1: De Anza Blvd/Mariani Ave



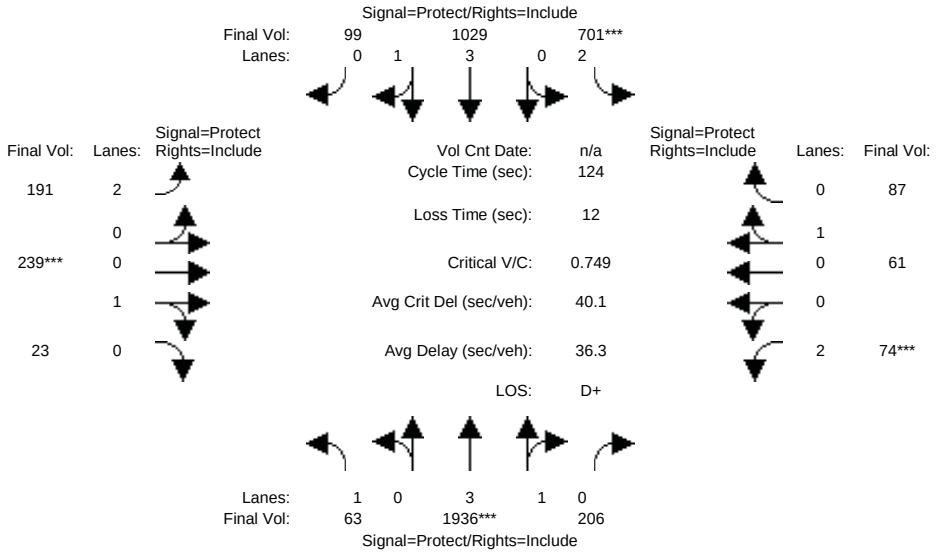
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	61	1867	201	684	995	97	186	233	22	72	60	85
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:	61	1867	201	684	995	97	186	233	22	72	60	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1867	201	684	995	97	186	233	22	72	60	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	62	1913	206	701	1019	99	191	239	23	74	61	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	1913	206	701	1019	99	191	239	23	74	61	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	1913	206	701	1019	99	191	239	23	74	61	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.60	0.40	2.00	3.63	0.37	2.00	0.91	0.09	2.00	0.41	0.59
Final Sat.:	1750	6770	729	3150	6833	666	3150	1645	155	3150	745	1055
Capacity Analysis Module:												
Vol/Sat:	0.04	0.28	0.28	0.22	0.15	0.15	0.06	0.15	0.15	0.02	0.08	0.08
Crit Moves:		****		****				****		****		
Green Time:	22.4	45.6	45.6	35.9	59.2	59.2	12.9	23.4	23.4	7.0	17.6	17.6
Volume/Cap:	0.20	0.77	0.77	0.77	0.31	0.31	0.58	0.77	0.77	0.41	0.58	0.58
Uniform Del:	43.2	34.5	34.5	40.2	19.9	19.9	53.0	47.7	47.7	56.5	49.8	49.8
IncremntDel:	0.3	1.4	1.4	4.0	0.1	0.1	2.7	10.1	10.1	1.6	3.4	3.4
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:	43.5	35.9	35.9	44.2	20.0	20.0	55.7	57.8	57.8	58.1	53.2	53.2
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:	43.5	35.9	35.9	44.2	20.0	20.0	55.7	57.8	57.8	58.1	53.2	53.2
LOS by Move:	D	D+	D+	D	B-	B-	E+	E+	E+	E+	D-	D-
HCM2kAvgQ:	2	18	18	16	6	6	5	12	12	2	6	6

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #1: De Anza Blvd/Mariani Ave



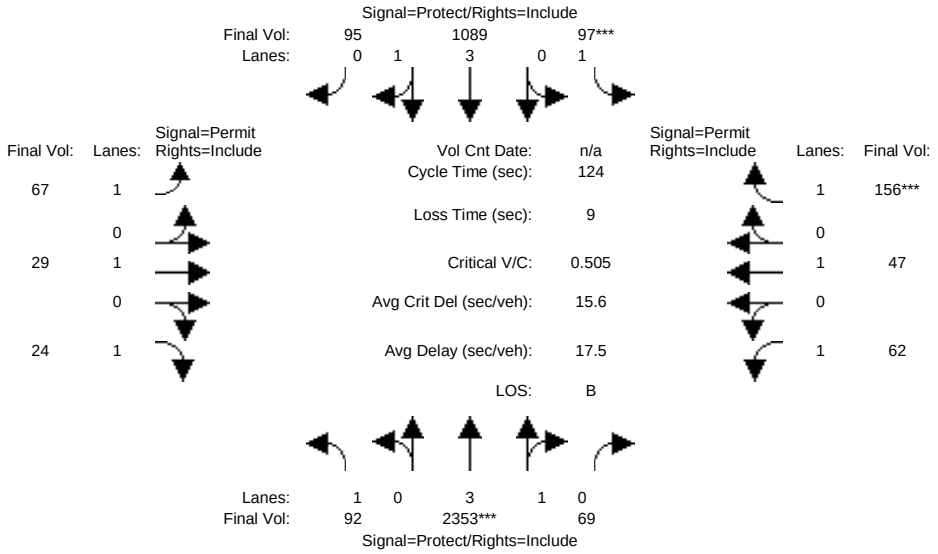
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	61	1867	201	684	995	97	186	233	22	72	60	85
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:	61	1867	201	684	995	97	186	233	22	72	60	85
Added Vol:	0	23	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	61	1890	201	684	1004	97	186	233	22	72	60	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	62	1936	206	701	1029	99	191	239	23	74	61	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	1936	206	701	1029	99	191	239	23	74	61	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	1936	206	701	1029	99	191	239	23	74	61	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.60	0.40	2.00	3.63	0.37	2.00	0.91	0.09	2.00	0.41	0.59
Final Sat.:	1750	6778	721	3150	6838	661	3150	1645	155	3150	745	1055
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.22	0.15	0.15	0.06	0.15	0.15	0.02	0.08	0.08
Crit Moves:		****		****				****		****		
Green Time:	22.3	45.9	45.9	35.8	59.4	59.4	12.8	23.3	23.3	7.0	17.5	17.5
Volume/Cap:	0.20	0.77	0.77	0.77	0.31	0.31	0.58	0.77	0.77	0.41	0.58	0.58
Uniform Del:	43.3	34.4	34.4	40.4	19.8	19.8	53.0	47.8	47.8	56.5	49.8	49.8
IncremntDel:	0.3	1.4	1.4	4.1	0.1	0.1	2.7	10.4	10.4	1.6	3.5	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:	43.6	35.8	35.8	44.5	19.9	19.9	55.8	58.2	58.2	58.1	53.3	53.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.6	35.8	35.8	44.5	19.9	19.9	55.8	58.2	58.2	58.1	53.3	53.3
LOS by Move:	D	D+	D+	D	B-	B-	E+	E+	E+	E+	D-	D-
HCM2kAvgQ:	2	18	18	16	6	6	5	12	12	2	6	6

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #2: De Anza Blvd/Lazaneo Dr



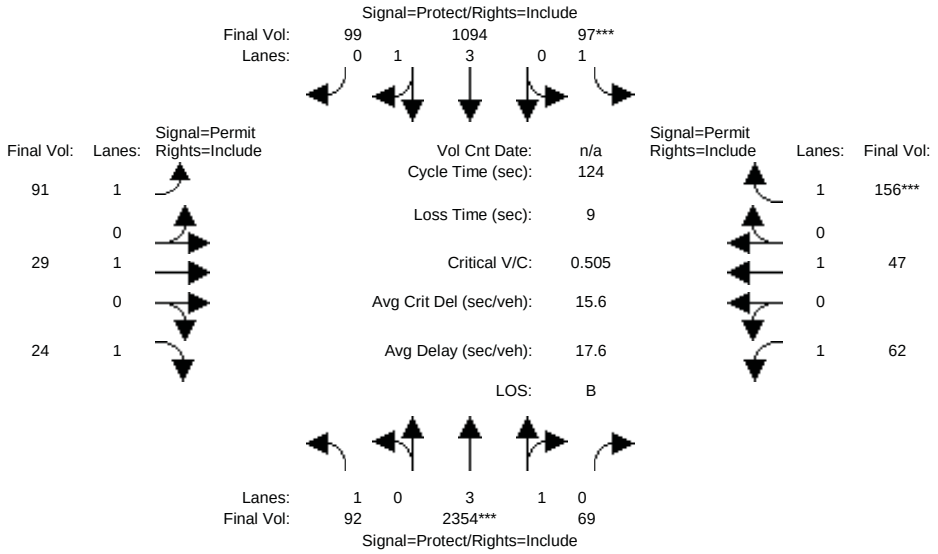
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	86	2198	64	91	1017	89	63	27	22	58	44	146
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:	86	2198	64	91	1017	89	63	27	22	58	44	146
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:	86	2198	64	91	1017	89	63	27	22	58	44	146
User Adj:	1.00	1.00	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	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	92	2353	69	97	1089	95	67	29	24	62	47	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	2353	69	97	1089	95	67	29	24	62	47	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	2353	69	97	1089	95	67	29	24	62	47	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.88	0.12	1.00	3.66	0.34	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7287	212	1750	6895	603	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.32	0.32	0.06	0.16	0.16	0.04	0.02	0.01	0.04	0.02	0.09
Crit Moves:		****		****								****
Green Time:	24.5	79.4	79.4	13.7	68.5	68.5	22.0	22.0	22.0	22.0	22.0	22.0
Volume/Cap:	0.27	0.50	0.50	0.50	0.29	0.29	0.22	0.09	0.08	0.20	0.14	0.50
Uniform Del:	42.1	11.9	11.9	52.0	14.7	14.7	43.7	42.6	42.6	43.5	43.1	46.1
IncremntDel:	0.4	0.1	0.1	2.1	0.0	0.0	0.4	0.1	0.1	0.3	0.2	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:	42.5	12.0	12.0	54.1	14.8	14.8	44.0	42.7	42.7	43.9	43.2	47.4
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:	42.5	12.0	12.0	54.1	14.8	14.8	44.0	42.7	42.7	43.9	43.2	47.4
LOS by Move:	D	B+	B+	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	12	12	4	6	6	2	1	1	2	2	6

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #2: De Anza Blvd/Lazaneo Dr



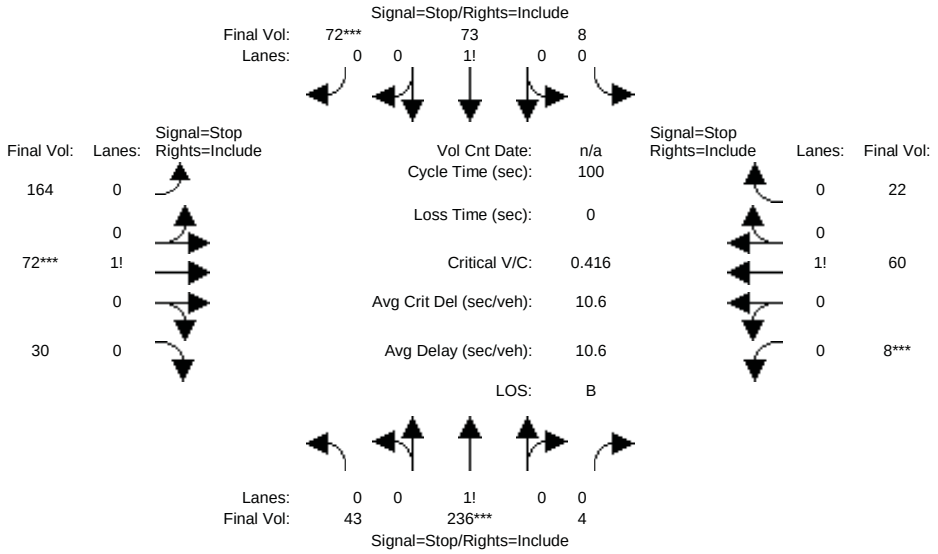
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	86	2198	64	91	1017	89	63	27	22	58	44	146
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:	86	2198	64	91	1017	89	63	27	22	58	44	146
Added Vol:	0	1	0	0	5	3	22	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	86	2199	64	91	1022	92	85	27	22	58	44	146
User Adj:	1.00	1.00	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	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	92	2354	69	97	1094	99	91	29	24	62	47	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	2354	69	97	1094	99	91	29	24	62	47	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	2354	69	97	1094	99	91	29	24	62	47	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.88	0.12	1.00	3.66	0.34	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7288	212	1750	6880	619	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.32	0.32	0.06	0.16	0.16	0.05	0.02	0.01	0.04	0.02	0.09
Crit Moves:		****		****								****
Green Time:	24.4	79.4	79.4	13.7	68.7	68.7	21.9	21.9	21.9	21.9	21.9	21.9
Volume/Cap:	0.27	0.50	0.50	0.50	0.29	0.29	0.29	0.09	0.08	0.20	0.14	0.50
Uniform Del:	42.2	11.9	11.9	52.0	14.7	14.7	44.3	42.6	42.6	43.5	43.1	46.1
IncremntDel:	0.4	0.1	0.1	2.1	0.0	0.0	0.5	0.1	0.1	0.3	0.2	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:	42.7	11.9	11.9	54.1	14.7	14.7	44.8	42.8	42.7	43.9	43.3	47.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.7	11.9	11.9	54.1	14.7	14.7	44.8	42.8	42.7	43.9	43.3	47.5
LOS by Move:	D	B+	B+	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	12	12	4	6	6	3	1	1	2	2	6

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	38	210	4	7	65	64	146	64	27	7	53	20
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:	38	210	4	7	65	64	146	64	27	7	53	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	210	4	7	65	64	146	64	27	7	53	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	43	236	4	8	73	72	164	72	30	8	60	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	236	4	8	73	72	164	72	30	8	60	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	236	4	8	73	72	164	72	30	8	60	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.83	0.02	0.05	0.48	0.47	0.62	0.27	0.11	0.09	0.66	0.25
Final Sat.:	103	568	11	35	324	319	408	179	75	55	415	156
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.23	0.23	0.23	0.40	0.40	0.40	0.14	0.14	0.14
Crit Moves:		****				****		****			****	
Delay/Veh:	11.3	11.3	11.3	9.2	9.2	9.2	11.3	11.3	11.3	9.0	9.0	9.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.3	11.3	11.3	9.2	9.2	9.2	11.3	11.3	11.3	9.0	9.0	9.0
LOS by Move:	B	B	B	A	A	A	B	B	B	A	A	A
ApproachDel:		11.3			9.2			11.3			9.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.3			9.2			11.3			9.0	
LOS by Appr:		B			A			B			A	
AllWayAvgQ:	0.6	0.6	0.6	0.2	0.2	0.2	0.6	0.6	0.6	0.1	0.1	0.1

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	38	210	4	7	65	64	146	64	27	7	53	20

Major Street Volume: 388
Minor Approach Volume: 237
Minor Approach Volume Threshold: 472

SIGNAL WARRANT DISCLAIMER

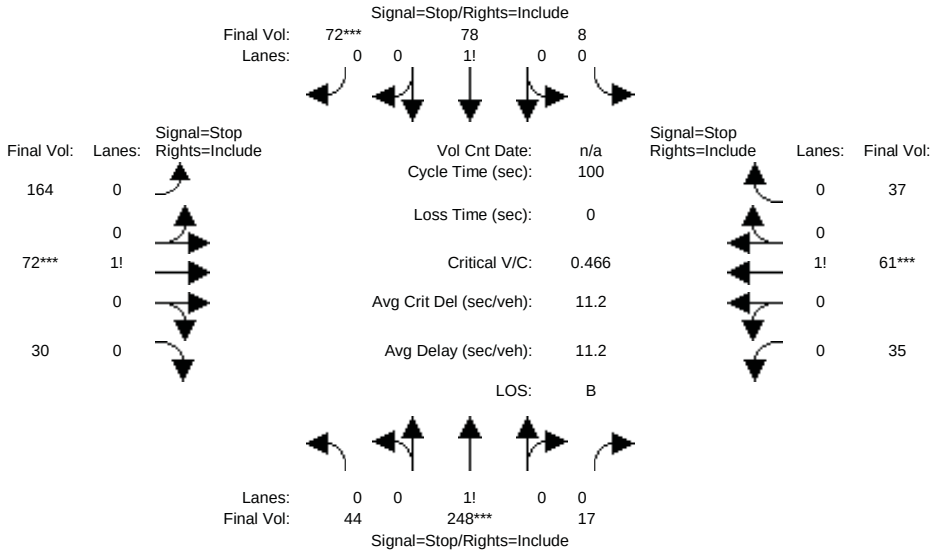
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	38	210	4	7	65	64	146	64	27	7	53	20
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:	38	210	4	7	65	64	146	64	27	7	53	20
Added Vol:	1	11	11	0	4	0	0	0	0	24	1	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	221	15	7	69	64	146	64	27	31	54	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:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	44	248	17	8	78	72	164	72	30	35	61	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	248	17	8	78	72	164	72	30	35	61	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	248	17	8	78	72	164	72	30	35	61	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.81	0.05	0.05	0.49	0.46	0.62	0.27	0.11	0.26	0.46	0.28
Final Sat.:	94	533	36	32	318	295	392	172	73	160	279	171
Capacity Analysis Module:												
Vol/Sat:	0.47	0.47	0.47	0.24	0.24	0.24	0.42	0.42	0.42	0.22	0.22	0.22
Crit Moves:		****				****		****			****	
Delay/Veh:	12.2	12.2	12.2	9.6	9.6	9.6	11.7	11.7	11.7	9.7	9.7	9.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.2	12.2	12.2	9.6	9.6	9.6	11.7	11.7	11.7	9.7	9.7	9.7
LOS by Move:	B	B	B	A	A	A	B	B	B	A	A	A
ApproachDel:		12.2			9.6			11.7			9.7	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.2			9.6			11.7			9.7	
LOS by Appr:		B			A			B			A	
AllWayAvgQ:	0.7	0.7	0.7	0.3	0.3	0.3	0.6	0.6	0.6	0.2	0.2	0.2

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	39	221	15	7	69	64	146	64	27	31	54	33

Major Street Volume: 415
Minor Approach Volume: 237
Minor Approach Volume Threshold: 454

SIGNAL WARRANT DISCLAIMER

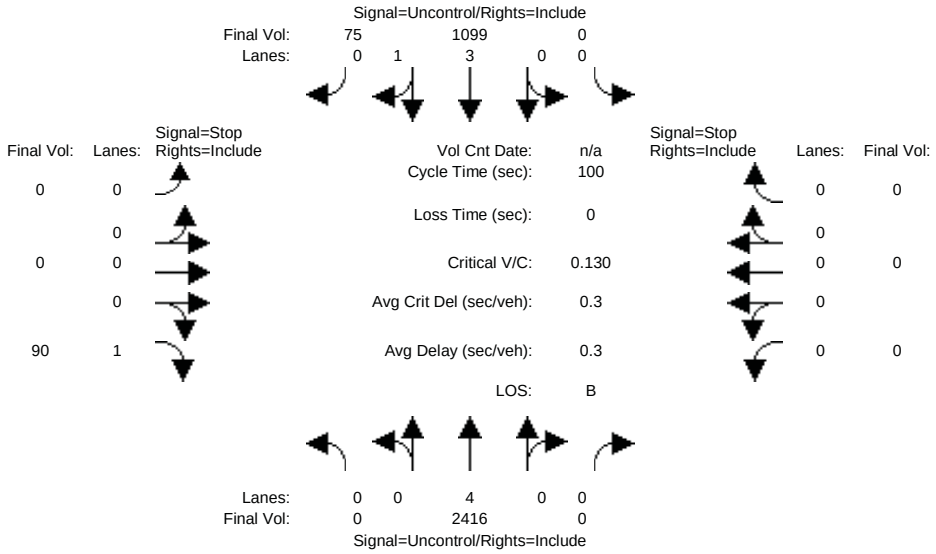
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	2315	0	0	1053	72	0	0	86	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2315	0	0	1053	72	0	0	86	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2315	0	0	1053	72	0	0	86	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	2416	0	0	1099	75	0	0	90	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2416	0	0	1099	75	0	0	90	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	312	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	689	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	689	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.4	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.0	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.0			xxxxxx		
ApproachLOS:	*			*			B			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2315		0	0 1053	72		0	0	86	0	0	0
ApproachDel:	xxxxxx			xxxxxx			11.0			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=86]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3526]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2315		0	0 1053	72		0	0	86	0	0	0

Major Street Volume: 3440
Minor Approach Volume: 86
Minor Approach Volume Threshold: -141 [less than minimum of 100]

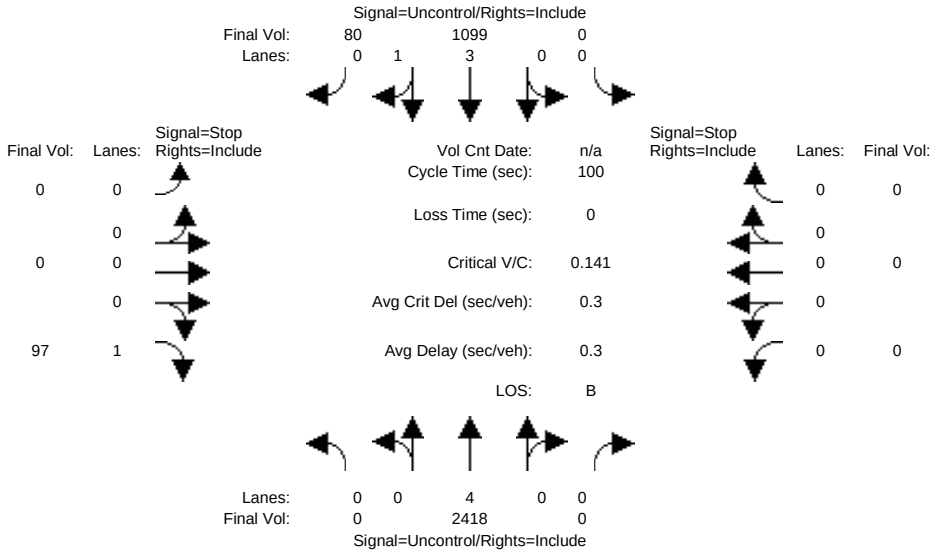
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP AM

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	2315	0	0	1053	72	0	0	86	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2315	0	0	1053	72	0	0	86	0	0	0
Added Vol:	0	1	0	0	0	5	0	0	7	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2316	0	0	1053	77	0	0	93	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	2418	0	0	1099	80	0	0	97	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2418	0	0	1099	80	0	0	97	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	315	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	687	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	687	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.1	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2316	0		0 1053	77		0	0	93	0	0	0
ApproachDel:	xxxxxx			xxxxxx			11.1			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=93]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3539]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2316	0		0 1053	77		0	0	93	0	0	0

Major Street Volume: 3446
Minor Approach Volume: 93
Minor Approach Volume Threshold: -141 [less than minimum of 100]

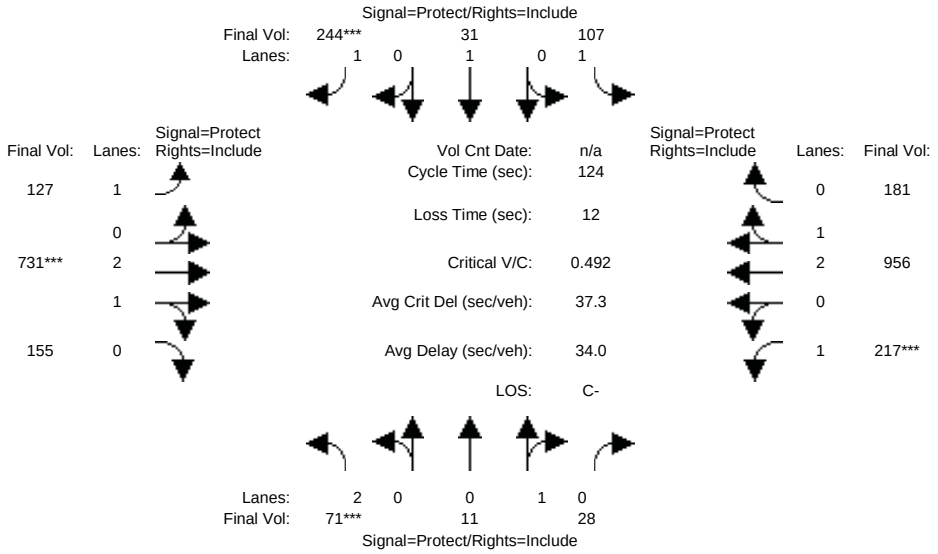
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #5: Mary Ave/Stevens Creek Blvd



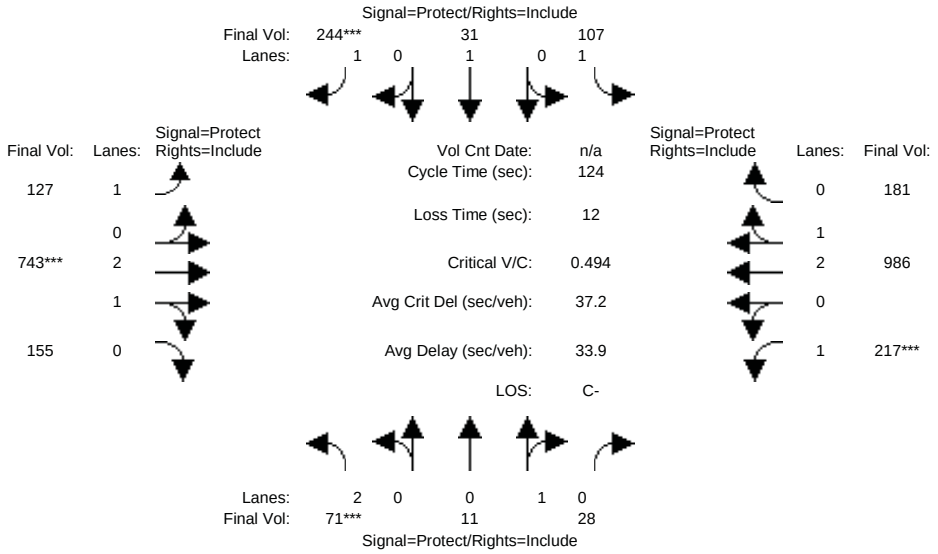
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	10	25	97	28	221	115	662	140	196	865	164
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	10	25	97	28	221	115	662	140	196	865	164
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	10	25	97	28	221	115	662	140	196	865	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	71	11	28	107	31	244	127	731	155	217	956	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	11	28	107	31	244	127	731	155	217	956	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	11	28	107	31	244	127	731	155	217	956	181
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	0.29	0.71	1.00	1.00	1.00	1.00	2.46	0.54	1.00	2.50	0.50
Final Sat.:	3150	514	1286	1750	1900	1750	1750	4621	977	1750	4706	892
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.02	0.14	0.07	0.16	0.16	0.12	0.20	0.20
Crit Moves:	****					****		****		****		
Green Time:	7.0	23.7	23.7	18.0	34.8	34.8	18.5	39.4	39.4	30.8	51.7	51.7
Volume/Cap:	0.40	0.11	0.11	0.42	0.06	0.50	0.49	0.50	0.50	0.50	0.49	0.49
Uniform Del:	56.5	41.4	41.4	48.2	32.6	37.3	48.4	34.3	34.3	40.0	26.4	26.4
IncremntDel:	1.5	0.1	0.1	1.1	0.0	0.8	1.4	0.2	0.2	0.9	0.2	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:	57.9	41.6	41.6	49.4	32.7	38.1	49.8	34.5	34.5	40.9	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:	57.9	41.6	41.6	49.4	32.7	38.1	49.8	34.5	34.5	40.9	26.6	26.6
LOS by Move:	E+	D	D	D	C-	D+	D	C-	C-	D	C	C
HCM2kAvgQ:	2	1	1	4	1	9	5	9	9	7	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #5: Mary Ave/Stevens Creek Blvd



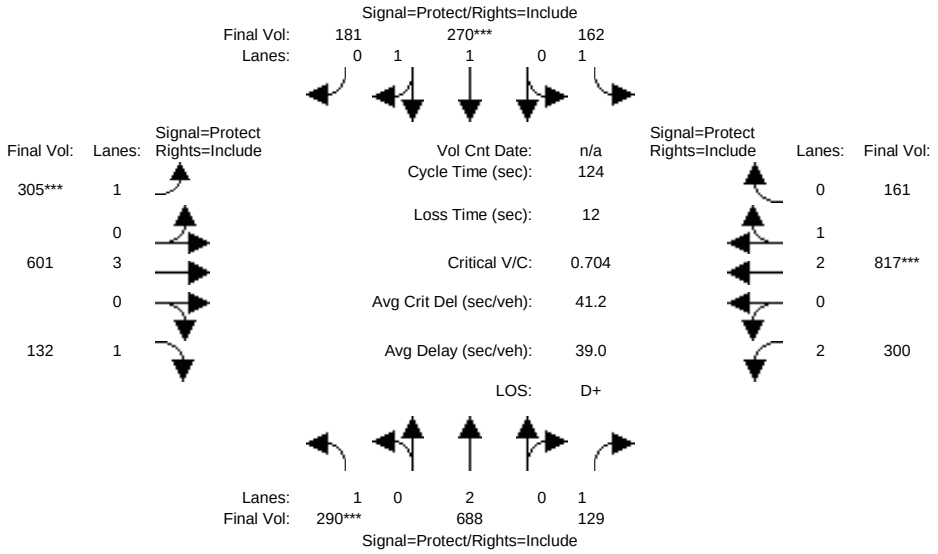
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	10	25	97	28	221	115	662	140	196	865	164
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	10	25	97	28	221	115	662	140	196	865	164
Added Vol:	0	0	0	0	0	0	0	10	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	10	25	97	28	221	115	672	140	196	892	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	71	11	28	107	31	244	127	743	155	217	986	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	11	28	107	31	244	127	743	155	217	986	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	11	28	107	31	244	127	743	155	217	986	181
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	0.29	0.71	1.00	1.00	1.00	1.00	2.46	0.54	1.00	2.52	0.48
Final Sat.:	3150	514	1286	1750	1900	1750	1750	4633	965	1750	4729	869
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.02	0.14	0.07	0.16	0.16	0.12	0.21	0.21
Crit Moves:	****					****		****		****		
Green Time:	7.0	23.6	23.6	18.0	34.6	34.6	18.2	39.7	39.7	30.7	52.2	52.2
Volume/Cap:	0.40	0.11	0.11	0.42	0.06	0.50	0.49	0.50	0.50	0.50	0.49	0.49
Uniform Del:	56.5	41.5	41.5	48.3	32.8	37.5	48.7	34.1	34.1	40.1	26.2	26.2
IncremntDel:	1.5	0.1	0.1	1.1	0.0	0.8	1.5	0.2	0.2	0.9	0.2	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:	57.9	41.7	41.7	49.4	32.8	38.3	50.2	34.3	34.3	41.0	26.4	26.4
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:	57.9	41.7	41.7	49.4	32.8	38.3	50.2	34.3	34.3	41.0	26.4	26.4
LOS by Move:	E+	D	D	D	C-	D+	D	C-	C-	D	C	C
HCM2kAvgQ:	2	1	1	4	1	9	5	9	9	7	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



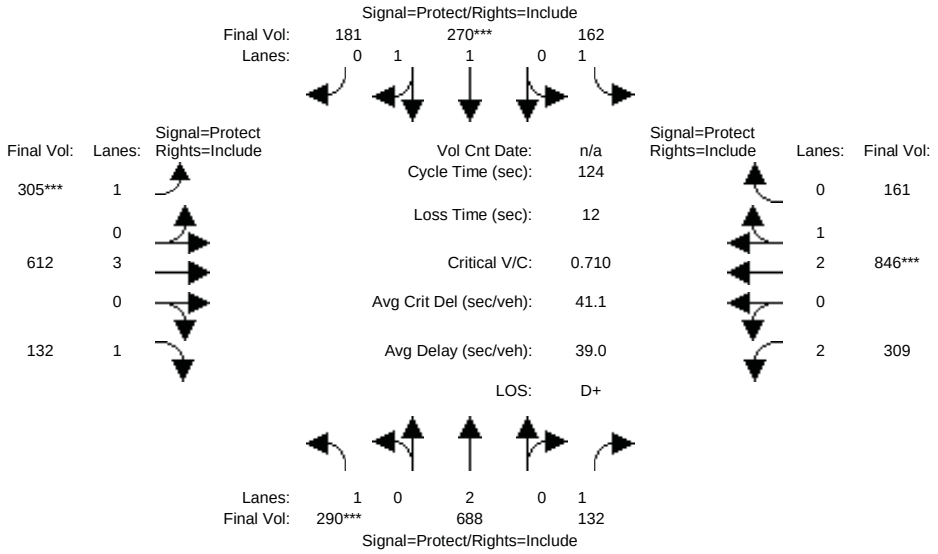
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	267	634	119	149	249	167	281	554	122	277	753	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:	267	634	119	149	249	167	281	554	122	277	753	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:	267	634	119	149	249	167	281	554	122	277	753	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	290	688	129	162	270	181	305	601	132	300	817	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	688	129	162	270	181	305	601	132	300	817	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	688	129	162	270	181	305	601	132	300	817	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	2.00	1.00	1.00	1.18	0.82	1.00	3.00	1.00	2.00	2.49	0.51
Final Sat.:	1750	3800	1750	1750	2214	1485	1750	5700	1750	3150	4679	920
Capacity Analysis Module:												
Vol/Sat:	0.17	0.18	0.07	0.09	0.12	0.12	0.17	0.11	0.08	0.10	0.17	0.17
Crit Moves:	****				****		****				****	
Green Time:	29.1	33.5	33.5	17.1	21.5	21.5	30.7	32.2	32.2	29.2	30.7	30.7
Volume/Cap:	0.70	0.67	0.27	0.67	0.70	0.70	0.70	0.41	0.29	0.41	0.70	0.70
Uniform Del:	43.5	40.3	35.6	50.8	48.3	48.3	42.5	38.0	36.7	40.1	42.5	42.5
IncremntDel:	5.5	1.7	0.3	7.1	3.6	3.6	5.2	0.2	0.4	0.4	1.7	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	0.78	0.77	0.77	0.80	0.78	0.78
Delay/Veh:	49.0	42.0	36.0	57.9	51.8	51.8	38.4	29.3	28.5	32.2	34.8	34.8
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:	49.0	42.0	36.0	57.9	51.8	51.8	38.4	29.3	28.5	32.2	34.8	34.8
LOS by Move:	D	D	D+	E+	D-	D-	D+	C	C	C-	C-	C-
HCM2kAvgQ:	12	12	4	7	10	10	10	5	3	5	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



