Traffic Impact Analysis Report

840 East El Camino Real Hotel Expansion

Mountain View, California

September 29, 2017

TJKM

Contents

Tables

Figures

Appendices

EXECUTIVE SUMMARY

This report summarizes the results of the Traffic Impact Analysis (TIA) conducted for the proposed hotel expansion located at 840 East El Camino Real in the City of Mountain View (City). The proposed project would expand the existing 160-room, four-story hotel with an 18,747 square foot (s.f.) addition, including 40 new guest rooms and a 4,122 s.f. freestanding restaurant. Entrance to the project site would be provided via the existing driveway on East El Camino Real.

The report also includes evaluations and recommendations concerning project site access and on-site circulation for vehicles, transit, bicycles, and pedestrians, evaluation of on-site vehicle parking supply, passenger and commercial loading spaces, garbage/trash facilities, and queuing analysis at the garage entrances.

To evaluate the impacts on the transportation infrastructure due to the addition of traffic from the proposed project, four study intersections were evaluated during the weekday morning a.m. peak hour and evening p.m. peak hour under six study scenarios. The study intersections were evaluated under *No Project* and *plus Project* scenarios for Existing, Background, and Cumulative Conditions. For the purposes of this analysis, potential traffic operational effects from the proposed project are identified based on established traffic operational thresholds for the Santa Clara County Valley Transportation Authority (VTA) Congestion Management Program (CMP) and the City of Mountain View.

Project Trip Generation

The proposed hotel expansion is expected to generate a net of 858 daily trips, of which 66 are generated in the a.m. peak hour, and 47 are generated in the p.m. peak hour. The proposed trip generation includes discounts for a restaurant pass-by trip reduction and Transportation Demand Management (TDM) based trip reduction.

Existing Conditions

Under this scenario, all of the study intersections operate at acceptable service levels LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.

Existing plus Project Conditions

Under this scenario, all intersections are expected to continue operating within applicable jurisdictional standards better during both a.m. and p.m. peak hours.

Based on the City of Mountain View and VTA's impact criteria the project is expected to have a **less-than-significant impact** at all the study intersections.

Background (Existing plus Approved projects) Conditions

Under this scenario, all of the study intersections operate at acceptable service levels during both a.m. and p.m. peak hours

Background plus Project Conditions

Under this scenario, all intersections are expected to continue operating within applicable standards during both peak hours.

Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a **less-than-significant impact** at all the study intersections.

Cumulative Conditions

Under this scenario, the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to operate within standards during both peak hours. The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour.

Cumulative plus Project Conditions

Under this scenario, the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to operate within standards during both peak hours. The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour. However, the peak hour signal warrants are not met for the p.m. peak hour, so the impact is **less-than-significant**.

Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a **less-than-significant impact** at all the study intersections evaluated in this TIA.

Queueing Analysis

Under Existing and Existing plus Project Conditions, the left turn pocket at the CMP intersection of East El Camino Real/SR-237/Grant Road experiences some overflow with 95th percentile queue lengths, during the p.m. peak hour only. The proposed project would increase the 95th percentile queue length by less than one car length. All other dedicated turn pockets provide adequate storage length to accommodate 95th percentile queues affected by project traffic. The proposed project *does not create a significant impact* by itself on the expected left-turn or right-turn queues at the study intersections.

Site Access and On-Site Circulation

The proposed site plan (dated July 28, 2017) shows one driveway on East El Camino Real. The proposed project would include minor changes to the existing parking lot, with no reductions to existing turning radii or truck access. The new site plan will continue to provide adequate access for trash collection and emergency vehicles.

Parking

The proposed project would make minor changes to the existing hotel parking lot but would reduce the total supply of parking from 152 spaces to 149 spaces. The number of accessible spaces would remain unchanged and adequate, and bicycle parking would be greatly expanded.

TJKM previously studied parking demand and parking supply requirements for the proposed project in a technical memorandum dated September 12, 2017. This study concluded that parking requirements should be based on parking demand rates found in the Institute of Transportation Engineers (ITE) *Parking Generation (4th Edition)* and parking demand observations at the project hotel. Although the planned parking supply is less than would be required under the Mountain View Zoning Ordinance, the supply could accommodate parking demand from the hotel at 84 percent occupancy based on the ITE rate or 97 percent occupancy based on the observed parking demand rate at the proposed hotel. This does not take into consideration any reduction in parking demand due to the planned Transportation Demand Management (TDM) program being prepared separately. With even a small reduction in parking demand as a result of the TDM plan, it is expected that the parking supply for the proposed project will be adequate. In addition, historical occupancy rates at this hotel between 2012 and 2016 indicated a peak occupancy of 88 percent. TJKM concluded that with a transportation demand management program proposed for the hotel, there should be no parking capacity issues, even in the rare event of 100 percent hotel occupancy.

Pedestrian Impacts

The proposed project provides adequate and appropriate facilities for safe non-motorized mobility. There is adequate pedestrian access to the project site from the surrounding area. The proposed project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is ***less-than-significant***.

Bicycle Impacts

The project is expected to generate few additional bicycle trips on existing and planned bicycle facilities and does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is ***less than significant***.

Transit Impacts

The project site is located within 50 feet of four local transit stops and within half a mile of the nearest rapid transit stops. The VTA CMP guideline for adequate transit access considers 2,000 feet a reasonable walking distance to the nearest transit stop. Thus, the project site is adequately served by the transit service. Spread amongst multiple bus routes, the existing transit service can accommodate the proposed demand. The transit service within the immediate project site operates within capacity, and additional trips generated by the proposed project could be accommodated by existing bus services. Therefore, impacts to transit service are expected to be ***less than significant***.

1.0 INTRODUCTION

This report summarizes the results of the TIA for the proposed hotel expansion located at 840 East El Camino Real in the City of Mountain View, California. The project is located at the eastern edge of the City on the El Camino Real corridor. The proposed project would expand the existing 160-room, four-story hotel with an 18,747 square foot (s.f.) addition, including 40 new guest rooms and a 4,122 s.f. freestanding restaurant. The expansion would be located along the East El Camino Real frontage, removing the existing garden. Entrance to the project site would be provided via the existing driveway on East El Camino Real. Two accessible parking spaces would be relocated and minor changes made to the existing surface parking lot.

The existing Hilton Garden Inn is surrounded by single- and multi-family residential, retail, and medical uses. The site is zoned "P-38 (El Camino Real) Precise Plan". The El Camino Real Precise Plan designates El Camino Real in this planning area as a Medium Intensity Corridor. General characteristics of the area include a mix of large retail parcels with parking lots and smaller, shallow parcels containing local, commercial, and service-oriented uses. El Camino Real is a regionally important major corridor that serves a large volume of automobile and transit users, including the most heavily utilized bus lines in the county. The major objective of this area is to make it a more dynamic and functional corridor with attractive commercial and housing development and improved facilities for pedestrians and transit users. A key element of the precise plan vision is ensuring that development just off the corridor is compatible with the surrounding neighborhoods. The proposed project is consistent with the Medium Intensity Corridor designation.

This chapter discusses the TIA purpose, project study area, analysis scenarios and methods, and criteria used to identify significant impacts.

1.1 Study Intersections and Scenarios

TJKM evaluated traffic conditions at four study intersections during the a.m. and p.m. peak hours for a typical weekday. The study intersections were selected in consultation with the City of Mountain View staff. The peak periods observed were between 7:00-9:00 a.m. and 4:00-6:00 p.m. The study intersections and associated traffic controls are as follows:

1. East El Camino Real//SR-237/ Grant Road [1, 2] (Signal)
2. East El Camino Real/Sylvan Avenue/The Americana[2] (Signal)
3. East El Camino Real/South Bernardo Avenue[2] (Signal)
4. East El Camino Real/Crestview Drive[2] (Unsignalized)

[1] Congestion Management Program (CMP) Intersection
[2] Intersection within the City of Mountain View El Camino Real Precise Plan Area.

It should be noted that intersection 3, East El Camino Real/South Bernardo Avenue, is located within the City of Sunnyvale.

Figure 1 illustrates the study intersections and the vicinity map of the proposed project. **Figure 2** shows the proposed project site plan.

This study addresses the following six traffic scenarios:

- **Existing Conditions** – This scenario evaluates the study intersections based on existing traffic volumes, lane geometry, and traffic controls.
- **Existing plus Project Conditions** – This scenario is identical to Existing Conditions, but with the addition of traffic from the proposed project.
- **Background (Existing plus Approved Projects) Conditions** – This scenario is similar to Existing Conditions, but with the addition of traffic from approved and pending developments within the vicinity of the proposed project.
- **Background plus Project Conditions** – This scenario is identical to Background Conditions, but with the addition of traffic from the proposed project.
- **Cumulative Conditions** – This analysis scenario is defined as baseline conditions without the proposed project in year 2030, based on the 2030 Mountain View Travel Demand Model.
- **Cumulative plus Project Conditions** – This scenario is identical to Cumulative Conditions, but with the addition of traffic from the proposed project.

Vicinity Map

LEGEND

X Study Intersection

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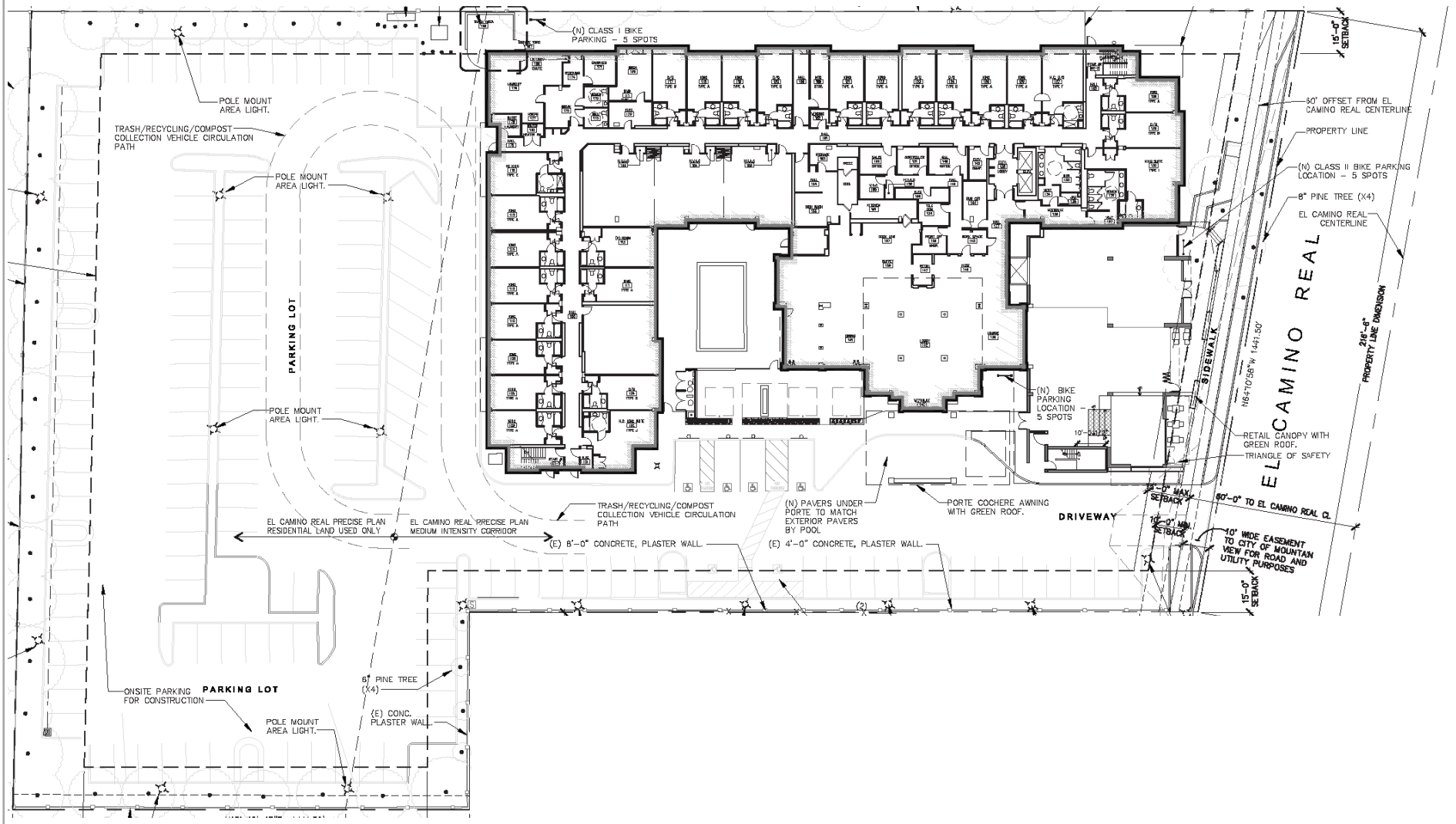
Figure 1

Site Plan



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Source: ARCSINE

Figure 2

2.0 STUDY METHODOLOGY

2.1 Level of Service Analysis Methodology

LOS is a qualitative measure that describes operational conditions as they relate to the traffic stream and perceptions by motorists and passengers. The LOS generally describes these conditions in terms of such factors as speed and travel time, delays, freedom to maneuver, traffic interruptions, comfort, convenience, and safety. The operational LOS are given letter designations from A to F, with A representing the best operating conditions (free-flow) and F the worst (severely congested flow with high delays). Intersections generally are the capacity-controlling locations with respect to traffic operations on arterial and collector streets.

Signalized Intersections

The study intersections under traffic signal control were analyzed using the 2000 Highway Capacity Manual (HCM) Operations Methodology for signalized intersections described in Chapter 16 (HCM 2000). This methodology determines LOS based on average control delay per vehicle for the overall intersection during peak-hour intersection operating conditions. The LOS methodology is approved by VTA and adopted by the City. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections was calculated using TRAFFIX 8.0 analysis software and was correlated to a LOS designation as shown in **Appendix A**. The LOS methodology is described for signalized intersections in detail in **Appendix A**.

Unsignalized Intersections

The study intersection under stop control (Unsignalized) was analyzed using the 2000 HCM Operations Methodology for unsignalized intersections described in Chapter 17 (HCM 2000). LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At side street-controlled intersections or two-way stop sign intersections, the control delay is calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, the control delay is computed as the average of all movements in that lane. The weighted average delay for the entire intersection is presented for the all-way stop controlled intersection. The average control delay for unsignalized intersections was calculated using TRAFFIX 8.0 analysis software and was correlated to a LOS designation as shown in **Appendix A**. The LOS methodology is described for unsignalized intersections in detail in **Appendix A**.

2.2 Significant Impact Criteria/Level of Service Standards

Signalized Intersections

In general, the LOS standard (minimum acceptable operations) for signalized intersections in the City of Mountain View is LOS D or better except at intersections within the Downtown Core and San Antonio areas where vitality, activity, and multi-modal transportation use are primary goals. Within these planning areas, the level service standard is LOS E or better. The City has also adopted LOS E as the minimum overall performance measure for Congestion Management Program (CMP) monitored roadways (e.g., Central Expressway, El Camino Real, and San Antonio Road).

According to the City of Mountain View, a projected-generated increase in traffic is considered to have a significant impact at a signalized intersection if it meets any of the following criteria:

- Intersection operations deteriorate from an acceptable level (LOS D outside of Downtown and San Antonio Center areas) to an unacceptable level (LOS E or F)
- Intersection operations deteriorate from an acceptable level (LOS E within the Downtown and San Antonio Center areas) to an unacceptable level (LOS F)
- If the study intersection is already operating at unacceptable levels, LOS E or F under Background Conditions, and the addition of project trips causes an increase in the average critical delay by more than four seconds and increasing the critical volume-to-capacity (V/C) ratio by 0.01 or more

The City considers a significant impact to be satisfactorily mitigated when the measure implemented would restore LOS to Background Conditions or better. All proposed mitigation must also include a feasibility analysis, which includes an aerial photograph showing all buildings and right-of-way lines overlaid with the proposed mitigation.

VTA CMP Intersections

The LOS standard for CMP intersections is LOS E. The projected-generated increase in traffic is considered to have a significant impact at a CMP intersection if it meets any of the following criteria:

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

Caltrans Intersections

Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on all State highway facilities. However, Caltrans has not established specific criteria for defining significant impacts for signalized or unsignalized intersections. Caltrans intersections within the CMP network are analyzed using VTA CMP standards and significance criteria. For the purpose of this analysis, the significance criteria established by the City of Mountain View have been applied to identify potentially significant impacts at Caltrans-operated intersections.

Unsignalized Intersections

According to City of Mountain View standards, a project is said to create a significant adverse impact on traffic conditions at unsignalized intersections if it meets the following criteria:

- When the addition of project traffic causes the average intersection delay for an all-way stop-controlled or the worst movement/approach for side-street stop-controlled intersections to degrade from an acceptable LOS (as defined for signalized intersections) to unacceptable level; and
- The intersection(s) satisfies the California MUTCD peak-hour signal warrant.

City of Sunnyvale Intersections

The City of Sunnyvale LOS traffic operational standard for intersections is LOS D, except for City intersections that are designated as regionally significant, and accordingly have a standard of LOS E. For the purposes of this study, regionally significant facilities include intersections on El Camino Real. It should be noted that intersection of East El Camino Real/South Bernardo Avenue, is located within the City of Sunnyvale.

Traffic impacts due to implementation of a proposed project occur when:

- Non-regionally significant intersection operations deteriorate from LOS D or better (acceptable) under the baseline conditions to LOS E or F (unacceptable);
- Regionally significant intersection operations deteriorate from LOS E or better (acceptable) to LOS F (unacceptable); or
- Unacceptable operations are exacerbated by increasing average control delay for critical movements by more than four (4) seconds and increasing the critical volume-to-capacity (v/c) ratio by 0.01 or more at an intersection operating at LOS E or F (LOS F for regionally significant intersections).
    - The exception to this threshold is when the addition of project traffic reduces the amount of average control delay for critical movements, i.e., the change in average control delay for critical movements are negative. In this case, the threshold is when the project increases the critical v/c value by 0.01 or more.

Transit Impact Criteria

According to City of Mountain View standards, a transit impact is considered significant if implementation of the proposed project would disrupt existing, or interfere with planned, transit services or facilities.

Bicycle Facilities Impact Criteria

According to City of Mountain View standards, a bicycle impact is considered significant if implementation of the proposed project would:

- Disrupt existing bicycle facilities; or
- Conflict or create inconsistencies with adopted bicycle system plans, guidelines, policies or standards.

Pedestrian Facilities Impact Criteria

According to City of Mountain View standards, a pedestrian impact is considered significant if implementation of the proposed project would:

- Disrupt existing pedestrian facilities; or
- Create inconsistencies with planned pedestrian facilities or adopted pedestrian system plans, guidelines, policies or standards.

3.0 EXISTING CONDITIONS

This section describes existing conditions in the immediate project site vicinity, including roadway facilities, bicycle and pedestrian facilities, and available transit service. In addition, existing traffic volumes and operations are presented for the study intersection, including the results of LOS calculations.

3.1 Existing Setting and Roadway System

Regional roadway facilities providing access to the proposed mixed-use development include State Route (SR) 237 and SR 85. Local access to the proposed project is provided via East El Camino Real, Bernardo Avenue and Sylvan Avenue. Descriptions of the existing roadways are provided as follows:

SR 85 is a north-south, six-lane freeway with two mixed-flow lanes and one HOV lane in each direction during peak periods in the vicinity of the project site. SR 85 extends from the SR 85/US 101 interchange in Mountain View to the SR 85/US 101 interchange in south San Jose. Access from SR 85 to the project site is provided via an interchange at El Camino Real.

SR 237 is an east-west freeway extending between the City of Mountain View (El Camino Real/SR 85) and the City of Milpitas (I-680). SR 237 includes two mixed flow lanes in each direction in the City of Mountain View. Access from SR 237 to the project site is provided via an at-grade intersection with El Camino Real/Grant Road.

SR 82/El Camino Real provides regional access between the City of San Francisco to the north and City of San Jose to the south. It is a regionally significant east-west (in the project vicinity) arterial with three mixed-flow lanes in each direction. The roadway provides direct access to the project site and connects it to SR 85, SR 237, and several local streets. The posted speed limit on El Camino Real is 40 mph.

Central Expressway is a regional significant roadway located north of the project site that provide access between the City of Mountain View to the west and City of Santa Clara to the east. It is an east-west expressway with two mixed-flow lanes in each direction in the vicinity of the proposed project. Access from Central Expressway in the project vicinity is provided by indirect connections via SR 85 and SR 237.

South Bernardo Avenue is a two-lane, north-south collector with a mix of residential and commercial uses in the vicinity of the proposed project. It provides local access to the project via East El Camino Real. The posted speed limit on South Bernardo Avenue is 30 mph.

3.2 Existing Peak Hour Traffic Volumes

TJKM collected turning movement counts during the a.m. and p.m. peak periods on August 3, 2017. Existing peak-hour traffic counts are provided in **Appendix B.**

3.3 Existing Pedestrian Facilities

Walkability is defined as the ability to travel easily and safely between various origins and destinations without having to rely on automobiles or other motorized travel. The ideal "walkable" community includes wide sidewalks, a mix of land uses such as residential, employment, and shopping opportunities, a limited number of conflict points with vehicle traffic, and easy access to transit facilities and services.