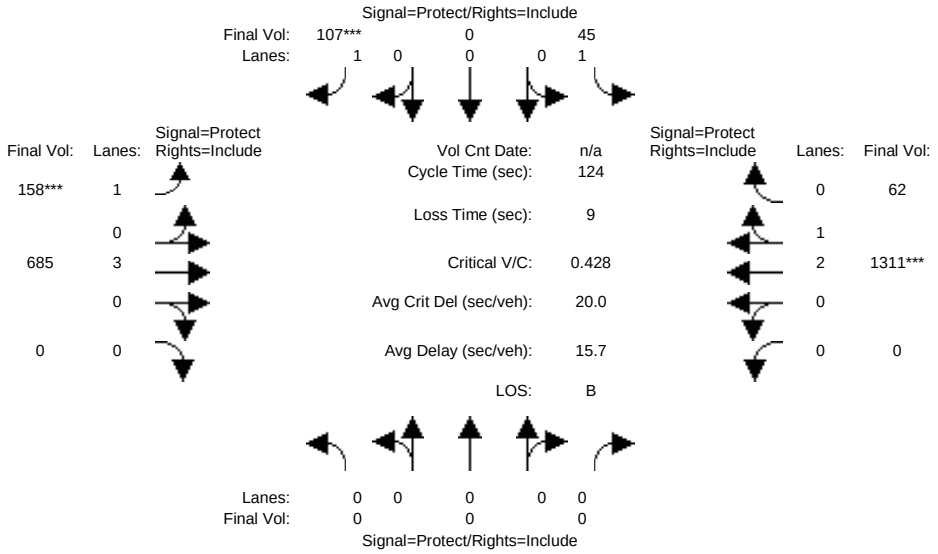
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	267	634	119	149	249	167	281	554	122	277	753	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:	267	634	119	149	249	167	281	554	122	277	753	148
Added Vol:	0	0	3	0	0	0	0	10	0	8	27	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	267	634	122	149	249	167	281	564	122	285	780	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	290	688	132	162	270	181	305	612	132	309	846	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	688	132	162	270	181	305	612	132	309	846	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	688	132	162	270	181	305	612	132	309	846	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	2.00	1.00	1.00	1.18	0.82	1.00	3.00	1.00	2.00	2.50	0.50
Final Sat.:	1750	3800	1750	1750	2214	1485	1750	5700	1750	3150	4706	893
Capacity Analysis Module:												
Vol/Sat:	0.17	0.18	0.08	0.09	0.12	0.12	0.17	0.11	0.08	0.10	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	28.9	33.2	33.2	17.0	21.3	21.3	30.4	32.3	32.3	29.5	31.4	31.4
Volume/Cap:	0.71	0.68	0.28	0.68	0.71	0.71	0.71	0.41	0.29	0.41	0.71	0.71
Uniform Del:	43.7	40.6	35.9	50.9	48.4	48.4	42.8	38.0	36.7	39.9	42.2	42.2
IncremntDel:	5.7	1.8	0.3	7.4	3.7	3.7	5.5	0.2	0.4	0.4	1.7	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	0.78	0.77	0.77	0.79	0.77	0.77
Delay/Veh:	49.4	42.4	36.3	58.3	52.2	52.2	39.0	29.3	28.4	32.0	34.3	34.3
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:	49.4	42.4	36.3	58.3	52.2	52.2	39.0	29.3	28.4	32.0	34.3	34.3
LOS by Move:	D	D	D+	E+	D-	D-	D+	C	C	C	C-	C-
HCM2kAvgQ:	12	12	4	8	10	10	11	5	3	5	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #7: Saich Way/Stevens Creek Blvd



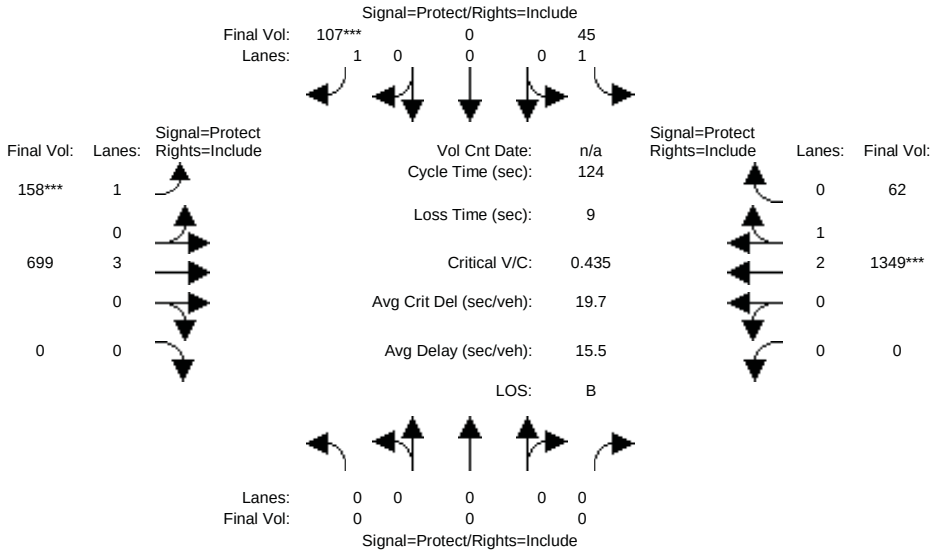
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	41	0	98	145	628	0	0	1202	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:	0	0	0	41	0	98	145	628	0	0	1202	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:	0	0	0	41	0	98	145	628	0	0	1202	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	45	0	107	158	685	0	0	1311	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	45	0	107	158	685	0	0	1311	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	45	0	107	158	685	0	0	1311	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.86	0.14
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5346	254
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.09	0.12	0.00	0.00	0.25	0.25
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	17.7	0.0	17.7	26.2	97.3	0.0	0.0	71.1	71.1
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.43	0.43	0.15	0.00	0.00	0.43	0.43
Uniform Del:	0.0	0.0	0.0	46.8	0.0	48.5	42.4	3.3	0.0	0.0	15.0	15.0
IncremntDel:	0.0	0.0	0.0	0.3	0.0	1.2	0.8	0.0	0.0	0.0	0.1	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:	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	47.1	0.0	49.7	43.2	3.3	0.0	0.0	15.0	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.1	0.0	49.7	43.2	3.3	0.0	0.0	15.0	15.0
LOS by Move:	A	A	A	D	A	D	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	4	5	2	0	0	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #7: Saich Way/Stevens Creek Blvd



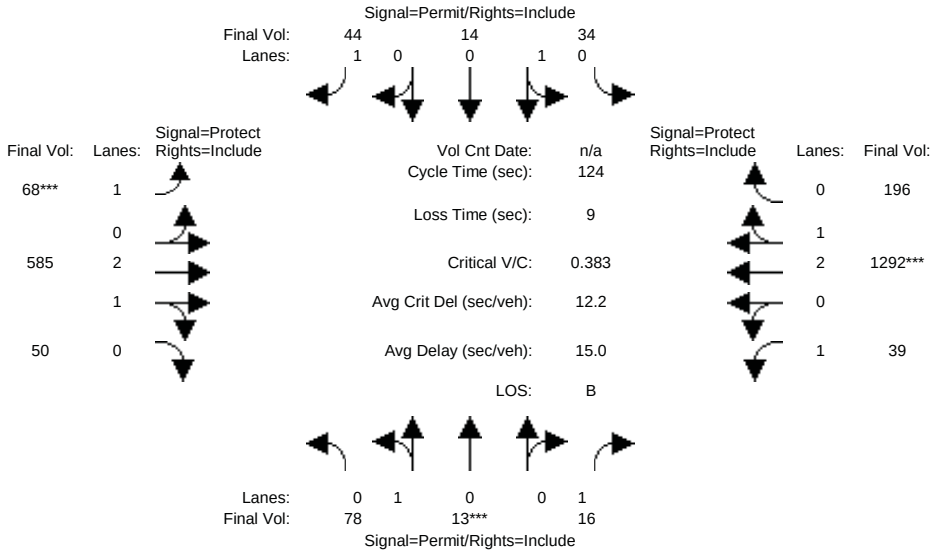
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	41	0	98	145	628	0	0	1202	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:	0	0	0	41	0	98	145	628	0	0	1202	57
Added Vol:	0	0	0	0	0	0	0	13	0	0	35	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	41	0	98	145	641	0	0	1237	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	45	0	107	158	699	0	0	1349	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	45	0	107	158	699	0	0	1349	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	45	0	107	158	699	0	0	1349	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.86	0.14
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5353	247
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.09	0.12	0.00	0.00	0.25	0.25
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	17.4	0.0	17.4	25.8	97.6	0.0	0.0	71.8	71.8
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.43	0.43	0.16	0.00	0.00	0.43	0.43
Uniform Del:	0.0	0.0	0.0	47.0	0.0	48.8	42.8	3.2	0.0	0.0	14.7	14.7
IncremntDel:	0.0	0.0	0.0	0.4	0.0	1.2	0.8	0.0	0.0	0.0	0.1	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:	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	47.4	0.0	50.0	43.6	3.2	0.0	0.0	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.4	0.0	50.0	43.6	3.2	0.0	0.0	14.8	14.8
LOS by Move:	A	A	A	D	A	D	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	4	5	2	0	0	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #8: Bandley Dr/Stevens Creek Blvd



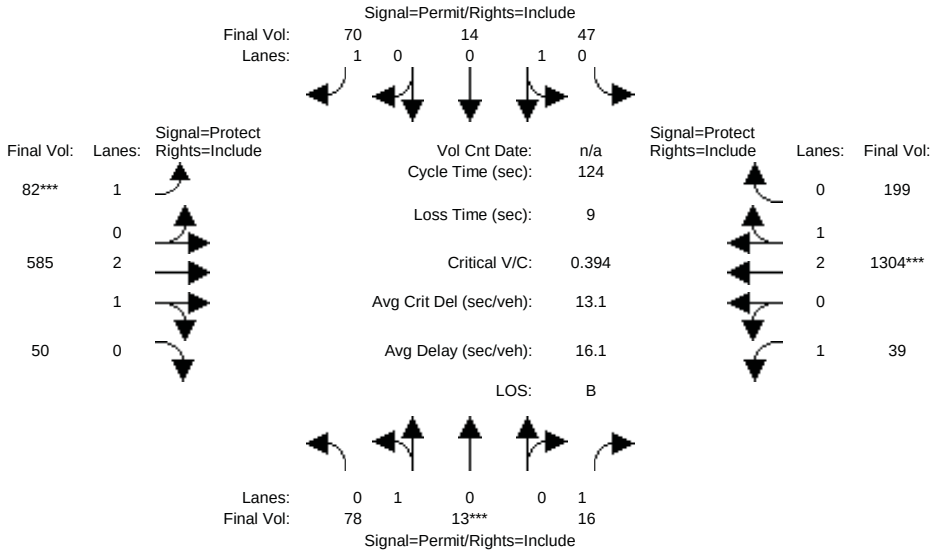
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	74	12	15	32	13	42	64	552	47	37	1220	185
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:	74	12	15	32	13	42	64	552	47	37	1220	185
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:	74	12	15	32	13	42	64	552	47	37	1220	185
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	78	13	16	34	14	44	68	585	50	39	1292	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	13	16	34	14	44	68	585	50	39	1292	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	13	16	34	14	44	68	585	50	39	1292	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	0.86	0.14	1.00	0.71	0.29	1.00	1.00	2.76	0.24	1.00	2.59	0.41
Final Sat.:	1549	251	1750	1280	520	1750	1750	5160	439	1750	4862	737
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.01	0.03	0.03	0.03	0.04	0.11	0.11	0.02	0.27	0.27
Crit Moves:		****					****				****	
Green Time:	16.4	16.4	16.4	16.4	16.4	16.4	12.5	65.8	65.8	32.8	86.1	86.1
Volume/Cap:	0.38	0.38	0.07	0.20	0.20	0.19	0.38	0.21	0.21	0.08	0.38	0.38
Uniform Del:	49.2	49.2	47.1	48.0	48.0	47.9	52.1	15.4	15.4	34.3	7.9	7.9
IncremntDel:	1.0	1.0	0.1	0.4	0.4	0.4	1.4	0.0	0.0	0.1	0.1	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:	50.2	50.2	47.2	48.4	48.4	48.3	53.5	15.4	15.4	34.4	8.0	8.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	50.2	47.2	48.4	48.4	48.3	53.5	15.4	15.4	34.4	8.0	8.0
LOS by Move:	D	D	D	D	D	D	D-	B	B	C-	A	A
HCM2kAvgQ:	4	4	1	2	2	2	3	4	4	1	8	8

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #8: Bandley Dr/Stevens Creek Blvd



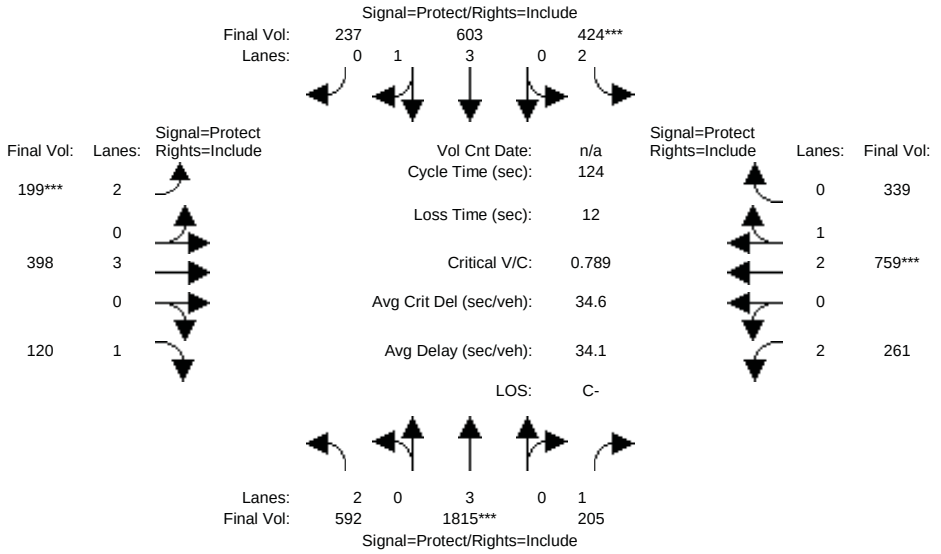
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	74	12	15	32	13	42	64	552	47	37	1220	185
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:	74	12	15	32	13	42	64	552	47	37	1220	185
Added Vol:	0	0	0	12	0	24	13	0	0	0	11	3
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	74	12	15	44	13	66	77	552	47	37	1231	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:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	78	13	16	47	14	70	82	585	50	39	1304	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	13	16	47	14	70	82	585	50	39	1304	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	13	16	47	14	70	82	585	50	39	1304	199
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	0.86	0.14	1.00	0.77	0.23	1.00	1.00	2.76	0.24	1.00	2.59	0.41
Final Sat.:	1549	251	1750	1389	411	1750	1750	5160	439	1750	4857	742
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.01	0.03	0.03	0.04	0.05	0.11	0.11	0.02	0.27	0.27
Crit Moves:		****					****				****	
Green Time:	15.9	15.9	15.9	15.9	15.9	15.9	14.7	66.1	66.1	32.9	84.4	84.4
Volume/Cap:	0.39	0.39	0.07	0.26	0.26	0.31	0.39	0.21	0.21	0.08	0.39	0.39
Uniform Del:	49.6	49.6	47.5	48.7	48.7	49.1	50.6	15.2	15.2	34.2	8.6	8.6
IncremntDel:	1.1	1.1	0.1	0.6	0.6	0.8	1.2	0.0	0.0	0.1	0.1	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:	50.7	50.7	47.7	49.3	49.3	49.9	51.8	15.3	15.3	34.3	8.7	8.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.7	50.7	47.7	49.3	49.3	49.9	51.8	15.3	15.3	34.3	8.7	8.7
LOS by Move:	D	D	D	D	D	D	D-	B	B	C-	A	A
HCM2kAvgQ:	4	4	1	2	2	3	3	4	4	1	8	8

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



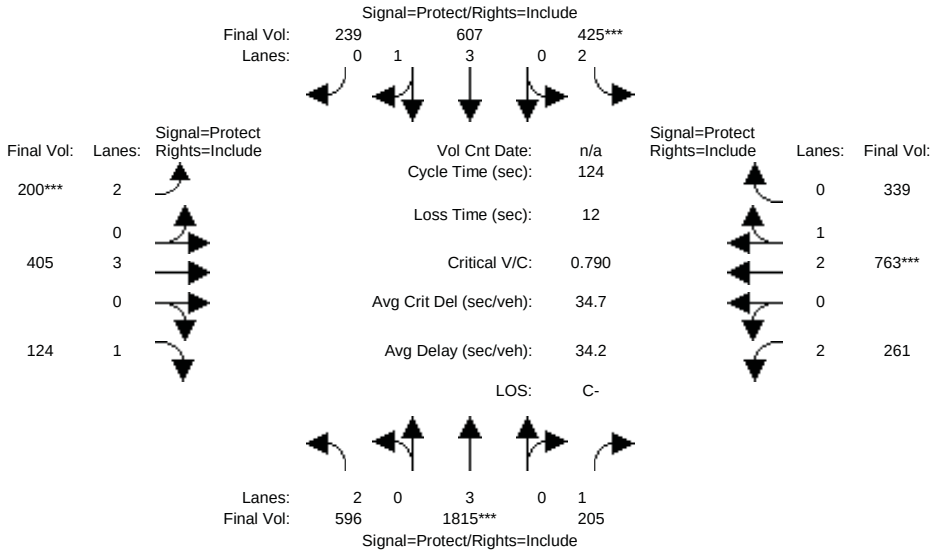
Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Volume Module:												
Base Vol:	564	1728	195	404	574	226	189	379	114	248	723	323
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:	564	1728	195	404	574	226	189	379	114	248	723	323
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:	564	1728	195	404	574	226	189	379	114	248	723	323
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	592	1815	205	424	603	237	199	398	120	261	759	339
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	592	1815	205	424	603	237	199	398	120	261	759	339
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	592	1815	205	424	603	237	199	398	120	261	759	339
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.04	0.96
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	3868	1728
Capacity Analysis Module:												
Vol/Sat:	0.19	0.32	0.12	0.13	0.11	0.14	0.06	0.07	0.07	0.08	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	41.4	50.1	50.1	21.2	29.8	29.8	9.9	20.1	20.1	20.6	30.9	30.9
Volume/Cap:	0.56	0.79	0.29	0.79	0.44	0.56	0.79	0.43	0.42	0.50	0.79	0.79
Uniform Del:	33.9	32.3	25.0	49.3	40.0	41.4	56.0	46.8	46.7	47.0	43.5	43.5
IncremntDel:	0.7	1.9	0.2	7.7	0.2	0.5	15.3	0.3	1.0	0.7	3.1	3.1
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:	0.67	0.55	0.55	0.86	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	23.3	19.7	13.9	50.2	31.7	33.1	71.3	47.1	47.7	47.7	46.6	46.6
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:	23.3	19.7	13.9	50.2	31.7	33.1	71.3	47.1	47.7	47.7	46.6	46.6
LOS by Move:	C	B-	B	D	C	C-	E	D	D	D	D	D
HCM2kAvgQ:	9	18	4	11	6	8	6	5	5	6	15	15

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP AM

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Volume Module:												
Base Vol:	564	1728	195	404	574	226	189	379	114	248	723	323
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:	564	1728	195	404	574	226	189	379	114	248	723	323
Added Vol:	3	0	0	1	4	2	1	7	4	0	3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	567	1728	195	405	578	228	190	386	118	248	726	323
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	596	1815	205	425	607	239	200	405	124	261	763	339
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	1815	205	425	607	239	200	405	124	261	763	339
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	596	1815	205	425	607	239	200	405	124	261	763	339
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.04	0.96
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	3873	1723
Capacity Analysis Module:												
Vol/Sat:	0.19	0.32	0.12	0.14	0.11	0.14	0.06	0.07	0.07	0.08	0.20	0.20
Crit Moves:		****		****			****				****	
Green Time:	41.3	50.0	50.0	21.2	29.9	29.9	9.9	20.2	20.2	20.7	30.9	30.9
Volume/Cap:	0.57	0.79	0.29	0.79	0.44	0.57	0.79	0.44	0.44	0.50	0.79	0.79
Uniform Del:	34.0	32.4	25.0	49.3	40.0	41.4	56.0	46.8	46.8	46.9	43.5	43.5
IncremntDel:	0.7	1.9	0.2	7.8	0.2	0.5	15.4	0.3	1.1	0.7	3.1	3.1
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:	0.67	0.55	0.55	0.86	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	23.4	19.8	14.0	50.3	31.7	33.1	71.4	47.1	47.9	47.7	46.7	46.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	23.4	19.8	14.0	50.3	31.7	33.1	71.4	47.1	47.9	47.7	46.7	46.7
LOS by Move:	C	B-	B	D	C	C-	E	D	D	D	D	D
HCM2kAvgQ:	9	18	4	11	6	8	6	5	5	6	15	15

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

Copyright (c) 2008 Dowling Associates, Inc.

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

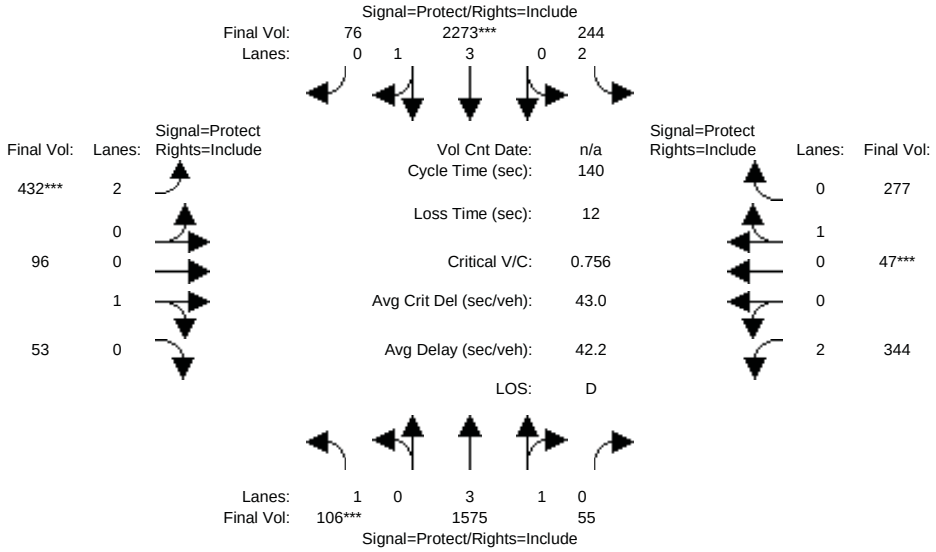
Intersection		???				Existing AM				Existing PP AM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	De Anza Boulevard and Mariani Avenue	?	xx.x	x.xxx	xx.x	D+	36.4	0.746	40.1	D+	36.3	0.749	+ 0.003	40.1	+ 0.0	?	xx.x	x.xxx	xx.x
#2	De Anza Boulevard and Lazaneo Drive	?	xx.x	x.xxx	xx.x	B	17.5	0.505	15.6	B	17.6	0.505	+ 0.000	15.6	- 0.0	?	xx.x	x.xxx	xx.x
#3	Bandley Drive and Alves Drive	?	xx.x	x.xxx	xx.x	B	10.6	0.416	10.6	B	11.2	0.466	+ 0.050	11.2	+ 0.6	?	xx.x	x.xxx	xx.x
#4	De Anza Boulevard and Alves Drive	?	xx.x	x.xxx	xx.x	B	11.0	0.130	0.3	B	11.1	0.141	+ 0.011	0.3	+ 0.0	?	xx.x	x.xxx	xx.x
#5	Mary Avenue and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C-	34.0	0.492	37.3	C-	33.9	0.494	+ 0.002	37.2	- 0.1	?	xx.x	x.xxx	xx.x
#6	N. Stelling Road and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D+	39.0	0.704	41.2	D+	39.0	0.710	+ 0.006	41.1	- 0.1	?	xx.x	x.xxx	xx.x
#7	Saich Way and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	B	15.7	0.428	20.0	B	15.5	0.435	+ 0.007	19.7	- 0.3	?	xx.x	x.xxx	xx.x
#8	Bandley Drive and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	B	15.0	0.383	12.2	B	16.1	0.394	+ 0.011	13.1	+ 0.9	?	xx.x	x.xxx	xx.x
#9	De Anza Boulevard and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C-	34.1	0.789	34.6	C-	34.2	0.790	+ 0.001	34.7	+ 0.1	?	xx.x	x.xxx	xx.x

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #1: De Anza Blvd/Mariani Ave



Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	100	1479	52	229	2134	71	406	90	50	323	44	260
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:	100	1479	52	229	2134	71	406	90	50	323	44	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	1479	52	229	2134	71	406	90	50	323	44	260
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	106	1575	55	244	2273	76	432	96	53	344	47	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	1575	55	244	2273	76	432	96	53	344	47	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	1575	55	244	2273	76	432	96	53	344	47	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.86	0.14	2.00	3.87	0.13	2.00	0.64	0.36	2.00	0.14	0.86
Final Sat.:	1750	7245	255	3150	7258	241	3150	1157	643	3150	261	1539
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.08	0.31	0.31	0.14	0.08	0.08	0.11	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	11.3	51.1	51.1	18.2	58.0	58.0	25.4	25.3	25.3	33.4	33.3	33.3
Volume/Cap:	0.76	0.60	0.60	0.60	0.76	0.76	0.76	0.46	0.46	0.46	0.76	0.76
Delay/Veh:	83.6	36.4	36.4	59.8	36.1	36.1	60.1	52.2	52.2	46.0	57.1	57.1
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:	83.6	36.4	36.4	59.8	36.1	36.1	60.1	52.2	52.2	46.0	57.1	57.1
LOS by Move:	F	D+	D+	E+	D+	D+	E	D-	D-	D	E+	E+
HCM2kAvgQ:	5	14	14	7	23	23	12	6	6	8	15	15

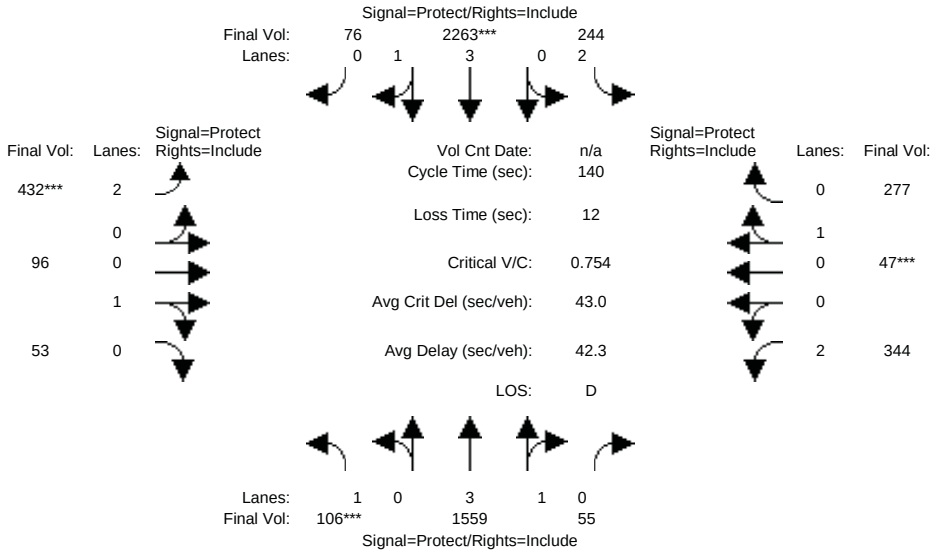
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #1: De Anza Blvd/Mariani Ave



Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	100	1479	52	229	2134	71	406	90	50	323	44	260
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:	100	1479	52	229	2134	71	406	90	50	323	44	260
Added Vol:	0	-15	0	0	-9	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	1464	52	229	2125	71	406	90	50	323	44	260
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	106	1559	55	244	2263	76	432	96	53	344	47	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	1559	55	244	2263	76	432	96	53	344	47	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	1559	55	244	2263	76	432	96	53	344	47	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.86	0.14	2.00	3.87	0.13	2.00	0.64	0.36	2.00	0.14	0.86
Final Sat.:	1750	7242	257	3150	7257	242	3150	1157	643	3150	261	1539
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.08	0.31	0.31	0.14	0.08	0.08	0.11	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	11.3	50.9	50.9	18.3	57.9	57.9	25.5	25.4	25.4	33.5	33.4	33.4
Volume/Cap:	0.75	0.59	0.59	0.59	0.75	0.75	0.75	0.46	0.46	0.46	0.75	0.75
Delay/Veh:	83.4	36.5	36.5	59.7	36.1	36.1	60.0	52.2	52.2	45.9	57.0	57.0
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:	83.4	36.5	36.5	59.7	36.1	36.1	60.0	52.2	52.2	45.9	57.0	57.0
LOS by Move:	F	D+	D+	E+	D+	D+	E+	D-	D-	D	E+	E+
HCM2kAvgQ:	5	14	14	7	22	22	12	6	6	8	15	15

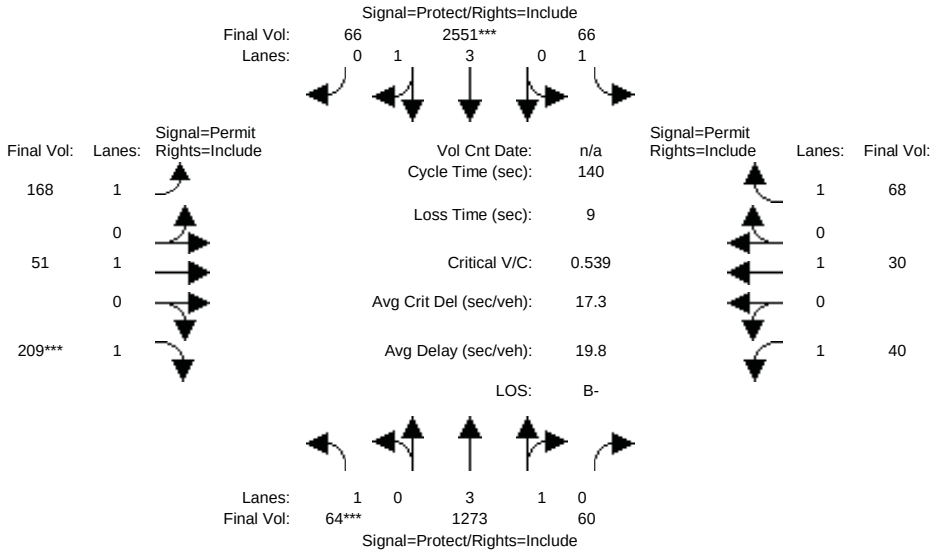
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #2: De Anza Blvd/Lazaneo Dr



Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
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
Volume Module:												
Base Vol:	60	1202	57	62	2408	62	159	48	197	38	28	64
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:	60	1202	57	62	2408	62	159	48	197	38	28	64
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	1202	57	62	2408	62	159	48	197	38	28	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	64	1273	60	66	2551	66	168	51	209	40	30	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1273	60	66	2551	66	168	51	209	40	30	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1273	60	66	2551	66	168	51	209	40	30	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.81	0.19	1.00	3.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7160	340	1750	7311	188	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.04	0.35	0.35	0.10	0.03	0.12	0.02	0.02	0.04
Crit Moves:	****				****				****			
Green Time:	9.4	78.1	78.1	22.0	90.6	90.6	31.0	31.0	31.0	31.0	31.0	31.0
Volume/Cap:	0.54	0.32	0.32	0.24	0.54	0.54	0.44	0.12	0.54	0.10	0.07	0.18
Delay/Veh:	68.1	16.7	16.7	52.2	13.5	13.5	47.8	43.8	49.7	43.6	43.2	44.4
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:	68.1	16.7	16.7	52.2	13.5	13.5	47.8	43.8	49.7	43.6	43.2	44.4
LOS by Move:	E	B	B	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	4	8	8	3	15	15	7	2	9	1	1	3

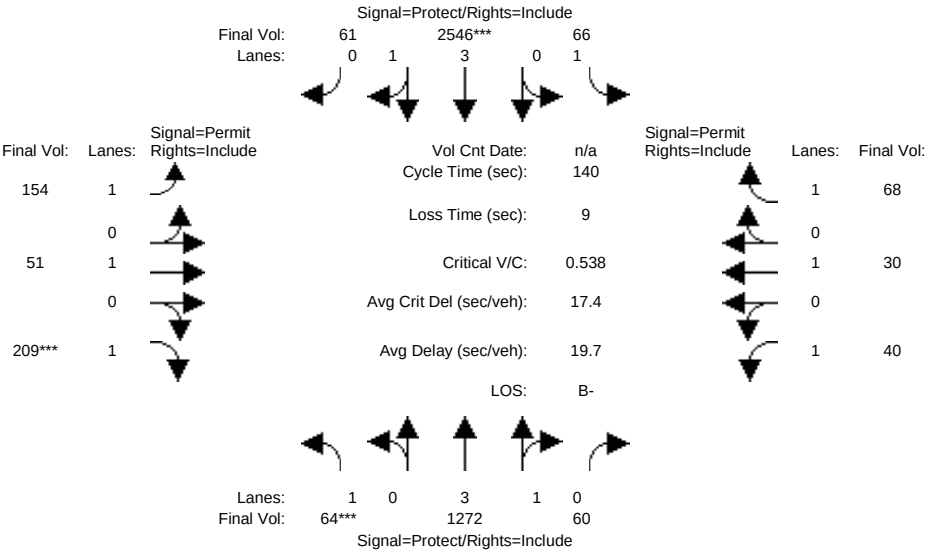
Note: Queue reported is the number of cars per lane.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #2: De Anza Blvd/Lazaneo Dr



Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
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
Volume Module:												
Base Vol:	60	1202	57	62	2408	62	159	48	197	38	28	64
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:	60	1202	57	62	2408	62	159	48	197	38	28	64
Added Vol:	0	-1	0	0	-5	-4	-14	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	60	1201	57	62	2403	58	145	48	197	38	28	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	64	1272	60	66	2546	61	154	51	209	40	30	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1272	60	66	2546	61	154	51	209	40	30	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1272	60	66	2546	61	154	51	209	40	30	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.81	0.19	1.00	3.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7160	340	1750	7323	177	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.18	0.18	0.04	0.35	0.35	0.09	0.03	0.12	0.02	0.02	0.04
Crit Moves:	****				****				****			
Green Time:	9.5	78.0	78.0	21.9	90.5	90.5	31.0	31.0	31.0	31.0	31.0	31.0
Volume/Cap:	0.54	0.32	0.32	0.24	0.54	0.54	0.40	0.12	0.54	0.10	0.07	0.17
Delay/Veh:	68.0	16.7	16.7	52.2	13.5	13.5	47.1	43.7	49.6	43.5	43.1	44.3
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:	68.0	16.7	16.7	52.2	13.5	13.5	47.1	43.7	49.6	43.5	43.1	44.3
LOS by Move:	E	B	B	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	4	8	8	3	15	15	6	2	9	1	1	3

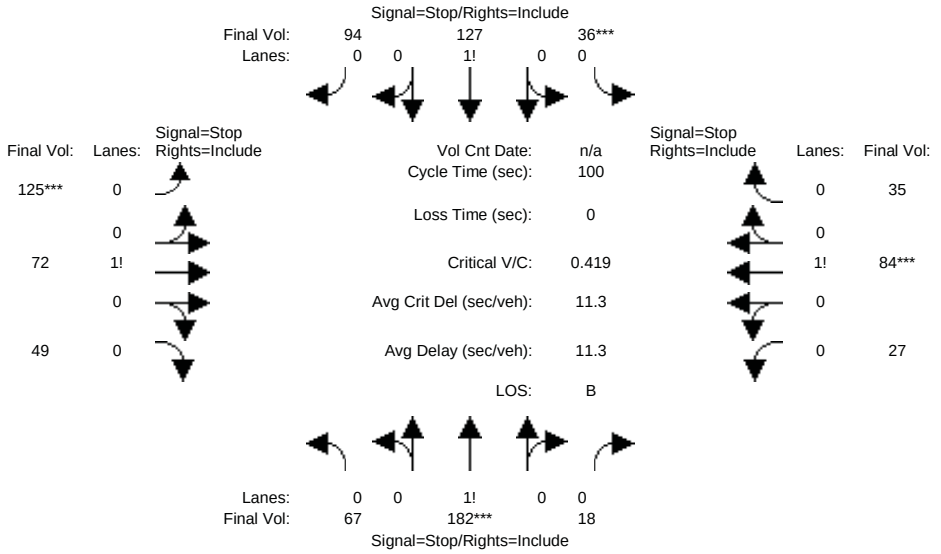
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	65	175	17	35	122	91	120	69	47	26	81	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	175	17	35	122	91	120	69	47	26	81	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:	65	175	17	35	122	91	120	69	47	26	81	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	67	182	18	36	127	94	125	72	49	27	84	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	182	18	36	127	94	125	72	49	27	84	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	182	18	36	127	94	125	72	49	27	84	35
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:	0.25	0.68	0.07	0.14	0.49	0.37	0.51	0.29	0.20	0.18	0.58	0.24
Final Sat.:	161	433	42	92	322	240	313	180	123	109	339	142
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.39	0.39	0.39	0.40	0.40	0.40	0.25	0.25	0.25
Crit Moves:		****			****			****			****	
Delay/Veh:	11.8	11.8	11.8	11.1	11.1	11.1	11.6	11.6	11.6	10.1	10.1	10.1
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:	11.8	11.8	11.8	11.1	11.1	11.1	11.6	11.6	11.6	10.1	10.1	10.1
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		11.8			11.1			11.6			10.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.8			11.1			11.6			10.1	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	65	175	17	35	122	91	120	69	47	26	81	34

Major Street Volume: 505
Minor Approach Volume: 236
Minor Approach Volume Threshold: 402

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

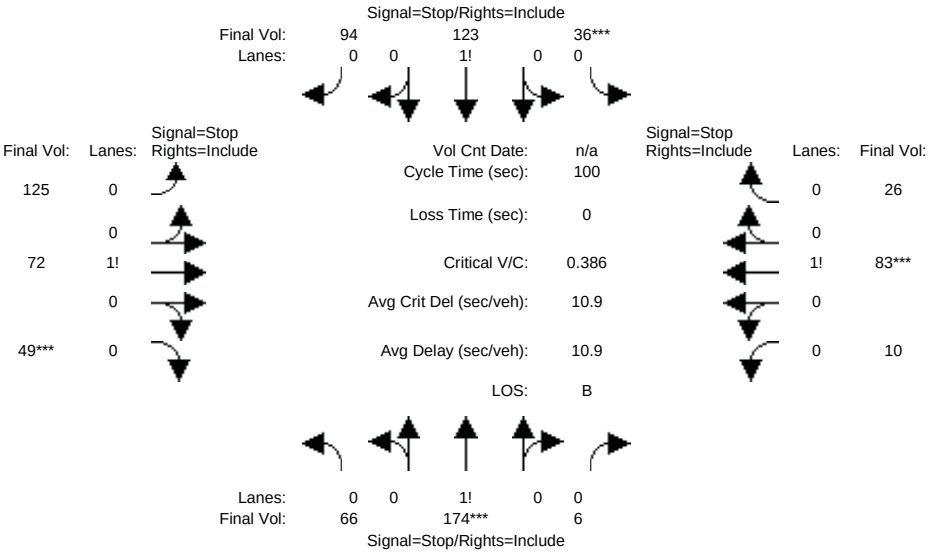
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	65	175	17	35	122	91	120	69	47	26	81	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	175	17	35	122	91	120	69	47	26	81	34
Added Vol:	-1	-7	-11	0	-4	0	0	0	0	-16	-1	-9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	168	6	35	118	91	120	69	47	10	80	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	66	174	6	36	123	94	125	72	49	10	83	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	174	6	36	123	94	125	72	49	10	83	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	174	6	36	123	94	125	72	49	10	83	26
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:	0.27	0.71	0.02	0.14	0.49	0.37	0.51	0.29	0.20	0.09	0.69	0.22
Final Sat.:	174	457	16	97	327	252	323	185	126	52	417	130
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.20	0.20	0.20
Crit Moves:		****			****				****		****	
Delay/Veh:	11.2	11.2	11.2	10.7	10.7	10.7	11.3	11.3	11.3	9.6	9.6	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	11.2	11.2	10.7	10.7	10.7	11.3	11.3	11.3	9.6	9.6	9.6
LOS by Move:	B	B	B	B	B	B	B	B	B	A	A	A
ApproachDel:		11.2			10.7			11.3			9.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.2			10.7			11.3			9.6	
LOS by Appr:		B			B			B			A	
AllWayAvgQ:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0
Initial Vol:	64	168	6	35	118	91	120	69	47	10	80	25

Major Street Volume: 482
Minor Approach Volume: 236
Minor Approach Volume Threshold: 414

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

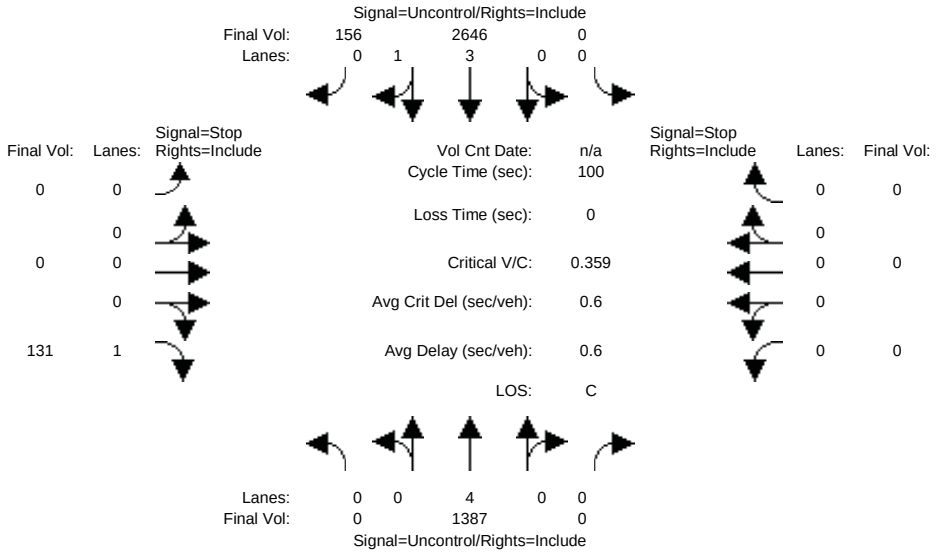
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	1350	0	0	2575	152	0	0	127	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1350	0	0	2575	152	0	0	127	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1350	0	0	2575	152	0	0	127	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1387	0	0	2646	156	0	0	131	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1387	0	0	2646	156	0	0	131	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	740	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	364	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	364	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.36	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	20.3	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.3			xxxxxx		
ApproachLOS:	*			*			C			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 1350	0		0 2575	152		0	0	127	0	0	0
ApproachDel:	xxxxxx			xxxxxx			20.3			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=127]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4204]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant Met

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 1350	0		0 2575	152		0	0	127	0	0	0

Major Street Volume: 4077
Minor Approach Volume: 127
Minor Approach Volume Threshold: -199 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

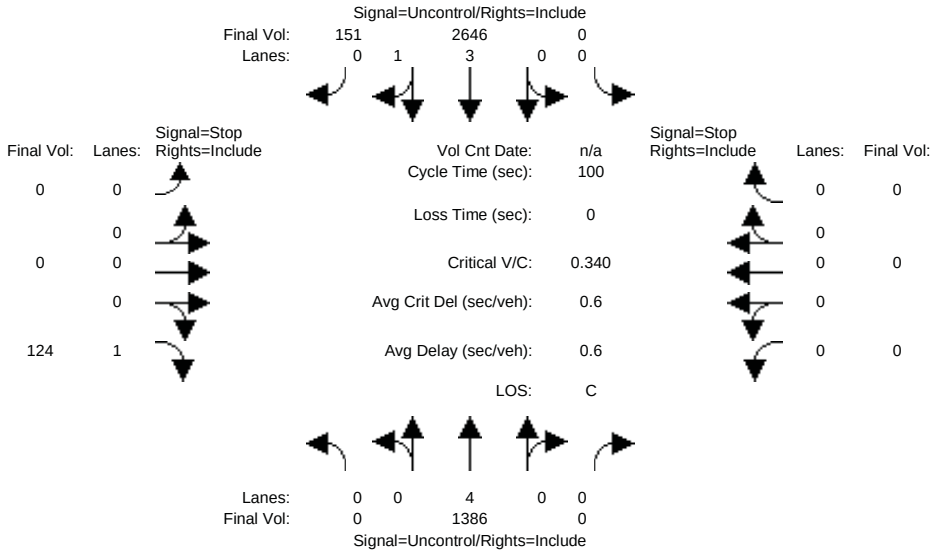
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Existing PP PM

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	1350	0	0	2575	152	0	0	127	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1350	0	0	2575	152	0	0	127	0	0	0
Added Vol:	0	-1	0	0	0	-5	0	0	-6	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1349	0	0	2575	147	0	0	121	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1386	0	0	2646	151	0	0	124	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1386	0	0	2646	151	0	0	124	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	737	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	365	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	365	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.34	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	19.9	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 1349	0		0 2575	147		0	0	121	0	0	0
ApproachDel:	xxxxxx			xxxxxx			19.9			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=121]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4192]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant Met

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 1349	0		0 2575	147		0	0	121	0	0	0

Major Street Volume: 4071
Minor Approach Volume: 121
Minor Approach Volume Threshold: -199 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

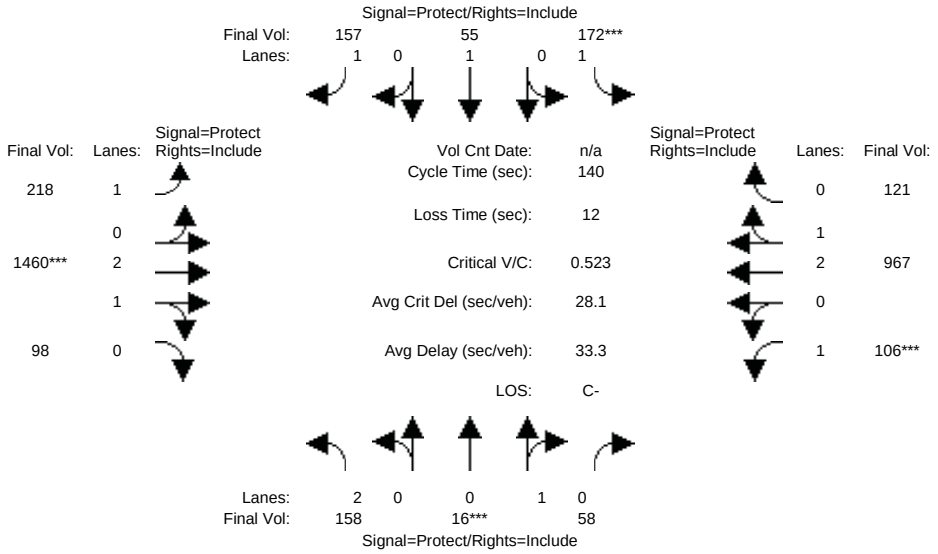
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #5: Mary Ave/Stevens Creek Blvd



Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	152	15	56	166	53	151	210	1406	94	102	931	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	15	56	166	53	151	210	1406	94	102	931	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:	152	15	56	166	53	151	210	1406	94	102	931	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	158	16	58	172	55	157	218	1460	98	106	967	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	16	58	172	55	157	218	1460	98	106	967	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	16	58	172	55	157	218	1460	98	106	967	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	0.21	0.79	1.00	1.00	1.00	1.00	2.81	0.19	1.00	2.65	0.35
Final Sat.:	3150	380	1420	1750	1900	1750	1750	5249	351	1750	4974	625
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.04	0.10	0.03	0.09	0.12	0.28	0.28	0.06	0.19	0.19
Crit Moves:		****		****				****		****		
Green Time:	13.4	11.0	11.0	26.4	23.9	23.9	35.4	74.5	74.5	16.2	55.2	55.2
Volume/Cap:	0.52	0.52	0.52	0.52	0.17	0.52	0.49	0.52	0.52	0.52	0.49	0.49
Delay/Veh:	62.0	65.5	65.5	52.7	49.8	54.5	45.5	21.4	21.4	60.7	32.0	32.0
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:	62.0	65.5	65.5	52.7	49.8	54.5	45.5	21.4	21.4	60.7	32.0	32.0
LOS by Move:	E	E	E	D-	D	D-	D	C+	C+	E	C-	C-
HCM2kAvgQ:	5	4	4	8	2	7	9	14	14	4	11	11

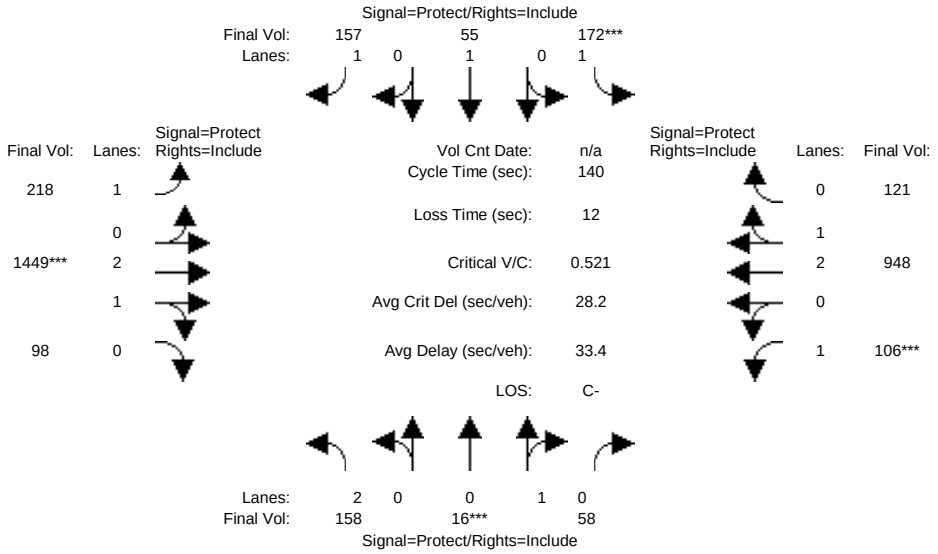
Note: Queue reported is the number of cars per lane.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #5: Mary Ave/Stevens Creek Blvd



Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	152	15	56	166	53	151	210	1406	94	102	931	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	15	56	166	53	151	210	1406	94	102	931	117
Added Vol:	0	0	0	0	0	0	0	-11	0	0	-18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	152	15	56	166	53	151	210	1395	94	102	913	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	158	16	58	172	55	157	218	1449	98	106	948	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	16	58	172	55	157	218	1449	98	106	948	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	16	58	172	55	157	218	1449	98	106	948	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	0.21	0.79	1.00	1.00	1.00	1.00	2.80	0.20	1.00	2.65	0.35
Final Sat.:	3150	380	1420	1750	1900	1750	1750	5246	353	1750	4963	636
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.04	0.10	0.03	0.09	0.12	0.28	0.28	0.06	0.19	0.19
Crit Moves:		****		****				****		****		
Green Time:	13.4	11.0	11.0	26.5	24.0	24.0	35.7	74.2	74.2	16.3	54.8	54.8
Volume/Cap:	0.52	0.52	0.52	0.52	0.17	0.52	0.49	0.52	0.52	0.52	0.49	0.49
Delay/Veh:	61.9	65.4	65.4	52.5	49.7	54.4	45.2	21.5	21.5	60.6	32.2	32.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.9	65.4	65.4	52.5	49.7	54.4	45.2	21.5	21.5	60.6	32.2	32.2
LOS by Move:	E	E	E	D-	D	D-	D	C+	C+	E	C-	C-
HCM2kAvgQ:	5	4	4	8	2	7	9	14	14	4	11	11

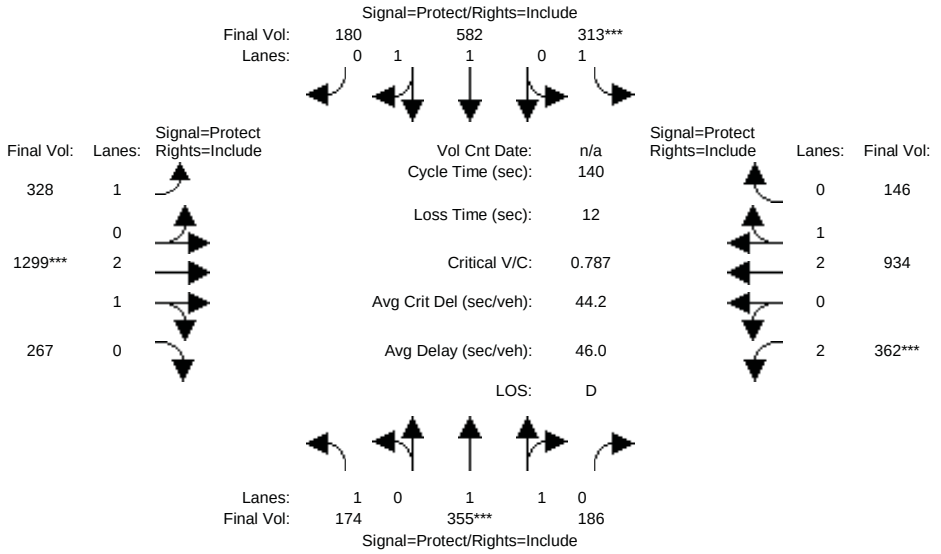
Note: Queue reported is the number of cars per lane.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	169	344	180	303	564	174	318	1259	259	351	905	141
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:	169	344	180	303	564	174	318	1259	259	351	905	141
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:	169	344	180	303	564	174	318	1259	259	351	905	141
User Adj:	1.00	1.00	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	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	174	355	186	313	582	180	328	1299	267	362	934	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	355	186	313	582	180	328	1299	267	362	934	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	355	186	313	582	180	328	1299	267	362	934	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.29	0.71	1.00	1.52	0.48	1.00	2.47	0.53	2.00	2.58	0.42
Final Sat.:	1750	2428	1270	1750	2827	872	1750	4643	955	3150	4844	755
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.18	0.21	0.21	0.19	0.28	0.28	0.11	0.19	0.19
Crit Moves:		****		****				****		****		
Green Time:	18.8	26.0	26.0	31.8	38.9	38.9	34.6	49.8	49.8	20.5	35.6	35.6
Volume/Cap:	0.74	0.79	0.79	0.79	0.74	0.74	0.76	0.79	0.79	0.79	0.76	0.76
Delay/Veh:	77.0	63.2	63.2	65.5	50.7	50.7	49.9	28.8	28.8	63.9	41.1	41.1
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:	77.0	63.2	63.2	65.5	50.7	50.7	49.9	28.8	28.8	63.9	41.1	41.1
LOS by Move:	E-	E	E	E	D	D	D	C	C	E	D	D
HCM2kAvgQ:	9	13	13	15	16	16	14	19	19	10	14	14

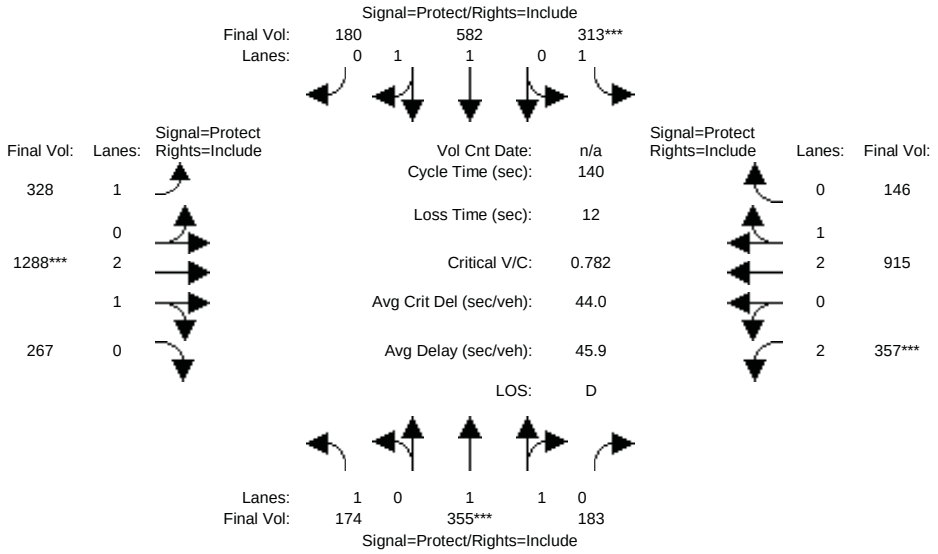
Note: Queue reported is the number of cars per lane.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	169	344	180	303	564	174	318	1259	259	351	905	141
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:	169	344	180	303	564	174	318	1259	259	351	905	141
Added Vol:	0	0	-3	0	0	0	0	-11	0	-5	-18	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	169	344	177	303	564	174	318	1248	259	346	887	141
User Adj:	1.00	1.00	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	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	174	355	183	313	582	180	328	1288	267	357	915	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	355	183	313	582	180	328	1288	267	357	915	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	355	183	313	582	180	328	1288	267	357	915	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.30	0.70	1.00	1.52	0.48	1.00	2.47	0.53	2.00	2.57	0.43
Final Sat.:	1750	2442	1257	1750	2827	872	1750	4636	962	3150	4831	768
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.18	0.21	0.21	0.19	0.28	0.28	0.11	0.19	0.19
Crit Moves:		****		****				****		****		
Green Time:	18.9	26.0	26.0	32.0	39.1	39.1	34.8	49.7	49.7	20.3	35.2	35.2
Volume/Cap:	0.74	0.78	0.78	0.78	0.74	0.74	0.75	0.78	0.78	0.78	0.75	0.75
Delay/Veh:	76.7	62.9	62.9	64.9	50.5	50.5	49.4	28.7	28.7	63.8	41.4	41.4
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:	76.7	62.9	62.9	64.9	50.5	50.5	49.4	28.7	28.7	63.8	41.4	41.4
LOS by Move:	E-	E	E	E	D	D	D	C	C	E	D	D
HCM2kAvgQ:	9	13	13	15	16	16	14	19	19	9	14	14

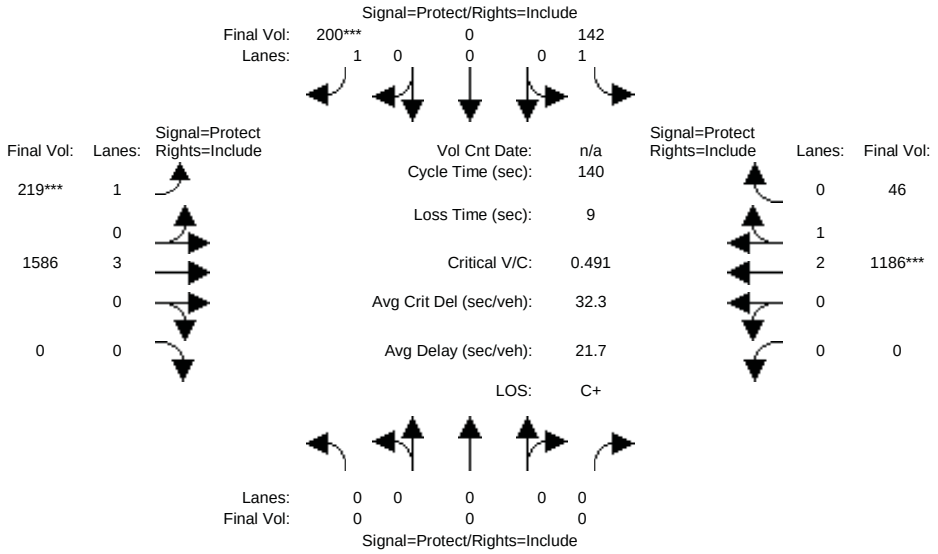
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #7: Saich Way/Stevens Creek Blvd



Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	0	0	0	132	0	186	204	1477	0	0	1104	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	132	0	186	204	1477	0	0	1104	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	132	0	186	204	1477	0	0	1104	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	142	0	200	219	1586	0	0	1186	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	142	0	200	219	1586	0	0	1186	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	142	0	200	219	1586	0	0	1186	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.88	0.12
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5390	210
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.11	0.13	0.28	0.00	0.00	0.22	0.22
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	32.6	0.0	32.6	35.7	98.4	0.0	0.0	62.7	62.7
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.49	0.49	0.40	0.00	0.00	0.49	0.49
Delay/Veh:	0.0	0.0	0.0	45.4	0.0	47.5	45.3	8.6	0.0	0.0	27.5	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	45.4	0.0	47.5	45.3	8.6	0.0	0.0	27.5	27.5
LOS by Move:	A	A	A	D	A	D	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	8	8	9	0	0	12	12

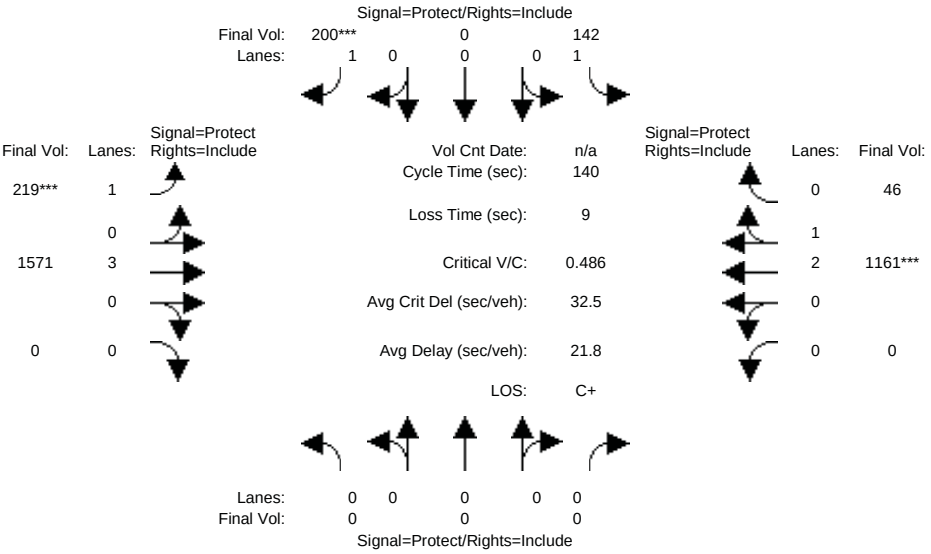
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #7: Saich Way/Stevens Creek Blvd



Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	0	0	0	132	0	186	204	1477	0	0	1104	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	132	0	186	204	1477	0	0	1104	43
Added Vol:	0	0	0	0	0	0	0	-14	0	0	-23	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	132	0	186	204	1463	0	0	1081	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	142	0	200	219	1571	0	0	1161	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	142	0	200	219	1571	0	0	1161	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	142	0	200	219	1571	0	0	1161	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.88	0.12
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5385	214
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.11	0.13	0.28	0.00	0.00	0.22	0.22
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	32.9	0.0	32.9	36.1	98.1	0.0	0.0	62.1	62.1
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.49	0.49	0.39	0.00	0.00	0.49	0.49
Delay/Veh:	0.0	0.0	0.0	45.1	0.0	47.2	44.9	8.7	0.0	0.0	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:	0.0	0.0	0.0	45.1	0.0	47.2	44.9	8.7	0.0	0.0	27.8	27.8
LOS by Move:	A	A	A	D	A	D	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	8	8	9	0	0	12	12

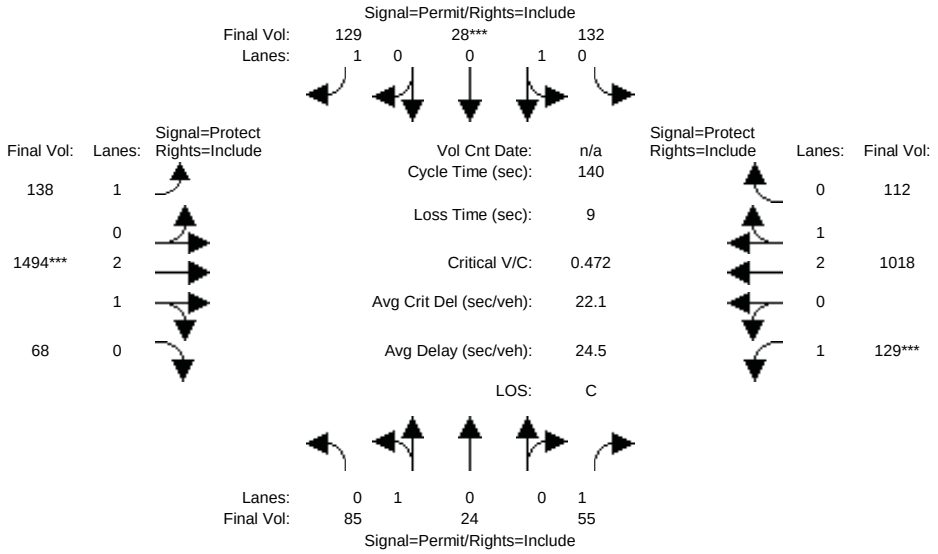
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #8: Bandley Dr/Stevens Creek Blvd



Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	82	23	53	127	27	124	133	1437	65	124	979	108
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:	82	23	53	127	27	124	133	1437	65	124	979	108
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:	82	23	53	127	27	124	133	1437	65	124	979	108
User Adj:	1.00	1.00	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	85	24	55	132	28	129	138	1494	68	129	1018	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	24	55	132	28	129	138	1494	68	129	1018	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	24	55	132	28	129	138	1494	68	129	1018	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	0.78	0.22	1.00	0.82	0.18	1.00	1.00	2.87	0.13	1.00	2.69	0.31
Final Sat.:	1406	394	1750	1484	316	1750	1750	5357	242	1750	5043	556
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.03	0.09	0.09	0.07	0.08	0.28	0.28	0.07	0.20	0.20
Crit Moves:					****			****		****		
Green Time:	26.4	26.4	26.4	26.4	26.4	26.4	29.4	82.7	82.7	21.9	75.2	75.2
Volume/Cap:	0.32	0.32	0.17	0.47	0.47	0.39	0.38	0.47	0.47	0.47	0.38	0.38
Delay/Veh:	49.6	49.6	47.8	51.6	51.6	50.5	48.1	16.3	16.3	55.1	18.9	18.9
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:	49.6	49.6	47.8	51.6	51.6	50.5	48.1	16.3	16.3	55.1	18.9	18.9
LOS by Move:	D	D	D	D-	D-	D	D	B	B	E+	B-	B-
HCM2kAvgQ:	4	4	2	7	7	5	5	12	12	6	9	9

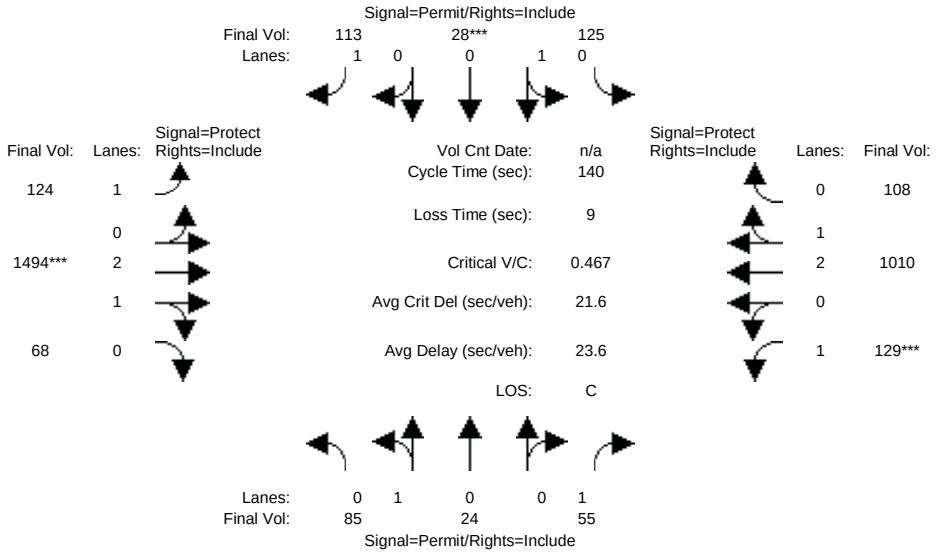
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #8: Bandley Dr/Stevens Creek Blvd



Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	82	23	53	127	27	124	133	1437	65	124	979	108
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:	82	23	53	127	27	124	133	1437	65	124	979	108
Added Vol:	0	0	0	-7	0	-15	-14	0	0	0	-7	-4
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	82	23	53	120	27	109	119	1437	65	124	972	104
User Adj:	1.00	1.00	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	85	24	55	125	28	113	124	1494	68	129	1010	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	24	55	125	28	113	124	1494	68	129	1010	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	24	55	125	28	113	124	1494	68	129	1010	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	0.78	0.22	1.00	0.82	0.18	1.00	1.00	2.87	0.13	1.00	2.70	0.30
Final Sat.:	1406	394	1750	1469	331	1750	1750	5357	242	1750	5058	541
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.03	0.08	0.08	0.06	0.07	0.28	0.28	0.07	0.20	0.20
Crit Moves:					****			****		****		
Green Time:	25.4	25.4	25.4	25.4	25.4	25.4	27.6	83.5	83.5	22.1	78.0	78.0
Volume/Cap:	0.33	0.33	0.17	0.47	0.47	0.36	0.36	0.47	0.47	0.47	0.36	0.36
Delay/Veh:	50.5	50.5	48.7	52.3	52.3	50.8	49.2	15.9	15.9	54.9	17.2	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.5	50.5	48.7	52.3	52.3	50.8	49.2	15.9	15.9	54.9	17.2	17.2
LOS by Move:	D	D	D	D-	D-	D	D	B	B	D-	B	B
HCM2kAvgQ:	4	4	2	6	6	5	5	12	12	6	9	9

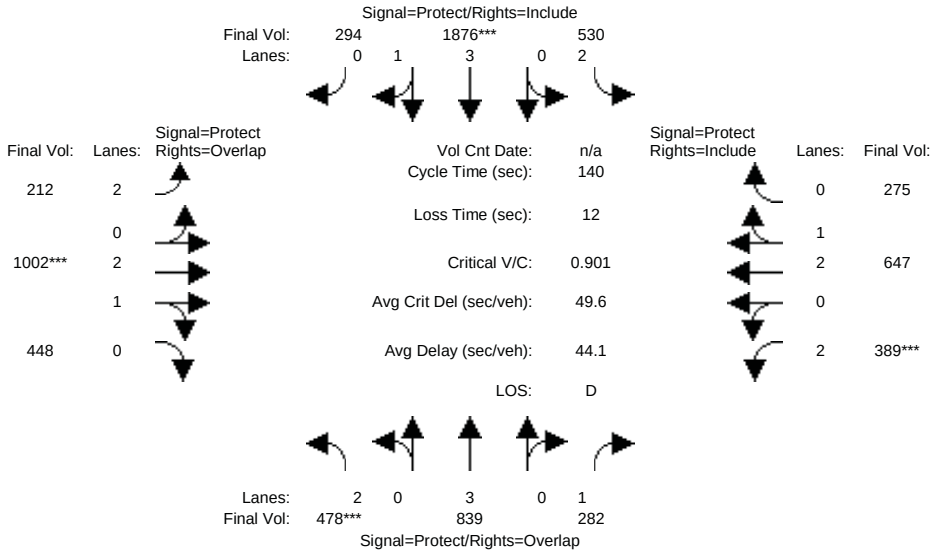
Note: Queue reported is the number of cars per lane.

Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

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

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	470	825	277	521	1844	289	208	985	440	382	636	270
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:	470	825	277	521	1844	289	208	985	440	382	636	270
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:	470	825	277	521	1844	289	208	985	440	382	636	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	478	839	282	530	1876	294	212	1002	448	389	647	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	478	839	282	530	1876	294	212	1002	448	389	647	275
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	478	839	282	530	1876	294	212	1002	448	389	647	275
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.95	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.44	0.56	2.00	2.04	0.96	2.00	2.07	0.93
Final Sat.:	3150	5700	1750	3150	6482	1016	3150	3869	1728	3150	3929	1668
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.16	0.17	0.29	0.29	0.07	0.26	0.26	0.12	0.16	0.16
Crit Moves:	****				****			****			****	
Green Time:	23.6	32.0	51.2	36.6	45.0	45.0	17.2	40.3	63.8	19.2	42.2	42.2
Volume/Cap:	0.90	0.64	0.44	0.64	0.90	0.90	0.55	0.90	0.57	0.90	0.55	0.55
Delay/Veh:	67.7	40.3	21.2	36.9	36.2	36.2	59.3	55.3	28.3	81.0	41.3	41.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.7	40.3	21.2	36.9	36.2	36.2	59.3	55.3	28.3	81.0	41.3	41.3
LOS by Move:	E	D	C+	D+	D+	D+	E+	E+	C	F	D	D
HCM2kAvgQ:	15	11	7	11	25	25	6	23	13	13	10	10

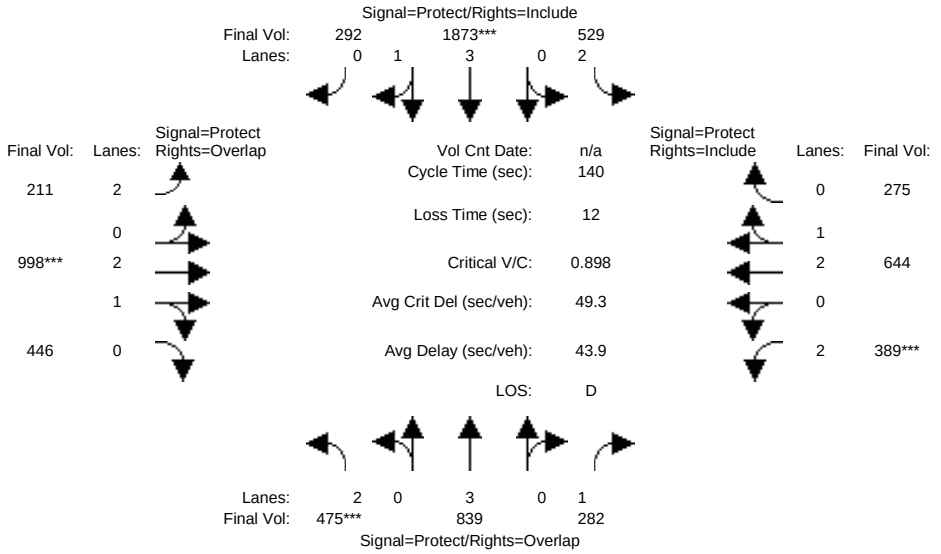
Note: Queue reported is the number of cars per lane.

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Existing PP PM

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	470	825	277	521	1844	289	208	985	440	382	636	270
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:	470	825	277	521	1844	289	208	985	440	382	636	270
Added Vol:	-3	0	0	-1	-3	-2	-1	-4	-2	0	-3	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	467	825	277	520	1841	287	207	981	438	382	633	270
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	475	839	282	529	1873	292	211	998	446	389	644	275
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	839	282	529	1873	292	211	998	446	389	644	275
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	475	839	282	529	1873	292	211	998	446	389	644	275
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.95	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.44	0.56	2.00	2.04	0.96	2.00	2.07	0.93
Final Sat.:	3150	5700	1750	3150	6487	1011	3150	3869	1728	3150	3923	1673
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.16	0.17	0.29	0.29	0.07	0.26	0.26	0.12	0.16	0.16
Crit Moves:	****				****			****			****	
Green Time:	23.5	32.0	51.3	36.5	45.0	45.0	17.2	40.2	63.7	19.2	42.3	42.3
Volume/Cap:	0.90	0.64	0.44	0.64	0.90	0.90	0.54	0.90	0.57	0.90	0.54	0.54
Delay/Veh:	67.4	40.3	21.1	36.9	35.9	35.9	59.3	55.0	28.3	80.4	41.2	41.2
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:	67.4	40.3	21.1	36.9	35.9	35.9	59.3	55.0	28.3	80.4	41.2	41.2
LOS by Move:	E	D	C+	D+	D+	D+	E+	E+	C	F	D	D
HCM2kAvgQ:	15	11	7	11	24	24	6	23	13	13	10	10

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

 Copyright (c) 2008 Dowling Associates, Inc.

Marina Plaza TIAR
DC16-0009

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		???				Existing PM				Existing PP PM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	De Anza Boulevard and Mariani Avenue	?	xx.x	x.xxx	xx.x	D	42.2	0.756	43.0	D	42.3	0.754	- 0.001	43.0	+ 0.0	?	xx.x	x.xxx	xx.x
#2	De Anza Boulevard and Lazaneo Drive	?	xx.x	x.xxx	xx.x	B-	19.8	0.539	17.3	B-	19.7	0.538	- 0.001	17.4	+ 0.0	?	xx.x	x.xxx	xx.x
#3	Bandley Drive and Alves Drive	?	xx.x	x.xxx	xx.x	B	11.3	0.419	11.3	B	10.9	0.386	- 0.033	10.9	- 0.4	?	xx.x	x.xxx	xx.x
#4	De Anza Boulevard and Alves Drive	?	xx.x	x.xxx	xx.x	C	20.3	0.359	0.6	C	19.9	0.340	- 0.018	0.6	- 0.0	?	xx.x	x.xxx	xx.x
#5	Mary Avenue and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C-	33.3	0.523	28.1	C-	33.4	0.521	- 0.002	28.2	+ 0.1	?	xx.x	x.xxx	xx.x
#6	N. Stelling Road and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D	46.0	0.787	44.2	D	45.9	0.782	- 0.005	44.0	- 0.2	?	xx.x	x.xxx	xx.x
#7	Saich Way and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C+	21.7	0.491	32.3	C+	21.8	0.486	- 0.005	32.5	+ 0.2	?	xx.x	x.xxx	xx.x
#8	Bandley Drive and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C	24.5	0.472	22.1	C	23.6	0.467	- 0.004	21.6	- 0.4	?	xx.x	x.xxx	xx.x
#9	De Anza Boulevard and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D	44.1	0.901	49.6	D	43.9	0.898	- 0.003	49.3	- 0.3	?	xx.x	x.xxx	xx.x

Copyright (c) 2008 Dowling Associates, Inc.

APPENDIX C: MAINSTREET MXD REDUCTIONS

MXD+

MXD+ User Guide

Prepared by

FEHR PEERS

February 2016

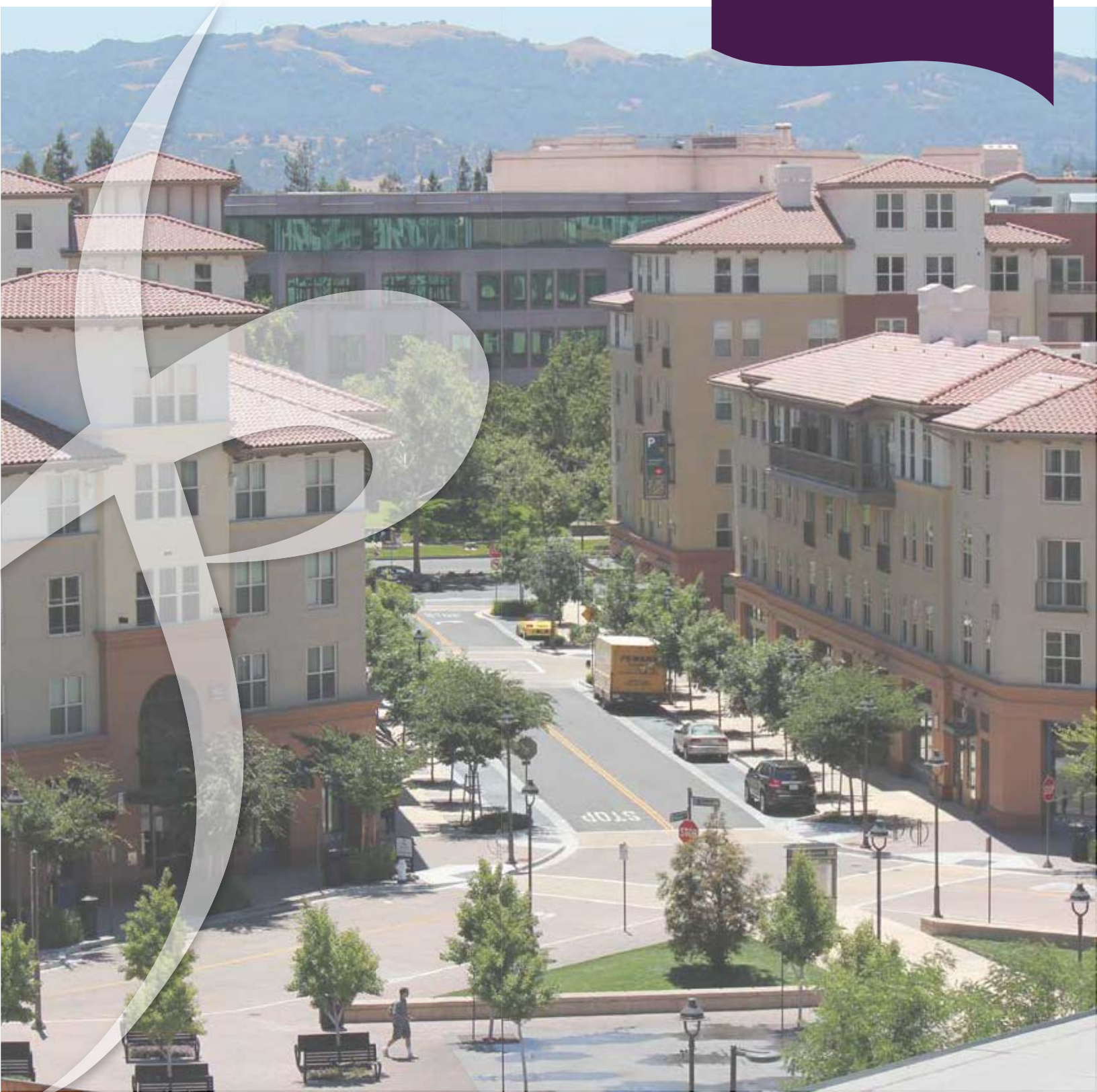


Table of Contents

1. INTRODUCTION 1

MXD+ Tool Implementation 1

2. TRIP GENERATION BACKGROUND 2

A. Industry Standard 2

B. FP Standard 2

3. MXD MODEL BACKGROUND 3

A. EPA MXD 3

B. NCHRP 684 (ITE Handbook Method) 3

C. MXD+ 4

4. MXD+ MODEL PROCEDURE – FLOW CHART 5

5. MXD+ MODEL PROCEDURE – DETAILS 6

A. Page Zero 6

B. Variable Glossary 7

C. MXD+ Model: Step-By-Step 8

D. Output Checks 15

6. ADDITIONAL RESOURCES 16

A. Advanced User Guide 16

B. Defensibility Package 16

C. MainStreet Champions 16

1. INTRODUCTION

This document is a basic user guide for the MXD+ tool. It presents clear directions and tips on how to best apply MXD+. Please refer to Chapter 6 (Additional Resources) for additional materials.

ASSUMED BACKGROUND KNOWLEDGE

This user guide assumes the analyst has basic background knowledge of trip generation. For newer users, it is recommended that FP training materials on trip generation be reviewed prior to using this tool. Particularly, it is assumed that the analyst is familiar with ITE's *Trip Generation Manual* and the ITE *Trip Generation Handbook*.

MXD+ TOOL IMPLEMENTATION

MXD+ was originally developed as an excel spreadsheet (wiki link). However, the firm decided to integrate MXD+ as a web application form as part of the firm's MainStreet platform. MainStreet is only accessible while within the FP network. Google Chrome or Mozilla Firefox is recommended to use MainStreet/MXD+. Do not use Internet Explorer. Access MainStreet via the link below.

http://mainstreet.fehrandpeers.com/mxdplus/main.html

BENEFITS AND DRAWBACKS OF SPREADSHEET VERSUS WEB APP

For several years, MXD users relied on spreadsheets to conduct their analyses. However, this became problematic for several reasons. First, updates to the spreadsheet (e.g., updated ITE trip rates) occurred occasionally, which led to the potential for staff to be using an outdated version. Second, it was difficult to track the usage/popularity of the spreadsheet throughout the firm. Third, the development of the spreadsheet represents a form of intellectual property held by Fehr & Peers, and accordingly, a greater level of management of the tool was necessary.

For the above reasons, Fehr & Peers made a sizeable investment in 2014-2015 to integrate MXD+ into the MainStreet platform. Advantages of doing this include the following:

- Improved version control, scenario management, and user experience
- Reduced set up time
- Extensible framework to entire USA through GIS
- Enhanced tracking of usage by office and geographic area

2. TRIP GENERATION BACKGROUND

Trip generation models provide estimates of the number of trips (by purpose and by mode) produced by or attracted to a given land use or activity as a function of the demographic, socioeconomic, locational, and land use characteristics of the zone.

A. INDUSTRY STANDARD

By far, the most common trip generation method used in the industry is *ITEs Trip Generation Manual (2012),* which estimates vehicle trips based on a single independent variable, such as dwelling units, thousand square feet (ksf), acres, or employees. This method simplifies the process of estimating trip generation at the cost of flexibility and accuracy. ITEs *Trip Generation Manual* does not estimate trip generation by purpose or by mode other than vehicle.

B. FP STANDARD

Fehr & Peers strives to use the most appropriate tool for each project. ITEs *Trip Generation Manual* is generally consulted as a first step for any land use project. The ITE *Trip Generation Handbook* procedure, which provides guidance on how to apply weighted average trip rates and fitted curve equations in the *Trip Generation Manual*, is followed to ensure that proper data application is used.

The EPA MXD method (and its successors) has proven successful in land use related projects and is used on most if not all trip generation related projects. Regardless of the method used, Fehr & Peers thoroughly reviews the inputs and outputs of the trip generation analysis against other data sources (e.g., census data, locally collected/validated data, travel demand model output, etc.) to ensure reasonableness and defensibility. Trust, but verify!

3. MXD MODEL BACKGROUND

Conventional methods that are used to evaluate traffic impacts fail to account for the trip-reduction benefits of mixed-use and other forms of lower-impact development. As a result, they often overstate impacts and result in excessive development costs, skewed public perception and decision-maker resistance.

The trip generation data and analysis methods published by the Institute of Transportation Engineers (ITE) in its *Trip Generation Manual* and *Trip Generation Handbook* primarily apply to single-use and free-standing sites, limiting their applicability in compact, mixed-use, or transit oriented developments.

A. EPA MXD

A study sponsored by the U.S. Environmental Protection Agency (EPA)[1] investigated trip generation for trips produced and attracted by mixed-use developments (MXDs) in Atlanta, Boston, Houston, Portland, Sacramento and Seattle. The 239 identified MXDs ranged from compact infill sites near the region's core to low-rise freeway oriented developments. They varied in population and employment densities, mix of jobs and housing, and presence or absence of transit. In total, the MXD sample for the six regions provided survey data on almost 36,000 trips.

The analysis found that one or more variables in each of six "D" categories were statistically significant predictors of internal capture, external walking, and external transit use. Specifically, an MXD's external traffic generation was influenced by: density, diversity, design, distance to transit, destination accessibility, development scale, and demographics. Fehr & Peers took the research described above and formulated the hierarchal, predictive equations into a spreadsheet, which allowed users to estimate internal trip capture and external trips made by driving, walk/bicycle, and transit modes.

B. NCHRP 684 (ITE HANDBOOK METHOD)

In 2011, the Transportation Research Board published National Cooperative Highway Research Program (NCHRP) Report 684 titled *Enhancing Internal Trip Capture Estimation for Mixed-Use Developments*. The study analyzed internal capture relationships at six mixed-use sites and examined the travel interactions among six individual types of MXD land uses: office, retail, restaurant, residential, cinema, and hotel. This research served as the basis for the recommended mixed-use trip generation method in the ITE *Trip Generation Handbook*.

[1] , *Traffic Generated by Mixed-Use Developments—A Six-Region Study Using Consistent Built Environmental Measures* (Ewing et al, ASCE UP0146, Sept 2011),

C. MXD+

The NCHRP 684 method and EPA MXD method each derive from different research approaches and produce different methods of analyzing trip generation at mixed-use developments. The resulting MXD+ method blends the predictive equations from the NCHRP 684 method and the EPA MXD model to better utilize the strengths and minimize the weaknesses of each approach. Figure 1 contains a flowchart showing the MXD+ model procedure.

In 2014, Fehr & Peers undertook the process of converting the MXD+ method from a spreadsheet tool into a web application located within the MainStreet platform. In 2015, MXD+ was launched under the MainStreet platform and used on over 200 projects in all offices of the company.

4. MXD+ MODEL PROCEDURE – FLOW CHART

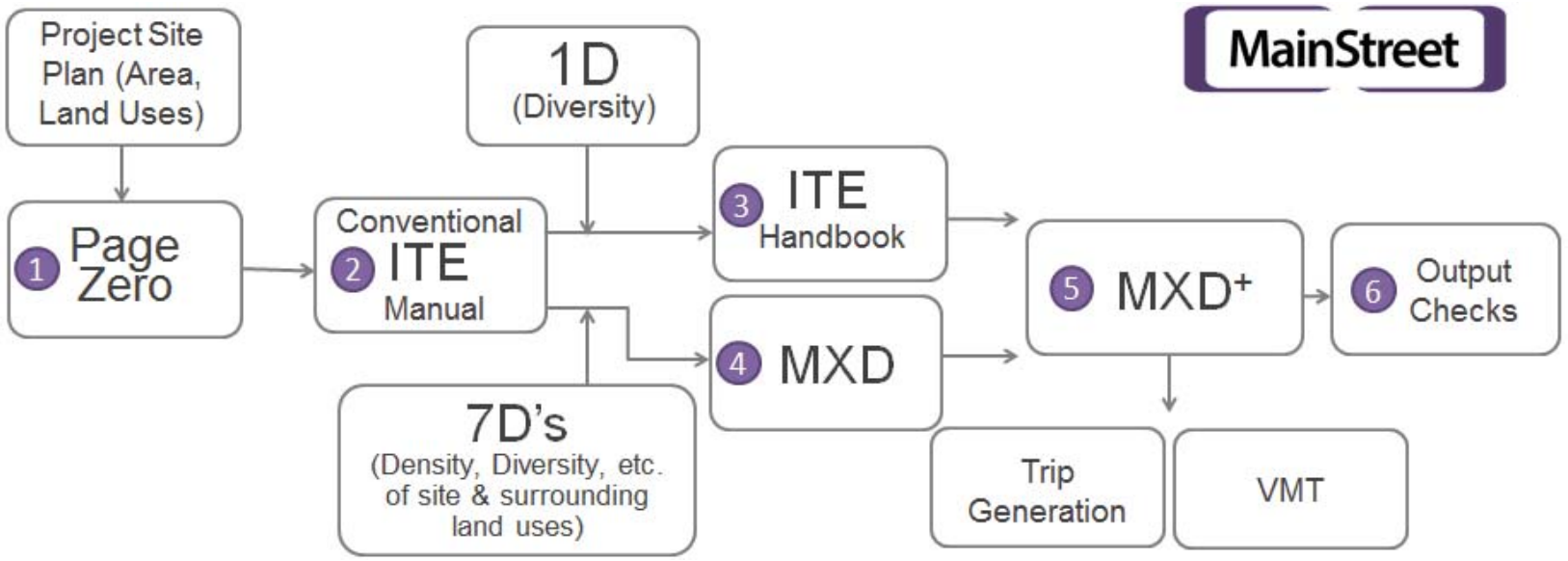


Figure 1 **Model Procedure Flowchart**

5. MXD+ MODEL PROCEDURE – DETAILS

This chapter provides a step-by-step guide for using MXD+. It is organized into the following sub-sections:

A. Page Zero – a process used to determine if MXD+ is appropriate for a given project.
B. Variable Glossary – provides a brief definition of the variables used in MXD+.
C. MXD+ Step-by-Step – describes each module of the MXD+ method including recommended guidance for variable inputs, run time, and error corrections/checking.
D. Output Checks – a process used to determine if estimated MXD+ outputs are appropriate

A. PAGE ZERO

The "Page Zero" spreadsheet allows the analyst to determine if MXD+ is appropriate to use for their project. Page Zero compares the basic characteristics of a proposed project against a database of over 250 mixed-use sites used to derive the MXD+ methodology. If the proposed project is statistically similar (in terms of population, employment, and size) to the 250 sites, it is assumed that MXD+ will produce reasonable results for the proposed project.

Results

Comparison of proposed project against MXD+ model development sites

	Value	Within Bounds?	Within 2 σ of average?
Activity Density	37,403	YES	YES
Area (Acres)	5.4	YES	YES
Population	250	YES	YES
Employment	65	YES	YES

Bounds Score	4
σ Score	4

Recommendation	**MXD+ is appropriate as is**

Click here to review Page Zero Graphs

The range of recommendations in Page Zero is:

- MXD+ is appropriate as is,
- MXD+ may be used with minor caution,
- MXD+ may be used with major caution,
- MXD+ may be used with extreme caution – need to justify use.

A Page Zero analysis should take roughly 10 to 20 minutes to complete.

B. VARIABLE GLOSSARY

TABLE 1 MODEL VARIABLES

Variable	Definition	Unit	Potential Sources	Used in Models				
				ITE	ITE Handbook	MXD+		
						Internal Capture	External Walk/Bike	External Transit
Input Variables								
Residential Land Use	Total residential land use on project site	Dwelling Units	Project Site Plan	✓	✓	✓	✓	✓
Commercial Land Use	Total commercial land use on project site	KSF or employees	Project Site Plan	✓	✓	✓	✓	✓
Developed Area	Gross site area of land within the project site (not including open space)	Acres	Project Site Plan/GIS Analysis			✓	✓	
Intersection Density	Vehicle intersection (3+ legs) density within and nearby the project site, not including driveways	Intersections per square mile	Project Site Plan/GIS Analysis			✓	✓	✓
Household Size	Average household size within and nearby the project site	Persons per DU	Census/ACS Data			✓	✓	✓
Vehicle Ownership	Average vehicle ownership per household within and nearby the project site	Vehicles per DU	Census/ACS Data			✓	✓	✓
Empl. within 1 mile	Number of jobs located within a one-mile walkshed of the project site (as measured from the central point of the project, not edge)	Employment	Census/ACS/Travel Models/GIS Analysis				✓	
Empl. within 30 minutes transit (as % share of regional empl.)	Share of total regional jobs located within a 30-minute door to door transit commute of the project site (as measured from the central point of the project, not edge)	% of total regional employment	Census/ACS/Travel Models/GIS Analysis					✓
Intermediate Variables								
Population Density	Population density (population divided by area)	Population per square mile	-			✓		
Employment Density	Employment density (population divided by area)	Employment per square mile	-			✓		
Activity Density	Activity density (population plus employment divided by area)	Population per square mile	-				✓	✓
Job/Pop Diversity Index	Job to population diversity index as compared to "ideal" 0.2 jobs per capita	Jobs to population ratio (compared to 0.2)	-			✓	✓	

Source: Fehr & Peers 2016.

TABLE 2 MXD+ OUTPUT MODEL VARIABLES

Variable[1]	Definition
ITE Net Auto Trips	Number of gross vehicle trips that are estimated using ITE *Trip Generation Manual* (assumes no internalization or mode split adjustments)
ITE Handbook Net Auto Trips	Number of auto trips that are estimated using ITE *Trip Generation Handbook* Procedure, which adjusts the ITE Trip Generation estimate above to account for internalized trips
ITE Handbook Internalization	Number and percentage of trips that are estimated as internal capture using the ITE *Trip Generation Handbook* Procedure internalization method
MXD+ Net Auto Trips	Number of net vehicle trips that are estimated using MXD+ model which adjusts the ITE *Trip Generation Manual* estimate above to account for internalized, external transit, and external walk/bike trips
MXD+ Internalization	Number and percentage of trips that are estimated as internal capture using the MXD+ model
MXD+ Transit	Number and percentage of trips that are estimated as transit trips using the MXD+ model
MXD+ WalkBike	Number and percentage of trips that are estimated as combined walk/bike using the MXD+ model

1. All MXD+ output variables are available by trip purpose (HBW/HBO/NHB) and time period (Daily, AM Peak Hour, PM Peak Hour)
2. All other output variables are available by combined trip purpose and time period (Daily, AM Peak Hour, PM Peak Hour)
Source: Fehr & Peers 2016.

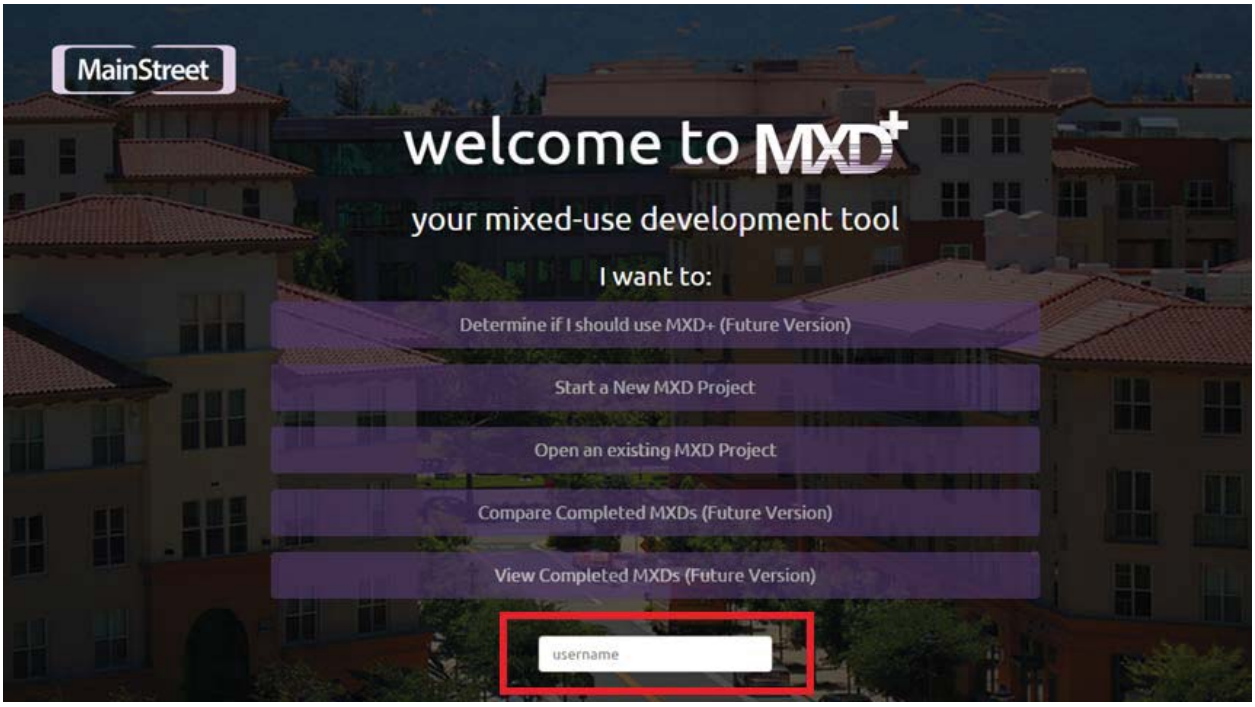
C. MXD+ MODEL: STEP-BY-STEP

The MXD+ Model uses the 7Ds to determine how to adjust ITE vehicle trips to account for internal capture, walking, biking, and transit travel behavior. The final product of an MXD+ analysis is net vehicle trip generation and, if desired, VMT. The following section goes through a typical MainStreet/MXD+ analysis and notes expected analyst staff time and model run time necessary for each step. Setting up the first scenario for a project should take approximately 45 minutes, with additional scenarios taking approximately 30 minutes each. This time estimate does not include time estimates for Page Zero or Output Checks.

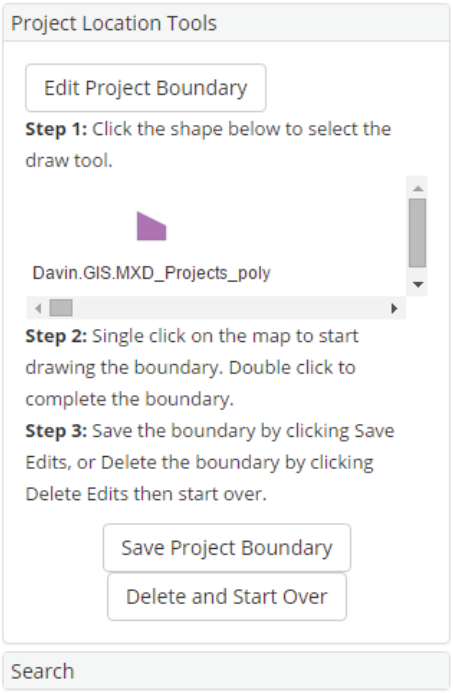
1. SPLASH PAGE

Google Chrome or Mozilla Firefox is recommended to use MainStreet/MXD+. Do not use Internet Explorer. Enter a username on the splash page. This username is only for informational and organization purposes. It is recommended that the analyst inputs the same username as their FP network login. This

will be tied to the MXD+ project that an analyst creates so that projects can be easily retrieved from the username.



2. PROJECT INFO

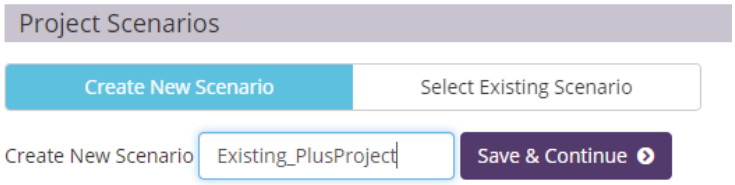


On this page, the analyst enters the project name and number. These variables will be saved to the MainStreet server.