Pedestrian facilities are comprised of crosswalks, sidewalks, pedestrian signals, and off-street paths, which provide safe and convenient routes for pedestrians to access the destinations such as institutions, businesses, public transportation, and recreation facilities. During field observations, it was observed that pedestrians near the project site on East El Camino Real are able to walk to the Palo Alto Medical Foundation (PAMF) Mountain View location 0.2 miles away, Safeway located 0.5 miles away, and other retail and commercial uses along East El Camino Real in both directions. The nearest crosswalk to the west of the project site is the signalized intersection of East El Camino Real and Sylvan Avenue 400 feet away, and the nearest crosswalk to the east of the project site is the signalized intersection of East El Camino Real and south Bernardo Avenue, 1,800 feet away. In the project vicinity, all signalized study intersections are equipped with pedestrian signal heads, crosswalks, and curb ramps. The roadway segments in the project vicinity have sidewalks along both sides. There are two pairs of bus stops on East El Camino Real, and one pair of bus stops on South Bernardo Avenue at East El Camino Real. All bus stops are accessible via existing sidewalks.

The existing pedestrian facilities in the study area are shown in **Figure 3**. Existing peak-hour pedestrian counts are provided in **Appendix B**.

3.4 Existing Bicycle Facilities

The 2008 Bicycle Transportation Plan describes the four bikeway classifications in the City of Mountain View, which all meet the design guidelines of the VTA Bicycle Technical Guidelines for bicycle facilities, and the Caltrans Highway Design Manual (HDM), Chapter 1000: Bikeway Planning and Design for multi-use trails. These bicycle facility types are described below.

- **Bike paths (Class I)**: These provide a completely separate right of way for the exclusive use of bicycles and pedestrians with minimal roadway crossings.
- **Bike lanes (Class II)**: These provide a striped lane and signage for one-way bike travel on a street or highway and are designed for the exclusive use of cyclists with certain exceptions. For instance, right-turning vehicles must merge into the lane before turning.
- **Bike routes/boulevards (Class III)**: Bike routes may be identified on a local residential or collector street when the travel lane is wide enough and the traffic volume is low enough to allow both cyclists and motor vehicles. Although some streets with high volumes of traffic have been designated as bike routes, most official bike routes in Mountain View are on low-volume streets. Bike boulevards are a modified bicycle route providing a more convenient and efficient through route for cyclists of all skill levels than a typical bike route. A bike boulevard includes signage, pavement markings, and in some cases, traffic calming (e.g., mid- block closures to vehicles), and bike lanes.

The Stevens Creek Trail is a Class I shared-use facility that runs adjacent to SR 85 in the project area, approximately five miles long that extends north to south from the Bay Trail in Shoreline at Mountain View Park south to Heatherstone Way. This trail is a popular facility and provides access to the Downtown Core Area and to North Bayshore Area employers. Class II bicycle lanes are located near the project site on Sylvan Avenue and Knickerbocker Drive. A Class III bicycle route parallel to the Stevens Creek Trail connects bicycle lanes at Dana Street and Moorpark Way in the north to Heatherstone Way and the

Stevens Creek Trail in the south. El Camino Real is identified as a high-caution roadway for cyclists along the majority of its length. Parallel east-west bicycle connections exist on Fremont Avenue, Remington Drive, and Knickerbocker Drive to the south, and Evelyn Avenue and Central Expressway to the north, as well as numerous east-west neighborhood streets east of SR 237.

The existing bicycle facilities in the study area are shown in **Figure 4**. Existing peak-hour traffic bicycle counts are provided in **Appendix B**.

The *Mountain View Bicycle Transportation Plan Updated* (adopted November 17, 2015) recommends the following bicycle projects adjacent to the project site:

- El Camino Real buffered bicycle lanes west of Knickerbocker Drive
- Improvements to bicycle lanes/boulevards on Sylvan Avenue, Dale Avenue, and Alice Avenue

Bay Area Bike Share

This regional bicycle share program is a rental system that allows bicycles to be used and docked at any of numerous stations throughout the service area. The Bay Area Bike Share brand is currently relaunching as Ford GoBike, with more stations concentrated in the major cities of the region: San Francisco, Oakland, and San Jose. The City of Mountain View currently has seven stations in the city, including three downtown. It is not yet clear whether all Peninsula bike share locations will remain after the relaunch.

3.5 Parking

Currently, parking on site is located along the main driveway and behind the existing hotel. On-street parking is not available on adjacent streets in the immediate project vicinity. However, street parking is available on neighborhood streets north and south of East El Camino Real.

3.6 Existing Transit Facilities

Mountain View has several transit options that provide access to regional destination as well as intercity travel. Transit services with route schedules are described in this section. The existing transit facilities in the study area are shown in **Figure 5**. The VTA operates bus service and light rail services in the cities of Mountain View and Sunnyvale, feeding into the entire Santa Clara County system. Local Bus Routes 22, 32, 35, 40, 51, 52, 53, and 54 connect the cities with adjacent jurisdictions via local roads and provide frequent stops. Community Bus Routes 32 and 34 use smaller 25-passenger buses and lower fares, to serve Downtown, the San Antonio Shopping Center, local schools, and employment centers. The Mountain View-Winchester Light Rail Transit (LRT) Line 902 provides service between Campbell, Downtown San Jose, and Mountain View. It connects with the Alum Rock-Santa Teresa line. During special events at Levi's Stadium in Santa Clara, such as professional football games or concerts, Route 902 will run extra trains. The Downtown Mountain View Station is located adjacent to the Mountain View Caltrain Station. **Table 1** summarizes existing VTA Services within the immediate vicinity of the project.

Table 1: Existing Santa Clara Valley Transportation Authority (VTA) Service

Route	*From*	*To*	*Closest Stop to Project Site*	*Weekdays*		*Weekends*	
				Operating Hours	*Headway (minutes)*	*Operating Hours*	*Headway (minutes)*
22	Palo Alto Transit Center	Eastridge Transit Center	East El Camino Real & Sylvan Avenue/Americana	24 hour	9-60	24 hour	14-60
53	West Valley College	Sunnyvale Transit Center	Bernardo Avenue & East El Camino Real	6:55 AM – 6:59 PM	20-60	-	-
522	Palo Alto Transit Center	Eastridge Transit Center	East El Camino Real & Bernardo Avenue	4:37 AM– 11: 26 PM	15-30	7:50 AM – 11:11 PM	14-25

Notes: Source VTA Website

Mountain View Community Shuttle – a service provided by the City of Mountain View and Google, this pair of shuttles operate on a loop throughout the City with stops including El Camino Hospital, the San Antonio Shopping Center, and Mountain View Caltrain Station. The shuttles operate along two routes- Gray (clockwise) and Red (Counterclockwise). The Mountain View Community Shuttles is a two-year pilot program fully funded by Google. The nearest shuttle stops are on Sylvan Avenue at East El Camino Real. **Table 2** summarizes existing shuttle service within the immediate vicinity of the project.

Table 2: Existing Mountain View Community Shuttle Service

Route	*From*	*To*	*Weekdays*		*Weekends*	
			Operating Hours	*Headway (minutes)*	*Operating Hours*	*Headway (minutes)*
Mountain View Community Shuttle	Citywide Stops		10:00 AM–6:00 PM	30	12:00 PM– 6:00 PM	60

Notes: Source City of Mountain View and VTA Website

Existing Pedestrian Facilities

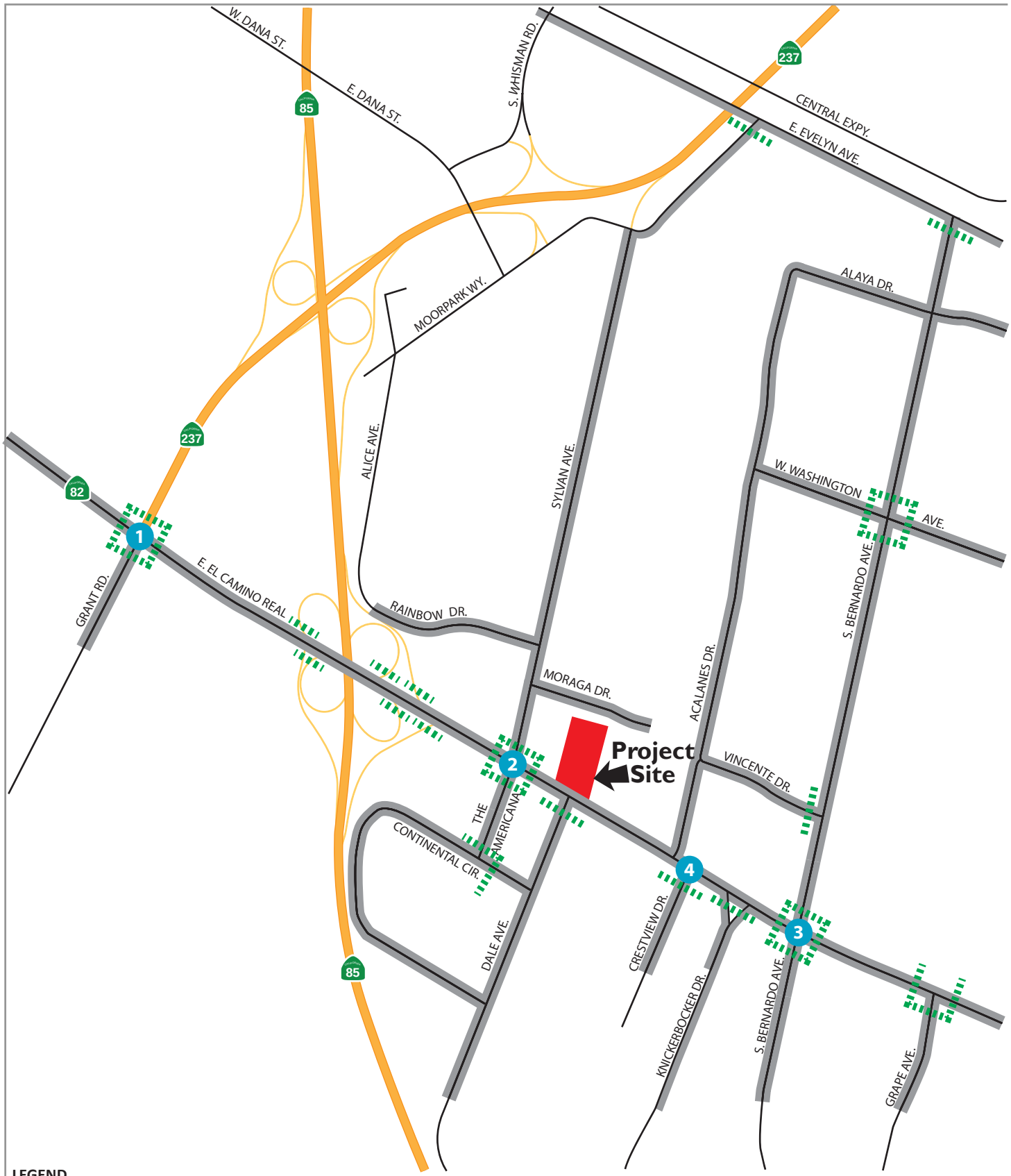

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Figure 3

Existing Bicycle Facilities

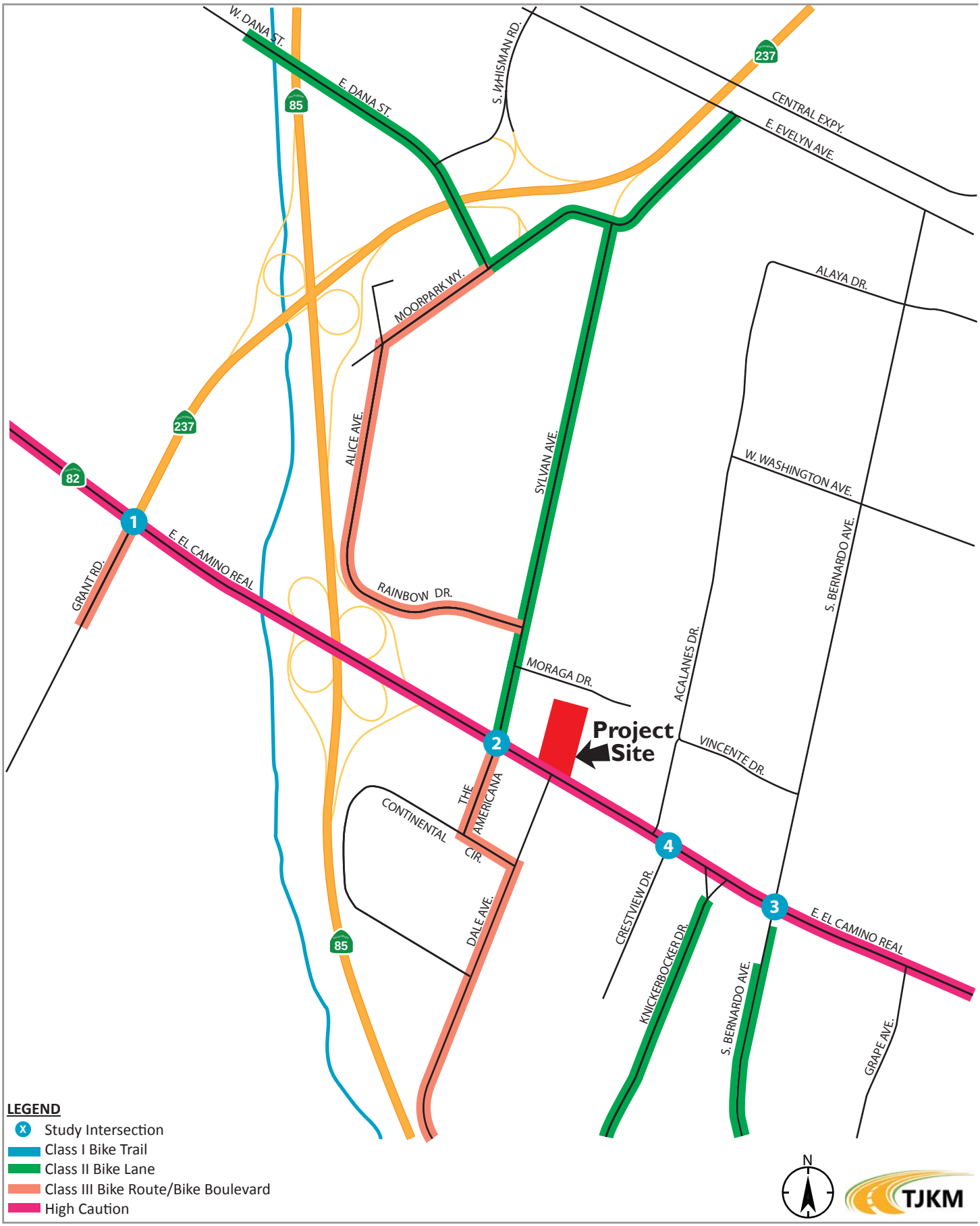

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Figure 4

Existing Transit Facilities

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Figure 5

3.7 Intersection Level of Service Analysis – Existing Conditions

The existing operations of the study intersections were evaluated for the highest one-hour volume during the weekday morning and evening peak periods. TJKM collected new turning movement counts for vehicles, bicycles, and pedestrians at all study intersections on August 3, 2017 during the a.m. and p.m. peak hours. Because traffic counts were conducted while school was not in session, morning traffic volumes were increased by 5 percent for the level of service (LOS) analysis, to account for the absence of school-related traffic when the counts were performed. The results of the LOS analysis using the TRAFFIX software program for Existing Conditions are summarized in **Table 4**. Field verification of existing intersection lane configurations and traffic controls were also conducted and provided the basis for the LOS analysis for Existing Conditions. **Appendix B** includes all data sheets for the collected vehicle, bicycle, and pedestrian counts. **Figure 6** illustrates the existing lane geometry and traffic controls at the study intersections. **Figure 7** illustrates the existing vehicle turning movement volumes at the study intersections, not including volume adjustments. **Figure 8** illustrates the existing pedestrian and bicycle volumes at the study intersections.

The Existing Conditions LOS analysis for purpose of this TIA is based on an isolated intersection analysis of traffic volumes, rather than analysis of the corridor as a whole. Standalone LOS results can sometimes be misleading if a corridor operates under forced flow, or congested, traffic conditions. Forced flow traffic operations can reduce overall vehicle throughput per hour at intersections, leading to LOS analysis results that suggest there is less corridor congestion than is actually occurring under existing field conditions. Where there is known congestion, additional analysis of field conditions becomes necessary in order to review and evaluate the extent of forced flow operations.

Table 3 below summarizes peak hour LOS at the study intersections under adjusted Existing Conditions, including the 5 percent increase in a.m. traffic volumes. At intersection 4 (East El Camino Real/Crestview Avenue), the offset alley on the north side of East El Camino Real does not affect operations at Crestview Avenue and was not included in the level of service analysis. Under this scenario, all of the study intersections operate at acceptable service levels LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours. LOS worksheets are provided in **Appendix C**.

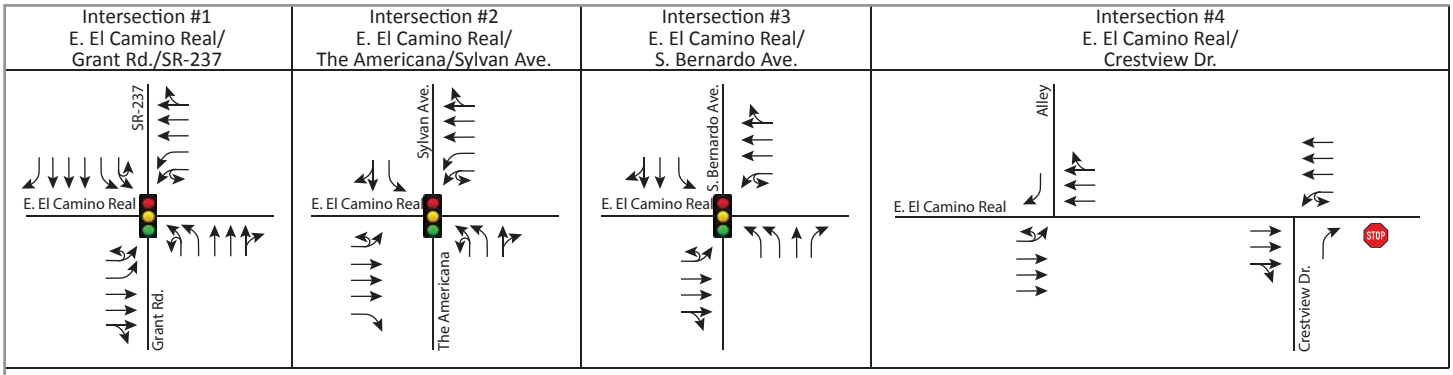
It should be noted that the LOS summary results presented in the LOS summary table (**Table 3**) are based on an isolated intersection analysis method adopted by the City of Mountain View that does not take into account advanced signal-timing parameters etc.