The following steps should be taken to draw the project polygon:

- Click on Add Project Boundary Button
- Click the polygon shape to start the draw tool
- Single click on the map to start drawing the boundary. Double click to complete the boundary
- Upon double-clicking, please wait 2 minutes for MainStreet to complete the GIS lookups necessary. A pop-up window will ask the analyst to wait – do not click anywhere while this step is occurring
- After the pop-up window disappears, save the boundary by clicking "save project boundary" or delete by clicking "delete and start over"

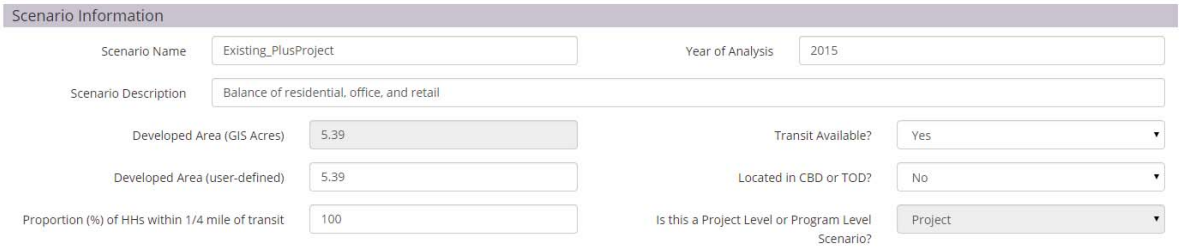
Once the project boundary is saved, the analyst can create a new scenario or select an existing scenario for the project. Within MainStreet, it is possible to create one project with multiple scenarios. This is useful for evaluating multiple project alternatives. To create a new scenario enter the name of the scenario in the box below and click save and continue. To select an existing scenario, switch to the other button and choose your scenario from the drop down menu.



The Project Info step should take a total of 5 minutes of combined analyst and model run time to complete.

3. SCENARIO INFO

On this page, the analyst enters more detailed information about the chosen scenario. The analyst may use the project boundary as the scenario boundary or draw a different scenario boundary. Most often the project and scenario boundaries will be the same. The "use project boundary" button/function should take 30 seconds to complete.



The analyst must enter a year of analysis and scenario description to continue to the next step. MainStreet auto calculates developed area based on the drawn polygon – the user may override this value if desired.

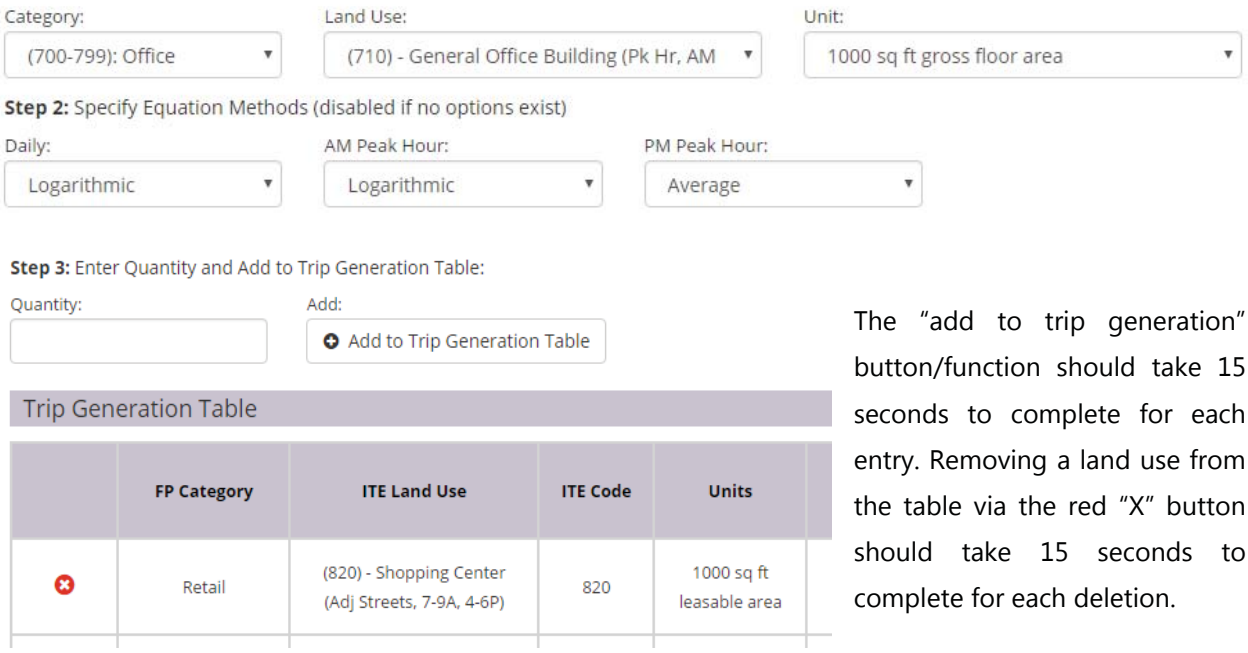
Following are some important clarifying notes regarding this module:

- Proportion of households within ¼ mile of transit is a value from 0 to 100.
- If "Transit Available" is set to "No" then the MXD+ analysis assumes zero transit travel behavior from the project. The model is not sensitive to the frequency/type of transit service. Thus, for certain applications, it may be appropriate to zero out transit use in MXD+ and estimate transit mode split using another method.
- "Located in CBD or TOD" is not currently active.

The Scenario Info step should take a total of 5 minutes of combined analyst and model run time to complete.

4. TRIP GENERATION

This step involves completing a conventional ITE *Trip Generation Manual* analysis for the project. It is assumed that the user follows the ITE *Trip Generation Handbook* procedure on selection of appropriate land use codes and equation methods (e.g. checking sample sizes and available statistics in the ITE Manual).



The "add to trip generation" button/function should take 15 seconds to complete for each entry. Removing a land use from the table via the red "X" button should take 15 seconds to complete for each deletion.

Following are some important clarifying notes regarding this module:

- Population and employment per land use unit are based on a database for all of the ITE land use codes. These rates are used to calculate density of the project and thus influence final net trip generation. The user may override these values if they have better information.
- Currently, only one entry for a given land use code may be present in the table.
- The user may use "Custom Trip Gen" for land uses that don't conform to the ITE land use codes. Note that currently only one "Custom Trip Gen" entry is allowed. The 'Custom Trip Gen' function provides users with flexibility to use special trip rates, account for existing trip credits, etc.

The "save and continue" button/function should take 1-2 minutes to complete and move to the next step. The Trip Generation step should take an average of 10 to 15 minutes of combined analyst and model run time to complete depending on the number of discrete land uses in the project. Projects with large

number of different land uses may take longer to complete. This time estimate includes critical thinking of the land use codes and equation method used.

5. MODEL INPUTS

The 'MXD Model Inputs' step generates MXD+ model input parameters based on the location of the project and available background data layers. These background data layers have been prepared by staff in each region of the company. Please refer to the wiki for a complete list of background data layers.

The available data layers will be presented as options for the user to choose. Based on knowledge of the project area and the data layers available, use engineering judgement to decide which parameters to use for the model analysis. Note that the data layers include national data sources (such as the EPA Smart Location Database and Census/ACS) as well as local data sources (such as regional travel demand models).

Less experienced analysts are urged to consult with more experienced MXD+ users within their offices and throughout the firm regarding the selection of specific input parameters. The chosen parameters form the basis of the MXD+ model inputs, which directly influence the outputs.

- Demographics (household size and vehicle ownership) are stratified by on site and surrounding area to account for certain projects where the demographics on-site vary significantly from those of the surrounding area. However, most often these values will be the same.
- Analysts who are using MXD+ to also calculate VMT are urged to consult the advanced reference guide regarding VMT input parameters.
- All variables can be set to a custom value based on engineering judgement

Although all the variables in Table 1 influence model outputs, there are certain variables that are more influential than others depending on the sub-model. Table 3 displays the most influential variables for each sub-model.

TABLE 3 MXD+ MOST INFLUENTIAL VARIABLES BY SUB-MODEL

Internal Capture	External Walk/Bike	External Transit
Intersection Density	Vehicle Ownership	Vehicle Ownership
Total Area	Empl. within 1 mile	Empl. within 30 min transit
Activity (Population Plus Employment) Density	Intersection Density	Intersection Density

Source: Fehr & Peers 2016.

Table 4 presents appropriate input variable ranges by placetype. The user should use this table to ensure that their inputs are generally reasonable for their project location. These are rough guidelines and are subject to additional engineering judgement.

TABLE 4 MXD+ APPROPRIATE INPUT VARIABLE RANGE BY PLACETYPE

Variable	Rural	Suburban	Urban	Urban Center	Urban Core
Intersection Density	20	70	200	250	350
Household Size	3.00	2.85	2.70	2.60	2.50
Vehicle Ownership	2.50	2.00	1.85	1.55	1.15
Empl. within 1 mile	50	1,000	10,000	30,000	60,000
Empl. within 30 minutes transit (as % share of regional empl.)	1%	3%	5%	8%	15%

MainStreet Team engineering judgement based on hundreds of MXD+ applications.
Source: Fehr & Peers 2016.

The "save and continue" button/function should take 2-3 minutes of model run time to complete and move to the next step. The Model Inputs step should take 20 to 30 minutes of combined analyst and model run time to complete for a first scenario. Additional scenarios should take 10 to 15 minutes. These time estimates include critical thinking of model inputs to ensure that they are appropriate for the scenario being analyzed.

6. MODEL OUTPUTS

The 'Model Outputs' step presents the results from each of the trip generation methodologies.

External Vehicle Trip Generation			
Methodology	Daily	AM Peak Hour	PM Peak Hour
ITE	8,481	434	525
ITE Handbook	8,481	400	350
MXD+	4,960	163	208

External VMT			
Methodology	Daily	AM Peak Hour	PM Peak Hour
ITE	67,848	3,906	4,200
ITE Handbook	67,848	3,600	2,800
MXD+	39,680	1,467	1,664

Following are some important clarifying notes regarding this module:

- Pass-by trips are not currently calculated in MXD+ (important to sites with large amounts of retail). Some public agency reviewers of MXD+ results have wondered why pass-by adjustments are not also taken. Our response has often been that not taking a pass-by reduction is considered conservative (and also because the level of pass-by activity at the 239 calibration sites was not known). However, on mixed-use projects with large amounts of retail, the analyst may wish to consider whether a pass-by reduction should be taken.
- Terminology is important depending on audience
  - ITE trip reduction vs. ITE trip shift
    - MXD+ adjusts ITE *Trip Generation Manual* estimates to account for internalized, external transit, and external walk/bike trips. Traditionally this has been described as a "reduction" from ITE *Trip Generation Manual* but it could be also described as a "shift" in ITE trips from all vehicle to a split of vehicle, transit, and walk/bike. The analyst's audience may determine which terminology is most appropriate.
  - MXD+ is "better" than ITE vs. MXD+ is more accurate than ITE
    - As described above, MXD+ more accurately estimates net vehicle trip generation, especially for mixed-use sites. The analyst should be careful to explain how MXD+ and ITE methodologies are different. Consistent with the FP approach to trip generation analysis, it's important to use the best tool for the certain project. In some instances, ITE may be appropriate for a given project while MXD+ is not.

- The MXD+ model can report trip reductions/shifts by sub-module (internal capture, external transit, and external walk/bike) and trip purpose (home-based work, home-based other, and non-home based) but has only been validated in the research against net vehicle trip generation.
    - The research indicated that using MXD+ can result in statistically valid estimates of net vehicle trip generation
    - Individual sub-model and trip purpose estimates have not been individually validated. Use with caution and provide additional validation/documentation to support your use
    - Based on brief investigations on various project, it has been found that the internal capture estimate is accurate, walk/bike estimate is high, and the transit estimate is low

D. OUTPUT CHECKS

Once an MXD+ analysis has been completed, the outputs should be checked to ensure that they are appropriate for the location and project type. Trust, but verify! Examples of comparisons include: mode share, VMT (normalized by household per per capita), net trips per land use unit. Sources of data for these comparisons include: household travel surveys, regional travel demand models, and Big Data. Example MXD+ transportation assumptions memos that include output checks can be found on the wiki.

6. ADDITIONAL RESOURCES

A. ADVANCED USER GUIDE

The MainStreet team is developing an advanced user guide that builds upon this document and adds the following:

- Relationship to other trip generation methodologies
- VMT input and output parameters
- Sample work products
- Special cases of MXD+analyses
- Marketing MXD+
- Example case studies of MXD+ analyses

The advanced user guide is anticipated to be available in the second quarter of 2016.

B. DEFENSIBILITY PACKAGE

Our clients often ask for us to provide substantial evidence in support of the use of MXD+. To this end, the MainStreet team is developing a 'defensibility package' that includes detailed background on the research that went into MXD+, validation of MXD+, and citations/references to MXD+ in published literature.

The defensibility package is anticipated to be available in the second quarter of 2016.

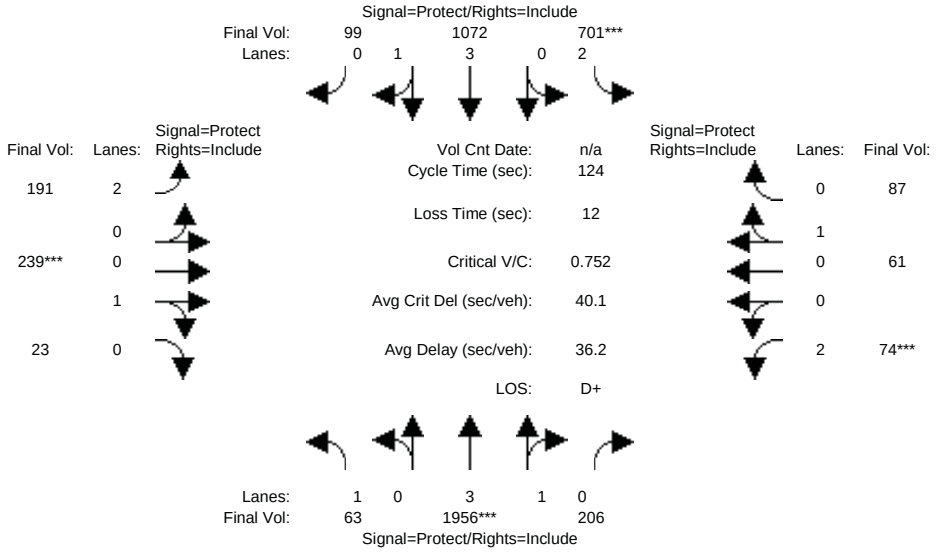
C. MAINSTREET CHAMPIONS

Each office of Fehr & Peers has a MainStreet Office Champion whose role is to ensure that MainStreet is tailored for the office's specific needs and market realities. They are the first line of defense when it comes to any questions relating to MainStreet or the ASAP tools it implements. They actively seek out feedback on MainStreet usage and report any comments, concerns, or issues to the entire Office Champion group as well as the MainStreet Development Team. The list of MainStreet Champions by office can be found on the wiki.

APPENDIX D: BACKGROUND AND BACKGROUND PLUS PROJECT INTERSECTION LEVEL OF SERVICE CALCULATIONS

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

Intersection #1: De Anza Blvd/Mariani Ave



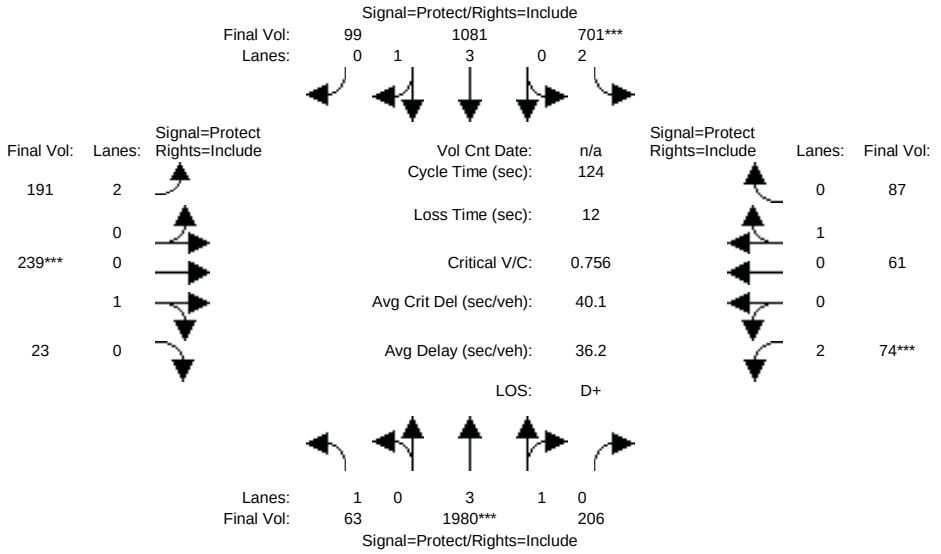
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	61	1867	201	684	995	97	186	233	22	72	60	85
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:	61	1867	201	684	995	97	186	233	22	72	60	85
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	61	1909	201	684	1046	97	186	233	22	72	60	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	62	1956	206	701	1072	99	191	239	23	74	61	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	1956	206	701	1072	99	191	239	23	74	61	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	1956	206	701	1072	99	191	239	23	74	61	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.60	0.40	2.00	3.65	0.35	2.00	0.91	0.09	2.00	0.41	0.59
Final Sat.:	1750	6784	714	3150	6862	636	3150	1645	155	3150	745	1055
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.22	0.16	0.16	0.06	0.15	0.15	0.02	0.08	0.08
Crit Moves:		****		****				****		****		
Green Time:	21.7	46.2	46.2	35.6	60.1	60.1	12.8	23.2	23.2	7.0	17.4	17.4
Volume/Cap:	0.20	0.77	0.77	0.77	0.32	0.32	0.59	0.77	0.77	0.41	0.59	0.59
Uniform Del:	43.8	34.3	34.3	40.5	19.5	19.5	53.1	47.9	47.9	56.5	49.9	49.9
IncremntDel:	0.3	1.4	1.4	4.2	0.1	0.1	2.8	10.7	10.7	1.6	3.5	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:	44.1	35.7	35.7	44.7	19.6	19.6	55.9	58.6	58.6	58.1	53.4	53.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	35.7	35.7	44.7	19.6	19.6	55.9	58.6	58.6	58.1	53.4	53.4
LOS by Move:	D	D+	D+	D	B-	B-	E+	E+	E+	E+	D-	D-
HCM2kAvgQ:	2	18	18	16	7	7	5	12	12	2	6	6

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #1: De Anza Blvd/Mariani Ave



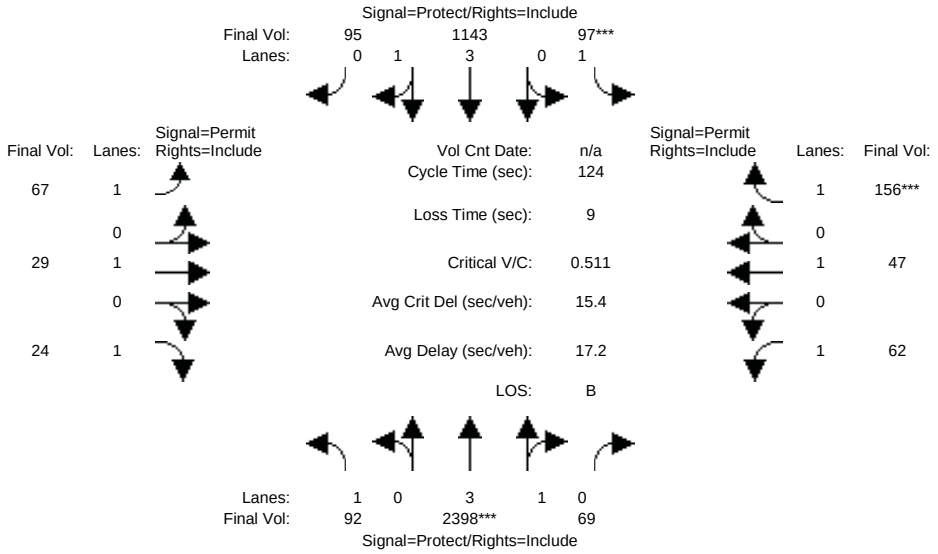
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	61	1867	201	684	995	97	186	233	22	72	60	85
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:	61	1867	201	684	995	97	186	233	22	72	60	85
Added Vol:	0	23	0	0	9	0	0	0	0	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	61	1932	201	684	1055	97	186	233	22	72	60	85
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	62	1980	206	701	1081	99	191	239	23	74	61	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	62	1980	206	701	1081	99	191	239	23	74	61	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	63	1980	206	701	1081	99	191	239	23	74	61	87
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.61	0.39	2.00	3.65	0.35	2.00	0.91	0.09	2.00	0.41	0.59
Final Sat.:	1750	6792	707	3150	6867	631	3150	1645	155	3150	745	1055
Capacity Analysis Module:												
Vol/Sat:	0.04	0.29	0.29	0.22	0.16	0.16	0.06	0.15	0.15	0.02	0.08	0.08
Crit Moves:		****		****				****		****		
Green Time:	21.6	46.4	46.4	35.4	60.3	60.3	12.7	23.1	23.1	7.0	17.4	17.4
Volume/Cap:	0.20	0.78	0.78	0.78	0.32	0.32	0.59	0.78	0.78	0.41	0.59	0.59
Uniform Del:	43.8	34.2	34.2	40.7	19.4	19.4	53.1	48.0	48.0	56.5	50.0	50.0
IncremntDel:	0.3	1.4	1.4	4.4	0.1	0.1	2.8	11.0	11.0	1.6	3.6	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:	44.2	35.7	35.7	45.0	19.5	19.5	56.0	59.0	59.0	58.1	53.6	53.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.2	35.7	35.7	45.0	19.5	19.5	56.0	59.0	59.0	58.1	53.6	53.6
LOS by Move:	D	D+	D+	D	B-	B-	E+	E+	E+	E+	D-	D-
HCM2kAvgQ:	2	19	19	16	7	7	5	12	12	2	6	6

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #2: De Anza Blvd/Lazaneo Dr



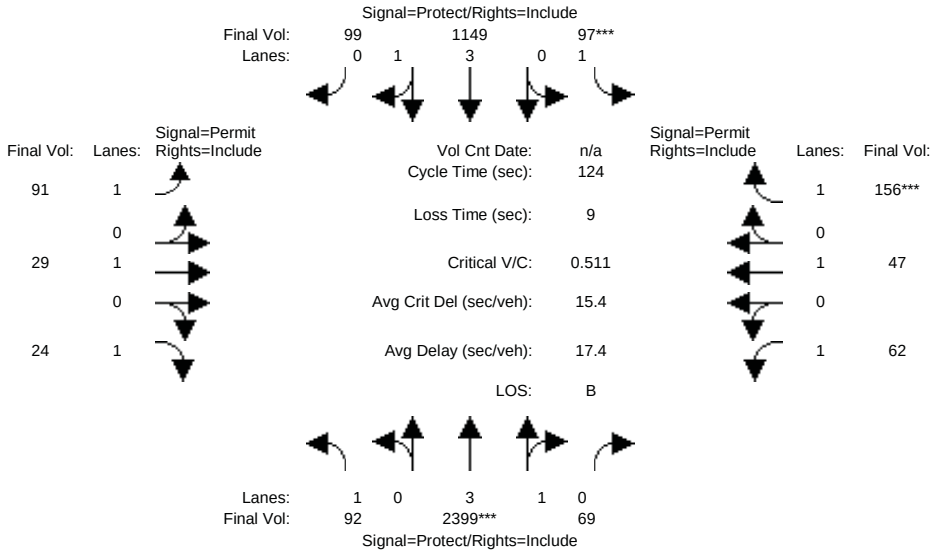
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	86	2198	64	91	1017	89	63	27	22	58	44	146
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:	86	2198	64	91	1017	89	63	27	22	58	44	146
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	86	2240	64	91	1068	89	63	27	22	58	44	146
User Adj:	1.00	1.00	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	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	92	2398	69	97	1143	95	67	29	24	62	47	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	2398	69	97	1143	95	67	29	24	62	47	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	2398	69	97	1143	95	67	29	24	62	47	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.88	0.12	1.00	3.68	0.32	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7291	208	1750	6922	577	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.06	0.17	0.17	0.04	0.02	0.01	0.04	0.02	0.09
Crit Moves:		****		****								****
Green Time:	23.8	79.8	79.8	13.5	69.6	69.6	21.7	21.7	21.7	21.7	21.7	21.7
Volume/Cap:	0.27	0.51	0.51	0.51	0.29	0.29	0.22	0.09	0.08	0.20	0.14	0.51
Uniform Del:	42.8	11.7	11.7	52.1	14.3	14.3	43.9	42.9	42.8	43.8	43.3	46.4
IncremntDel:	0.4	0.1	0.1	2.3	0.0	0.0	0.4	0.1	0.1	0.3	0.2	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:	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:	43.2	11.8	11.8	54.4	14.4	14.4	44.3	43.0	42.9	44.1	43.5	47.8
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:	43.2	11.8	11.8	54.4	14.4	14.4	44.3	43.0	42.9	44.1	43.5	47.8
LOS by Move:	D	B+	B+	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	12	12	4	6	6	2	1	1	2	2	6

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #2: De Anza Blvd/Lazaneo Dr



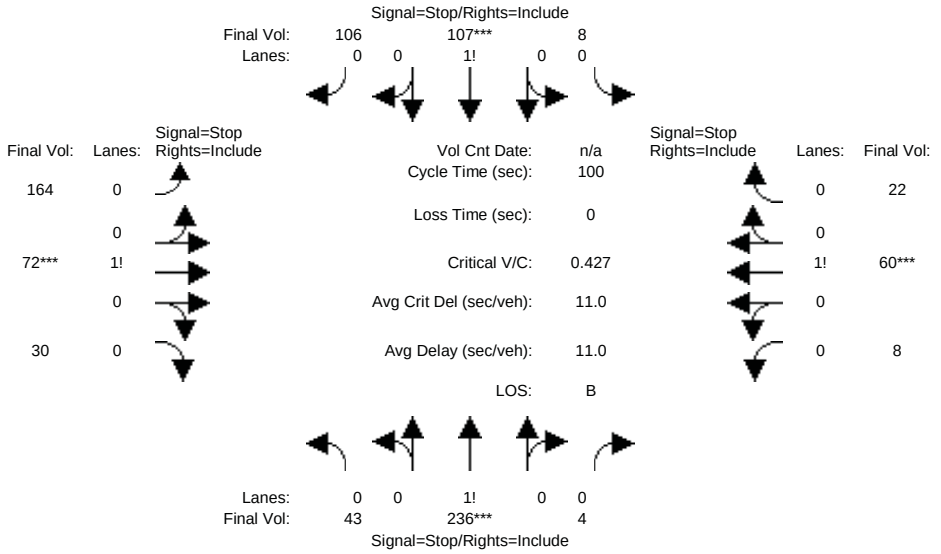
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	86	2198	64	91	1017	89	63	27	22	58	44	146
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:	86	2198	64	91	1017	89	63	27	22	58	44	146
Added Vol:	0	1	0	0	5	3	22	0	0	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	86	2241	64	91	1073	92	85	27	22	58	44	146
User Adj:	1.00	1.00	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	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	92	2399	69	97	1149	99	91	29	24	62	47	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	92	2399	69	97	1149	99	91	29	24	62	47	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	92	2399	69	97	1149	99	91	29	24	62	47	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.88	0.12	1.00	3.67	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7291	208	1750	6907	592	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.05	0.33	0.33	0.06	0.17	0.17	0.05	0.02	0.01	0.04	0.02	0.09
Crit Moves:		****		****								****
Green Time:	23.6	79.8	79.8	13.5	69.7	69.7	21.7	21.7	21.7	21.7	21.7	21.7
Volume/Cap:	0.28	0.51	0.51	0.51	0.30	0.30	0.30	0.09	0.08	0.20	0.14	0.51
Uniform Del:	42.9	11.7	11.7	52.1	14.3	14.3	44.5	42.9	42.8	43.8	43.3	46.4
IncremntDel:	0.5	0.1	0.1	2.3	0.0	0.0	0.5	0.1	0.1	0.3	0.2	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:	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:	43.3	11.8	11.8	54.5	14.3	14.3	45.1	43.0	42.9	44.1	43.5	47.8
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:	43.3	11.8	11.8	54.5	14.3	14.3	45.1	43.0	42.9	44.1	43.5	47.8
LOS by Move:	D	B+	B+	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	3	12	12	4	6	6	3	1	1	2	2	6

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	38	210	4	7	95	94	146	64	27	7	53	20
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:	38	210	4	7	95	94	146	64	27	7	53	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	38	210	4	7	95	94	146	64	27	7	53	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	43	236	4	8	107	106	164	72	30	8	60	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	236	4	8	107	106	164	72	30	8	60	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	43	236	4	8	107	106	164	72	30	8	60	22
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.15	0.83	0.02	0.04	0.48	0.48	0.62	0.27	0.11	0.09	0.66	0.25
Final Sat.:	100	553	11	24	329	326	392	172	72	52	394	149
Capacity Analysis Module:												
Vol/Sat:	0.43	0.43	0.43	0.32	0.32	0.32	0.42	0.42	0.42	0.15	0.15	0.15
Crit Moves:		****			****			****			****	
Delay/Veh:	11.6	11.6	11.6	10.1	10.1	10.1	11.7	11.7	11.7	9.3	9.3	9.3
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.6	11.6	11.6	10.1	10.1	10.1	11.7	11.7	11.7	9.3	9.3	9.3
LOS by Move:	B	B	B	B	B	B	B	B	B	A	A	A
ApproachDel:		11.6			10.1			11.7			9.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.6			10.1			11.7			9.3	
LOS by Appr:		B			B			B			A	
AllWayAvgQ:	0.6	0.6	0.6	0.4	0.4	0.4	0.6	0.6	0.6	0.1	0.1	0.1

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	38	210	4	7	95	94	146	64	27	7	53	20

Major Street Volume: 448
Minor Approach Volume: 237
Minor Approach Volume Threshold: 434

SIGNAL WARRANT DISCLAIMER

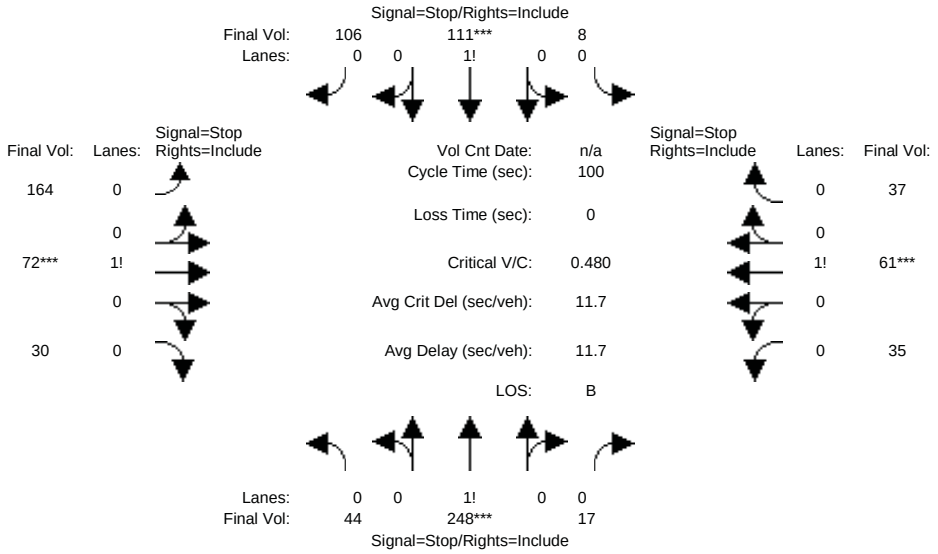
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	38	210	4	7	95	94	146	64	27	7	53	20
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:	38	210	4	7	95	94	146	64	27	7	53	20
Added Vol:	1	11	11	0	4	0	0	0	0	24	1	13
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	39	221	15	7	99	94	146	64	27	31	54	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:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
PHF Volume:	44	248	17	8	111	106	164	72	30	35	61	37
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	44	248	17	8	111	106	164	72	30	35	61	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	44	248	17	8	111	106	164	72	30	35	61	37
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.14	0.81	0.05	0.03	0.50	0.47	0.62	0.27	0.11	0.26	0.46	0.28
Final Sat.:	91	517	35	23	320	303	376	165	70	152	265	162
Capacity Analysis Module:												
Vol/Sat:	0.48	0.48	0.48	0.35	0.35	0.35	0.44	0.44	0.44	0.23	0.23	0.23
Crit Moves:		****			****			****			****	
Delay/Veh:	12.7	12.7	12.7	10.6	10.6	10.6	12.3	12.3	12.3	10.0	10.0	10.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.7	12.7	12.7	10.6	10.6	10.6	12.3	12.3	12.3	10.0	10.0	10.0
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		12.7			10.6			12.3			10.0	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		12.7			10.6			12.3			10.0	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.8	0.8	0.8	0.4	0.4	0.4	0.6	0.6	0.6	0.2	0.2	0.2

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	39	221	15	7	99	94	146	64	27	31	54	33

Major Street Volume: 475
Minor Approach Volume: 237
Minor Approach Volume Threshold: 418