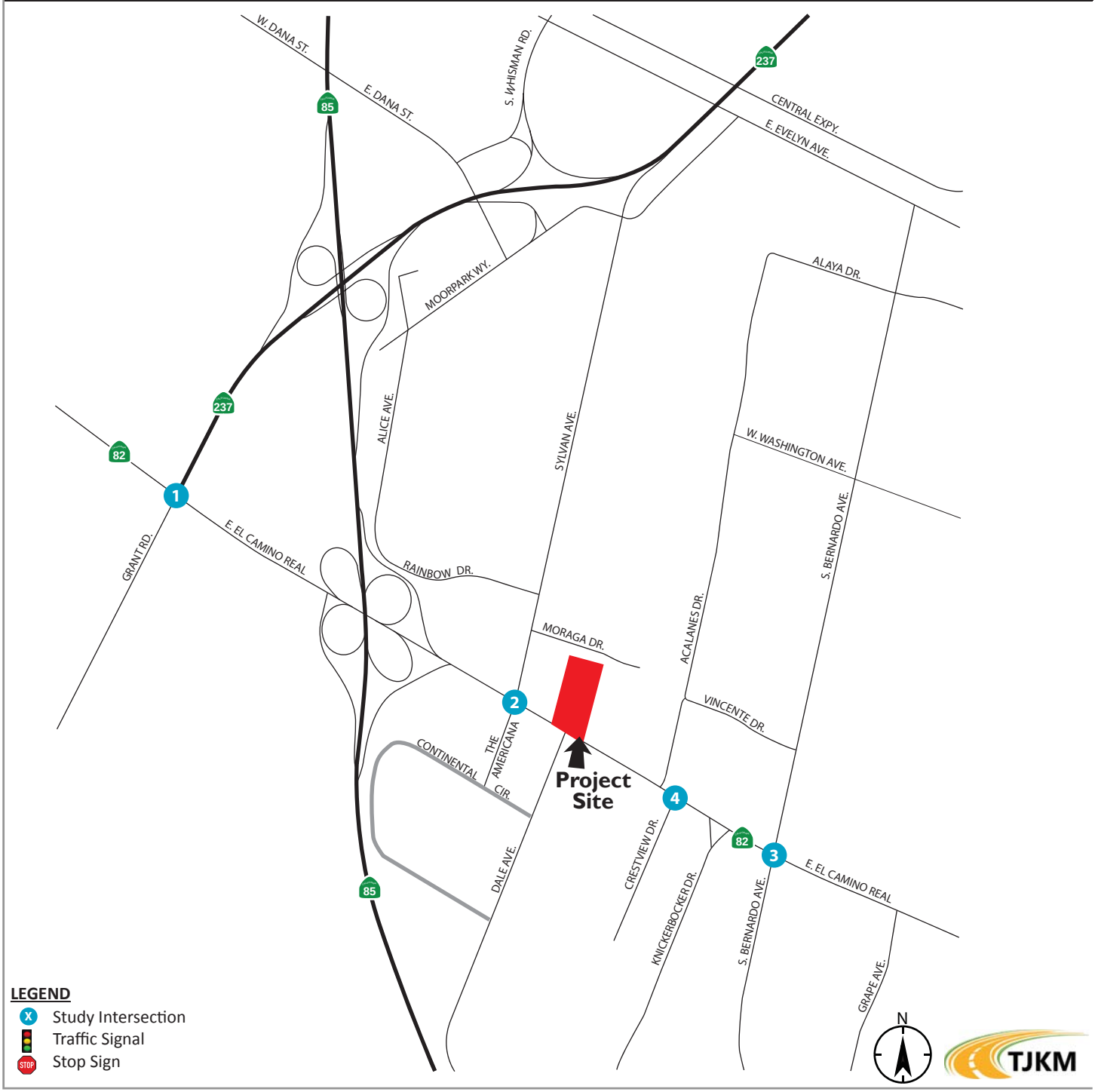
Table 3: Intersection Level of Service Analysis – Existing Conditions

ID	*Study Intersections*	*Control*	*Peak Hour[1]*	*Existing Conditions*			
				Delay[2]	*LOS[3]*	*Critical V/C[4]*	*Critical Delay[5]*
1	East El Camino Real/ SR-237/Grant Road[6]	Signalized	AM	68.4	E	1.072	110.9
			PM	49.7	D	0.954	61.8
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	37.7	D	0.815	41.8
			PM	31.9	C	0.684	31.0
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	43.1	D	0.797	46.3
			PM	36.2	D	0.669	34.2
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	9.9	A	0.039	0.2
			PM	24.8	C	0.312	0.6

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Critical volume to capacity ratio
[5]Critical movement delay
[6]CMP intersections with LOS E threshold

Lane Geometry and Controls

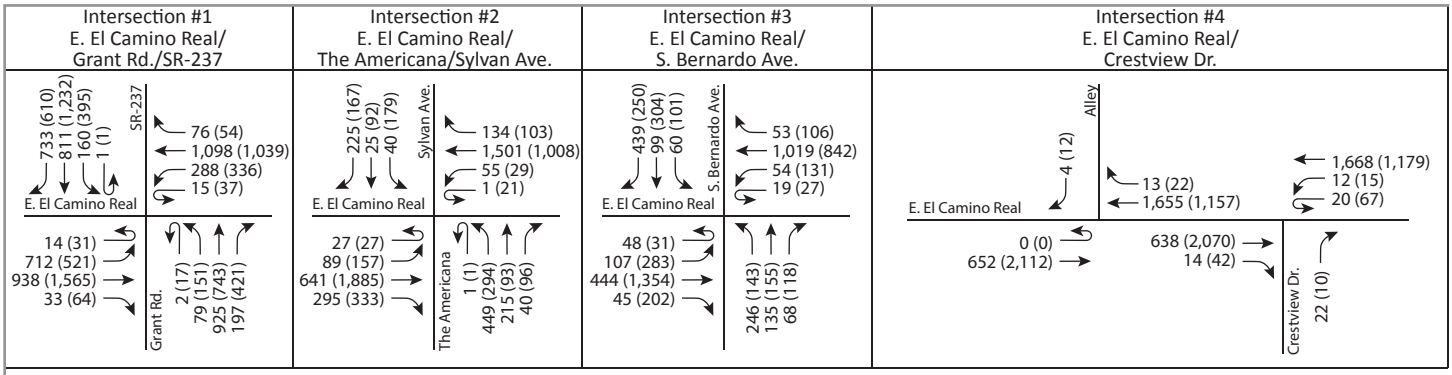


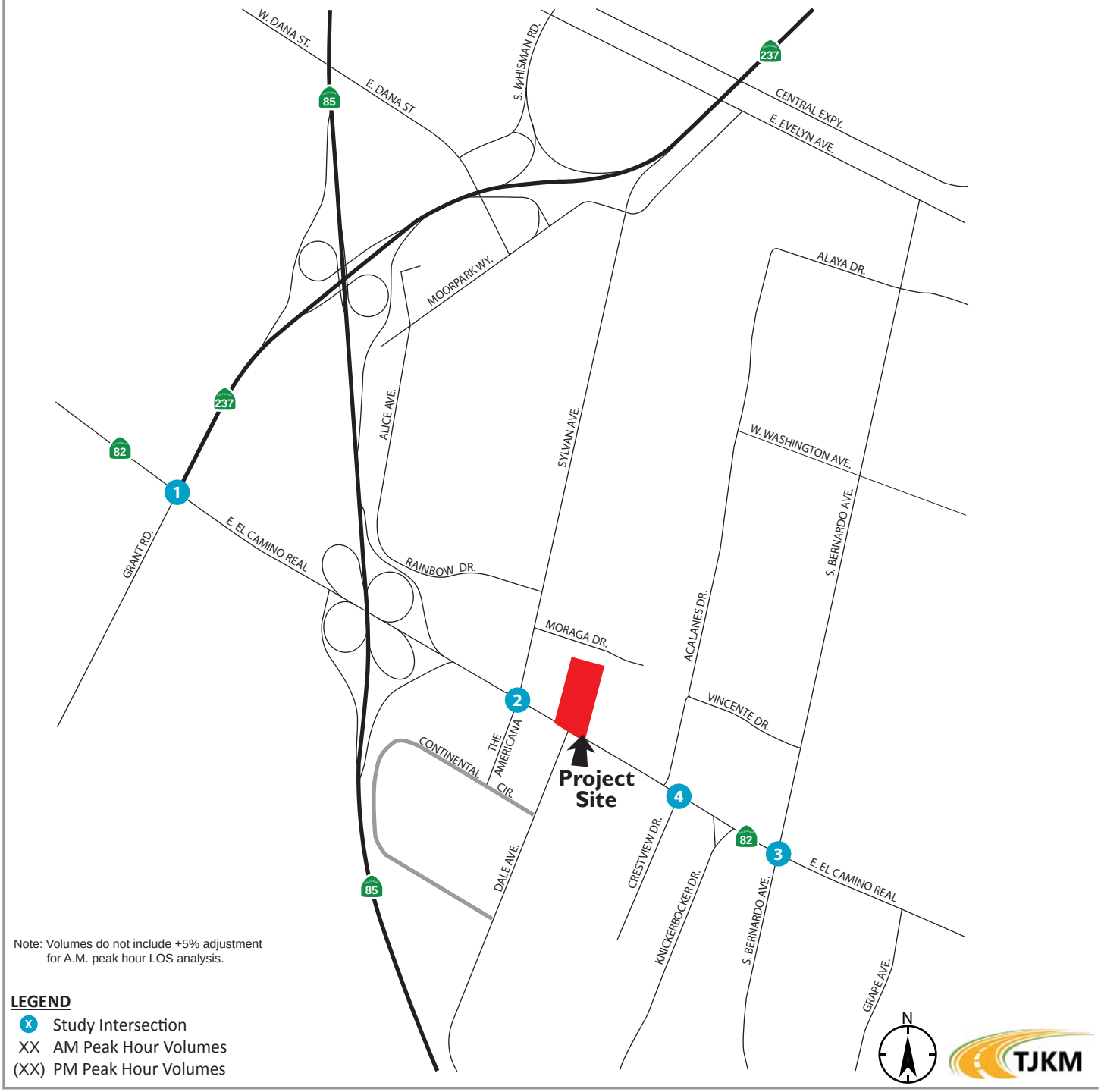


138-053

Figure 6

Existing Conditions Traffic Volumes





Note: Volumes do not include +5% adjustment for A.M. peak hour LOS analysis.

LEGEND

- X Study Intersection
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

TJKM

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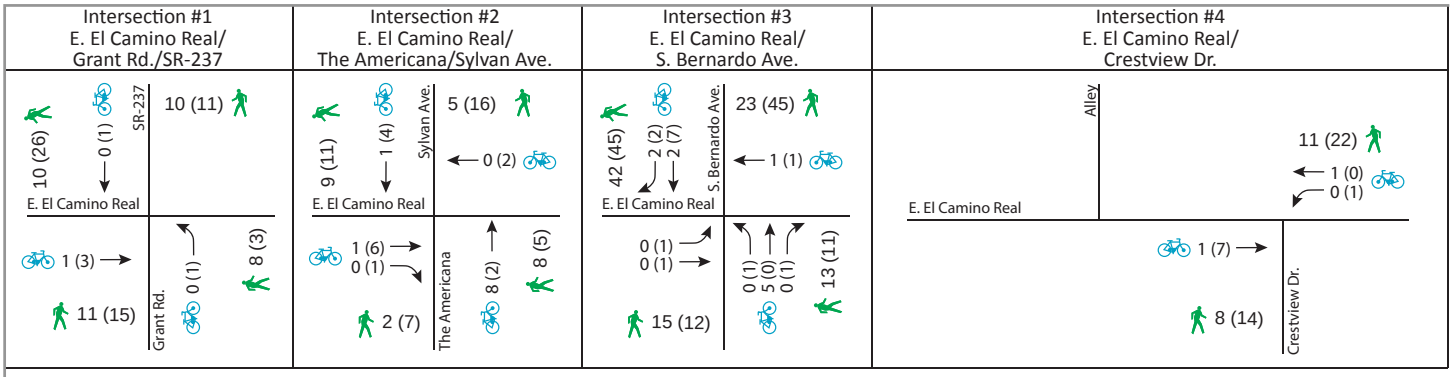
Figure 7

Pedestrian and Bicycle Volumes



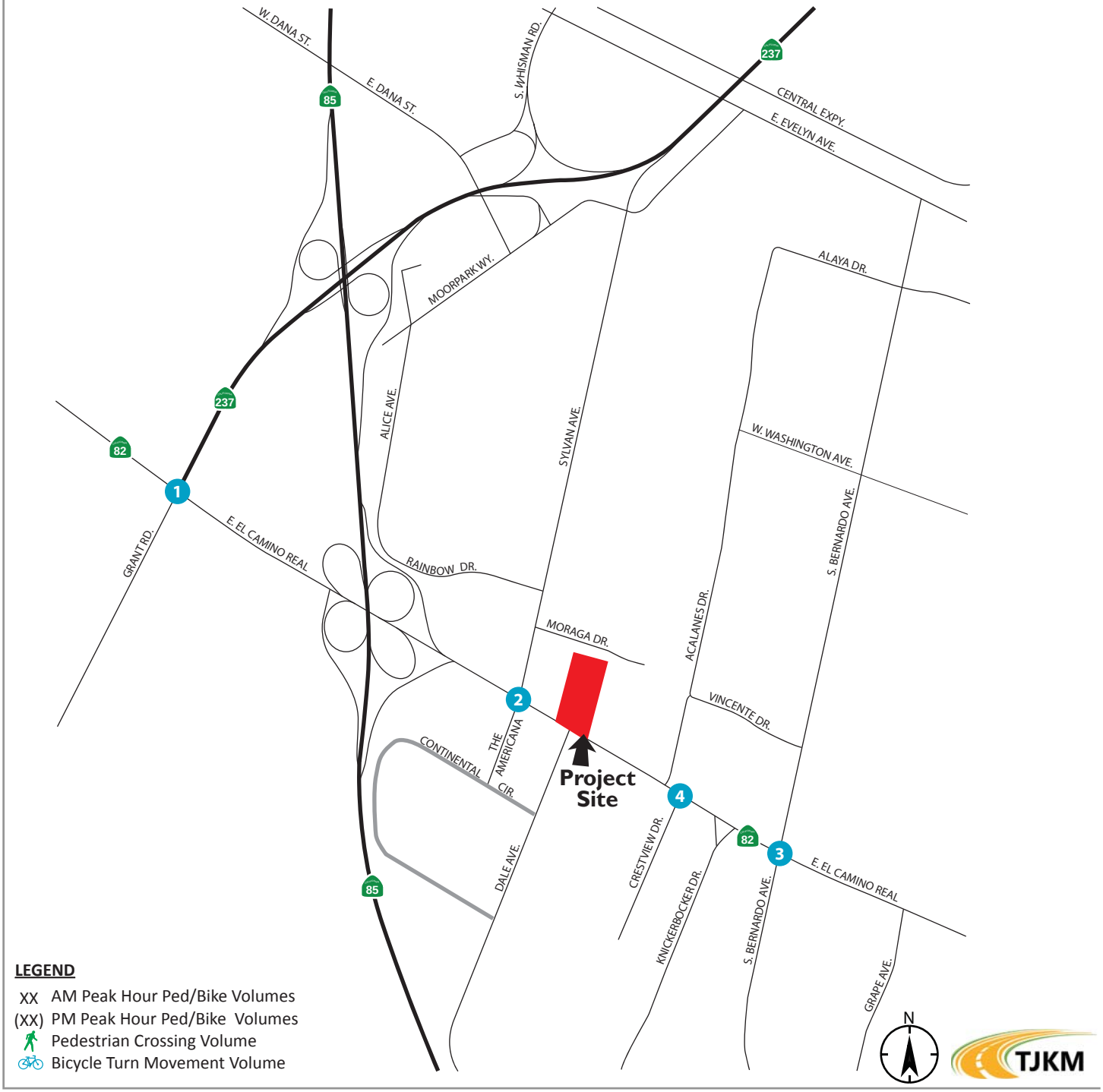


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Figure 8

4.0 EXISTING PLUS PROJECT CONDITIONS

This analysis scenario presents the impacts of the proposed hotel expansion at the study intersections and surrounding roadway system. This scenario is similar to Existing Conditions, but with the addition of traffic from the proposed project.

4.1 Project Trip Generation

TJKM developed estimated project trip generation for the proposed project based on published trip generation rates from the ITE publication *Trip Generation (9th Edition)*. TJKM applied trip discounts to the proposed project trip generation that are consistent with the VTA Traffic Analysis Guidelines for restaurant pass by and a planned transportation demand management (TDM) plan in consultation with City of Mountain View staff.

TJKM used published trip rates for the ITE land uses Hotel (ITE Code 310) and High-Turnover (Sit-Down) Restaurant (ITE Code 932). **Table 4** shows the trip generation expected to be generated by the proposed project. Two trip generation discounts were then applied: a TDM trip discount of 3.9 percent as per City of Mountain View TDM trip reduction strategies[1], and a pass-by trip reduction of 43 percent for land use High-Turnover (Sit-Down) Restaurant as per the ITE *Trip Generation Manual*. The proposed project is expected to generate approximately 66 weekday a.m. peak hour trips (37 inbound trips, 29 outbound trips) and 47 weekday p.m. peak hour trips (26 inbound trips, 21 outbound trips).

Pass-by trips are made as intermediate stops on the way from an origin to a primary trip destination, without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent street or roadway that offers direct access to the generator. Pass-by trips are not diverted from another roadway.

4.2 Project Trip Distribution and Assignment

Trip distribution is a process that determines what proportion vehicles would be expected to travel between a project site and various destinations outside the project study area. The process of trip assignment determines the various routes that vehicles would take from the project site to each destination using the calculated trip distribution. Trip distribution assumptions for the proposed project were developed based on existing travel patterns, and knowledge of the study area. **Figure 9** illustrates the trip distribution percentages developed for the proposed project and the trip assignment of project volumes developed for the proposed project. The assigned project trips were then added to adjusted traffic volumes under Existing Conditions to generate Existing plus Project Conditions traffic volumes.

[1] *City of Mountain View Draft 2030 General Plan EIR*, Table IV.C-1, pg. 116: A 3.9 percent peak hour trip reduction was used to estimate the average impact of TDM plans in this geographic area of the city for the purposes of transportation demand modeling. The same reduction was used here to estimate the minimum trip reduction of an unspecified TDM plan. Actual trip reductions from the finalized TDM plan may be higher.

Table 4: Project Trip Generation

Proposed Land Uses (ITE Code)	Building Area	Units	Daily		AM Peak						PM Peak					
			Rate	*Trips*	*Rate*	*In %*	*Out %*	*In*	*Out*	*Total*	*Rate*	*In %*	*Out %*	*In*	*Out*	*Total*
Hotel (310)	40	rooms	*8.17*	327	*0.53*	*59*	*41*	13	9	21	*0.60*	*51*	*49*	12	12	24
High Turnover (Sit-Down) Restaurant (ITE Code 932)	4.4	k.s.f	*127.15*	559	*10.81*	*55*	*45*	26	21	48	*9.85*	*60*	*40*	26	17	43
Grand Total				**886**				**39**	**30**	**69**				**38**	**29**	**68**
TDM Measure Reduction, 3.9%[1]				-10				-2	-1	-3				-1	-1	-2
Peak Hour Pass by Trip Reduction (ITE) , 43%[2]				-19										-11	-7	-19
Net Total Trips				**858**				**37**	**29**	**66**				**26**	**21**	**47**

Notes:

Source - ITE Trip Generation Manual, 9th Edition (2012).

Rates per room for hotel use; per 1,000 s.f. for restaurant use.

[1]TDM Measure Reduction, 3.9% peak hour/1.1% daily based on *City of Mountain View General Plan 2030 EIR*, Table IV.C-1: TDM Trip Reduction Summary.

[2]ITE Pass-by reduction rate of 43% for High Turnover (Sit-Down) Restaurant (ITE Code 932).

Project Trip Distribution and Assignment

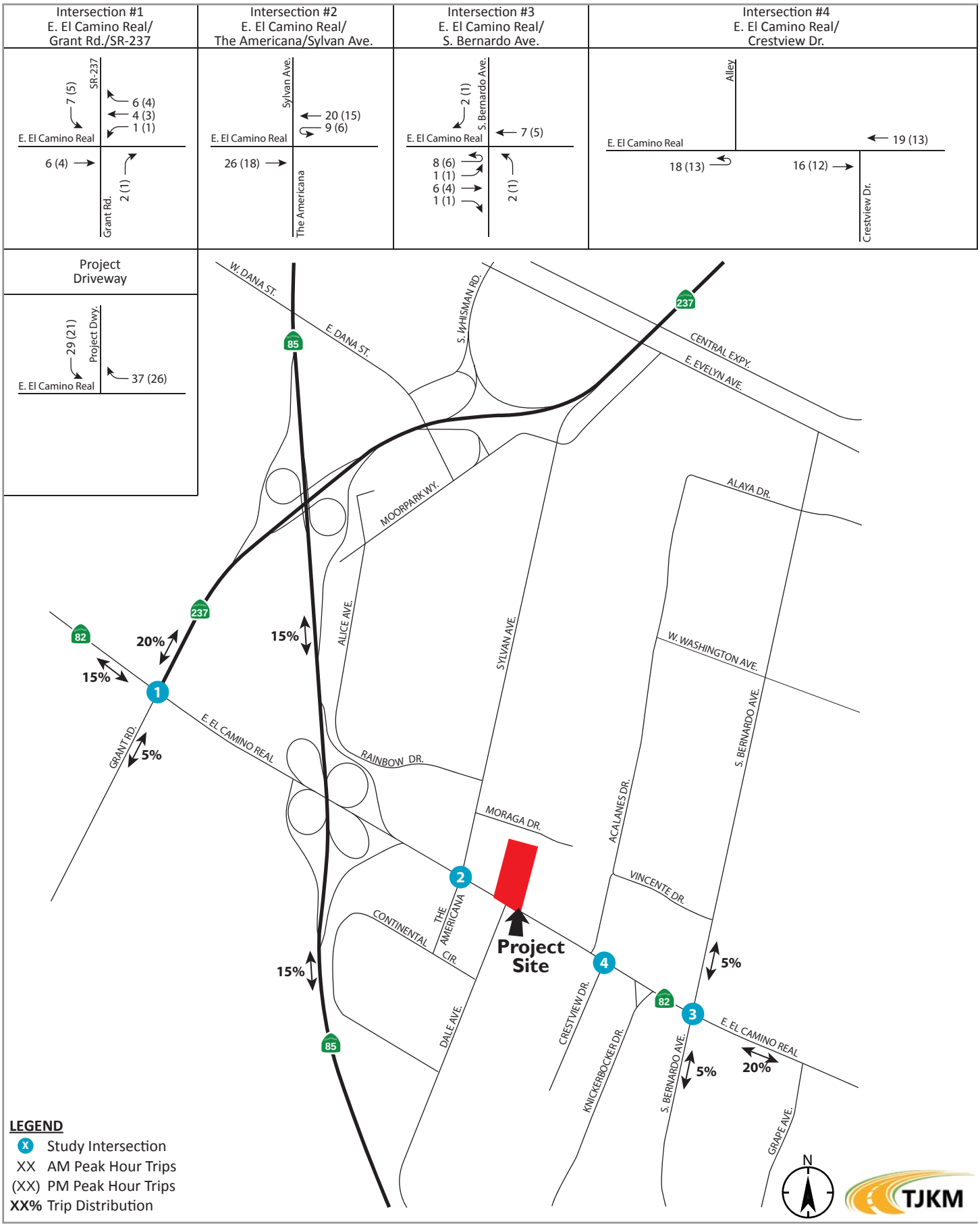

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Figure 9

4.3 Intersection Level of Service Analysis – Existing plus Project Conditions

The intersection LOS analysis results for Existing plus Project Conditions are summarized in **Table 5**. The results for Existing Conditions are included for comparison purposes, along with the projected increases in critical delay and critical V/C ratios. Detailed calculation sheets for Existing plus Project Conditions are contained in **Appendix D**. Under this scenario, all intersections are expected to continue operating within applicable jurisdictional standards LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.

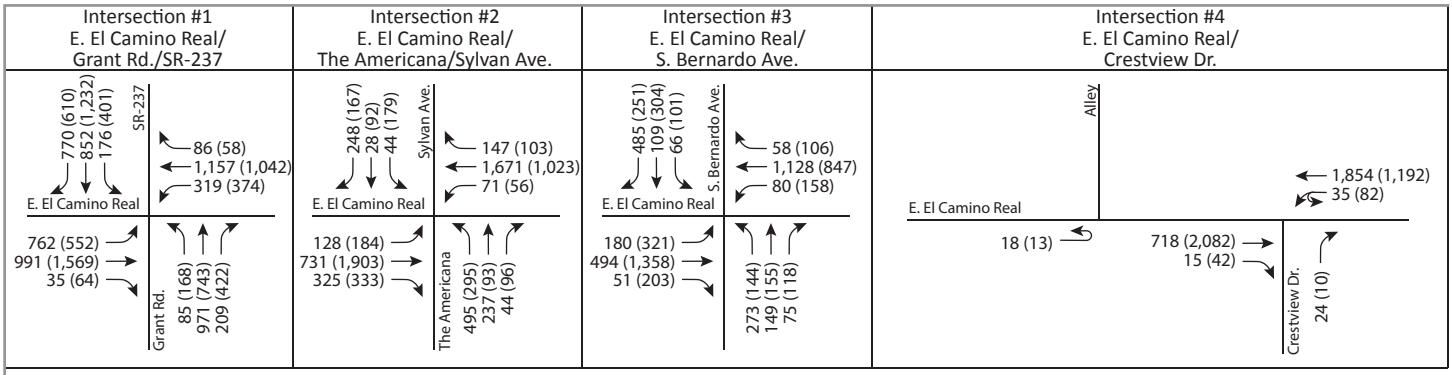
Based on the City of Mountain View and VTA's impact criteria the project is expected to have a **less-than-significant impact** at all the study intersections evaluated in this TIA. **Figure 10** shows projected turning movement volumes at all of the study intersections for Existing plus Project Conditions.

Table 5: Intersection Level of Service Analysis – Existing plus Project Conditions

ID	*Study Intersections*	*Control*	*Peak Hour*[1]	*Existing Conditions*		*Existing plus Project Conditions*		*Change In*	
				Delay[2]	*LOS*[3]	*Delay*[2]	*LOS*[3]	*Critical V/C*[4]	*Critical Delay*[5]
1	East El Camino Real/ SR-237/Grant Road*	Signalized	AM	68.4	E	68.8	E	0.002	0.8
			PM	49.7	D	49.9	D	0.001	0.2
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	37.7	D	37.7	D	0.004	0.1
			PM	31.9	C	31.9	C	0.005	0.0
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	43.1	D	43.5	D	0.010	0.8
			PM	36.2	D	36.3	D	0.002	0.0
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	9.9	A	9.9	A	0.001	0.0
			PM	24.8	C	25.1	D	0.003	0.0

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Change in critical volume to capacity ratio between Existing and Existing plus Project Conditions
[5]Change in average critical movement delay between Existing and Existing plus Project Conditions
[6]CMP intersections with LOS E threshold

Existing plus Project Conditions Traffic Volumes



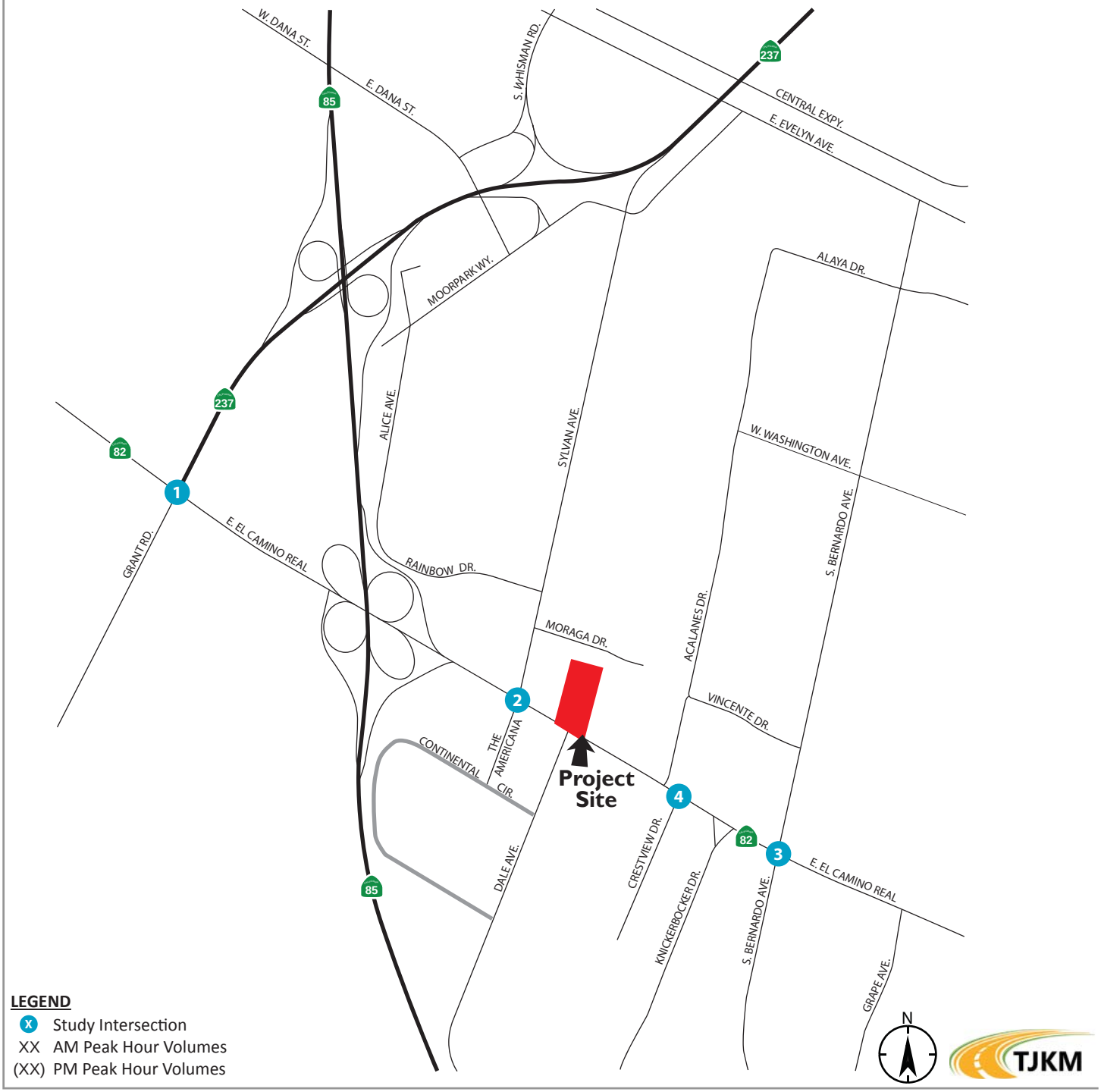


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Figure 10

5.0 BACKGROUND (EXISTING PLUS APPROVED PROJECTS) CONDITIONS

This scenario is similar to Existing Conditions, but with the addition of traffic from approved and pending developments located within the immediate vicinity of the project. Approved Trip Inventory (ATI) volumes were added to the Existing Conditions volumes to project the peak hour turning movements at the study intersections under Background Conditions.

Approved and pending developments located within the immediate vicinity of the project are:

- 1101 West El Camino Real – 52 residential units
- 250 Bryant Street – 68,000 sf of office use
- 1720 and 1730 El Camino Real – 162 residential units
- 605 Castro Street – 28,000 sf of commercial use and 8 residential units
- 801 W El Camino Real – 10,800 sf of commercial use and 164 residential units
- 582 Hope street – 96,600 sf commercial and retail use and 12 residential units

Figure 10 shows projected turning movement volumes at all of the study intersections for Background Conditions for both a.m. and p.m. peak hours. **Appendix E** includes a list of approved and pending projects trips.

5.1 Intersections Level of Service Analysis – Background Conditions

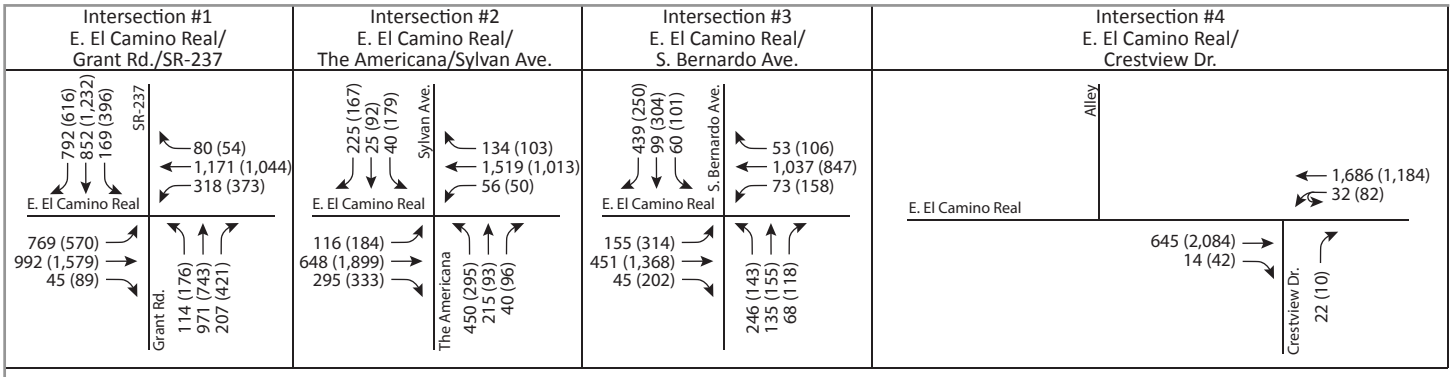
The intersection LOS analysis results for Background Conditions are summarized in **Table 6**. Detailed calculation sheets for Background Conditions (Existing plus Approved Projects) are contained in **Appendix E**. Under this scenario, all intersections are expected to continue operating within applicable jurisdictional standards LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.

Table 6: Intersection Level of Service Analysis – Background Conditions

ID	*Study Intersections*	*Control*	*Peak Hour*[1]	*Background Conditions*			
				Delay[2]	*LOS*[3]	*Critical V/C*[4]	*Critical Delay*[5]
1	East El Camino Real/ SR-237/Grant Road[6]	Signalized	AM	72.5	E	1.103	119.0
			PM	51.3	D	0.970	65.0
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	35.3	D	0.744	38.2
			PM	31.9	C	0.687	31.0
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	40.8	D	0.729	42.9
			PM	36.1	D	0.672	34.2
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	9.7	A	0.034	0.2
			PM	25.1	D	0.316	0.6

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Critical volume to capacity ratio
[5]Critical movement delay
[6]CMP intersections with LOS E threshold

Background Conditions Traffic Volumes



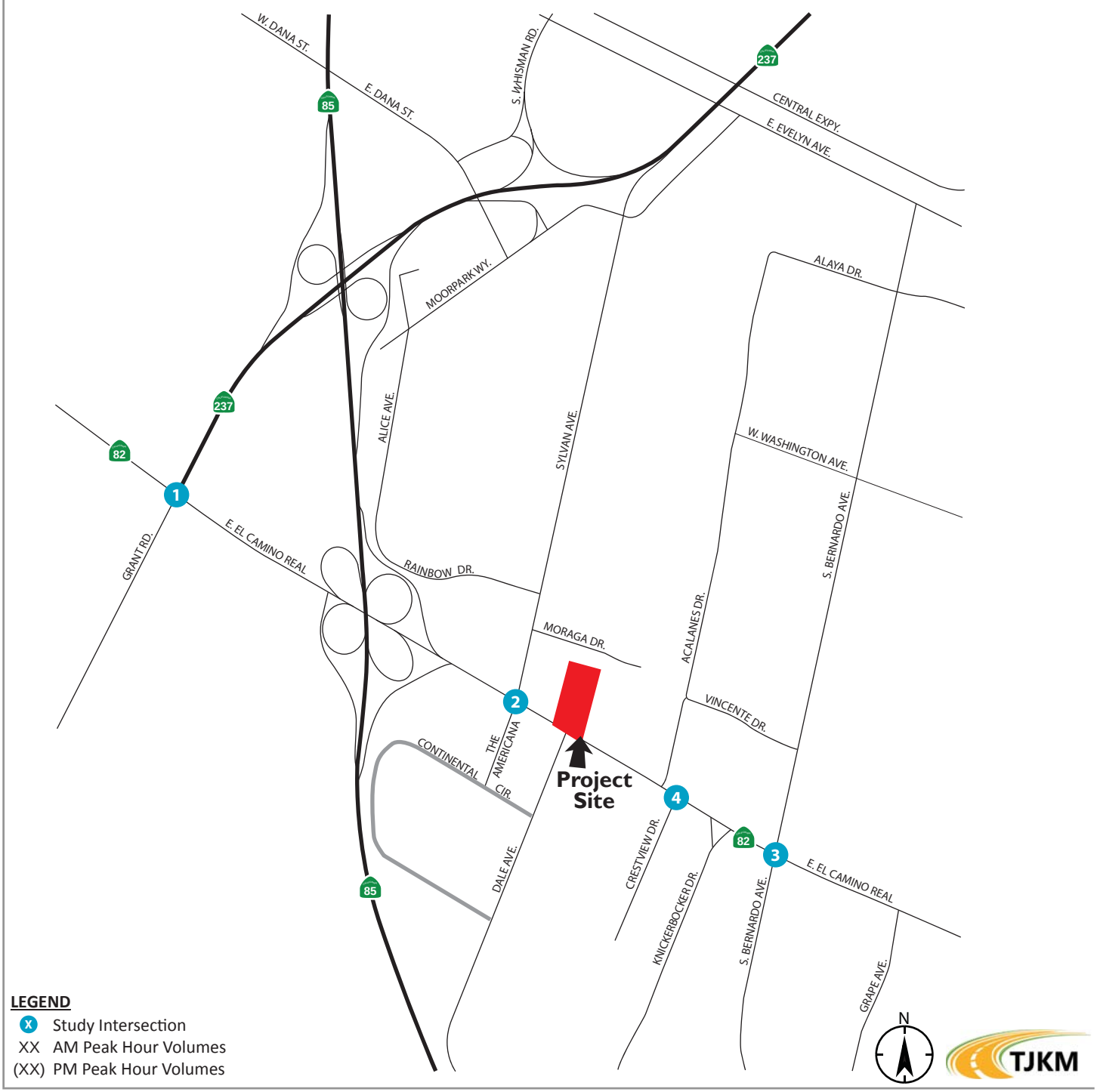


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Figure 11

6.0 BACKGROUND PLUS PROJECT CONDITIONS

This scenario is identical to Background Conditions, but with the addition of projected traffic from the proposed project. Trip generation, distribution, and assignment for the proposed project are identical to that assumed under Existing plus Project Conditions.

6.1 Intersection Level of Service Analysis – Background plus Project Conditions

The intersection LOS analysis results for Background plus Project Conditions are summarized in **Table 7**. Detailed calculation sheets for Background plus Project Conditions are contained in **Appendix F**. The results for Background Conditions are included for comparison purposes, along with the projected increases in critical delay and critical V/C ratios. Under this scenario, all intersections are expected to continue operating within applicable jurisdictional standards LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.

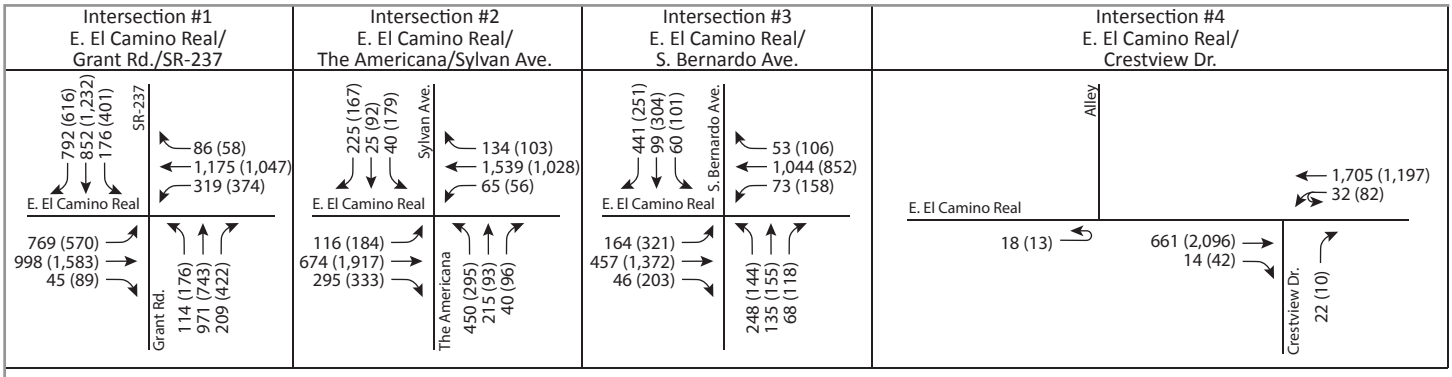
Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a **less-than-significant impact** at all the study intersections evaluated in this TIA. **Figure 12** shows projected turning movement volumes at all of the study intersections for Background plus Project Conditions.

Table 7: Intersection Level of Service Analysis – Background plus Project Conditions

ID	*Study Intersections*	*Control*	*Peak Hour*[1]	*Background Conditions*		*Background plus Project Conditions*		*Change In*	
				Delay[2]	*LOS*[3]	*Delay*[2]	*LOS*[3]	*Critical V/C*[4]	*Critical Delay*[5]
1	East El Camino Real/ SR-237/Grant Road[6]	Signalized	AM	72.5	E	72.9	E	0.002	0.8
			PM	51.3	D	51.5	D	0.001	0.3
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	35.3	D	35.3	D	0.005	0.0
			PM	31.9	C	31.9	C	0.005	0.0
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	40.8	D	41.1	D	0.009	0.5
			PM	36.1	D	36.3	D	0.002	0.0
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	9.7	A	9.7	A	0.001	0.0
			PM	25.1	D	25.5	D	0.003	0.1

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Change in critical volume to capacity ratio between Background and Background plus Project Conditions
[5]Change in average critical movement delay between Background and Background plus Project Conditions
[6]CMP intersections with LOS E threshold

Background plus Project Conditions Traffic Volumes



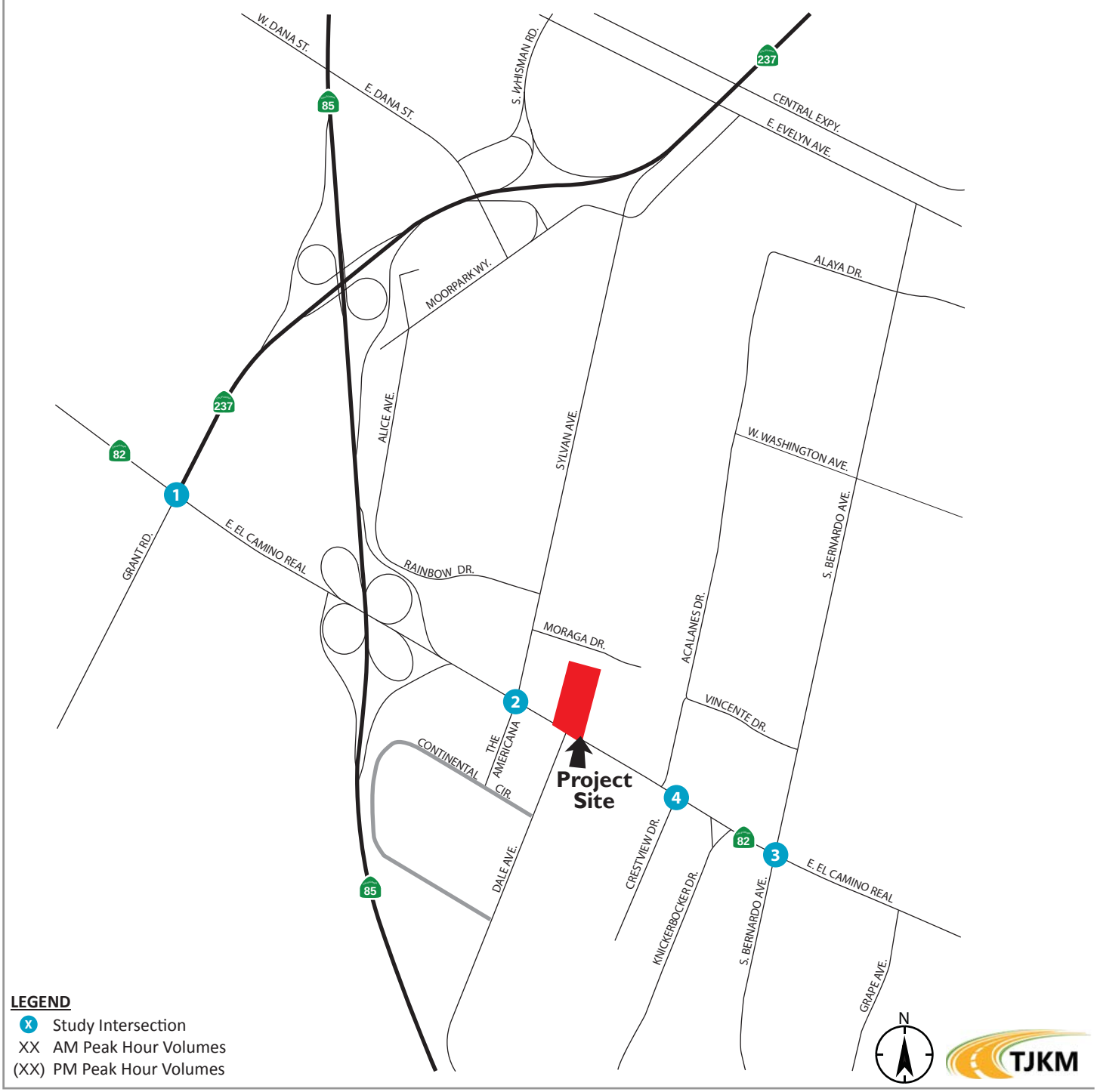


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Figure 12

7.0 CUMULATIVE CONDITIONS

This section details expected traffic conditions at the study intersections under Cumulative (No Project) Conditions. This analysis scenario is defined as baseline conditions without the proposed project in year 2030, based on the 2030 Mountain View Travel Demand Model. The model results for the study intersections of East El Camino Real/SR-237/Grant Road and East El Camino Real/Sylvan Avenue/The Americana (found in the 2014 El Camino Real Precise Plan Environmental Impact Report) were used to calculate an annual growth factor from 2017 existing traffic conditions. This growth factor was then applied to existing traffic volumes at the remaining two study intersections to estimate 2030 traffic volumes. **Figure 13** shows projected turning movement volumes at all of the study intersections for Cumulative Conditions.