SIGNAL WARRANT DISCLAIMER

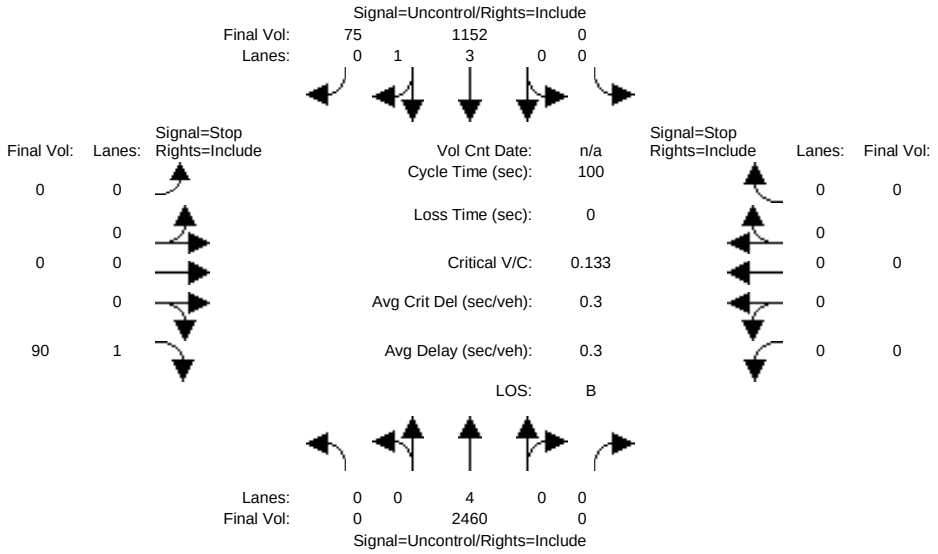
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	2315	0	0	1053	72	0	0	86	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2315	0	0	1053	72	0	0	86	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	0	2357	0	0	1104	72	0	0	86	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	2460	0	0	1152	75	0	0	90	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2460	0	0	1152	75	0	0	90	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	326	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	676	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	676	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.13	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.1	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.1			xxxxxx		
ApproachLOS:	*			*			B			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2357	0		0 1104	72		0	0	86	0	0	0
ApproachDel:	xxxxxx			xxxxxx			11.1			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=86]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3619]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 2357	0		0 1104	72		0	0	86	0	0	0

Major Street Volume: 3533
Minor Approach Volume: 86
Minor Approach Volume Threshold: -150 [less than minimum of 100]

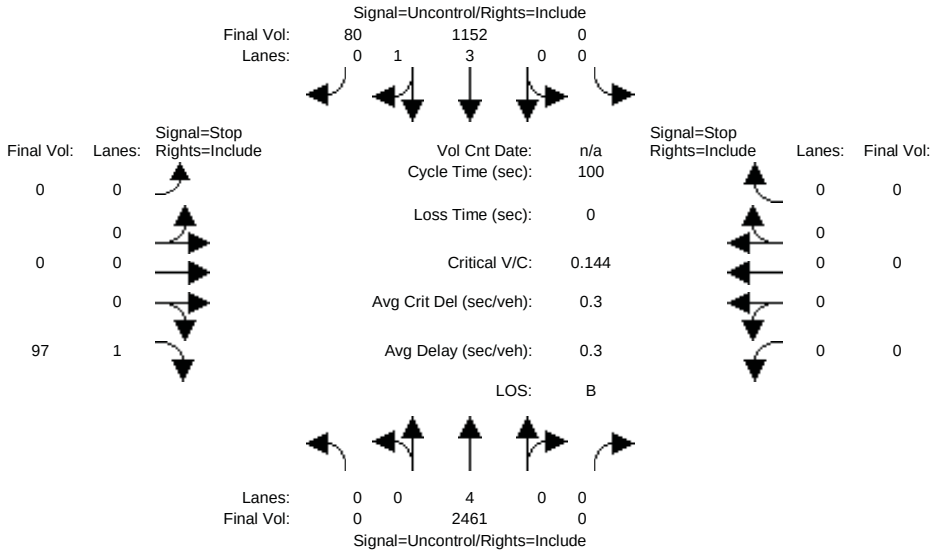
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PP AM

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	2315	0	0	1053	72	0	0	86	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	2315	0	0	1053	72	0	0	86	0	0	0
Added Vol:	0	1	0	0	0	5	0	0	7	0	0	0
PasserByVol:	0	42	0	0	51	0	0	0	0	0	0	0
Initial Fut:	0	2358	0	0	1104	77	0	0	93	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	0	2461	0	0	1152	80	0	0	97	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	2461	0	0	1152	80	0	0	97	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	328	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	673	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	673	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.14	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	0.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	11.2	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			11.2			xxxxxx		
ApproachLOS:	*			*			B			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 2358	0		0 1104	77		0	0	93	0	0	0
ApproachDel:	xxxxxx			xxxxxx			11.2			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=93]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3632]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 2358	0		0 1104	77		0	0	93	0	0	0

Major Street Volume: 3539
Minor Approach Volume: 93
Minor Approach Volume Threshold: -151 [less than minimum of 100]

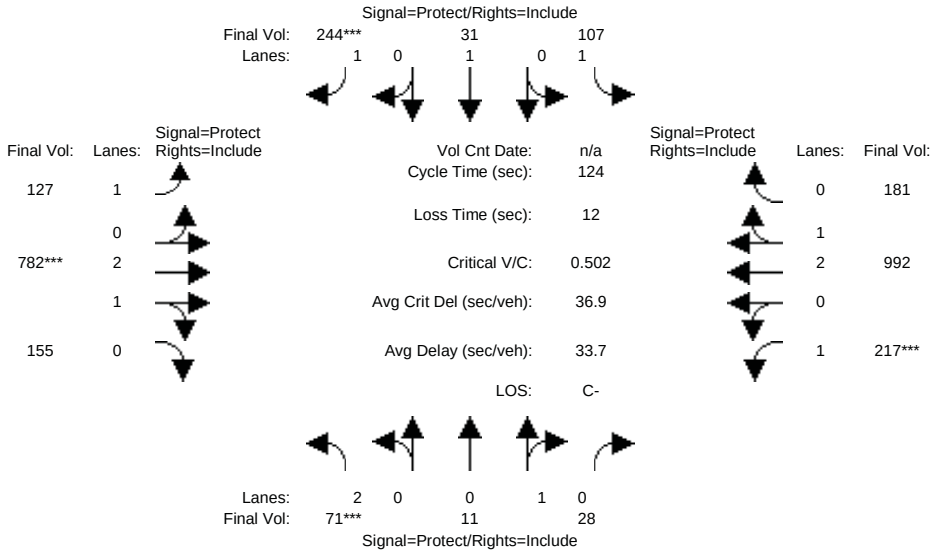
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #5: Mary Ave/Stevens Creek Blvd



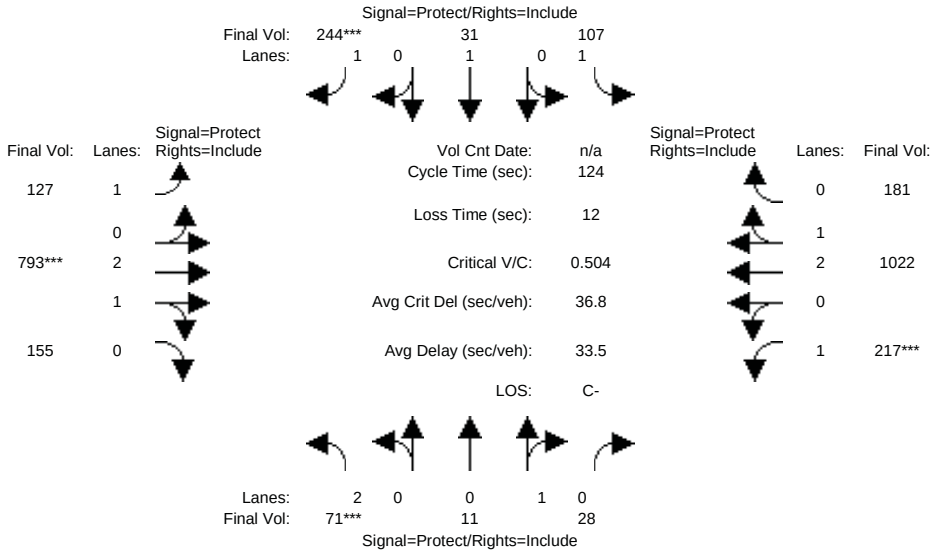
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	10	25	97	28	221	115	662	140	196	865	164
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	10	25	97	28	221	115	662	140	196	865	164
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	64	10	25	97	28	221	115	708	140	196	898	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	71	11	28	107	31	244	127	782	155	217	992	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	11	28	107	31	244	127	782	155	217	992	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	11	28	107	31	244	127	782	155	217	992	181
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	0.29	0.71	1.00	1.00	1.00	1.00	2.49	0.51	1.00	2.52	0.48
Final Sat.:	3150	514	1286	1750	1900	1750	1750	4674	924	1750	4734	865
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.02	0.14	0.07	0.17	0.17	0.12	0.21	0.21
Crit Moves:	****					****		****		****		
Green Time:	7.0	23.3	23.3	17.7	34.0	34.0	18.3	40.8	40.8	30.2	52.7	52.7
Volume/Cap:	0.40	0.11	0.11	0.43	0.06	0.51	0.49	0.51	0.51	0.51	0.49	0.49
Uniform Del:	56.5	41.8	41.8	48.5	33.2	37.9	48.6	33.5	33.5	40.5	25.9	25.9
IncremntDel:	1.5	0.2	0.2	1.2	0.0	0.9	1.5	0.2	0.2	1.0	0.2	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:	57.9	41.9	41.9	49.7	33.2	38.8	50.1	33.8	33.8	41.5	26.1	26.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.9	41.9	41.9	49.7	33.2	38.8	50.1	33.8	33.8	41.5	26.1	26.1
LOS by Move:	E+	D	D	D	C-	D+	D	C-	C-	D	C	C
HCM2kAvgQ:	2	1	1	4	1	9	5	10	10	7	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #5: Mary Ave/Stevens Creek Blvd



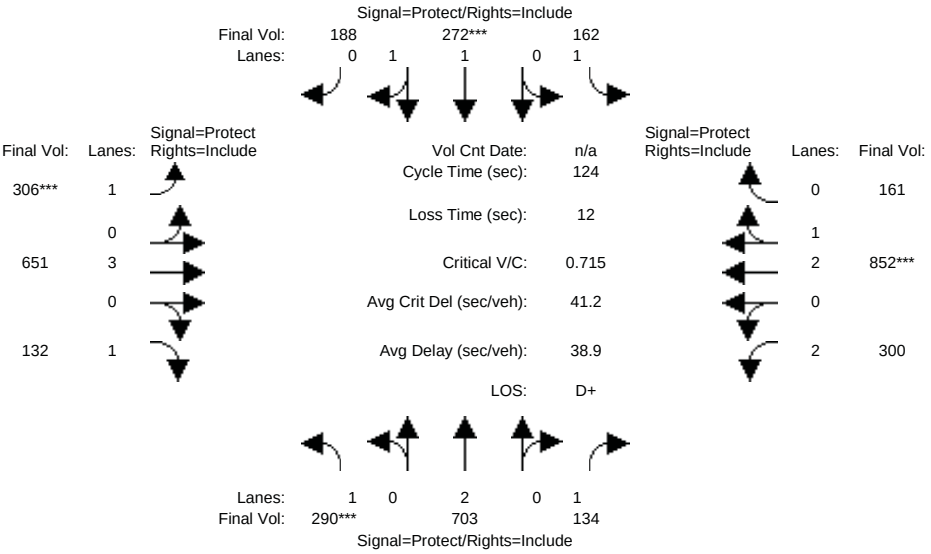
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	64	10	25	97	28	221	115	662	140	196	865	164
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	10	25	97	28	221	115	662	140	196	865	164
Added Vol:	0	0	0	0	0	0	0	10	0	0	27	0
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	64	10	25	97	28	221	115	718	140	196	925	164
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	71	11	28	107	31	244	127	793	155	217	1022	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	11	28	107	31	244	127	793	155	217	1022	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	71	11	28	107	31	244	127	793	155	217	1022	181
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	2.00	0.29	0.71	1.00	1.00	1.00	1.00	2.49	0.51	1.00	2.53	0.47
Final Sat.:	3150	514	1286	1750	1900	1750	1750	4685	914	1750	4756	843
Capacity Analysis Module:												
Vol/Sat:	0.02	0.02	0.02	0.06	0.02	0.14	0.07	0.17	0.17	0.12	0.21	0.21
Crit Moves:	****					****		****		****		
Green Time:	7.0	23.2	23.2	17.6	33.9	33.9	18.0	41.1	41.1	30.0	53.2	53.2
Volume/Cap:	0.40	0.11	0.11	0.43	0.06	0.51	0.50	0.51	0.51	0.51	0.50	0.50
Uniform Del:	56.5	41.8	41.8	48.6	33.3	38.1	48.9	33.4	33.4	40.6	25.8	25.8
IncremntDel:	1.5	0.2	0.2	1.2	0.0	0.9	1.6	0.2	0.2	1.0	0.2	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:	57.9	42.0	42.0	49.8	33.3	39.0	50.5	33.6	33.6	41.7	25.9	25.9
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:	57.9	42.0	42.0	49.8	33.3	39.0	50.5	33.6	33.6	41.7	25.9	25.9
LOS by Move:	E+	D	D	D	C-	D	D	C-	C-	D	C	C
HCM2kAvgQ:	2	1	1	4	1	9	5	10	10	7	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



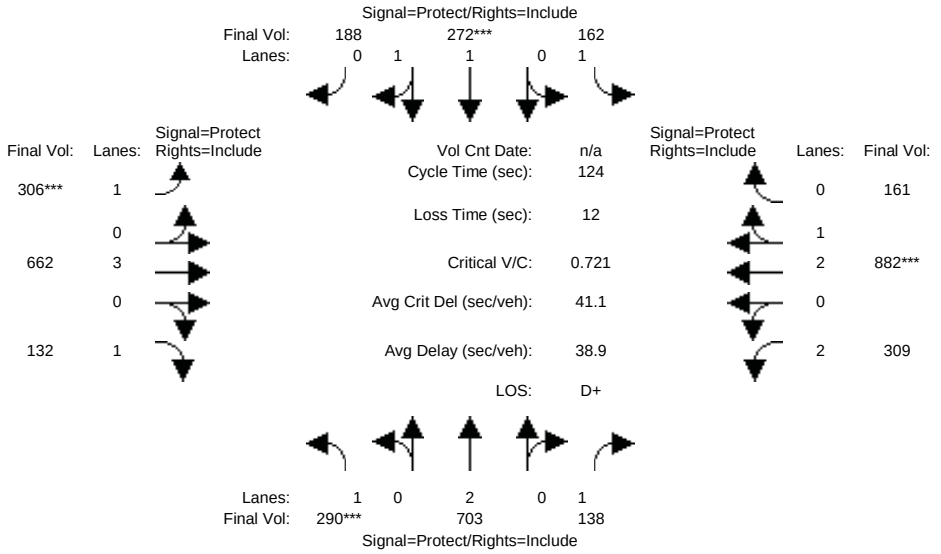
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	267	634	119	149	249	167	281	554	122	277	753	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:	267	634	119	149	249	167	281	554	122	277	753	148
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	14	5	0	2	6	1	46	0	0	33	0
Initial Fut:	267	648	124	149	251	173	282	600	122	277	786	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	290	703	134	162	272	188	306	651	132	300	852	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	703	134	162	272	188	306	651	132	300	852	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	703	134	162	272	188	306	651	132	300	852	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	2.00	1.00	1.00	1.16	0.84	1.00	3.00	1.00	2.00	2.51	0.49
Final Sat.:	1750	3800	1750	1750	2189	1509	1750	5700	1750	3150	4711	887
Capacity Analysis Module:												
Vol/Sat:	0.17	0.18	0.08	0.09	0.12	0.12	0.17	0.11	0.08	0.10	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	28.7	33.5	33.5	16.7	21.6	21.6	30.3	33.6	33.6	28.1	31.4	31.4
Volume/Cap:	0.71	0.68	0.28	0.68	0.71	0.71	0.71	0.42	0.28	0.42	0.71	0.71
Uniform Del:	43.9	40.5	35.7	51.1	48.3	48.3	42.9	37.2	35.6	41.0	42.2	42.2
IncremntDel:	6.0	1.9	0.3	8.0	3.8	3.8	5.7	0.2	0.3	0.4	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	0.78	0.75	0.75	0.80	0.77	0.77
Delay/Veh:	49.8	42.4	36.1	59.1	52.1	52.1	39.3	28.1	27.1	33.4	34.4	34.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	49.8	42.4	36.1	59.1	52.1	52.1	39.3	28.1	27.1	33.4	34.4	34.4
LOS by Move:	D	D	D+	E+	D-	D-	D	C	C	C-	C-	C-
HCM2kAvgQ:	12	13	4	8	10	10	11	5	3	5	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



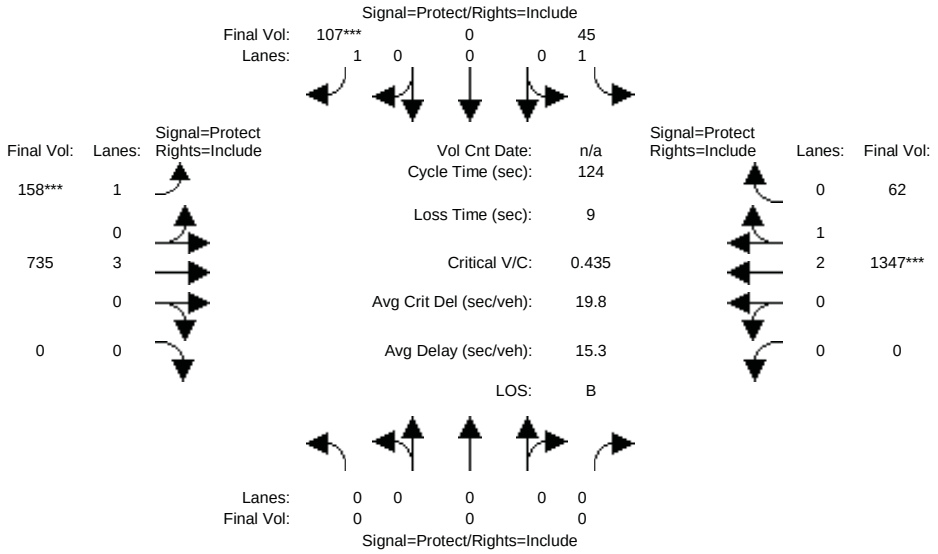
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	267	634	119	149	249	167	281	554	122	277	753	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:	267	634	119	149	249	167	281	554	122	277	753	148
Added Vol:	0	0	3	0	0	0	0	10	0	8	27	0
PasserByVol:	0	14	5	0	2	6	1	46	0	0	33	0
Initial Fut:	267	648	127	149	251	173	282	610	122	285	813	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	290	703	138	162	272	188	306	662	132	309	882	161
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	703	138	162	272	188	306	662	132	309	882	161
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	703	138	162	272	188	306	662	132	309	882	161
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	0.99	0.95	0.92	1.00	0.92	0.83	0.99	0.95
Lanes:	1.00	2.00	1.00	1.00	1.16	0.84	1.00	3.00	1.00	2.00	2.52	0.48
Final Sat.:	1750	3800	1750	1750	2189	1509	1750	5700	1750	3150	4736	862
Capacity Analysis Module:												
Vol/Sat:	0.17	0.18	0.08	0.09	0.12	0.12	0.17	0.12	0.08	0.10	0.19	0.19
Crit Moves:	****				****		****				****	
Green Time:	28.5	33.3	33.3	16.6	21.4	21.4	30.1	33.7	33.7	28.5	32.0	32.0
Volume/Cap:	0.72	0.69	0.29	0.69	0.72	0.72	0.72	0.43	0.28	0.43	0.72	0.72
Uniform Del:	44.1	40.7	36.0	51.2	48.5	48.5	43.1	37.2	35.6	40.8	41.9	41.9
IncremntDel:	6.3	2.0	0.3	8.4	4.0	4.0	5.9	0.2	0.3	0.4	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	0.79	0.75	0.75	0.80	0.77	0.77
Delay/Veh:	50.3	42.7	36.4	59.6	52.5	52.5	39.8	28.2	27.1	33.1	34.0	34.0
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	42.7	36.4	59.6	52.5	52.5	39.8	28.2	27.1	33.1	34.0	34.0
LOS by Move:	D	D	D+	E+	D-	D-	D	C	C	C-	C-	C-
HCM2kAvgQ:	12	13	5	8	10	10	11	6	3	5	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #7: Saich Way/Stevens Creek Blvd



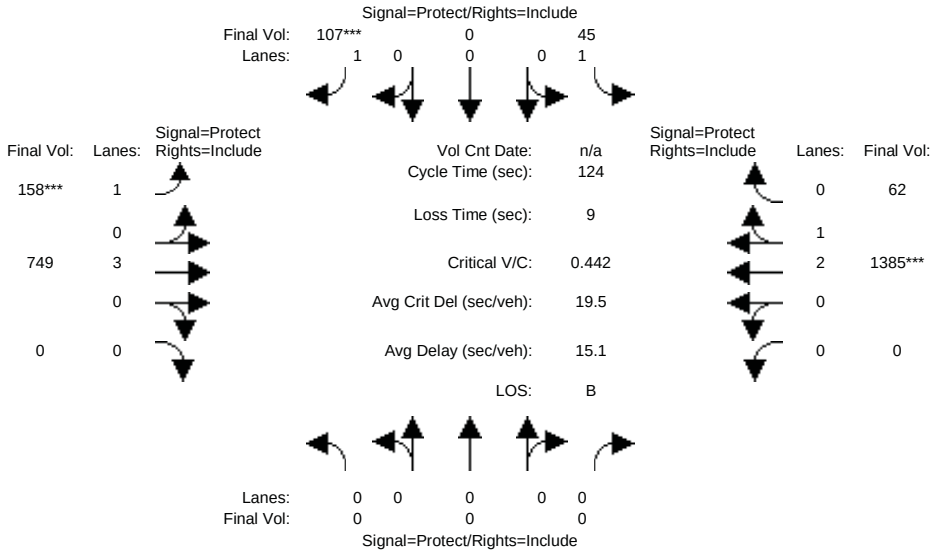
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	41	0	98	145	628	0	0	1202	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:	0	0	0	41	0	98	145	628	0	0	1202	57
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	0	0	0	41	0	98	145	674	0	0	1235	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	45	0	107	158	735	0	0	1347	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	45	0	107	158	735	0	0	1347	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	45	0	107	158	735	0	0	1347	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.86	0.14
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5353	247
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.09	0.13	0.00	0.00	0.25	0.25
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	17.4	0.0	17.4	25.8	97.6	0.0	0.0	71.8	71.8
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.43	0.43	0.16	0.00	0.00	0.43	0.43
Uniform Del:	0.0	0.0	0.0	47.0	0.0	48.8	42.8	3.2	0.0	0.0	14.7	14.7
IncremntDel:	0.0	0.0	0.0	0.4	0.0	1.2	0.8	0.0	0.0	0.0	0.1	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:	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	47.4	0.0	50.0	43.6	3.2	0.0	0.0	14.8	14.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.4	0.0	50.0	43.6	3.2	0.0	0.0	14.8	14.8
LOS by Move:	A	A	A	D	A	D	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	4	5	2	0	0	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #7: Saich Way/Stevens Creek Blvd



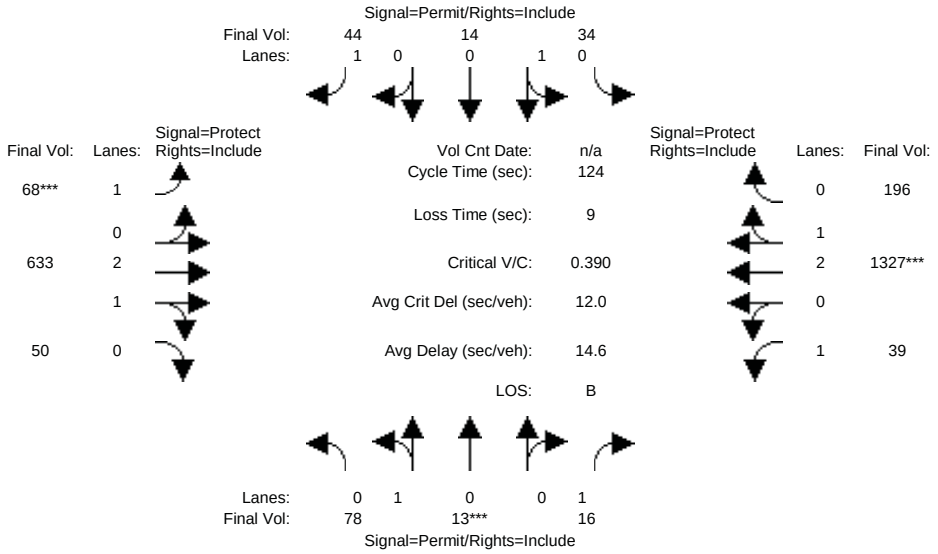
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	41	0	98	145	628	0	0	1202	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:	0	0	0	41	0	98	145	628	0	0	1202	57
Added Vol:	0	0	0	0	0	0	0	13	0	0	35	0
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	0	0	0	41	0	98	145	687	0	0	1270	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:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	45	0	107	158	749	0	0	1385	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	45	0	107	158	749	0	0	1385	62
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	45	0	107	158	749	0	0	1385	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.87	0.13
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5359	241
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.03	0.00	0.06	0.09	0.13	0.00	0.00	0.26	0.26
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	17.1	0.0	17.1	25.4	97.9	0.0	0.0	72.5	72.5
Volume/Cap:	0.00	0.00	0.00	0.18	0.00	0.44	0.44	0.17	0.00	0.00	0.44	0.44
Uniform Del:	0.0	0.0	0.0	47.3	0.0	49.0	43.1	3.2	0.0	0.0	14.4	14.4
IncremntDel:	0.0	0.0	0.0	0.4	0.0	1.3	0.9	0.0	0.0	0.0	0.1	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:	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	47.6	0.0	50.3	44.0	3.2	0.0	0.0	14.5	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.6	0.0	50.3	44.0	3.2	0.0	0.0	14.5	14.5
LOS by Move:	A	A	A	D	A	D	D	A	A	A	B	B
HCM2kAvgQ:	0	0	0	2	0	4	6	2	0	0	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #8: Bandley Dr/Stevens Creek Blvd



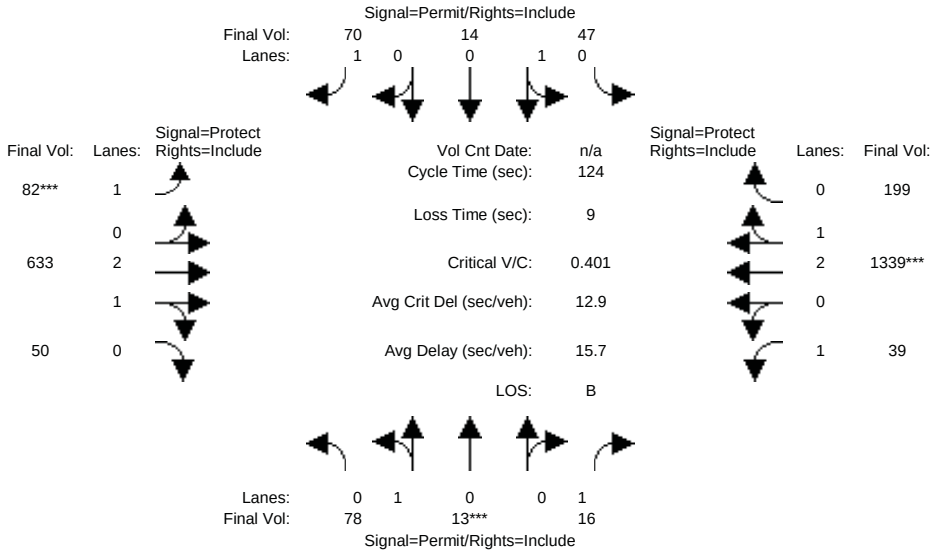
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	74	12	15	32	13	42	64	552	47	37	1220	185
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:	74	12	15	32	13	42	64	552	47	37	1220	185
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	74	12	15	32	13	42	64	598	47	37	1253	185
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	78	13	16	34	14	44	68	633	50	39	1327	196
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	13	16	34	14	44	68	633	50	39	1327	196
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	13	16	34	14	44	68	633	50	39	1327	196
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	0.86	0.14	1.00	0.71	0.29	1.00	1.00	2.77	0.23	1.00	2.60	0.40
Final Sat.:	1549	251	1750	1280	520	1750	1750	5191	408	1750	4879	720
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.01	0.03	0.03	0.03	0.04	0.12	0.12	0.02	0.27	0.27
Crit Moves:		****					****				****	
Green Time:	16.1	16.1	16.1	16.1	16.1	16.1	12.3	67.6	67.6	31.3	86.6	86.6
Volume/Cap:	0.39	0.39	0.07	0.20	0.20	0.20	0.39	0.22	0.22	0.09	0.39	0.39
Uniform Del:	49.4	49.4	47.4	48.2	48.2	48.2	52.3	14.6	14.6	35.5	7.8	7.8
IncremntDel:	1.1	1.1	0.1	0.4	0.4	0.4	1.4	0.0	0.0	0.1	0.1	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:	50.5	50.5	47.5	48.7	48.7	48.6	53.8	14.6	14.6	35.5	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.5	50.5	47.5	48.7	48.7	48.6	53.8	14.6	14.6	35.5	7.8	7.8
LOS by Move:	D	D	D	D	D	D	D-	B	B	D+	A	A
HCM2kAvgQ:	4	4	1	2	2	2	3	4	4	1	8	8

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #8: Bandley Dr/Stevens Creek Blvd



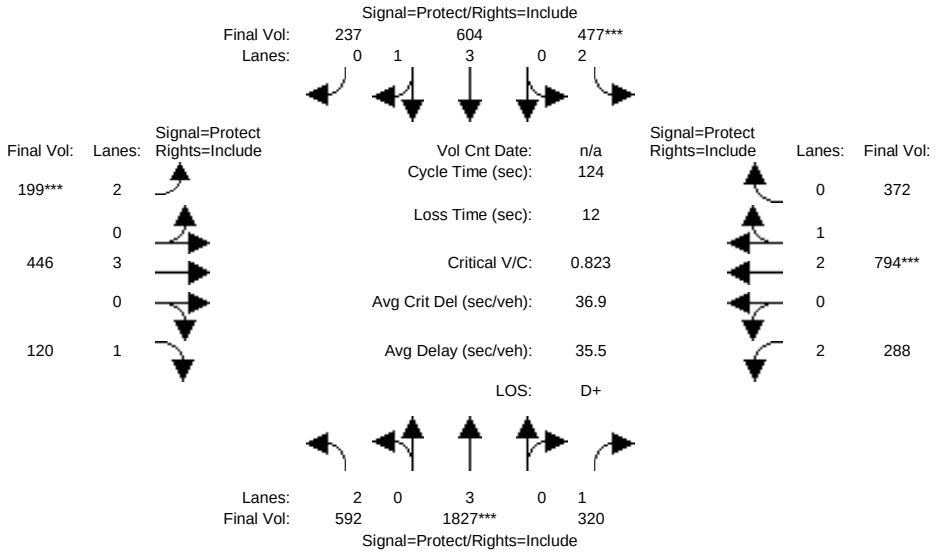
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	74	12	15	32	13	42	64	552	47	37	1220	185
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:	74	12	15	32	13	42	64	552	47	37	1220	185
Added Vol:	0	0	0	12	0	24	13	0	0	0	11	3
PasserByVol:	0	0	0	0	0	0	0	46	0	0	33	0
Initial Fut:	74	12	15	44	13	66	77	598	47	37	1264	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:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	78	13	16	47	14	70	82	633	50	39	1339	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	13	16	47	14	70	82	633	50	39	1339	199
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	13	16	47	14	70	82	633	50	39	1339	199
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.99	0.95	0.92	0.99	0.95
Lanes:	0.86	0.14	1.00	0.77	0.23	1.00	1.00	2.77	0.23	1.00	2.60	0.40
Final Sat.:	1549	251	1750	1389	411	1750	1750	5191	408	1750	4874	725
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.01	0.03	0.03	0.04	0.05	0.12	0.12	0.02	0.27	0.27
Crit Moves:		****					****				****	
Green Time:	15.6	15.6	15.6	15.6	15.6	15.6	14.4	67.9	67.9	31.4	84.9	84.9
Volume/Cap:	0.40	0.40	0.07	0.27	0.27	0.32	0.40	0.22	0.22	0.09	0.40	0.40
Uniform Del:	49.9	49.9	47.8	49.0	49.0	49.3	50.8	14.4	14.4	35.3	8.5	8.5
IncremntDel:	1.2	1.2	0.1	0.6	0.6	0.8	1.3	0.0	0.0	0.1	0.1	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:	51.0	51.0	47.9	49.6	49.6	50.1	52.1	14.5	14.5	35.4	8.6	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:	51.0	51.0	47.9	49.6	49.6	50.1	52.1	14.5	14.5	35.4	8.6	8.6
LOS by Move:	D-	D-	D	D	D	D	D-	B	B	D+	A	A
HCM2kAvgQ:	4	4	1	2	2	3	3	4	4	1	8	8

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



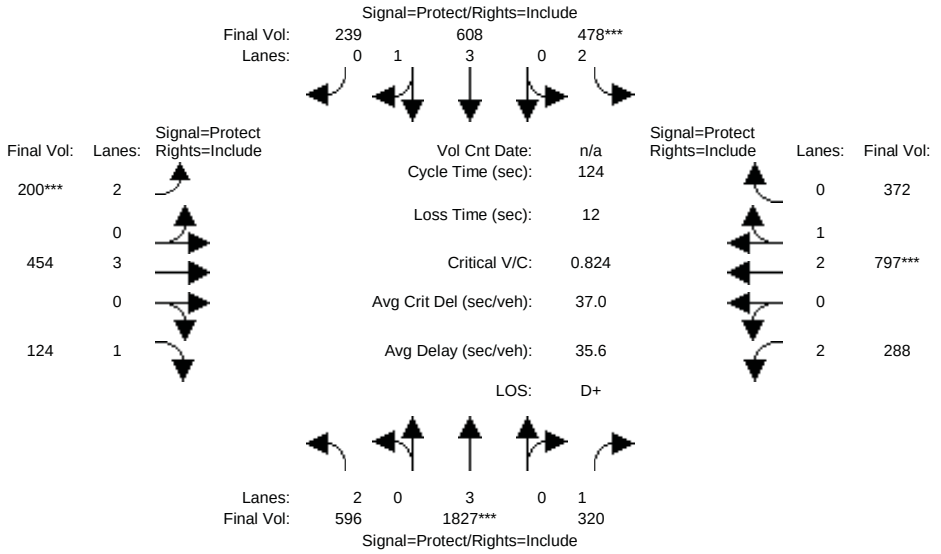
Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Volume Module:												
Base Vol:	564	1728	195	404	574	226	189	379	114	248	723	323
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:	564	1728	195	404	574	226	189	379	114	248	723	323
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	11	110	50	1	0	0	46	0	26	33	31
Initial Fut:	564	1739	305	454	575	226	189	425	114	274	756	354
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	592	1827	320	477	604	237	199	446	120	288	794	372
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	592	1827	320	477	604	237	199	446	120	288	794	372
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	592	1827	320	477	604	237	199	446	120	288	794	372
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.01	0.99
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	3812	1785
Capacity Analysis Module:												
Vol/Sat:	0.19	0.32	0.18	0.15	0.11	0.14	0.06	0.08	0.07	0.09	0.21	0.21
Crit Moves:		****		****			****				****	
Green Time:	41.3	48.3	48.3	22.8	29.8	29.8	9.5	19.2	19.2	21.7	31.4	31.4
Volume/Cap:	0.56	0.82	0.47	0.82	0.44	0.56	0.82	0.51	0.44	0.52	0.82	0.82
Uniform Del:	34.0	34.0	28.3	48.6	40.0	41.4	56.4	48.1	47.6	46.4	43.7	43.7
IncremntDel:	0.7	2.6	0.5	9.3	0.2	0.5	19.9	0.5	1.2	0.9	4.0	4.0
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:	0.67	0.57	0.57	0.85	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	23.4	22.2	16.8	50.6	31.7	33.2	76.3	48.6	48.7	47.3	47.7	47.7
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:	23.4	22.2	16.8	50.6	31.7	33.2	76.3	48.6	48.7	47.3	47.7	47.7
LOS by Move:	C	C+	B	D	C	C-	E-	D	D	D	D	D
HCM2kAvgQ:	9	20	7	12	6	8	7	6	5	6	16	16

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP AM

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Volume Module:												
Base Vol:	564	1728	195	404	574	226	189	379	114	248	723	323
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:	564	1728	195	404	574	226	189	379	114	248	723	323
Added Vol:	3	0	0	1	4	2	1	7	4	0	3	0
PasserByVol:	0	11	110	50	1	0	0	46	0	26	33	31
Initial Fut:	567	1739	305	455	579	228	190	432	118	274	759	354
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	596	1827	320	478	608	239	200	454	124	288	797	372
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	596	1827	320	478	608	239	200	454	124	288	797	372
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	596	1827	320	478	608	239	200	454	124	288	797	372
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.92	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.01	0.99
Final Sat.:	3150	5700	1750	3150	5700	1750	3150	5700	1750	3150	3817	1780
Capacity Analysis Module:												
Vol/Sat:	0.19	0.32	0.18	0.15	0.11	0.14	0.06	0.08	0.07	0.09	0.21	0.21
Crit Moves:		****		****			****				****	
Green Time:	41.2	48.2	48.2	22.8	29.8	29.8	9.5	19.2	19.2	21.8	31.4	31.4
Volume/Cap:	0.57	0.82	0.47	0.82	0.44	0.57	0.82	0.51	0.46	0.52	0.82	0.82
Uniform Del:	34.1	34.1	28.3	48.7	40.0	41.4	56.4	48.1	47.7	46.4	43.7	43.7
IncremntDel:	0.7	2.6	0.5	9.4	0.2	0.5	20.0	0.5	1.2	0.9	4.1	4.1
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:	0.67	0.58	0.58	0.85	0.79	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	23.5	22.3	16.8	50.7	31.7	33.2	76.4	48.6	48.9	47.3	47.7	47.7
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:	23.5	22.3	16.8	50.7	31.7	33.2	76.4	48.6	48.9	47.3	47.7	47.7
LOS by Move:	C	C+	B	D	C	C-	E-	D	D	D	D	D
HCM2kAvgQ:	9	20	7	12	6	8	7	6	5	6	16	16

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

Copyright (c) 2008 Dowling Associates, Inc.