7.1 Intersection Level of Service Analysis – Cumulative Conditions

The intersection LOS analysis results for Cumulative Conditions are summarized in **Table 8**. Detailed calculation sheets for Cumulative Conditions are contained in **Appendix G**. Under this scenario, the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to operate within applicable jurisdictional standards LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.

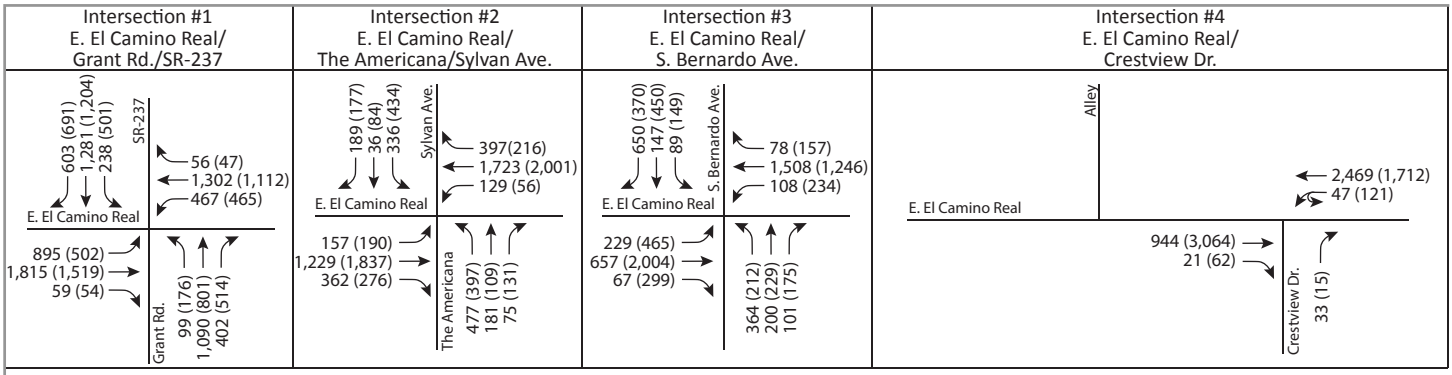
The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour. At side-street stop controlled intersections, the high level of delay on the side street is due to stopped vehicles waiting for gaps between vehicles on the through street. As through volumes increase, adequate gaps become less frequent. A designation of LOS F does not indicate a deterioration of conditions on the through street.

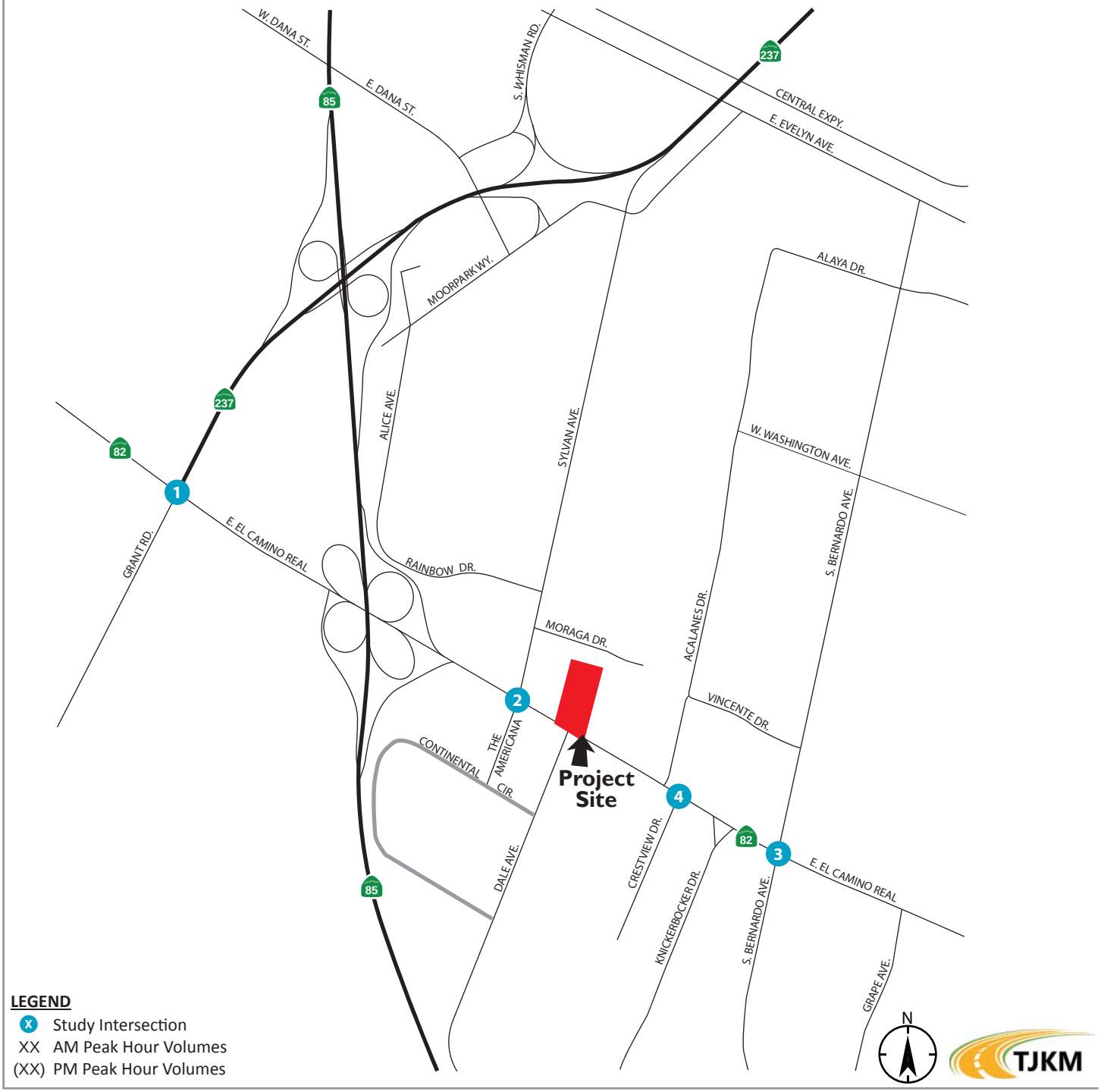
Table 8: Intersection Level of Service Analysis – Cumulative Conditions

ID	*Study Intersections*	*Control*	*Peak Hour*[1]	*Cumulative Conditions*			
				Delay[2]	*LOS*[3]	*Critical V/C*[4]	*Critical Delay*[5]
1	East El Camino Real/ SR-237/Grant Road[6]	Signalized	AM	65.7	E	1.023	89.8
			PM	59.9	E	1.017	79.2
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	43.4	D	0.927	50.4
			PM	54.1	D	1.019	72.2
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	72.6	E	1.055	90.5
			PM	56.7	E	0.985	60.7
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	10.6	B	0.066	0.2
			PM	215.5	F	1.163	5.3

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Change in critical volume to capacity ratio between Cumulative and Cumulative plus Project Conditions
[5]Change in average critical movement delay between Cumulative and Cumulative plus Project Conditions
[6]CMP intersections with LOS E threshold

Cumulative Conditions Traffic Volumes





LEGEND

- X Study Intersection
- XX AM Peak Hour Volumes
- (XX) PM Peak Hour Volumes

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Figure 13

8.0 CUMULATIVE PLUS PROJECT CONDITIONS

This scenario is similar to the Cumulative Conditions, with the addition of projected traffic from the proposed project. Trip generation, distribution, and assignment for the proposed project are identical to that assumed under Existing plus Project Conditions. **Figure 14** shows projected turning movement volumes at all the study intersections for Cumulative plus Project Conditions.

8.1 Intersection Level of Service Analysis – Cumulative plus Project Conditions

The intersection LOS analysis results for Cumulative plus Project Conditions are summarized in **Table 9**. Detailed calculation sheets for Cumulative plus Project Conditions are contained in **Appendix H**. The results for Cumulative Conditions are included for comparison purposes, along with the projected increases in critical delay and critical V/C ratios.

Under this scenario, the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to operate within applicable jurisdictional standards LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours..

The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour. As under Cumulative Conditions, a designation of LOS F reflects deterioration of conditions on the side street and does not indicate unacceptable conditions on the through street. The LOS Threshold criteria for unsignalized intersections indicates "if project generated traffic is added to an intersection already operating unacceptably and the MUTCD peak hour signal warrant volume threshold is met, the impact is significant."

The proposed project adds additional traffic at the intersection of East El Camino Real/Crestview Drive (projected to operate at LOS F during the p.m. peak hour under Cumulative Conditions without the project traffic). However, since the MUTCD peak hour signal warrant threshold is not met in either the a.m. or p.m. peak hours, the intersection does not meet both impact thresholds (LOS F and peak hour signal warrant) during either the a.m. and p.m. peak hours. Therefore, based on the City of Mountain View unsignalized intersections threshold criteria, the East El Camino Real/Crestview Drive intersection would have a less-than-significant impact. The peak hour signal warrant worksheets are included in **Appendix H**.

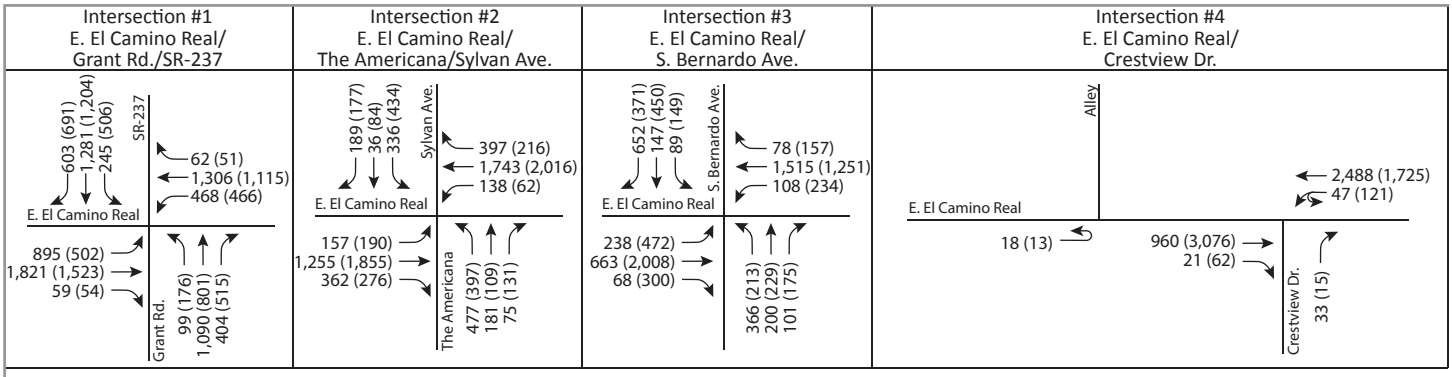
Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a **less-than-significant impact** at all the study intersections evaluated in this TIA.

Table 9: Intersection Level of Service Analysis – Cumulative plus Project Conditions

ID	*Study Intersections*	*Control*	*Peak Hour*[1]	*Cumulative Conditions*		*Cumulative plus Project Conditions*		*Change In*	
				Delay[2]	*LOS*[3]	*Delay*[2]	*LOS*[3]	*Critical V/C*[4]	*Critical Delay*[5]
1	East El Camino Real/ SR-237/Grant Road[6]	Signalized	AM	65.7	E	66.2	E	0.002	0.8
			PM	59.9	E	60.3	E	0.002	0.4
2	East El Camino Real/ Sylvan Avenue/The Americana	Signalized	AM	43.4	D	43.6	D	0.005	0.5
			PM	54.1	D	54.5	D	0.003	0.8
3	East El Camino Real/ South Bernardo Avenue	Signalized	AM	72.6	E	74.8	E	0.009	3.1
			PM	56.7	E	57.2	E	0.001	0.4
4	East El Camino Real/ Crestview Drive	Unsignalized	AM	10.6	B	10.6	B	0.001	0.0
			PM	215.5	F	221.0	F	0.016	0.2

Notes:
[1] AM – morning peak hour, PM – evening peak hour
[2] Delay – Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop controlled intersections. Total control delay for the worst movement is presented for side-street stop – controlled intersections.
[3]LOS – Level of Service
[4]Change in critical volume to capacity ratio between Cumulative and Cumulative plus Project Conditions
[5]Change in average critical movement delay between Cumulative and Cumulative plus Project Conditions
[6]CMP intersections with LOS E threshold

Cumulative plus Project Conditions Traffic Volumes



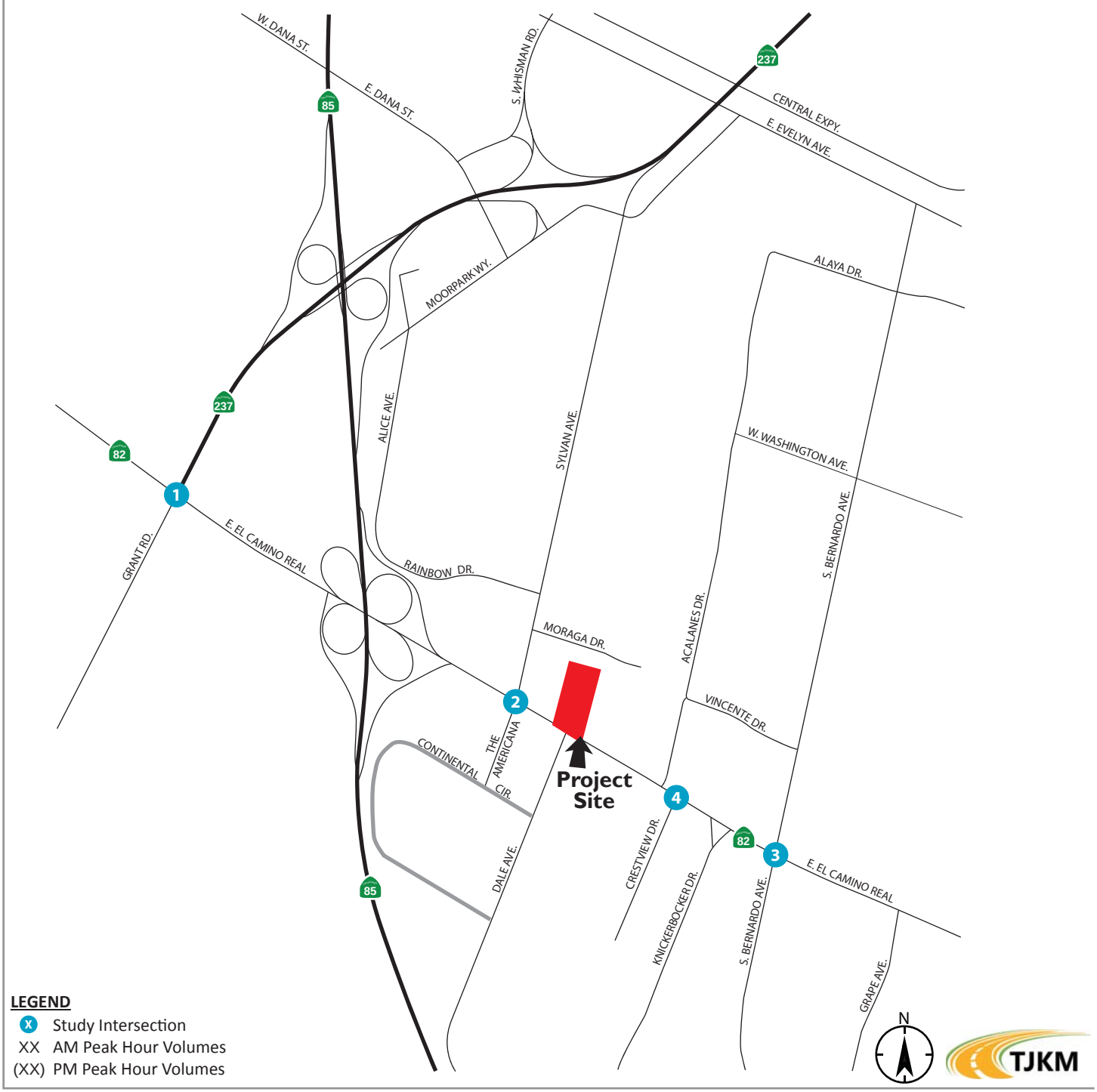


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Figure 14

9.0 ADDITIONAL ANALYSES

The following sections provide additional analyses of other transportation issues associated with the project site, including:

- Queuing analysis
- Site access and onsite circulation;
- Parking analysis;
- Pedestrian, bicycle and transit services, and
- Transportation demand management, greenhouse gas reduction, and vehicle miles traveled

Unlike the LOS impact methodology, which is adopted by the City Council, the analyses in these sections are based on professional judgment in accordance with the standards and methods employed by traffic engineers. Although operational issues are not considered CEQA impacts, they do describe traffic conditions that are relevant to describing the project environment.

9.1 Queuing Analysis

Queuing Analysis at Signalized Study Intersections

TJKM conducted a vehicle queuing and storage analysis for all exclusive left turn pockets at select study intersections where project traffic is added under Existing plus Project Conditions. None of the study intersections had exclusive right turn pockets with added project trips. The 95th percentile (maximum) queues were analyzed using the HCM 2000 Queue methodology contained in TRAFFIX software, assuming an average vehicle length of 20 feet. Detailed calculations are included in the LOS appendices corresponding to each analysis scenario. **Table 10** summarizes the 95th percentile queue lengths at selected study intersections under all Existing and Existing plus Project Conditions scenarios. Under Existing conditions, the southbound left turn lanes on SR-237 would experience some queue overflow of approximately two car lengths. However, the project would add less than one car length to this queue. The proposed project *does not create a significant impact* by itself on the expected left-turn or right-turn queues at the study intersections.

Table 10: 95th Percentile Queues at Turn Pockets Affected by Project Traffic

ID	*Study Intersections*	*Lane Group*	*Storage Length per Lane*	*Storage Lanes*	*Existing*		*Existing plus Project*	
					AM	*PM*	*AM*	*PM*
1	East El Camino Real/ SR-237/Grant Road[4]	SBL	200	2	180	**440**	180	**460**
		WBL	200	2	280	400	280	400
2	East El Camino Real/ Sylvan Avenue/The Americana	WBL	275	2	60	60	60	60
3	East El Camino Real/ South Bernardo Avenue	NBL	175	2	340	200	340	200
		EBL	465	1	320	440	340	460

Notes: Storage length and 95th percentile queue is expressed in feet per lane. **Bold** indicates overflow.

9.2 Site Access and On-Site Circulation

This section analyzes site access and internal circulation for vehicles, pedestrians, bicycles, and transit vehicles based on the site plan presented on **Figure 2**. TJKM reviewed internal and external access for the project site for vehicles, pedestrians, and bicycles. The site access and on-site circulation is considered adequate.

Site Access

The proposed site plan (dated July 28, 2017) shows one driveway on East El Camino Real. The project would extend the corner of the building closer to the driveway, but it would not overly restrict the sight triangles of drivers entering or exiting the driveway. Pedestrian and bicycle access will continue to be adequate, and the project site is close to major transit connections. The site plan also shows new bicycle parking close to the main entrance of the hotel. With the addition of the proposed project, access to the site would continue to be adequate.

On-Site Circulation

The proposed project would eliminate two accessible parking spaces near the street but would not narrow the main drive aisle. The site plan shows minor changes to the existing parking lot, with no reductions to existing turning radii or truck access. On-site circulation with the proposed project will continue to be adequate for trash collection and emergency vehicles.

9.3 Parking Analysis

This section discusses vehicle parking for the proposed project and includes an assessment of whether the proposed parking supply is adequate. The existing hotel provides 152 total parking spaces, which would be reduced to 149 parking spaces with the proposed project. The proposed site plan shows minor changes to the parking lot layout and supply, relative to the existing parking lot. The number of accessible spaces would remain unchanged and adequate, and bicycle parking would be greatly expanded. TJKM previously studied parking demand and parking supply requirements for the proposed project in a technical memorandum dated September 29, 2017. This study concluded that parking requirements should be based on parking demand observations at the project hotel. Although the planned parking supply is less than would be required under the Mountain View Zoning Ordinance, the supply could accommodate parking demand from the hotel at 97 percent occupancy based on the observed parking demand rate at the proposed hotel. This does not take into consideration any reduction in parking demand due to the planned Transportation Demand Management (TDM) program being prepared separately. With even a small reduction in parking demand as a result of the TDM plan, it is expected that the parking supply for the proposed project will be adequate. In addition, historical occupancy rates at this hotel between 2012 and 2016 indicated a peak occupancy of 88 percent. TJKM concluded that with a transportation demand management program proposed for the hotel, there should be no parking capacity issues, even in the rare event of 100 percent hotel occupancy.

9.4 Pedestrian, Bicycle, and Transit Impacts

Pedestrian Impacts

Pedestrian access to the project site will be exclusively by existing sidewalks on East El Camino Real. East El Camino Real and the surrounding neighborhoods feature continuous sidewalks on both sides of the street throughout, with few exceptions. Crosswalks are located at all signalized intersections, with a mix of traditional, countdown, and accessible pedestrian signals. Crosswalks are also found along East El Camino Real at most side streets. The project is located close to numerous retail, service, and restaurant uses, as well as multiple transit connections. Increased pedestrian activity on East El Camino Real is in line with goals outlined in the El Camino Real Precise Plan.

An impact to pedestrians occurs if the proposed project disrupts existing pedestrian's facilities; or create inconsistencies with planned pedestrian facilities or adopted pedestrian system plans, guidelines, policies, or standards. The proposed project provides adequate and appropriate facilities for safe non-motorized mobility. The proposed project will have adequate pedestrian access to the project site from the surrounding area, including the Mountain View Transit Center. The proposed project will not result in any impacts to existing or planned pedestrian facilities in the immediate vicinity of the project. The proposed project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is ***less than significant***.

Bicycle Impacts

Direct bicycle access to the project site is limited, as bicycling conditions on East El Camino Real itself require caution. However, the project is located very close to Sylvan Avenue/The Americana, which is a designated bicycle boulevard that connects to downtown Mountain View via West Dana Street and East Evelyn Avenue. The Stevens Creek Trail is readily accessible via El Camino Real (west), Dale Avenue (south), and East Dana Street (north) providing connectivity with major employment centers. Encouraging the use of these bicycle facilities is in line with the bike plans enacted by Santa Clara County, VTA, and the City of Mountain View. Improving bicycle facilities on El Camino Real is a long-term regional goal.

An impact to bicyclists occurs if the proposed project disrupts existing bicycle facilities; or conflicts or creates inconsistencies with adopted bicycle system plans, guidelines, policies or standards as per the City of Mountain View bicycle impact criteria. The project is expected to generate few additional bicycle trips on existing and planned bicycle facilities. The project does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is ***less than significant***.

Transit Impacts

The VTA CMP guideline for adequate transit access considers 2,000 feet a reasonable walking distance to the nearest transit stop. The project site is well connected to transit, with stops for both the VTA route 22 bus and the Mountain View Community Shuttle close by (within 500 feet) at East El Camino Real and Sylvan Avenue. The nearest route 53 and rapid route 522 bus stops are less than 0.5 miles away at East El Camino Real and Bernardo. These transit lines connect to the Mountain View and Sunnyvale Caltrain stations, major employment centers including North Bayshore, and numerous other connections to the north and south along East El Camino Real. Transit access to the project is facilitated by adequate

pedestrian facilities between bus stops and the project site. Increased transit activity on the El Camino Real corridor is in line with goals outlined in the El Camino Real Precise Plan and multiple VTA plans.

A proposed project is considered to have a significant impact on transit if it conflicts with existing or planned transit facilities, or is expected to generate additional transit trips and does not provide adequate facilities for pedestrians and bicyclists to access transit routes and stops. Spread among multiple bus routes, the existing transit service can accommodate the proposed demand. The transit service within the immediate project site operates within capacity, and additional trips generated by the proposed project could be accommodated by existing bus services. Therefore, impacts to transit service are expected to be ***less than significant***.

9.5 Other Transportation Issues

Transportation Demand Management

The proposed project was analyzed under the assumption that a Transportation Demand Management (TDM) program would be implemented, in line with requirements in the El Camino Real Precise Plan and the Greenhouse Gas Reduction Program and as a condition of approval. The TDM program is being developed separate from this study and must be adequate to provide the minimum trip reduction of 3.9 percent used for trip generation here. As mentioned above, TDM programs can also be applied to reduce parking supply requirements by up to 20 percent in the El Camino Real Precise Plan area.

TDM programs may utilize any of several strategies to minimizing single occupancy vehicle trips. These include, but are not limited to, providing an on-site TDM coordinator to encourage and facilitate carpooling and use of alternate modes of transportation, providing discounted transit passes to employees, providing secure bicycle parking, and providing shuttles for guests traveling to locations such as airports, train stations, and major employers. The specific mix of TDM strategies to be applied to this project are currently under consideration.

Greenhouse Gas Reduction Program

The City of Mountain View Greenhouse Gas Reduction Program mandates that new projects creating 50 or more new jobs achieve a reduction in the number of peak hour drive-alone commute vehicles. In the El Camino Real Greenhouse Gas Strategy Area, the minimum reduction required is 4 percent. The City specifies the implementation and monitoring of a Transportation Demand Management program in order to achieve this target.

Although the project is not expected to create 50 new jobs, and would therefore not be subject to this 4 percent trip reduction requirement, a TDM program is already planned for the proposed project as a condition of approval. That program is expected to reduce total vehicle trips by a minimum of 3.9 percent, based on estimates of average TDM program results in the El Camino Real planning area as described in the *2030 General Plan EIR*.

Vehicle Miles Traveled

In accordance with SB 743, daily VMT projects for the City of Mountain View versus the average of the San Francisco Bay Area are presented based on the Metropolitan Transportation Commission (MTC) travel demand forecast model (http://analytics.mtc.ca.gov/foswiki/Main/VMTPerWorker), accessed on August 8, 2017. The Year 2010 Plan Bay Area model forecasted a daily VMT of 26.4 miles per worker employed in

this area of Mountain View (Traffic Analysis Zone 391), while the San Francisco Bay Area average daily VMT is 23.8 miles per worker. Given that no standard approach or guidelines have been finalized under SB 743, the VMT presented in this report is for informational purposes only and is not used to determine whether the project's impacts are significant for purposes of CEQA. VMT guidelines are currently being developed at the statewide level.

10. CONCLUSIONS AND RECOMMENDATIONS

- The proposed hotel expansion is expected to generate a net of 858 daily trips, of which 66 are generated in the a.m. peak hour, and 47 are generated in the p.m. peak hour. The proposed trip generation includes discounts for a restaurant pass-by trip reduction and Transportation Demand Management (TDM) based trip reduction.
- Under Existing Conditions , all of the study intersections operate at acceptable service levels LOS D/E (Mountain View or Sunnyvale and VTA CMP) or better during both a.m. and p.m. peak hours.
- Under Existing plus Project Conditions, all intersections are expected to continue operating within applicable jurisdictional standards during both a.m. and p.m. peak hours. Based on the City of Mountain View and VTA's impact criteria the project is expected to have a less-than-significant impact at all the study intersections.
- Under Background (Existing plus Approved projects) Conditions, all of the study intersections operate at acceptable service levels during both a.m. and p.m. peak hours
- Under Background plus Project Conditions, all intersections are expected to continue operating within applicable standards during both peak hours. Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a less-than-significant impact at all the study intersections.
- Under Cumulative Conditions, the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to operate within standards during peak hours. The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour.
- Under Cumulative plus Project Conditions , the intersections of East El Camino Real/SR-237/Grant Road, East El Camino Real/Sylvan Avenue/The Americana and East El Camino Real/South Bernardo Avenue are expected to continue to operate within jurisdictional standards during both peak hours. The intersection of East El Camino Real/Crestview Drive is expected to operate at acceptable LOS B in the a.m. peak hour but an unacceptable LOS F in the p.m. peak hour. However, the peak hour signal warrants are not met for the p.m. peak hour, so the impact is less-than-significant. Based on the City of Mountain View and VTA's impact criteria, the project is expected to have a less-than-significant impact at all the study intersections evaluated in this TIA.
- Under Existing and Existing plus Project Conditions, the left turn pocket at the CMP intersection of El Camino Real/SR-237/Grant Road experiences some overflow with 95th percentile queue lengths, during the p.m. peak hour only. The proposed project would increase the 95th percentile queue length by less than one car length. All other dedicated turn pockets provide adequate storage length to accommodate 95th percentile queues affected by project traffic. The proposed project *does not create a significant impact* by itself on the expected left-turn or right-turn queues at the study intersections.

- The proposed site plan (dated July 28, 2017) shows one driveway on East El Camino Real. The proposed project would include minor changes to the existing parking lot, with no reductions to existing turning radii or truck access. The new site plan will continue to provide adequate access for trash collection and emergency vehicles.
- The proposed project would make minor changes to the existing hotel parking lot but would reduce the total supply of parking from 152 spaces to 149 spaces. The number of accessible spaces would remain unchanged and adequate, and bicycle parking would be greatly expanded. TJKM previously studied parking demand and parking supply requirements for the proposed project in a technical memorandum dated September 29, 2017. This study concluded that parking requirements should be based on parking demand observations at the project hotel, which found a parking demand rate of 0.77 spaces per occupied room. Although the planned parking supply is less than would be required under the Mountain View Zoning Ordinance, the supply could accommodate parking demand from the hotel at 97 percent occupancy based on the observed parking demand rate at the proposed hotel. This does not take into consideration any reduction in parking demand due to the planned Transportation Demand Management (TDM) program being prepared separately. With even a small reduction in parking demand as a result of the TDM plan, it is expected that the parking supply for the proposed project will be adequate. In addition, historical occupancy rates at this hotel between 2012 and 2016 indicated a peak occupancy of 88 percent. TJKM concluded that with a transportation demand management program proposed for the hotel, there should be no parking capacity issues, even in the rare event of 100 percent hotel occupancy.
- The proposed project provides adequate and appropriate facilities for safe non-motorized mobility. There is adequate pedestrian access to the project site from the surrounding area. The proposed project does not conflict with existing and planned pedestrian facilities; therefore, the impact to pedestrian facilities is ***less-than-significant***.
- The project is expected to generate few additional bicycle trips on existing and planned bicycle facilities and does not conflict with existing and planned bicycle facilities; therefore, the impact to bicycle facilities is ***less than significant***.
- The project site is located within 50 feet of four local transit stops and within half a mile of the nearest rapid transit stops. The VTA CMP guideline for adequate transit access considers 2,000 feet a reasonable walking distance to the nearest transit stop. Thus, the project site is adequately served by the transit service. Spread amongst multiple bus routes, the existing transit service can accommodate the proposed demand. The transit service within the immediate project site operates within capacity, and additional trips generated by the proposed project could be accommodated by existing bus services. Therefore, impacts to transit service are expected to be ***less than significant***.

Appendix A – Level of Service Methodology

APPENDIX A – LEVEL OF SERVICE METHODOLOGY

APPENDIX A

LEVEL OF SERVICE

The description and procedures for calculating capacity and level of service are found in Transportation Research Board, *Highway Capacity Manual 2000*. *Highway Capacity Manual 2000* represents the latest research on capacity and quality of service for transportation facilities.

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service is a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of service are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with level-of-service A representing the best operating conditions and level-of-service F the worst. Each level of service represents a range of operating conditions and the driver's perception of these conditions. Safety is not included in the measures that establish service levels.

A general description of service levels for various types of facilities is shown in Table A-I.

Table A-I

Level of Service Description

Facility Type	**Uninterrupted Flow**	**Interrupted Flow**
	Freeways Multi-lane Highways Two-lane Highways Urban Streets	Signalized Intersections Unsignalized Intersections Two-way Stop Control All-way Stop Control
LOS		
A	Free-flow	Very low delay.
B	Stable flow. Presence of other users noticeable.	Low delay.
C	Stable flow. Comfort and convenience starts to decline.	Acceptable delay.
D	High density stable flow.	Tolerable delay.
E	Unstable flow.	Limit of acceptable delay.
F	Forced or breakdown flow.	Unacceptable delay

Source: *Highway Capacity Manual 2000*

Urban Streets

The term “urban streets” refers to urban arterials and collectors, including those in downtown areas.

Arterial streets are roads that primarily serve longer through trips. However, providing access to abutting commercial and residential land uses is also an important function of arterials.

Collector streets provide both land access and traffic circulation within residential, commercial and industrial areas. Their access function is more important than that of arterials, and unlike arterials their operation is not always dominated by traffic signals.

Downtown streets are signalized facilities that often resemble arterials. They not only move through traffic but also provide access to local businesses for passenger cars, transit buses, and trucks. Pedestrian conflicts and lane obstructions created by stopping or standing buses, trucks and parking vehicles that cause turbulence in the traffic flow are typical of downtown streets.

The speed of vehicles on urban streets is influenced by three main factors, street environment, interaction among vehicles and traffic control. As a result, these factors also affect quality of service.

The street environment includes the geometric characteristics of the facility, the character of roadside activity and adjacent land uses. Thus, the environment reflects the number and width of lanes, type of median, driveway density, spacing between signalized intersections, existence of parking, level of pedestrian activity and speed limit.

The interaction among vehicles is determined by traffic density, the proportion of trucks and buses, and turning movements. This interaction affects the operation of vehicles at intersections and, to a lesser extent, between signals.

Traffic control (including signals and signs) forces a portion of all vehicles to slow or stop. The delays and speed changes caused by traffic control devices reduce vehicle speeds, however, such controls are needed to establish right-of-way.

The average travel speed for through vehicles along an urban street is the determinant of the operating level of service. The travel speed along a segment, section or entire length of an urban street is dependent on the running speed between signalized intersections and the amount of control delay incurred at signalized intersections.

Level-of-service A describes primarily free-flow operations. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Control delay at signalized intersections is minimal.

Level-of-service B describes reasonably unimpeded operations. The ability to maneuver within the traffic stream is only slightly restricted, and control delays at signalized intersections are not significant.

Level-of-service C describes stable operations, however, ability to maneuver and change lanes in midblock location may be more restricted than at level-of-service B. Longer queues, adverse signal coordination, or both may contribute to lower travel speeds.

Level-of-service D borders on a range in which in which small increases in flow may cause substantial increases in delay and decreases in travel speed. Level-of-service D may be due to adverse signal progression, inappropriate signal timing, high volumes, or a combination of these factors.

Level-of-service E is characterized by significant delays and lower travel speeds. Such operations are caused by a combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.

Level-of-service F is characterized by urban street flow at extremely low speeds. Intersection congestion is likely at critical signalized locations, with high delays, high volumes, and extensive queuing.

The methodology to determine level of service stratifies urban streets into four classifications. The classifications are complex, and are related to functional and design categories. Table A-II describes the functional and design categories, while Table A-III relates these to the urban street classification.

Once classified, the urban street is divided into segments for analysis. An urban street segment is a one-way section of street encompassing a series of blocks or links terminating at a signalized intersection. Adjacent segments of urban streets may be combined to form larger street sections, provided that the segments have similar demand flows and characteristics.

Levels of service are related to the average travel speed of vehicles along the urban street segment or section.

Travel times for existing conditions are obtained by field measurements. The maximum-car technique is used. The vehicle is driven at the posted speed limit unless impeded by actual traffic conditions. In the maximum-car technique, a safe level of vehicular operation is maintained by observing proper following distances and by changing speeds at reasonable rates of acceleration and deceleration. The maximum-car technique provides the best base for measuring traffic performance.

An observer records the travel time and locations and duration of delay. The beginning and ending points are the centers of intersections. Delays include times waiting in queues at signalized intersections. The travel speed is determined by dividing the length of the segment by the travel time. Once the travel speed on the arterial is determined, the level of service is found by comparing the speed to the criteria in Table A-IV. Level-of-service criteria vary for the different classifications of urban street, reflecting differences in driver expectations.

Table A-II

Functional and Design Categories for Urban Streets

Criterion	Functional Category	
	Principal Arterial	**Minor Arterial**
Mobility function	Very important	Important
Access function	Very minor	Substantial
Points connected	Freeways, important activity centers, major traffic generators	Principal arterials
Predominant trips served	Relatively long trips between major points and through trips entering, leaving, and passing through city	Trips of moderate length within relatively small geographical areas

Criterion	Design Category			
	High-Speed	**Suburban**	**Intermediate**	**Urban**
Driveway access density	Very low density	Low density	Moderate density	High density
Arterial type	Multilane divided; undivided or two-lane with shoulders	Multilane divided: undivided or two-lane with shoulders	Multilane divided or undivided; one way, two lane	Undivided one way; two way, two or more lanes
Parking	No	No	Some	Usually
Separate left-turn lanes	Yes	Yes	Usually	Some
Signals per mile	0.5 to 2	1 to 5	4 to 10	6 to 12
Speed limits	45 to 55 mph	40 to 45 mph	30 to 40 mph	25 to 35 mph
Pedestrian activity	Very little	Little	Some	Usually
Roadside development	Low density	Low to medium density	Medium to moderate density	High density

Source: *Highway Capacity Manual 2000*

Table A-III

Urban Street Class based on Function and Design Categories

Design Category	Functional Category	
	Principal Arterial	**Minor Arterial**
High-Speed	I	Not applicable
Suburban	II	II
Intermediate	II	III or IV
Urban	III or IV	IV

Source: *Highway Capacity Manual 2000*

Table A-IV

Urban Street Levels of Service by Class

Urban Street Class	I	II	III	IV
Range of Free Flow Speeds (mph)	45 to 55	35 to 45	30 to 35	25 to 35
Typical Free Flow Speed (mph)	50	40	33	30
Level of Service	**Average Travel Speed (mph)**			
A	>42	>35	>30	>25
B	>34	>28	>24	>19
C	>27	>22	>18	>13
D	>21	>17	>14	>9
E	>16	>13	>10	>7
F	≤16	≤13	≤10	≤7

Source: *Highway Capacity Manual 2000*

Interrupted Flow

One of the more important elements limiting, and often interrupting the flow of traffic on a highway is the intersection. Flow on an interrupted facility is usually dominated by points of fixed operation such as traffic signals, stop and yield signs. These all operate quite differently and have differing impacts on overall flow.

Signalized Intersections

The capacity of a highway is related primarily to the geometric characteristics of the facility, as well as to the composition of the traffic stream on the facility. Geometrics are a fixed, or non-varying, characteristic of a facility.

At the signalized intersection, an additional element is introduced into the concept of capacity: time allocation. A traffic signal essentially allocates time among conflicting traffic movements seeking use of the same physical space. The way in which time is allocated has a significant impact on the operation of the intersection and on the capacity of the intersection and its approaches.

Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, *i. e.*, in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Specifically, level of service criteria for traffic signals are stated in terms of average control delay per vehicle, typically for a 15-minute analysis period. Delay is a complex measure and depends on a number of variables, including the quality of progression, the cycle length, the ratio of green time to cycle length and the volume to capacity ratio for the lane group.

For each intersection analyzed the average control delay per vehicle per approach is determined for the peak hour. A weighted average of control delay per vehicle is then determined for the intersection. A level of service designation is given to the control delay to better describe the level of operation. A

description of levels of service for signalized intersections can be found in Table A-V.

Table A-V

Description of Level of Service for Signalized Intersections

Level of Service	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase doe not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: *Highway Capacity Manual 2000*

The use of control delay, which may also be referred to as signal delay, was introduced in the 1997 update to the *Highway Capacity Manual*, and represents a departure from previous updates. In the third edition, published in 1985 and the 1994 update to the third edition, delay only included stopped delay. Thus, the level of service criteria listed in Table A-V differs from earlier criteria.