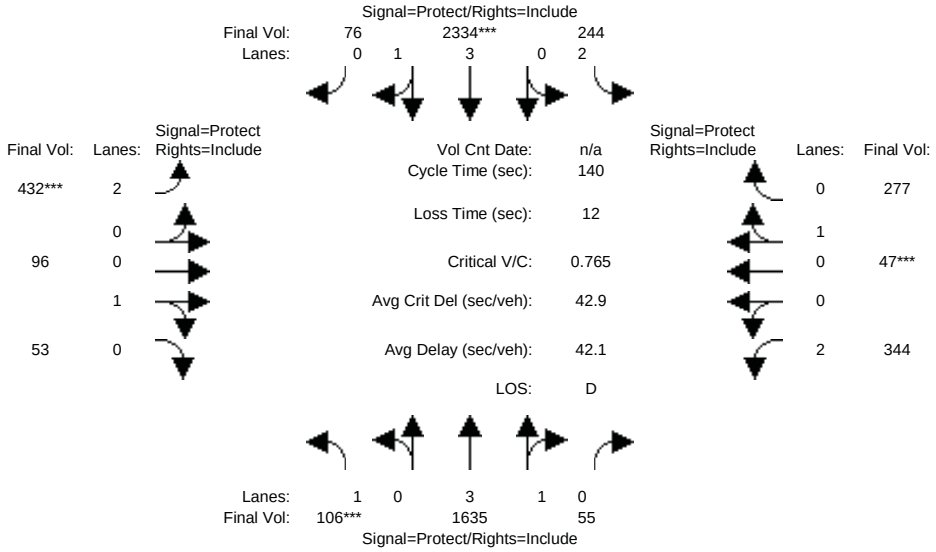
Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		???				Background AM				Background PP AM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	De Anza Boulevard and Mariani Avenue	?	xx.x	x.xxx	xx.x	D+	36.2	0.752	40.1	D+	36.2	0.756	+ 0.003	40.1	+ 0.0	?	xx.x	x.xxx	xx.x
#2	De Anza Boulevard and Lazaneo Drive	?	xx.x	x.xxx	xx.x	B	17.2	0.511	15.4	B	17.4	0.511	+ 0.000	15.4	- 0.0	?	xx.x	x.xxx	xx.x
#3	Bandley Drive and Alves Drive	?	xx.x	x.xxx	xx.x	B	11.0	0.427	11.0	B	11.7	0.480	+ 0.053	11.7	+ 0.7	?	xx.x	x.xxx	xx.x
#4	De Anza Boulevard and Alves Drive	?	xx.x	x.xxx	xx.x	B	11.1	0.133	0.3	B	11.7	0.144	+ 0.011	0.3	+ 0.0	?	xx.x	x.xxx	xx.x
#5	Mary Avenue and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C-	33.7	0.502	36.9	C-	33.5	0.504	+ 0.002	36.8	- 0.1	?	xx.x	x.xxx	xx.x
#6	N. Stelling Road and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D+	38.9	0.715	41.2	D+	38.9	0.721	+ 0.006	41.1	- 0.1	?	xx.x	x.xxx	xx.x
#7	Saich Way and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	B	15.3	0.435	19.8	B	15.1	0.442	+ 0.007	19.5	- 0.3	?	xx.x	x.xxx	xx.x
#8	Bandley Drive and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	B	14.6	0.390	12.0	B	15.7	0.401	+ 0.011	12.9	+ 0.9	?	xx.x	x.xxx	xx.x
#9	De Anza Boulevard and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D+	35.5	0.823	36.9	D+	35.6	0.824	+ 0.001	37.0	+ 0.1	?	xx.x	x.xxx	xx.x

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #1: De Anza Blvd/Mariani Ave



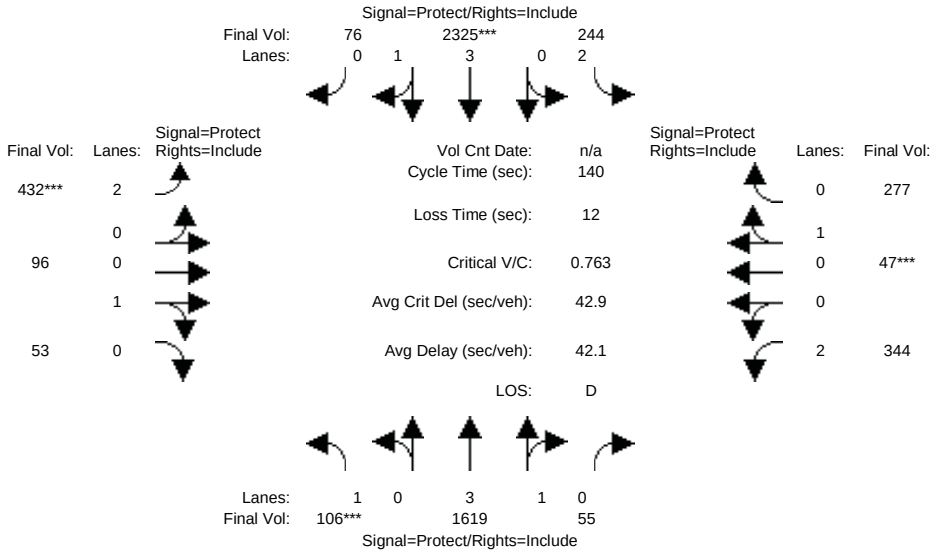
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	1479	52	229	2134	71	406	90	50	323	44	260
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:	100	1479	52	229	2134	71	406	90	50	323	44	260
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	100	1535	52	229	2192	71	406	90	50	323	44	260
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	106	1635	55	244	2334	76	432	96	53	344	47	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	1635	55	244	2334	76	432	96	53	344	47	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	1635	55	244	2334	76	432	96	53	344	47	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.86	0.14	2.00	3.87	0.13	2.00	0.64	0.36	2.00	0.14	0.86
Final Sat.:	1750	7254	246	3150	7264	235	3150	1157	643	3150	261	1539
Capacity Analysis Module:												
Vol/Sat:	0.06	0.23	0.23	0.08	0.32	0.32	0.14	0.08	0.08	0.11	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	11.1	52.1	52.1	17.9	58.8	58.8	25.1	25.0	25.0	33.0	32.9	32.9
Volume/Cap:	0.76	0.61	0.61	0.61	0.76	0.76	0.76	0.46	0.46	0.46	0.76	0.76
Uniform Del:	63.1	35.6	35.6	57.7	34.7	34.7	54.6	51.5	51.5	45.9	49.9	49.9
IncremntDel:	22.0	0.4	0.4	2.6	1.2	1.2	6.2	1.1	1.1	0.5	8.1	8.1
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:	85.1	36.0	36.0	60.4	35.8	35.8	60.8	52.5	52.5	46.4	58.0	58.0
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:	85.1	36.0	36.0	60.4	35.8	35.8	60.8	52.5	52.5	46.4	58.0	58.0
LOS by Move:	F	D+	D+	E	D+	D+	E	D-	D-	D	E+	E+
HCM2kAvgQ:	5	15	15	7	23	23	12	6	6	8	15	15

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #1: De Anza Blvd/Mariani Ave



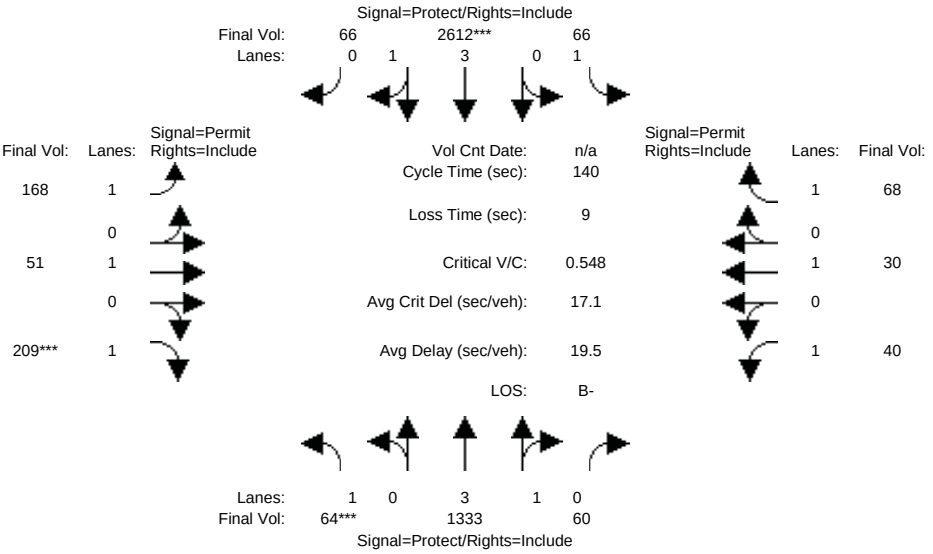
Street Name:	De Anza Blvd						Mariani Ave					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	100	1479	52	229	2134	71	406	90	50	323	44	260
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:	100	1479	52	229	2134	71	406	90	50	323	44	260
Added Vol:	0	-15	0	0	-9	0	0	0	0	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	100	1520	52	229	2183	71	406	90	50	323	44	260
User Adj:	1.00	1.00	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	106	1619	55	244	2325	76	432	96	53	344	47	277
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	106	1619	55	244	2325	76	432	96	53	344	47	277
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	106	1619	55	244	2325	76	432	96	53	344	47	277
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.83	0.99	0.95	0.83	0.95	0.95	0.83	0.95	0.95
Lanes:	1.00	3.86	0.14	2.00	3.87	0.13	2.00	0.64	0.36	2.00	0.14	0.86
Final Sat.:	1750	7251	248	3150	7263	236	3150	1157	643	3150	261	1539
Capacity Analysis Module:												
Vol/Sat:	0.06	0.22	0.22	0.08	0.32	0.32	0.14	0.08	0.08	0.11	0.18	0.18
Crit Moves:	****				****		****				****	
Green Time:	11.2	51.9	51.9	18.0	58.7	58.7	25.2	25.1	25.1	33.1	33.0	33.0
Volume/Cap:	0.76	0.60	0.60	0.60	0.76	0.76	0.76	0.46	0.46	0.46	0.76	0.76
Delay/Veh:	84.9	36.1	36.1	60.2	35.9	35.9	60.7	52.5	52.5	46.3	57.9	57.9
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:	84.9	36.1	36.1	60.2	35.9	35.9	60.7	52.5	52.5	46.3	57.9	57.9
LOS by Move:	F	D+	D+	E	D+	D+	E	D-	D-	D	E+	E+
HCM2kAvgQ:	5	14	14	7	23	23	12	6	6	8	15	15

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

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #2: De Anza Blvd/Lazaneo Dr



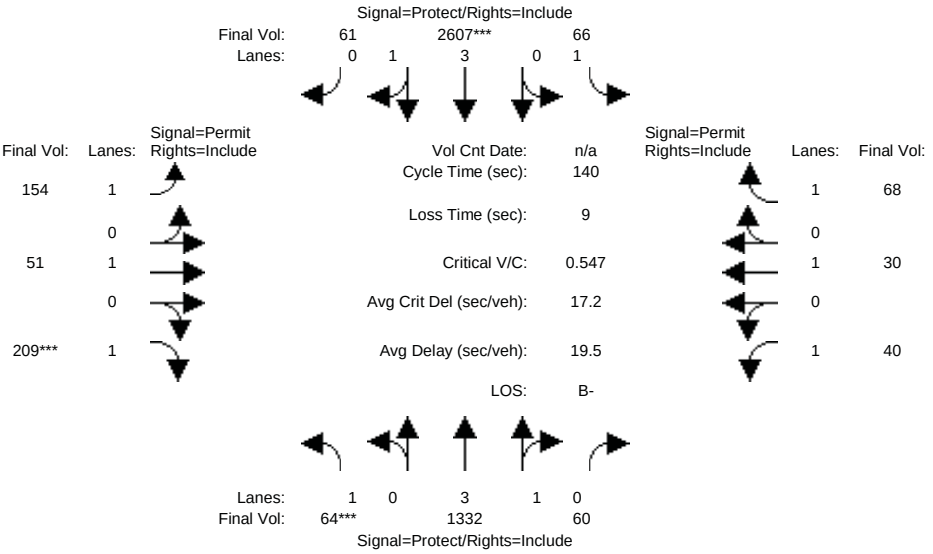
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	1202	57	62	2408	62	159	48	197	38	28	64
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:	60	1202	57	62	2408	62	159	48	197	38	28	64
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	60	1258	57	62	2466	62	159	48	197	38	28	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	64	1333	60	66	2612	66	168	51	209	40	30	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1333	60	66	2612	66	168	51	209	40	30	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1333	60	66	2612	66	168	51	209	40	30	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.82	0.18	1.00	3.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7174	325	1750	7316	184	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.19	0.04	0.36	0.36	0.10	0.03	0.12	0.02	0.02	0.04
Crit Moves:	****				****				****			
Green Time:	9.3	79.2	79.2	21.3	91.2	91.2	30.5	30.5	30.5	30.5	30.5	30.5
Volume/Cap:	0.55	0.33	0.33	0.25	0.55	0.55	0.44	0.12	0.55	0.11	0.07	0.18
Uniform Del:	63.3	16.2	16.2	52.3	13.2	13.2	47.4	44.0	48.6	43.9	43.5	44.6
IncremntDel:	5.4	0.0	0.0	0.5	0.1	0.1	0.8	0.1	1.7	0.1	0.1	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:	68.8	16.3	16.3	52.7	13.3	13.3	48.2	44.2	50.3	44.0	43.6	44.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	68.8	16.3	16.3	52.7	13.3	13.3	48.2	44.2	50.3	44.0	43.6	44.8
LOS by Move:	E	B	B	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	4	8	8	3	15	15	7	2	9	1	1	3

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #2: De Anza Blvd/Lazaneo Dr



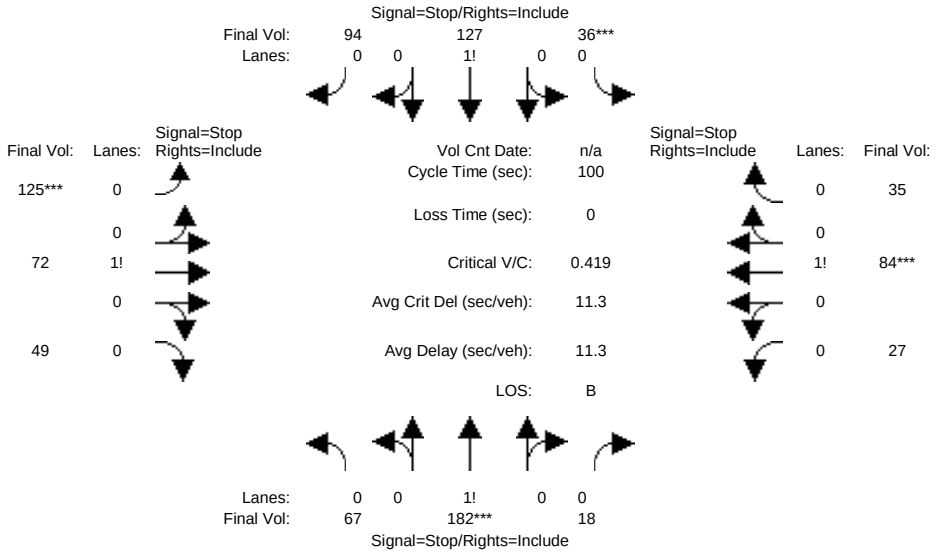
Street Name:	De Anza Blvd						Lazaneo Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	60	1202	57	62	2408	62	159	48	197	38	28	64
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:	60	1202	57	62	2408	62	159	48	197	38	28	64
Added Vol:	0	-1	0	0	-5	-4	-14	0	0	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	60	1257	57	62	2461	58	145	48	197	38	28	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	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	64	1332	60	66	2607	61	154	51	209	40	30	68
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	1332	60	66	2607	61	154	51	209	40	30	68
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	1332	60	66	2607	61	154	51	209	40	30	68
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.99	0.95	0.92	1.00	0.92	0.92	1.00	0.92
Lanes:	1.00	3.82	0.18	1.00	3.90	0.10	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1750	7174	325	1750	7327	173	1750	1900	1750	1750	1900	1750
Capacity Analysis Module:												
Vol/Sat:	0.04	0.19	0.19	0.04	0.36	0.36	0.09	0.03	0.12	0.02	0.02	0.04
Crit Moves:	****				****				****			
Green Time:	9.3	79.1	79.1	21.3	91.1	91.1	30.5	30.5	30.5	30.5	30.5	30.5
Volume/Cap:	0.55	0.33	0.33	0.25	0.55	0.55	0.40	0.12	0.55	0.11	0.07	0.18
Delay/Veh:	68.7	16.3	16.3	52.8	13.4	13.4	47.6	44.1	50.2	43.9	43.5	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:	68.7	16.3	16.3	52.8	13.4	13.4	47.6	44.1	50.2	43.9	43.5	44.7
LOS by Move:	E	B	B	D-	B	B	D	D	D	D	D	D
HCM2kAvgQ:	4	8	8	3	15	15	6	2	9	1	1	3

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	65	175	17	35	122	91	120	69	47	26	81	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	175	17	35	122	91	120	69	47	26	81	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:	65	175	17	35	122	91	120	69	47	26	81	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	67	182	18	36	127	94	125	72	49	27	84	35
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	67	182	18	36	127	94	125	72	49	27	84	35
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	182	18	36	127	94	125	72	49	27	84	35
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:	0.25	0.68	0.07	0.14	0.49	0.37	0.51	0.29	0.20	0.18	0.58	0.24
Final Sat.:	161	433	42	92	322	240	313	180	123	109	339	142
Capacity Analysis Module:												
Vol/Sat:	0.42	0.42	0.42	0.39	0.39	0.39	0.40	0.40	0.40	0.25	0.25	0.25
Crit Moves:		****			****			****			****	
Delay/Veh:	11.8	11.8	11.8	11.1	11.1	11.1	11.6	11.6	11.6	10.1	10.1	10.1
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:	11.8	11.8	11.8	11.1	11.1	11.1	11.6	11.6	11.6	10.1	10.1	10.1
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:		11.8			11.1			11.6			10.1	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.8			11.1			11.6			10.1	
LOS by Appr:		B			B			B			B	
AllWayAvgQ:	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0		0 0 1! 0	0	
Initial Vol:	65	175	17	35	122	91	120	69	47	26	81	34

Major Street Volume: 505
Minor Approach Volume: 236
Minor Approach Volume Threshold: 402

SIGNAL WARRANT DISCLAIMER

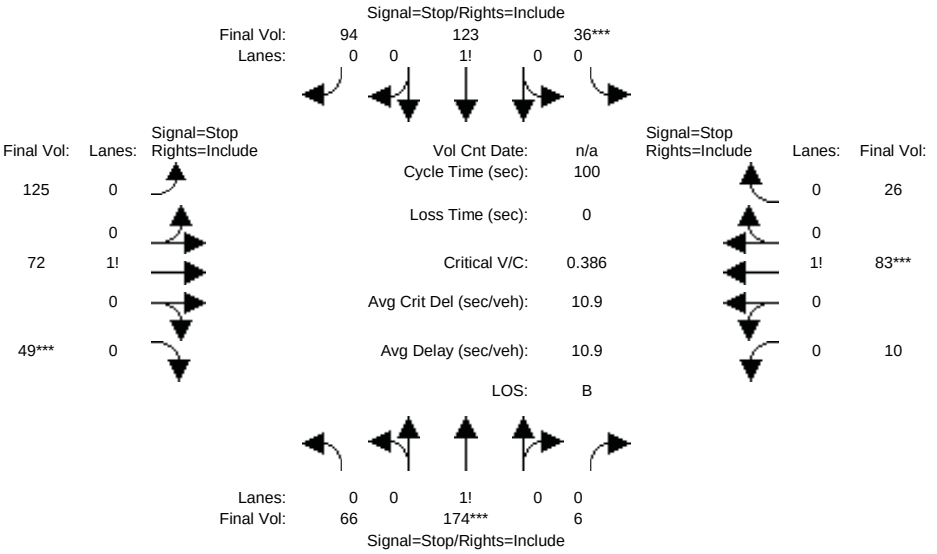
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #3: Bandley Dr/Alves Dr



Street Name:	Bandley Dr						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Volume Module:												
Base Vol:	65	175	17	35	122	91	120	69	47	26	81	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	65	175	17	35	122	91	120	69	47	26	81	34
Added Vol:	-1	-7	-11	0	-4	0	0	0	0	-16	-1	-9
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	168	6	35	118	91	120	69	47	10	80	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	66	174	6	36	123	94	125	72	49	10	83	26
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	174	6	36	123	94	125	72	49	10	83	26
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	174	6	36	123	94	125	72	49	10	83	26
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:	0.27	0.71	0.02	0.14	0.49	0.37	0.51	0.29	0.20	0.09	0.69	0.22
Final Sat.:	174	457	16	97	327	252	323	185	126	52	417	130
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.20	0.20	0.20
Crit Moves:		****		****					****		****	
Delay/Veh:	11.2	11.2	11.2	10.7	10.7	10.7	11.3	11.3	11.3	9.6	9.6	9.6
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	11.2	11.2	11.2	10.7	10.7	10.7	11.3	11.3	11.3	9.6	9.6	9.6
LOS by Move:	B	B	B	B	B	B	B	B	B	A	A	A
ApproachDel:		11.2			10.7			11.3			9.6	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		11.2			10.7			11.3			9.6	
LOS by Appr:		B			B			B			A	
AllWayAvgQ:	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.2	0.2	0.2

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

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #3 Bandley Dr/Alves Dr

****

 Copyright (c) 2008 Dowling Associates, Inc.

Future Volume Alternative: Peak Hour Warrant NOT Met

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		
Lanes:	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0	0 0 1!	0	0
Initial Vol:	64	168	6	35	118	91	120	69	47	10	80	25

Major Street Volume: 482
Minor Approach Volume: 236
Minor Approach Volume Threshold: 414

SIGNAL WARRANT DISCLAIMER

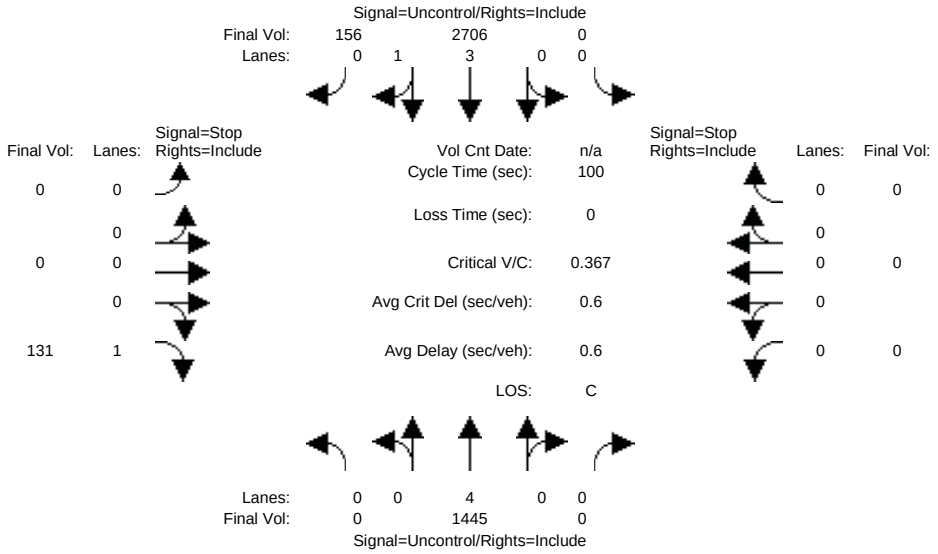
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	1350	0	0	2575	152	0	0	127	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1350	0	0	2575	152	0	0	127	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	0	1406	0	0	2633	152	0	0	127	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1445	0	0	2706	156	0	0	131	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1445	0	0	2706	156	0	0	131	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	755	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	356	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	356	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.37	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.6	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	20.9	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.9			xxxxxx		
ApproachLOS:	*			*			C			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 1406	0		0 2633	152		0	0	127	0	0	0
ApproachDel:	xxxxxx			xxxxxx			20.9			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=127]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4318]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant Met

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		
Lanes:	0 0 4	0 0		0 0 3	1 0		0 0 0	0 1		0 0 0	0 0	
Initial Vol:	0 1406	0		0 2633	152		0	0	127	0	0	0

Major Street Volume: 4191
Minor Approach Volume: 127
Minor Approach Volume Threshold: -209 [less than minimum of 100]

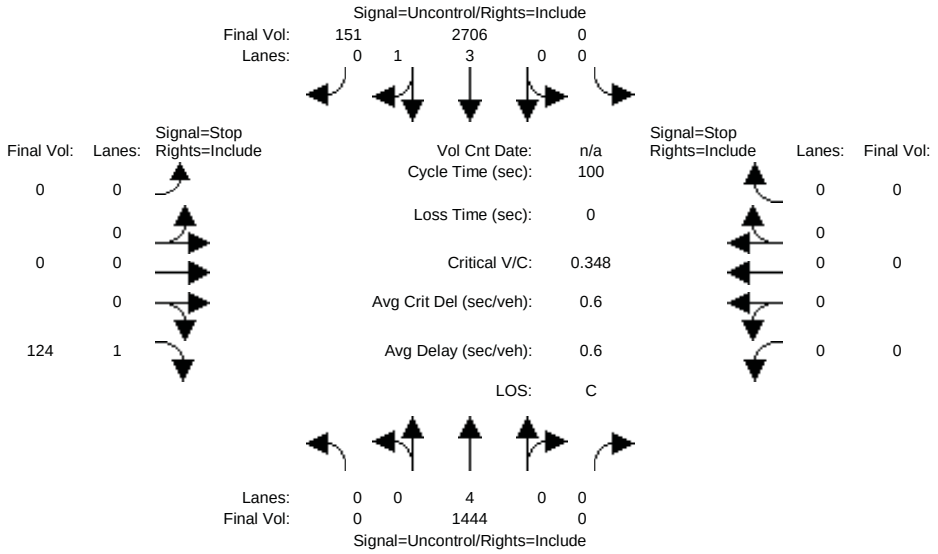
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Background PP PM

Intersection #4: De Anza Blvd/Alves Dr



Street Name:	De Anza Blvd						Alves Dr					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module:												
Base Vol:	0	1350	0	0	2575	152	0	0	127	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1350	0	0	2575	152	0	0	127	0	0	0
Added Vol:	0	-1	0	0	0	-5	0	0	-6	0	0	0
PasserByVol:	0	56	0	0	58	0	0	0	0	0	0	0
Initial Fut:	0	1405	0	0	2633	147	0	0	121	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:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	1444	0	0	2706	151	0	0	124	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1444	0	0	2706	151	0	0	124	0	0	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	752	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	357	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	357	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.35	xxxx	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	1.5	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	20.4	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	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			xxxxxx			20.4			xxxxxx		
ApproachLOS:	*			*			C			*		

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

Peak Hour Delay Signal Warrant Report

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant NOT Met

 Copyright (c) 2008 Dowling Associates, Inc.