Unsignalized Intersections

The current procedures on unsignalized intersections were first introduced in the 1997 update to the *Highway Capacity Manual* and represent a revision of the methodology published in the 1994 update to the 1985 *Highway Capacity Manual*. The revised procedures use control delay as a measure of effectiveness to determine level of service. Delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, *i. e.*, in the absence of traffic control, geometric delay, any incidents, and any other vehicles. Control delay is the increased time of travel for a vehicle approaching and passing through an unsignalized intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection.

Two-Way Stop Controlled Intersections

Two-way stop controlled intersections in which stop signs are used to assign the right-of-way, are the most prevalent type of intersection in the United States. At two-way stop-controlled intersections the stop-controlled approaches are referred as the minor street approaches and can be either public streets or private driveways. The approaches that are not controlled by stop signs are referred to as the major street approaches.

The capacity of movements subject to delay are determined using the "critical gap" method of capacity analysis. Expected average control delay based on movement volume and movement capacity is calculated. A level of service designation is given to the expected control delay for each minor movement. Level of service is not defined for the intersection as a whole. Control delay is the increased time of travel for a vehicle approaching and passing through a stop-controlled intersection, compared with a free-flow vehicle if it were not required to slow or stop at the intersection. A description of levels of service for two-way stop-controlled intersections is found in Table A-VI.

Table A-VI

Description of Level of Service for Two-Way Stop Controlled Intersections

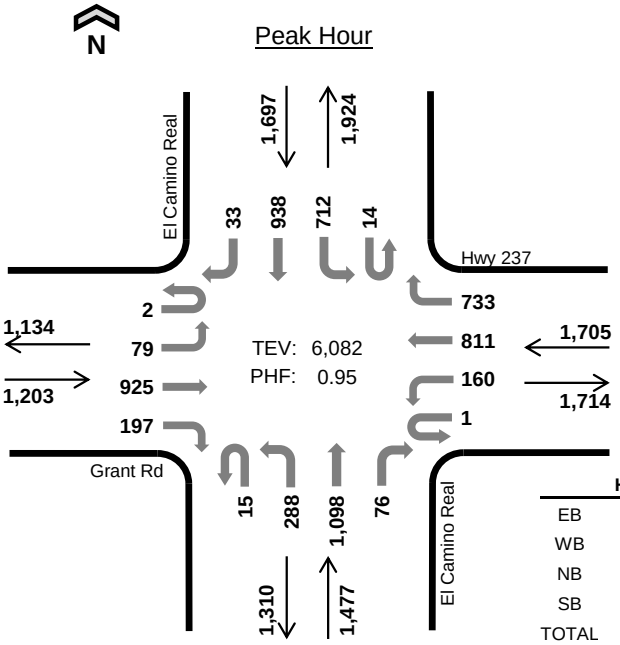
Level of Service	Description
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: *Highway Capacity Manual 2000*

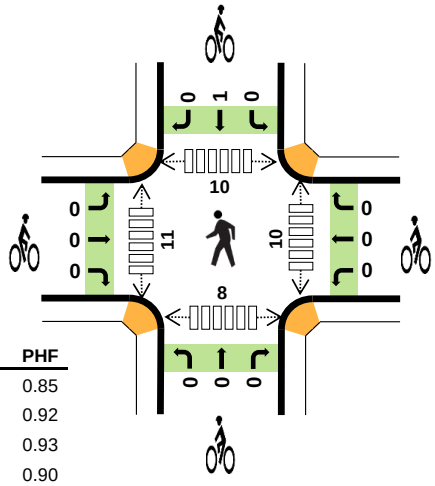
Appendix B – Existing Traffic Counts

El Camino Real
Grant Rd

Date: 08/03/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	3.0%	0.85
WB	6.3%	0.92
NB	2.2%	0.93
SB	3.5%	0.90
TOTAL	3.8%	0.95



Two-Hour Count Summaries

Interval Start		Grant Rd Eastbound				Hwy 237 Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	13	89	28	0	31	170	143	0	37	141	4	0	98	100	6	860	0
7:15 AM		0	16	112	26	1	37	185	158	1	64	211	5	0	116	111	7	1,050	0
7:30 AM		0	15	203	33	0	45	200	155	2	62	249	10	3	110	154	8	1,249	0
7:45 AM		0	23	174	39	1	27	173	175	3	70	272	7	5	132	187	9	1,297	4,456
8:00 AM		**0**	**21**	**194**	**39**	**0**	**45**	**229**	**191**	**2**	**47**	**259**	**13**	**2**	**157**	**173**	**2**	**1,374**	4,970
8:15 AM		**1**	**12**	**199**	**45**	**0**	**40**	**210**	**178**	**4**	**88**	**289**	**18**	**1**	**182**	**252**	**9**	**1,528**	5,448
8:30 AM		**0**	**22**	**268**	**62**	**1**	**34**	**198**	**185**	**3**	**88**	**277**	**20**	**8**	**183**	**245**	**9**	**1,603**	5,802
8:45 AM		**1**	**24**	**264**	**51**	**0**	**41**	**174**	**179**	**6**	**65**	**273**	**25**	**3**	**190**	**268**	**13**	**1,577**	**6,082**
Count Total		2	146	1,503	323	3	300	1,539	1,364	21	521	1,971	102	22	1,168	1,490	63	10,538	0
Peak Hour	**All**	**2**	**79**	**925**	**197**	**1**	**160**	**811**	**733**	**15**	**288**	**1,098**	**76**	**14**	**712**	**938**	**33**	**6,082**	**0**
	HV	**0**	**4**	**24**	**8**	**0**	**11**	**51**	**45**	**0**	**6**	**25**	**1**	**1**	**20**	**36**	**2**	**234**	**0**
	HV%	**0%**	**5%**	**3%**	**4%**	**0%**	**7%**	**6%**	**6%**	**0%**	**2%**	**2%**	**1%**	**7%**	**3%**	**4%**	**6%**	**4%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	11	4	11	*30*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 AM	4	18	8	15	*45*	0	0	0	0	*0*	0	2	1	0	*3*
7:30 AM	4	12	8	12	*36*	0	0	0	1	*1*	1	2	3	2	*8*
7:45 AM	2	15	8	12	*37*	0	0	0	1	*1*	2	2	3	2	*9*
8:00 AM	**8**	**38**	**7**	**14**	***67***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**2**	**2**	*10*
8:15 AM	**10**	**25**	**7**	**12**	***54***	**0**	**0**	**0**	**0**	***0***	**1**	**5**	**4**	**1**	*11*
8:30 AM	**10**	**17**	**9**	**16**	***52***	**0**	**0**	**0**	**1**	***1***	**3**	**4**	**3**	**3**	*13*
8:45 AM	**8**	**27**	**9**	**17**	***61***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**2**	***5***
Count Total	50	163	60	109	*382*	0	0	0	3	*3*	13	18	17	12	*60*
Peak Hour	**36**	**107**	**32**	**59**	***234***	**0**	**0**	**0**	**1**	***1***	**10**	**11**	**10**	**8**	***39***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Grant Rd				Hwy 237				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	1	0	1	5	5	0	1	3	0	0	2	6	3	30	0
7:15 AM	0	0	4	0	0	2	3	13	0	1	7	0	0	8	7	0	45	0
7:30 AM	0	2	2	0	0	3	3	6	0	2	6	0	0	6	4	2	36	0
7:45 AM	0	0	2	0	0	2	4	9	0	2	6	0	1	4	7	0	37	148
8:00 AM	**0**	**0**	**5**	**3**	**0**	**1**	**23**	**14**	**0**	**1**	**6**	**0**	**0**	**5**	**9**	**0**	**67**	185
8:15 AM	**0**	**1**	**7**	**2**	**0**	**4**	**12**	**9**	**0**	**2**	**5**	**0**	**0**	**6**	**5**	**1**	**54**	194
8:30 AM	**0**	**2**	**6**	**2**	**0**	**2**	**8**	**7**	**0**	**0**	**8**	**1**	**1**	**5**	**9**	**1**	**52**	210
8:45 AM	**0**	**1**	**6**	**1**	**0**	**4**	**8**	**15**	**0**	**3**	**6**	**0**	**0**	**4**	**13**	**0**	**61**	**234**
Count Total	0	6	35	9	0	19	66	78	0	12	47	1	2	40	60	7	382	0
Peak Hour	**0**	**4**	**24**	**8**	**0**	**11**	**51**	**45**	**0**	**6**	**25**	**1**	**1**	**20**	**36**	**2**	**234**	**0**

Two-Hour Count Summaries - Bikes

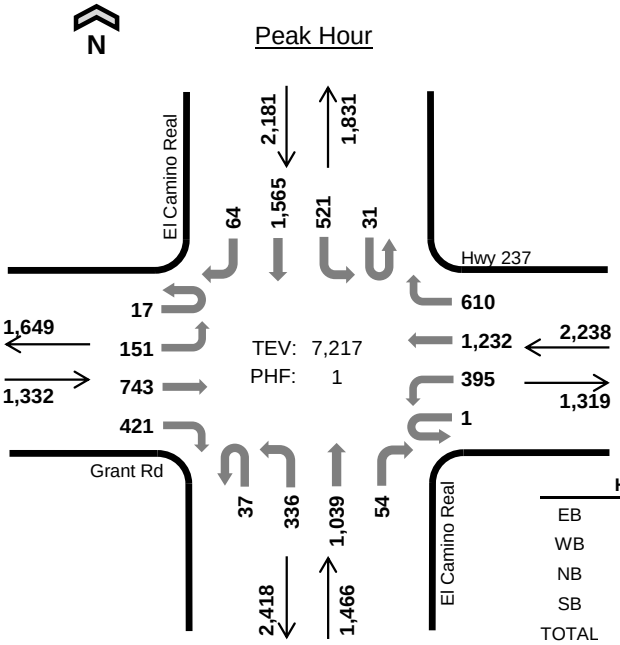
Interval Start	Grant Rd			Hwy 237			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	2
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	0	0	0	0	0	0	0	0	0	3	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

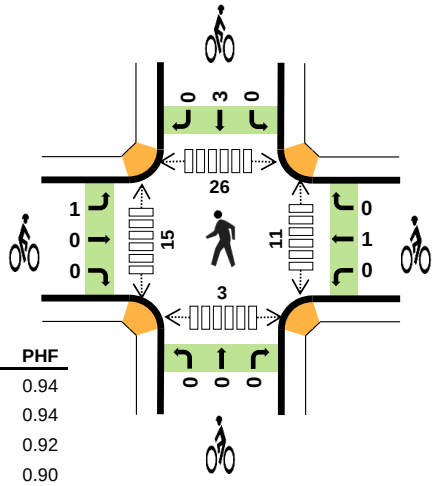
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
Grant Rd

Date: 08/03/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.8%	0.94
WB	0.4%	0.94
NB	1.2%	0.92
SB	1.1%	0.90
TOTAL	0.9%	1.00



Two-Hour Count Summaries

Interval Start		Grant Rd Eastbound				Hwy 237 Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	25	199	99	0	61	237	126	13	73	204	8	1	127	351	10	1,534	0
4:15 PM		1	37	167	91	0	92	249	134	15	82	271	26	7	131	332	14	1,649	0
4:30 PM		2	36	161	86	0	89	279	153	7	76	219	11	5	156	363	19	1,662	0
4:45 PM		**4**	**43**	**205**	**103**	**0**	**103**	**340**	**155**	**11**	**83**	**241**	**16**	**8**	**131**	**345**	**14**	**1,802**	6,647
5:00 PM		**5**	**33**	**179**	**104**	**0**	**90**	**301**	**147**	**10**	**88**	**288**	**11**	**11**	**128**	**395**	**23**	**1,813**	6,926
5:15 PM		**6**	**42**	**185**	**107**	**1**	**90**	**283**	**139**	**9**	**79**	**251**	**17**	**3**	**146**	**442**	**12**	**1,812**	7,089
5:30 PM		**2**	**33**	**174**	**107**	**0**	**112**	**308**	**169**	**7**	**86**	**259**	**10**	**9**	**116**	**383**	**15**	**1,790**	**7,217**
5:45 PM		1	36	162	106	0	91	306	125	16	91	278	13	6	107	373	15	1,726	7,141
Count Total		21	285	1,432	803	1	728	2,303	1,148	88	658	2,011	112	50	1,042	2,984	122	13,788	0
Peak Hour	**All**	**17**	**151**	**743**	**421**	**1**	**395**	**1,232**	**610**	**37**	**336**	**1,039**	**54**	**31**	**521**	**1,565**	**64**	**7,217**	**0**
	HV	**0**	**0**	**7**	**3**	**0**	**2**	**4**	**3**	**0**	**5**	**12**	**1**	**0**	**6**	**19**	**0**	**62**	**0**
	HV%	**0%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0%**	**0%**	**0%**	**1%**	**1%**	**2%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	6	4	3	12	*25*	0	0	0	0	*0*	1	4	4	1	*10*
4:15 PM	6	1	8	7	*22*	0	0	0	1	*1*	2	14	6	1	*23*
4:30 PM	3	3	4	10	*20*	0	0	0	1	*1*	0	4	5	1	*10*
4:45 PM	**2**	**4**	**2**	**7**	***15***	**1**	**0**	**0**	**1**	***2***	**0**	**4**	**4**	**1**	*9*
5:00 PM	**3**	**3**	**6**	**3**	***15***	**0**	**0**	**0**	**1**	***1***	**4**	**3**	**2**	**1**	*10*
5:15 PM	**3**	**0**	**5**	**11**	***19***	**0**	**0**	**0**	**1**	***1***	**2**	**1**	**12**	**0**	*15*
5:30 PM	**2**	**2**	**5**	**4**	***13***	**0**	**1**	**0**	**0**	***1***	**5**	**7**	**8**	**1**	***21***
5:45 PM	4	0	3	5	*12*	0	0	0	0	*0*	2	1	4	0	*7*
Count Total	29	17	36	59	*141*	1	1	0	5	*7*	16	38	45	6	*105*
Peak Hour	**10**	**9**	**18**	**25**	***62***	**1**	**1**	**0**	**3**	***5***	**11**	**15**	**26**	**3**	***55***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Grant Rd				Hwy 237				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	2	0	2	1	1	0	0	3	0	0	2	10	0	25	0
4:15 PM	0	0	6	0	0	0	1	0	0	1	7	0	0	2	5	0	22	0
4:30 PM	0	0	2	1	0	2	1	0	0	0	4	0	0	2	8	0	20	0
4:45 PM	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**2**	**0**	**1**	**1**	**0**	**0**	**2**	**5**	**0**	**15**	82
5:00 PM	**0**	**0**	**1**	**2**	**0**	**0**	**2**	**1**	**0**	**2**	**4**	**0**	**0**	**0**	**3**	**0**	**15**	72
5:15 PM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**1**	**0**	**4**	**7**	**0**	**19**	69
5:30 PM	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**0**	**13**	**62**
5:45 PM	0	0	2	2	0	0	0	0	0	0	3	0	0	0	4	1	12	59
Count Total	0	0	21	8	0	6	7	4	0	6	29	1	0	12	46	1	141	0
Peak Hour	**0**	**0**	**7**	**3**	**0**	**2**	**4**	**3**	**0**	**5**	**12**	**1**	**0**	**6**	**19**	**0**	**62**	**0**

Two-Hour Count Summaries - Bikes

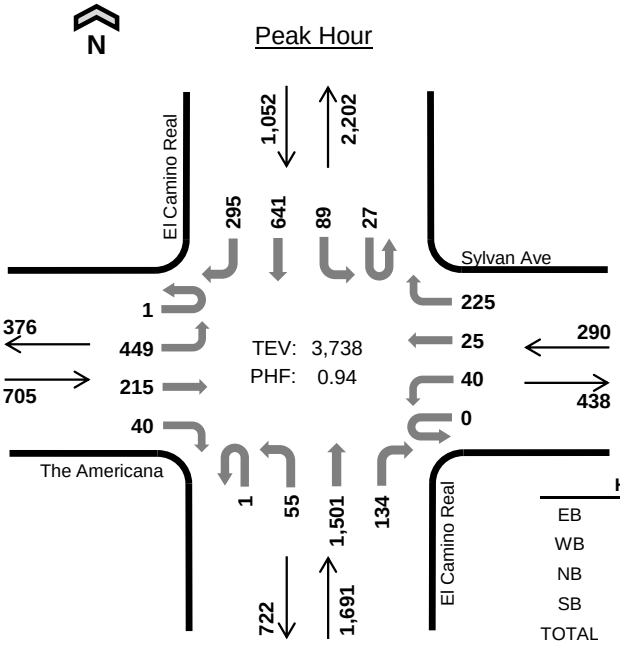
Interval Start	Grant Rd			Hwy 237			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:45 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	5
5:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	1	0	0	0	1	0	0	0	0	0	5	0	7	0
Peak Hour	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

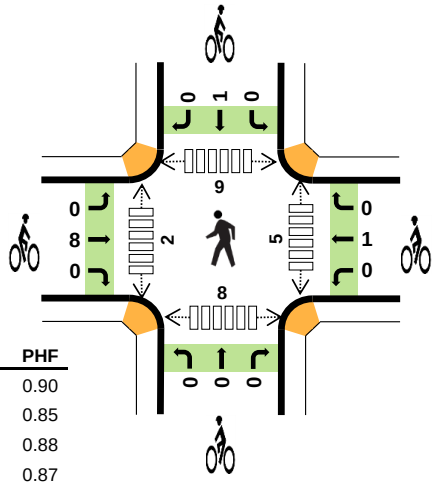
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
The Americana

Date: 08/03/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	1.1%	0.90
WB	0.7%	0.85
NB	2.0%	0.88
SB	4.5%	0.87
TOTAL	2.4%	0.94



Two-Hour Count Summaries

Interval Start	The Americana Eastbound				Sylvan Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	48	19	3	0	2	2	25	0	3	160	16	4	10	96	47	435	0
7:15 AM	0	39	21	1	0	3	6	38	0	5	209	15	11	11	111	63	533	0
7:30 AM	0	61	31	4	0	8	4	39	2	12	308	28	12	23	119	80	731	0
7:45 AM	0	73	28	6	0	10	2	54	2	20	336	18	4	9	136	106	804	2,503
8:00 AM	**0**	**95**	**39**	**9**	**0**	**7**	**4**	**48**	**0**	**10**	**353**	**31**	**4**	**20**	**152**	**84**	**856**	2,924
8:15 AM	**1**	**125**	**50**	**11**	**0**	**11**	**7**	**58**	**0**	**17**	**353**	**32**	**5**	**18**	**147**	**71**	**906**	3,297
8:30 AM	**0**	**113**	**60**	**7**	**0**	**9**	**3**	**58**	**1**	**15**	**429**	**38**	**9**	**19**	**159**	**61**	**981**	3,547
8:45 AM	**0**	**116**	**66**	**13**	**0**	**13**	**11**	**61**	**0**	**13**	**366**	**33**	**9**	**32**	**183**	**79**	**995**	**3,738**
Count Total	1	670	314	54	0	63	39	381	5	95	2,514	211	58	142	1,103	591	6,241	0
Peak Hour All	**1**	**449**	**215**	**40**	**0**	**40**	**25**	**225**	**1**	**55**	**1,501**	**134**	**27**	**89**	**641**	**295**	**3,738**	**0**
Peak Hour HV	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**32**	**1**	**1**	**5**	**39**	**2**	**90**	**0**
Peak Hour HV%	**0%**	**1%**	**1%**	**0%**	**-**	**0%**	**0%**	**1%**	**0%**	**0%**	**2%**	**1%**	**4%**	**6%**	**6%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	2	7	*10*	2	0	0	1	*3*	0	1	1	0	*2*
7:15 AM	3	0	10	7	*20*	1	0	0	0	*1*	3	0	0	0	*3*
7:30 AM	1	1	10	7	*19*	0	4	1	1	*6*	2	3	3	0	*8*
7:45 AM	1	0	7	16	*24*	5	0	0	1	*6*	2	5	3	2	*12*
8:00 AM	**3**	**1**	**7**	**13**	***24***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**0**	*3*
8:15 AM	**2**	**1**	**9**	**9**	***21***	**1**	**0**	**0**	**1**	***2***	**3**	**1**	**0**	**4**	*8*
8:30 AM	**2**	**0**	**11**	**12**	***25***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**2**	**3**	*6*
8:45 AM	**1**	**0**	**6**	**13**	***20***	**6**	**0**	**0**	**0**	***6***	**1**	**1**	**4**	**1**	***7***
Count Total	14	3	62	84	*163*	16	5	1	4	*26*	12	11	16	10	*49*
Peak Hour	**8**	**2**	**33**	**47**	***90***	**8**	**1**	**0**	**1**	***10***	**5**	**2**	**9**	**8**	***24***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	The Americana				Sylvan Ave				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	1	6	0	10	0
7:15 AM	0	3	0	0	0	0	0	0	0	0	10	0	0	0	7	0	20	0
7:30 AM	0	1	0	0	0	1	0	0	0	0	9	1	0	0	6	1	19	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	7	0	0	3	13	0	24	73
8:00 AM	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	**0**	**0**	**1**	**11**	**1**	**24**	87
8:15 AM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**9**	**0**	**1**	**0**	**7**	**1**	**21**	88
8:30 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**1**	**0**	**2**	**10**	**0**	**25**	94
8:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**11**	**0**	**20**	**90**
Count Total	0	12	2	0	0	1	0	2	0	0	60	2	1	9	71	3	163	0
Peak Hour	**0**	**6**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**32**	**1**	**1**	**5**	**39**	**2**	**90**	**0**