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 1405	0		0 2633	147		0	0	121	0	0	0
ApproachDel:	xxxxxx			xxxxxx			20.4			xxxxxx		

Approach[eastbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=121]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4306]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban]

****

Intersection #4 De Anza Blvd/Alves Dr

****

Future Volume Alternative: Peak Hour Warrant Met

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		
Lanes:	0 0 4	0	0	0 0 3	1	0	0 0 0	0	1	0 0 0	0	0
Initial Vol:	0 1405	0		0 2633	147		0	0	121	0	0	0

Major Street Volume: 4185
Minor Approach Volume: 121
Minor Approach Volume Threshold: -208 [less than minimum of 100]

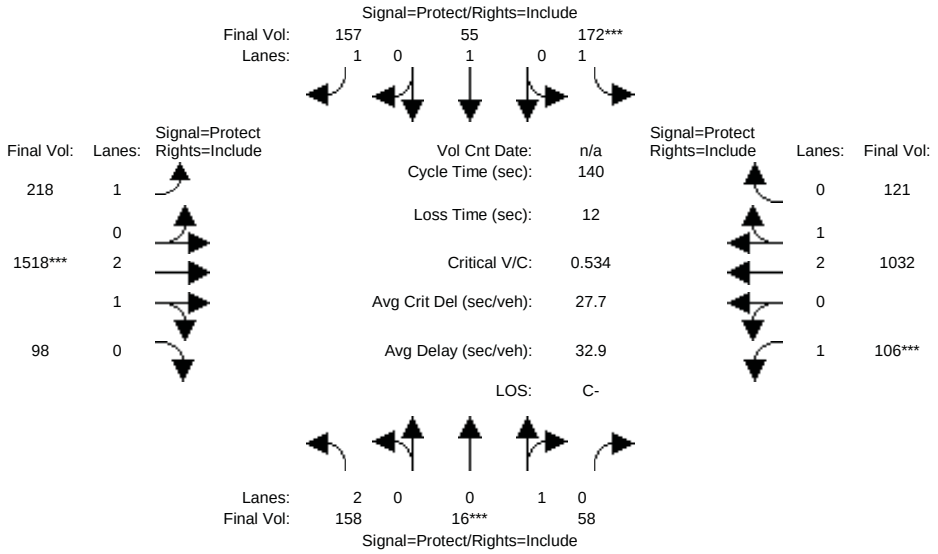
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #5: Mary Ave/Stevens Creek Blvd



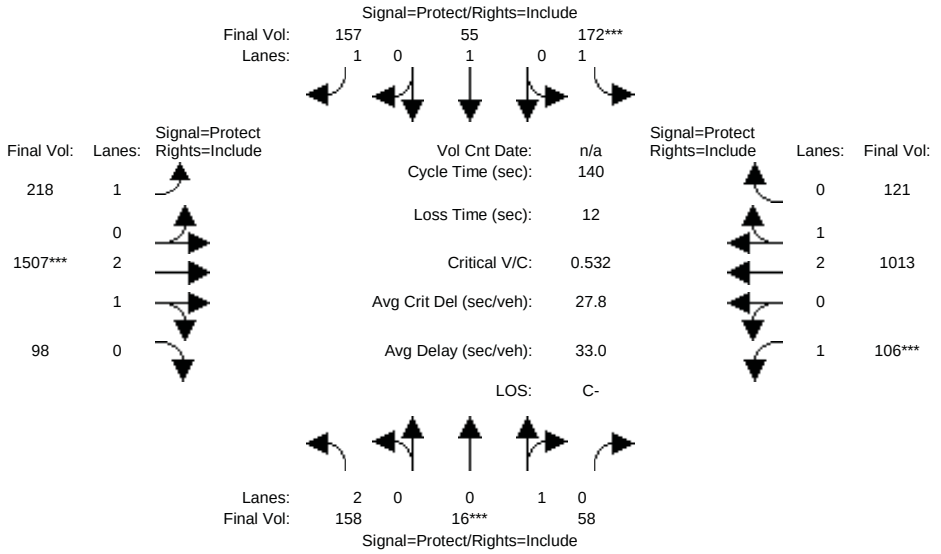
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	152	15	56	166	53	151	210	1406	94	102	931	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	15	56	166	53	151	210	1406	94	102	931	117
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	152	15	56	166	53	151	210	1462	94	102	994	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	158	16	58	172	55	157	218	1518	98	106	1032	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	16	58	172	55	157	218	1518	98	106	1032	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	16	58	172	55	157	218	1518	98	106	1032	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	0.21	0.79	1.00	1.00	1.00	1.00	2.81	0.19	1.00	2.67	0.33
Final Sat.:	3150	380	1420	1750	1900	1750	1750	5261	338	1750	5009	590
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.04	0.10	0.03	0.09	0.12	0.29	0.29	0.06	0.21	0.21
Crit Moves:		****		****				****		****		
Green Time:	13.1	10.7	10.7	25.8	23.4	23.4	34.5	75.6	75.6	15.9	57.0	57.0
Volume/Cap:	0.54	0.53	0.53	0.53	0.17	0.54	0.51	0.53	0.53	0.53	0.51	0.51
Uniform Del:	60.5	62.2	62.2	51.7	50.0	53.3	45.4	20.8	20.8	58.6	31.0	31.0
IncremntDel:	1.9	4.0	4.0	1.7	0.3	1.9	1.0	0.2	0.2	2.8	0.2	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:	62.5	66.3	66.3	53.4	50.2	55.2	46.4	21.0	21.0	61.4	31.2	31.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	62.5	66.3	66.3	53.4	50.2	55.2	46.4	21.0	21.0	61.4	31.2	31.2
LOS by Move:	E	E	E	D-	D	E+	D	C+	C+	E	C	C
HCM2kAvgQ:	5	4	4	8	2	7	9	15	15	4	12	12

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #5: Mary Ave/Stevens Creek Blvd



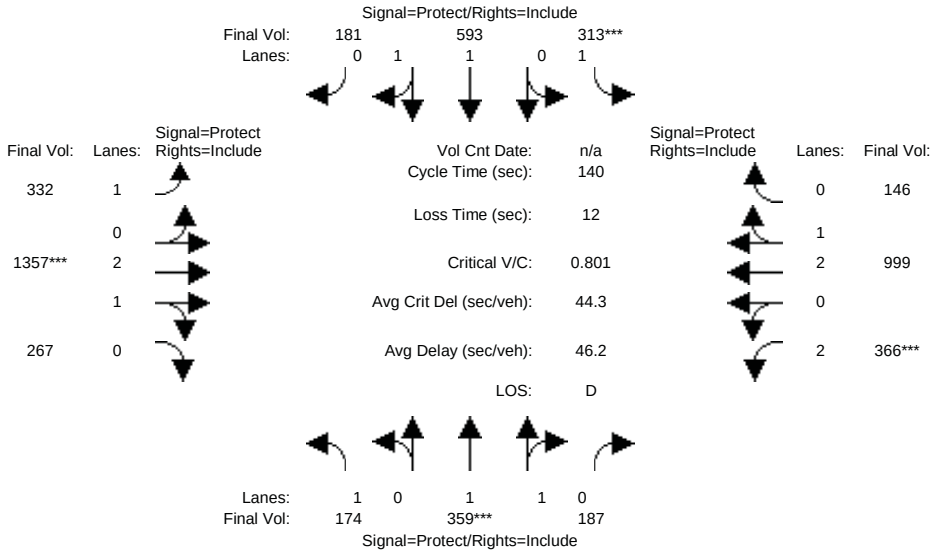
Street Name:	Mary Ave						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	152	15	56	166	53	151	210	1406	94	102	931	117
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	15	56	166	53	151	210	1406	94	102	931	117
Added Vol:	0	0	0	0	0	0	0	-11	0	0	-18	0
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	152	15	56	166	53	151	210	1451	94	102	976	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:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	158	16	58	172	55	157	218	1507	98	106	1013	121
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	158	16	58	172	55	157	218	1507	98	106	1013	121
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	158	16	58	172	55	157	218	1507	98	106	1013	121
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	0.95	0.95	0.92	1.00	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	2.00	0.21	0.79	1.00	1.00	1.00	1.00	2.81	0.19	1.00	2.67	0.33
Final Sat.:	3150	380	1420	1750	1900	1750	1750	5259	341	1750	5000	599
Capacity Analysis Module:												
Vol/Sat:	0.05	0.04	0.04	0.10	0.03	0.09	0.12	0.29	0.29	0.06	0.20	0.20
Crit Moves:		****		****				****		****		
Green Time:	13.2	10.8	10.8	25.9	23.5	23.5	34.8	75.4	75.4	15.9	56.5	56.5
Volume/Cap:	0.53	0.53	0.53	0.53	0.17	0.53	0.50	0.53	0.53	0.53	0.50	0.50
Delay/Veh:	62.4	66.1	66.1	53.3	50.1	55.1	46.1	21.1	21.1	61.3	31.4	31.4
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:	62.4	66.1	66.1	53.3	50.1	55.1	46.1	21.1	21.1	61.3	31.4	31.4
LOS by Move:	E	E	E	D-	D	E+	D	C+	C+	E	C	C
HCM2kAvgQ:	5	4	4	8	2	7	9	15	15	4	12	12

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



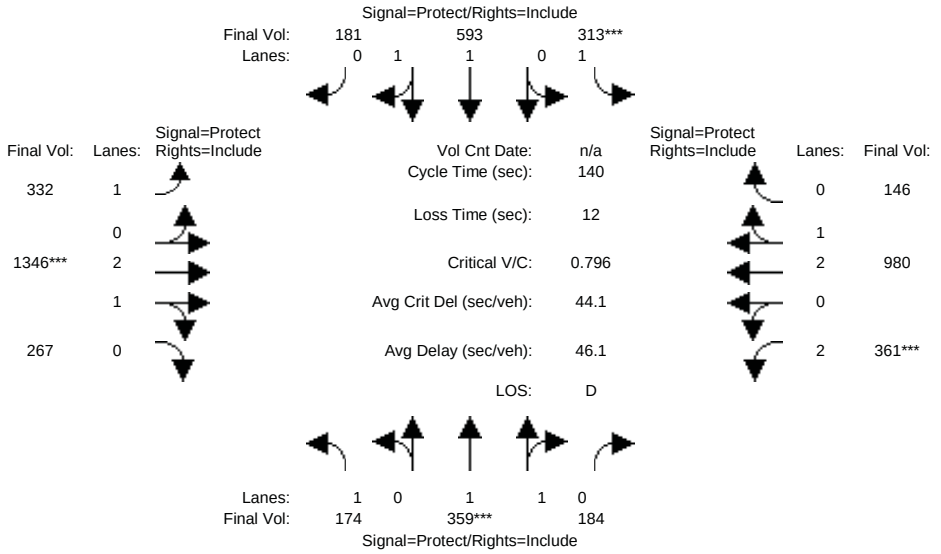
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	169	344	180	303	564	174	318	1259	259	351	905	141
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:	169	344	180	303	564	174	318	1259	259	351	905	141
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	4	1	0	11	1	4	56	0	4	63	0
Initial Fut:	169	348	181	303	575	175	322	1315	259	355	968	141
User Adj:	1.00	1.00	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	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	174	359	187	313	593	181	332	1357	267	366	999	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	359	187	313	593	181	332	1357	267	366	999	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	359	187	313	593	181	332	1357	267	366	999	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.30	0.70	1.00	1.52	0.48	1.00	2.49	0.51	2.00	2.60	0.40
Final Sat.:	1750	2433	1265	1750	2836	863	1750	4677	921	3150	4887	712
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.18	0.21	0.21	0.19	0.29	0.29	0.12	0.20	0.20
Crit Moves:		****		****				****		****		
Green Time:	18.4	25.8	25.8	31.2	38.6	38.6	34.2	50.7	50.7	20.3	36.8	36.8
Volume/Cap:	0.76	0.80	0.80	0.80	0.76	0.76	0.78	0.80	0.80	0.80	0.78	0.78
Uniform Del:	58.7	54.7	54.7	51.5	46.4	46.4	49.4	40.1	40.1	57.9	47.8	47.8
IncremntDel:	20.7	9.6	9.6	15.8	5.3	5.3	13.0	3.5	3.5	13.8	4.1	4.1
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	0.78	0.62	0.62	0.89	0.76	0.76
Delay/Veh:	79.3	64.3	64.3	67.3	51.7	51.7	51.7	28.4	28.4	65.1	40.5	40.5
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:	79.3	64.3	64.3	67.3	51.7	51.7	51.7	28.4	28.4	65.1	40.5	40.5
LOS by Move:	E-	E	E	E	D-	D-	D-	C	C	E	D	D
HCM2kAvgQ:	9	13	13	16	17	17	14	20	20	10	15	15

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #6: Stevens Creek Blvd/Stelling Rd 1613-217 [CMP 2010]



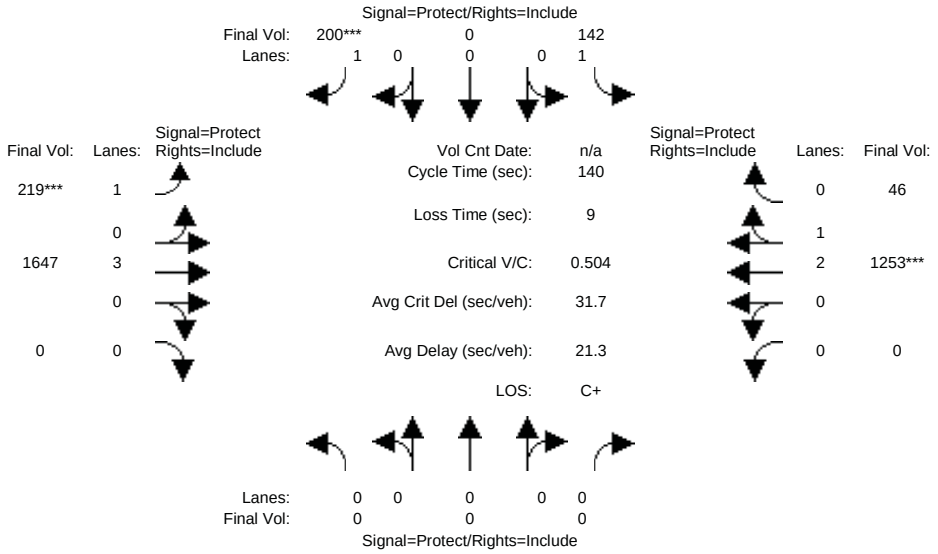
Street Name:	Stelling Road						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	169	344	180	303	564	174	318	1259	259	351	905	141
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:	169	344	180	303	564	174	318	1259	259	351	905	141
Added Vol:	0	0	-3	0	0	0	0	-11	0	-5	-18	0
PasserByVol:	0	4	1	0	11	1	4	56	0	4	63	0
Initial Fut:	169	348	178	303	575	175	322	1304	259	350	950	141
User Adj:	1.00	1.00	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	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	174	359	184	313	593	181	332	1346	267	361	980	146
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	359	184	313	593	181	332	1346	267	361	980	146
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	359	184	313	593	181	332	1346	267	361	980	146
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.99	0.95	0.92	0.98	0.95	0.92	0.99	0.95	0.83	0.99	0.95
Lanes:	1.00	1.30	0.70	1.00	1.52	0.48	1.00	2.48	0.52	2.00	2.60	0.40
Final Sat.:	1750	2447	1252	1750	2836	863	1750	4671	928	3150	4875	724
Capacity Analysis Module:												
Vol/Sat:	0.10	0.15	0.15	0.18	0.21	0.21	0.19	0.29	0.29	0.11	0.20	0.20
Crit Moves:		****		****				****		****		
Green Time:	18.5	25.8	25.8	31.4	38.7	38.7	34.4	50.6	50.6	20.2	36.4	36.4
Volume/Cap:	0.76	0.80	0.80	0.80	0.76	0.76	0.77	0.80	0.80	0.80	0.77	0.77
Delay/Veh:	79.0	64.0	64.0	66.6	51.5	51.5	51.2	28.3	28.3	65.0	40.8	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.0	64.0	64.0	66.6	51.5	51.5	51.2	28.3	28.3	65.0	40.8	40.8
LOS by Move:	E-	E	E	E	D-	D-	D-	C	C	E	D	D
HCM2kAvgQ:	9	13	13	16	17	17	14	20	20	10	15	15

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

 Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #7: Saich Way/Stevens Creek Blvd



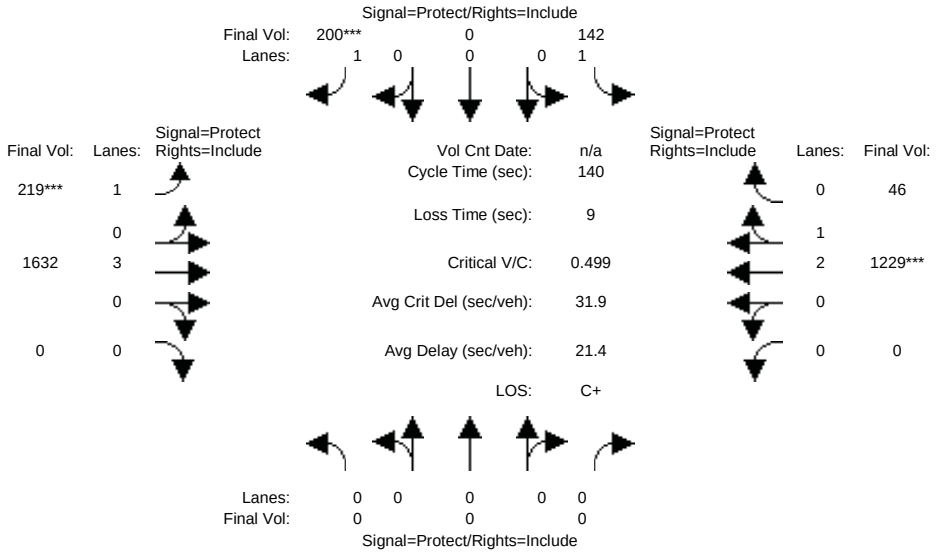
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	132	0	186	204	1477	0	0	1104	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	132	0	186	204	1477	0	0	1104	43
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	0	0	0	132	0	186	204	1533	0	0	1167	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	142	0	200	219	1647	0	0	1253	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	142	0	200	219	1647	0	0	1253	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	142	0	200	219	1647	0	0	1253	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.89	0.11
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5401	199
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.11	0.13	0.29	0.00	0.00	0.23	0.23
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	31.7	0.0	31.7	34.8	99.3	0.0	0.0	64.5	64.5
Volume/Cap:	0.00	0.00	0.00	0.36	0.00	0.50	0.50	0.41	0.00	0.00	0.50	0.50
Uniform Del:	0.0	0.0	0.0	45.6	0.0	47.3	45.2	8.3	0.0	0.0	26.5	26.5
IncremntDel:	0.0	0.0	0.0	0.6	0.0	1.0	0.9	0.1	0.0	0.0	0.2	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:	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	46.1	0.0	48.3	46.1	8.4	0.0	0.0	26.7	26.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	46.1	0.0	48.3	46.1	8.4	0.0	0.0	26.7	26.7
LOS by Move:	A	A	A	D	A	D	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	8	8	9	0	0	13	13

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #7: Saich Way/Stevens Creek Blvd



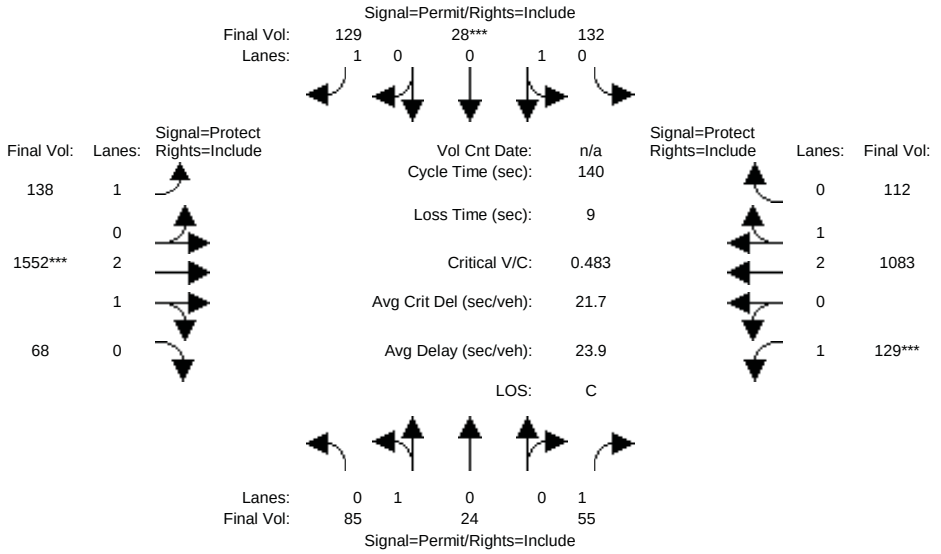
Street Name:	Saich Way						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	0	0	0	132	0	186	204	1477	0	0	1104	43
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	132	0	186	204	1477	0	0	1104	43
Added Vol:	0	0	0	0	0	0	0	-14	0	0	-23	0
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	0	0	0	132	0	186	204	1519	0	0	1144	43
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	142	0	200	219	1632	0	0	1229	46
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	142	0	200	219	1632	0	0	1229	46
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	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	142	0	200	219	1632	0	0	1229	46
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.92	0.92	1.00	0.92	0.92	1.00	0.92	0.92	0.98	0.95
Lanes:	0.00	0.00	0.00	1.00	0.00	1.00	1.00	3.00	0.00	0.00	2.89	0.11
Final Sat.:	0	0	0	1750	0	1750	1750	5700	0	0	5397	203
Capacity Analysis Module:												
Vol/Sat:	0.00	0.00	0.00	0.08	0.00	0.11	0.13	0.29	0.00	0.00	0.23	0.23
Crit Moves:						****	****				****	
Green Time:	0.0	0.0	0.0	32.0	0.0	32.0	35.1	99.0	0.0	0.0	63.9	63.9
Volume/Cap:	0.00	0.00	0.00	0.35	0.00	0.50	0.50	0.40	0.00	0.00	0.50	0.50
Delay/Veh:	0.0	0.0	0.0	45.9	0.0	48.0	45.8	8.5	0.0	0.0	27.0	27.0
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	45.9	0.0	48.0	45.8	8.5	0.0	0.0	27.0	27.0
LOS by Move:	A	A	A	D	A	D	D	A	A	A	C	C
HCM2kAvgQ:	0	0	0	6	0	8	8	9	0	0	13	13

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #8: Bandley Dr/Stevens Creek Blvd



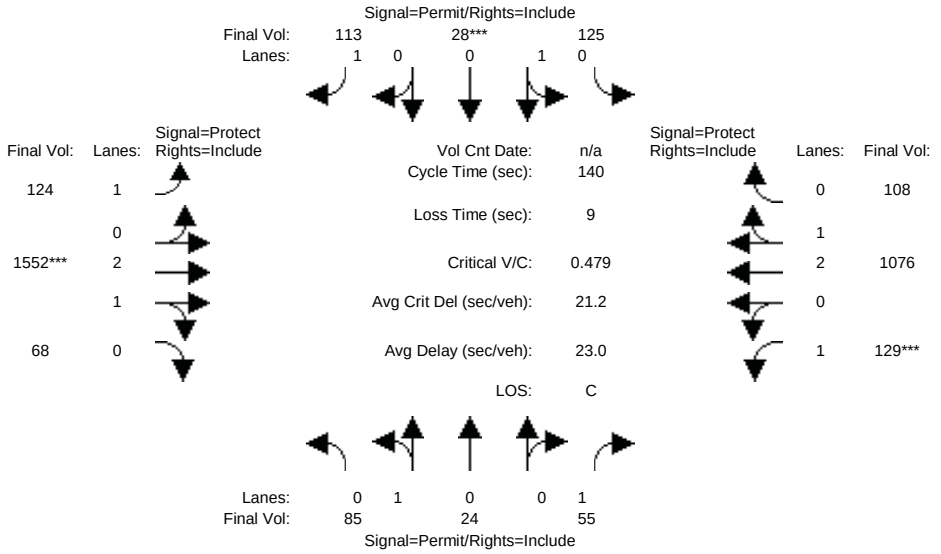
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	82	23	53	127	27	124	133	1437	65	124	979	108
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:	82	23	53	127	27	124	133	1437	65	124	979	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	82	23	53	127	27	124	133	1493	65	124	1042	108
User Adj:	1.00	1.00	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	85	24	55	132	28	129	138	1552	68	129	1083	112
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	24	55	132	28	129	138	1552	68	129	1083	112
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	24	55	132	28	129	138	1552	68	129	1083	112
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	0.78	0.22	1.00	0.82	0.18	1.00	1.00	2.87	0.13	1.00	2.71	0.29
Final Sat.:	1406	394	1750	1484	316	1750	1750	5366	234	1750	5073	526
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.03	0.09	0.09	0.07	0.08	0.29	0.29	0.07	0.21	0.21
Crit Moves:					****			****		****		
Green Time:	25.8	25.8	25.8	25.8	25.8	25.8	28.4	83.9	83.9	21.4	76.8	76.8
Volume/Cap:	0.33	0.33	0.17	0.48	0.48	0.40	0.39	0.48	0.48	0.48	0.39	0.39
Uniform Del:	49.6	49.6	48.1	51.1	51.1	50.3	48.3	15.8	15.8	54.3	18.1	18.1
IncremntDel:	0.6	0.6	0.3	1.1	1.1	0.8	0.7	0.1	0.1	1.4	0.1	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:	50.2	50.2	48.4	52.2	52.2	51.1	49.0	15.9	15.9	55.6	18.2	18.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	50.2	50.2	48.4	52.2	52.2	51.1	49.0	15.9	15.9	55.6	18.2	18.2
LOS by Move:	D	D	D	D-	D-	D-	D	B	B	E+	B-	B-
HCM2kAvgQ:	4	4	2	7	7	5	5	13	13	6	10	10

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #8: Bandley Dr/Stevens Creek Blvd



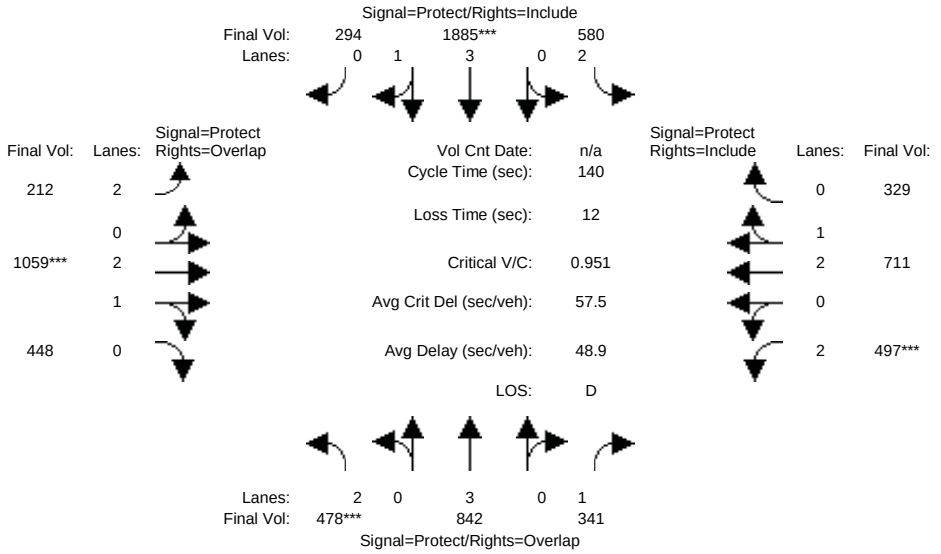
Street Name:	Bandley Dr						Stevens Creek Blvd					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	82	23	53	127	27	124	133	1437	65	124	979	108
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:	82	23	53	127	27	124	133	1437	65	124	979	108
Added Vol:	0	0	0	-7	0	-15	-14	0	0	0	-7	-4
PasserByVol:	0	0	0	0	0	0	0	56	0	0	63	0
Initial Fut:	82	23	53	120	27	109	119	1493	65	124	1035	104
User Adj:	1.00	1.00	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	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	85	24	55	125	28	113	124	1552	68	129	1076	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	24	55	125	28	113	124	1552	68	129	1076	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	24	55	125	28	113	124	1552	68	129	1076	108
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.92	0.95	0.95	0.92	0.92	0.98	0.95	0.92	0.99	0.95
Lanes:	0.78	0.22	1.00	0.82	0.18	1.00	1.00	2.87	0.13	1.00	2.72	0.28
Final Sat.:	1406	394	1750	1469	331	1750	1750	5366	234	1750	5088	511
Capacity Analysis Module:												
Vol/Sat:	0.06	0.06	0.03	0.08	0.08	0.06	0.07	0.29	0.29	0.07	0.21	0.21
Crit Moves:					****			****		****		
Green Time:	24.8	24.8	24.8	24.8	24.8	24.8	26.6	84.6	84.6	21.5	79.6	79.6
Volume/Cap:	0.34	0.34	0.18	0.48	0.48	0.36	0.37	0.48	0.48	0.48	0.37	0.37
Delay/Veh:	51.1	51.1	49.2	52.9	52.9	51.4	50.1	15.5	15.5	55.4	16.6	16.6
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:	51.1	51.1	49.2	52.9	52.9	51.4	50.1	15.5	15.5	55.4	16.6	16.6
LOS by Move:	D-	D-	D	D-	D-	D-	D	B	B	E+	B	B
HCM2kAvgQ:	4	4	2	7	7	5	5	13	13	6	9	9

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

Copyright (c) 2008 Dowling Associates, Inc.

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

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



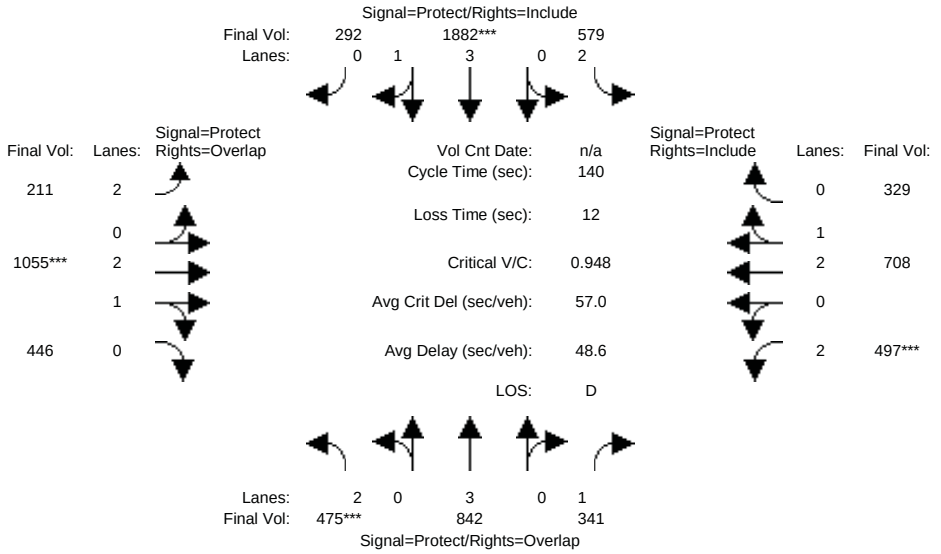
Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	470	825	277	521	1844	289	208	985	440	382	636	270
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:	470	825	277	521	1844	289	208	985	440	382	636	270
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	3	58	49	9	0	0	56	0	107	63	53
Initial Fut:	470	828	335	570	1853	289	208	1041	440	489	699	323
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	478	842	341	580	1885	294	212	1059	448	497	711	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	478	842	341	580	1885	294	212	1059	448	497	711	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	478	842	341	580	1885	294	212	1059	448	497	711	329
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.95	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.44	0.56	2.00	2.08	0.92	2.00	2.02	0.98
Final Sat.:	3150	5700	1750	3150	6486	1012	3150	3934	1663	3150	3828	1769
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.19	0.18	0.29	0.29	0.07	0.27	0.27	0.16	0.19	0.19
Crit Moves:	****				****			****			****	
Green Time:	22.3	29.0	52.2	36.1	42.8	42.8	16.7	39.6	62.0	23.2	46.2	46.2
Volume/Cap:	0.95	0.71	0.52	0.71	0.95	0.95	0.56	0.95	0.61	0.95	0.56	0.56
Uniform Del:	58.3	51.6	34.2	47.2	47.6	47.6	58.2	49.2	29.8	57.8	38.6	38.6
IncremntDel:	28.1	2.1	0.8	3.0	9.7	9.7	2.0	12.8	0.4	27.4	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:	0.87	0.83	0.60	0.77	0.71	0.71	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	79.0	44.7	21.4	39.3	43.4	43.4	60.2	62.1	30.2	85.2	39.0	39.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	79.0	44.7	21.4	39.3	43.4	43.4	60.2	62.1	30.2	85.2	39.0	39.0
LOS by Move:	E-	D	C+	D	D	D	E	E	C	F	D	D
HCM2kAvgQ:	16	12	9	13	27	27	6	26	14	17	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Background PP PM

Intersection #9: De Anza Blvd/Stevens Creek Blvd 1638-211 [CMP 2010]



Street Name:	De Anza Boulevard						Stevens Creek Boulevard					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
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
Volume Module:												
Base Vol:	470	825	277	521	1844	289	208	985	440	382	636	270
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:	470	825	277	521	1844	289	208	985	440	382	636	270
Added Vol:	-3	0	0	-1	-3	-2	-1	-4	-2	0	-3	0
PasserByVol:	0	3	58	49	9	0	0	56	0	107	63	53
Initial Fut:	467	828	335	569	1850	287	207	1037	438	489	696	323
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	475	842	341	579	1882	292	211	1055	446	497	708	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	475	842	341	579	1882	292	211	1055	446	497	708	329
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	475	842	341	579	1882	292	211	1055	446	497	708	329
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.83	1.00	0.92	0.83	0.99	0.95	0.83	1.00	0.95	0.83	1.00	0.95
Lanes:	2.00	3.00	1.00	2.00	3.44	0.56	2.00	2.08	0.92	2.00	2.01	0.99
Final Sat.:	3150	5700	1750	3150	6491	1007	3150	3935	1662	3150	3823	1774
Capacity Analysis Module:												
Vol/Sat:	0.15	0.15	0.19	0.18	0.29	0.29	0.07	0.27	0.27	0.16	0.19	0.19
Crit Moves:	****				****			****			****	
Green Time:	22.3	29.0	52.3	36.1	42.8	42.8	16.7	39.6	61.9	23.3	46.2	46.2
Volume/Cap:	0.95	0.71	0.52	0.71	0.95	0.95	0.56	0.95	0.61	0.95	0.56	0.56
Delay/Veh:	78.5	44.7	21.3	39.3	42.9	42.9	60.1	61.6	30.2	84.5	38.9	38.9
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:	78.5	44.7	21.3	39.3	42.9	42.9	60.1	61.6	30.2	84.5	38.9	38.9
LOS by Move:	E-	D	C+	D	D	D	E	E	C	F	D+	D+
HCM2kAvgQ:	16	12	9	13	27	27	6	26	14	17	11	11

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

Copyright (c) 2008 Dowling Associates, Inc.

Summary Scenario Comparison Report (With Average Critical Delay)
Future Volume Alternative

Intersection		???				Background PM				Background PP PM						???			
		LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)	LOS	Avg Del (sec)	Crit V/C	Crit V/C Change	Avg Crit Del (sec)	Avg Crit Del Change	LOS	Avg Del (sec)	Crit V/C	Avg Crit Del (sec)
#1	De Anza Boulevard and Mariani Avenue	?	xx.x	x.xxx	xx.x	D	42.1	0.765	42.9	D	42.1	0.763	- 0.001	42.9	+ 0.0	?	xx.x	x.xxx	xx.x
#2	De Anza Boulevard and Lazaneo Drive	?	xx.x	x.xxx	xx.x	B-	19.5	0.548	17.1	B-	19.5	0.547	- 0.001	17.2	+ 0.0	?	xx.x	x.xxx	xx.x
#3	Bandley Drive and Alves Drive	?	xx.x	x.xxx	xx.x	B	11.3	0.419	11.3	B	10.9	0.386	- 0.033	10.9	- 0.4	?	xx.x	x.xxx	xx.x
#4	De Anza Boulevard and Alves Drive	?	xx.x	x.xxx	xx.x	C	20.9	0.367	0.6	C	20.4	0.348	- 0.019	0.6	- 0.0	?	xx.x	x.xxx	xx.x
#5	Mary Avenue and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C-	32.9	0.534	27.7	C-	33.0	0.532	- 0.002	27.8	+ 0.1	?	xx.x	x.xxx	xx.x
#6	N. Stelling Road and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D	46.2	0.801	44.3	D	46.1	0.796	- 0.005	44.1	- 0.2	?	xx.x	x.xxx	xx.x
#7	Saich Way and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C+	21.3	0.504	31.7	C+	21.4	0.499	- 0.005	31.9	+ 0.2	?	xx.x	x.xxx	xx.x
#8	Bandley Drive and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	C	23.9	0.483	21.7	C	23.0	0.479	- 0.004	21.2	- 0.4	?	xx.x	x.xxx	xx.x
#9	De Anza Boulevard and Stevens Creek Boulevard	?	xx.x	x.xxx	xx.x	D	48.9	0.951	57.5	D	48.6	0.948	- 0.003	57.0	- 0.5	?	xx.x	x.xxx	xx.x

Copyright (c) 2008 Dowling Associates, Inc.