Two-Hour Count Summaries - Bikes

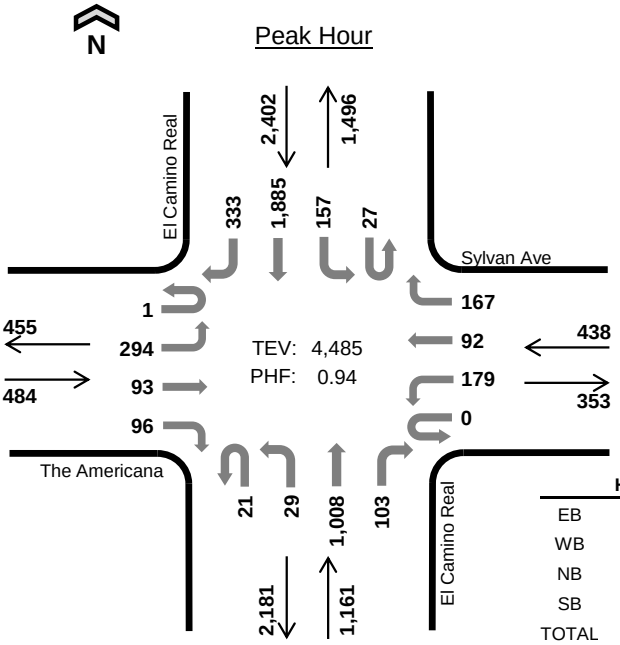
Interval Start	The Americana			Sylvan Ave			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	1	3	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	3	1	0	1	0	0	1	0	6	0
7:45 AM	1	4	0	0	0	0	0	0	0	1	0	0	6	16
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	14
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	15
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	10
8:45 AM	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**10**
Count Total	2	14	0	0	4	1	0	1	0	1	2	1	26	0
Peak Hour	**0**	**8**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**10**	**0**

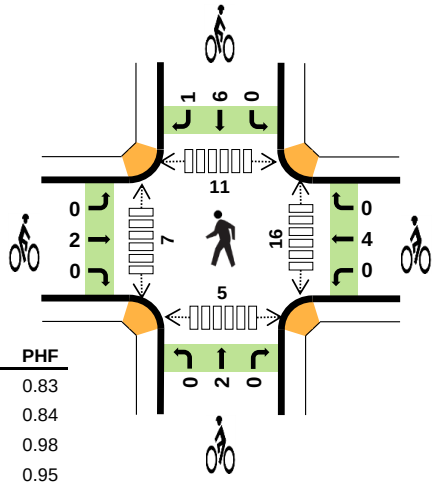
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
The Americana

Date: 08/03/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.4%	0.83
WB	1.8%	0.84
NB	1.2%	0.98
SB	0.9%	0.95
TOTAL	1.0%	0.94

Two-Hour Count Summaries

Interval Start	The Americana Eastbound				Sylvan Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	82	26	23	0	16	13	34	1	12	227	21	10	36	380	73	954	0
4:15 PM	0	76	18	34	0	24	8	30	2	14	249	23	11	28	363	72	952	0
4:30 PM	0	85	26	28	0	30	8	23	5	11	215	28	8	31	420	82	1,000	0
4:45 PM	0	78	25	36	0	32	24	36	2	5	221	21	8	31	471	62	1,052	3,958
5:00 PM	**0**	**82**	**22**	**28**	**0**	**32**	**13**	**37**	**3**	**3**	**258**	**27**	**11**	**41**	**459**	**70**	**1,086**	4,090
5:15 PM	**1**	**62**	**20**	**23**	**0**	**49**	**20**	**38**	**4**	**9**	**256**	**28**	**8**	**33**	**461**	**85**	**1,097**	4,235
5:30 PM	**0**	**90**	**31**	**25**	**0**	**44**	**28**	**47**	**8**	**6**	**253**	**28**	**2**	**43**	**500**	**84**	**1,189**	4,424
5:45 PM	**0**	**60**	**20**	**20**	**0**	**54**	**31**	**45**	**6**	**11**	**241**	**20**	**6**	**40**	**465**	**94**	**1,113**	**4,485**
Count Total	1	615	188	217	0	281	145	290	31	71	1,920	196	64	283	3,519	622	8,443	0
Peak Hour All	**1**	**294**	**93**	**96**	**0**	**179**	**92**	**167**	**21**	**29**	**1,008**	**103**	**27**	**157**	**1,885**	**333**	**4,485**	**0**
Peak Hour HV	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**6**	**0**	**0**	**14**	**0**	**0**	**2**	**19**	**0**	**45**	**0**
Peak Hour HV%	**0%**	**0%**	**1%**	**0%**	**-**	**1%**	**1%**	**4%**	**0%**	**0%**	**1%**	**0%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	1	6	8	*17*	0	0	0	3	*3*	0	1	0	1	*2*
4:15 PM	1	3	7	8	*19*	1	2	1	1	*5*	1	8	1	2	*12*
4:30 PM	1	3	7	9	*20*	0	0	0	0	*0*	1	2	1	2	*6*
4:45 PM	3	1	1	7	*12*	3	1	0	3	*7*	4	0	1	2	*7*
5:00 PM	**0**	**2**	**2**	**3**	***7***	**1**	**2**	**0**	**5**	***8***	**8**	**3**	**4**	**2**	*17*
5:15 PM	**1**	**3**	**2**	**6**	***12***	**0**	**0**	**0**	**1**	***1***	**2**	**3**	**4**	**2**	*11*
5:30 PM	**0**	**2**	**8**	**5**	***15***	**0**	**1**	**2**	**1**	***4***	**3**	**1**	**0**	**1**	*5*
5:45 PM	**1**	**1**	**2**	**7**	***11***	**1**	**1**	**0**	**0**	***2***	**3**	**0**	**3**	**0**	***6***
Count Total	9	16	35	53	*113*	6	7	3	14	*30*	22	18	14	12	*66*
Peak Hour	**2**	**8**	**14**	**21**	***45***	**2**	**4**	**2**	**7**	***15***	**16**	**7**	**11**	**5**	***39***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	The Americana				Sylvan Ave				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	0	0	0	0	1	0	0	5	1	0	1	7	0	17	0
4:15 PM	0	0	1	0	0	2	0	1	1	0	5	1	0	0	8	0	19	0
4:30 PM	0	1	0	0	0	1	0	2	0	0	6	1	0	1	7	1	20	0
4:45 PM	0	3	0	0	0	0	0	1	0	0	1	0	0	0	7	0	12	68
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**7**	58
5:15 PM	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**12**	51
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**8**	**0**	**0**	**1**	**4**	**0**	**15**	46
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**7**	**0**	**11**	**45**
Count Total	0	6	3	0	0	4	1	11	1	0	31	3	0	4	48	1	113	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**6**	**0**	**0**	**14**	**0**	**0**	**2**	**19**	**0**	**45**	**0**

Two-Hour Count Summaries - Bikes

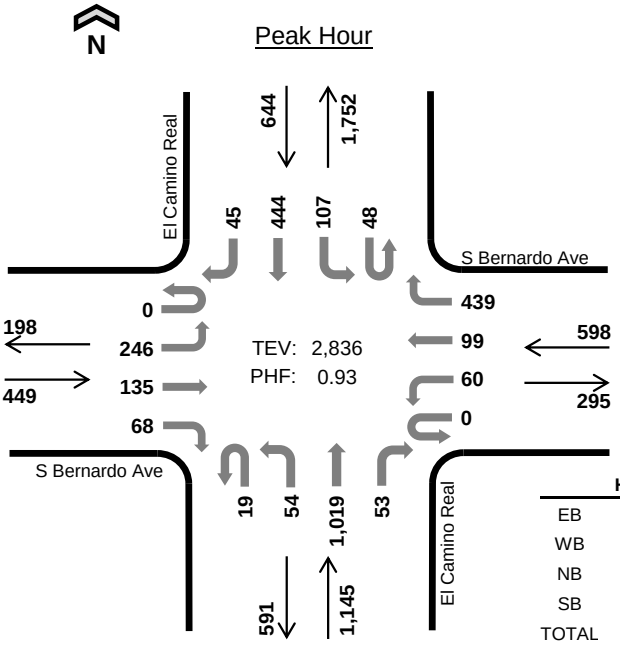
Interval Start	The Americana			Sylvan Ave			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	3	0	3	0
4:15 PM	1	0	0	0	2	0	0	1	0	0	1	0	5	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	3	0	0	1	0	0	0	0	1	2	0	7	15
5:00 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**8**	20
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	16
5:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**4**	20
5:45 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**15**
Count Total	1	5	0	0	7	0	0	3	0	1	12	1	30	0
Peak Hour	**0**	**2**	**0**	**0**	**4**	**0**	**0**	**2**	**0**	**0**	**6**	**1**	**15**	**0**

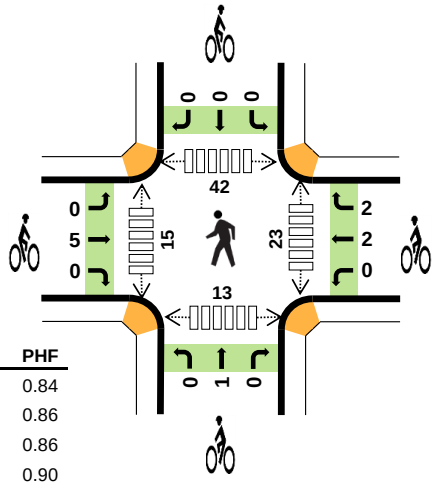
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
S Bernardo Ave

Date: 08/03/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	1.6%	0.84
WB	1.2%	0.86
NB	2.5%	0.86
SB	5.6%	0.90
TOTAL	2.8%	0.93

Two-Hour Count Summaries

Interval Start		S Bernardo Ave Eastbound				S Bernardo Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	27	5	7	0	6	12	55	2	8	101	4	4	9	75	7	322	0
7:15 AM		0	20	12	14	0	10	17	67	4	9	134	15	4	15	69	12	402	0
7:30 AM		0	37	31	15	0	8	14	102	5	6	220	10	10	19	83	8	568	0
7:45 AM		0	39	17	14	0	9	19	93	8	12	289	10	8	27	115	5	665	1,957
8:00 AM		**0**	**57**	**26**	**10**	**0**	**12**	**20**	**93**	**5**	**8**	**209**	**12**	**10**	**25**	**89**	**7**	**583**	2,218
8:15 AM		**0**	**57**	**26**	**18**	**0**	**16**	**25**	**101**	**7**	**18**	**297**	**9**	**12**	**25**	**113**	**12**	**736**	2,552
8:30 AM		**0**	**58**	**38**	**25**	**0**	**17**	**28**	**112**	**5**	**11**	**283**	**10**	**15**	**31**	**119**	**13**	**765**	2,749
8:45 AM		**0**	**74**	**45**	**15**	**0**	**15**	**26**	**133**	**2**	**17**	**230**	**22**	**11**	**26**	**123**	**13**	**752**	**2,836**
Count Total		0	369	200	118	0	93	161	756	38	89	1,763	92	74	177	786	77	4,793	0
Peak Hour	**All**	**0**	**246**	**135**	**68**	**0**	**60**	**99**	**439**	**19**	**54**	**1,019**	**53**	**48**	**107**	**444**	**45**	**2,836**	**0**
	HV	**0**	**4**	**3**	**0**	**0**	**0**	**2**	**5**	**0**	**2**	**27**	**0**	**2**	**0**	**31**	**3**	**79**	**0**
	HV%	**-**	**2%**	**2%**	**0%**	**-**	**0%**	**2%**	**1%**	**0%**	**4%**	**3%**	**0%**	**4%**	**0%**	**7%**	**7%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	1	3	8	*13*	0	0	0	1	*1*	1	3	4	0	*8*
7:15 AM	1	1	10	4	*16*	0	0	0	0	*0*	4	2	7	1	*14*
7:30 AM	0	1	9	4	*14*	1	0	1	1	*3*	2	8	6	1	*17*
7:45 AM	0	2	7	11	*20*	2	1	1	0	*4*	4	3	12	1	*20*
8:00 AM	**0**	**2**	**7**	**9**	***18***	**1**	**1**	**0**	**0**	***2***	**5**	**6**	**11**	**5**	*27*
8:15 AM	**2**	**2**	**8**	**9**	***21***	**0**	**0**	**0**	**0**	***0***	**4**	**4**	**11**	**4**	*23*
8:30 AM	**2**	**2**	**10**	**8**	***22***	**1**	**0**	**0**	**0**	***1***	**3**	**3**	**11**	**3**	*20*
8:45 AM	**3**	**1**	**4**	**10**	***18***	**3**	**3**	**1**	**0**	***7***	**11**	**2**	**9**	**1**	***23***
Count Total	9	12	58	63	*142*	8	5	3	2	*18*	34	31	71	16	*152*
Peak Hour	**7**	**7**	**29**	**36**	***79***	**5**	**4**	**1**	**0**	***10***	**23**	**15**	**42**	**13**	***93***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	S Bernardo Ave				S Bernardo Ave				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	1	0	0	0	3	0	0	0	8	0	13	0
7:15 AM	0	0	1	0	0	0	1	0	1	0	8	1	0	0	4	0	16	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	9	0	0	0	4	0	14	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	7	0	0	1	9	1	20	63
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**5**	**0**	**0**	**0**	**8**	**1**	**18**	68
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**8**	**0**	**1**	**0**	**7**	**1**	**21**	73
8:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**10**	**0**	**0**	**0**	**7**	**1**	**22**	81
8:45 AM	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**	**1**	**0**	**9**	**0**	**18**	**79**
Count Total	0	5	4	0	0	0	4	8	1	2	54	1	2	1	56	4	142	0
Peak Hour	**0**	**4**	**3**	**0**	**0**	**0**	**2**	**5**	**0**	**2**	**27**	**0**	**2**	**0**	**31**	**3**	**79**	**0**

Two-Hour Count Summaries - Bikes

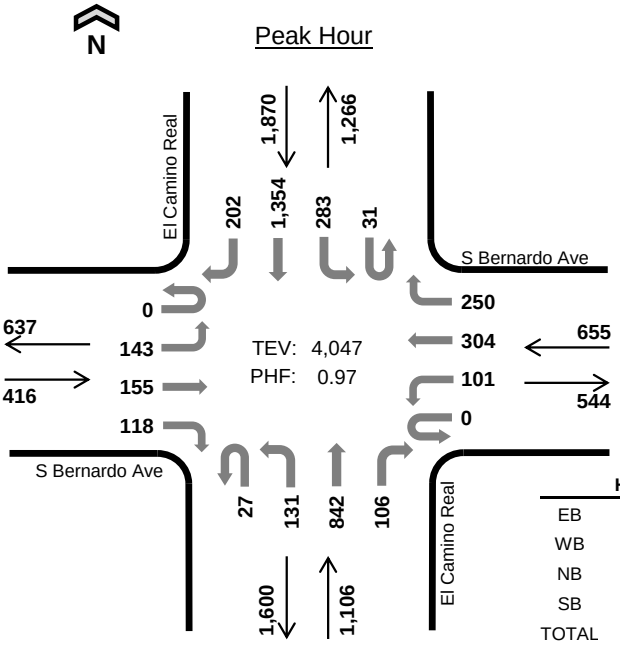
Interval Start	S Bernardo Ave			S Bernardo Ave			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	1	0	0	1	0	3	0
7:45 AM	0	2	0	0	1	0	0	1	0	0	0	0	4	8
8:00 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	9
8:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	7
8:45 AM	**0**	**3**	**0**	**0**	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**7**	**10**
Count Total	0	8	0	0	3	2	0	3	0	1	1	0	18	0
Peak Hour	**0**	**5**	**0**	**0**	**2**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**10**	**0**

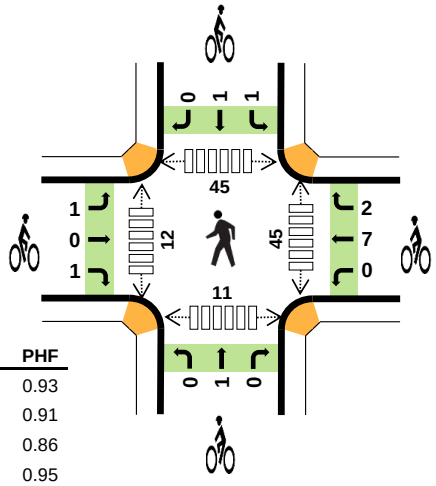
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
S Bernardo Ave

Date: 08/03/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.5%	0.93
WB	0.6%	0.91
NB	1.0%	0.86
SB	1.1%	0.95
TOTAL	0.9%	0.97

Two-Hour Count Summaries

Interval Start	S Bernardo Ave Eastbound				S Bernardo Ave Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	36	25	28	0	17	37	45	5	24	158	17	12	47	304	26	781	0
4:15 PM	0	27	36	23	0	25	33	37	9	28	222	17	7	48	283	36	831	0
4:30 PM	0	32	42	20	0	24	51	48	6	18	176	22	8	56	322	46	871	0
4:45 PM	0	42	33	28	0	27	61	52	6	31	197	28	12	64	335	35	951	3,434
5:00 PM	**0**	**44**	**29**	**39**	**0**	**24**	**80**	**56**	**8**	**33**	**210**	**28**	**9**	**71**	**322**	**51**	**1,004**	3,657
5:15 PM	**0**	**27**	**42**	**16**	**0**	**27**	**66**	**53**	**7**	**38**	**258**	**17**	**9**	**78**	**359**	**45**	**1,042**	3,868
5:30 PM	**0**	**36**	**42**	**31**	**0**	**27**	**76**	**67**	**3**	**29**	**180**	**30**	**7**	**71**	**359**	**48**	**1,006**	4,003
5:45 PM	**0**	**36**	**42**	**32**	**0**	**23**	**82**	**74**	**9**	**31**	**194**	**31**	**6**	**63**	**314**	**58**	**995**	**4,047**
Count Total	0	280	291	217	0	194	486	432	53	232	1,595	190	70	498	2,598	345	7,481	0
Peak Hour All	**0**	**143**	**155**	**118**	**0**	**101**	**304**	**250**	**27**	**131**	**842**	**106**	**31**	**283**	**1,354**	**202**	**4,047**	**0**
Peak Hour HV	**0**	**1**	**1**	**0**	**0**	**2**	**1**	**1**	**0**	**1**	**10**	**0**	**0**	**0**	**18**	**2**	**37**	**0**
Peak Hour HV%	**-**	**1%**	**1%**	**0%**	**-**	**2%**	**0%**	**0%**	**0%**	**1%**	**1%**	**0%**	**0%**	**0%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	4	2	8	*15*	0	0	0	0	*0*	3	2	25	4	*34*
4:15 PM	2	1	4	10	*17*	1	0	0	0	*1*	6	9	8	1	*24*
4:30 PM	3	0	6	4	*13*	1	2	0	0	*3*	10	5	7	2	*24*
4:45 PM	0	0	4	6	*10*	0	2	0	1	*3*	6	2	9	4	*21*
5:00 PM	**0**	**1**	**2**	**4**	***7***	**0**	**4**	**0**	**1**	***5***	**7**	**5**	**13**	**2**	*27*
5:15 PM	**0**	**0**	**3**	**4**	***7***	**1**	**4**	**0**	**0**	***5***	**14**	**1**	**9**	**2**	*26*
5:30 PM	**1**	**2**	**4**	**6**	***13***	**1**	**1**	**0**	**0**	***2***	**15**	**2**	**7**	**4**	*28*
5:45 PM	**1**	**1**	**2**	**6**	***10***	**0**	**0**	**1**	**1**	***2***	**9**	**4**	**16**	**3**	***32***
Count Total	8	9	27	48	*92*	4	13	1	3	*21*	70	30	94	22	*216*
Peak Hour	**2**	**4**	**11**	**20**	***37***	**2**	**9**	**1**	**2**	***14***	**45**	**12**	**45**	**11**	***113***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	S Bernardo Ave				S Bernardo Ave				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	0	0	1	1	2	0	0	2	0	0	1	7	0	15	0
4:15 PM	0	0	0	2	0	0	0	1	0	0	4	0	1	2	6	1	17	0
4:30 PM	0	1	2	0	0	0	0	0	0	0	5	1	0	0	3	1	13	0
4:45 PM	0	0	0	0	0	0	0	0	1	1	1	1	0	0	6	0	10	55
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**7**	47
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**7**	37
5:30 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**1**	**13**	37
5:45 PM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**5**	**1**	**10**	**37**
Count Total	0	3	3	2	0	3	2	4	1	2	22	2	1	3	40	4	92	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**2**	**1**	**1**	**0**	**1**	**10**	**0**	**0**	**0**	**18**	**2**	**37**	**0**

Two-Hour Count Summaries - Bikes

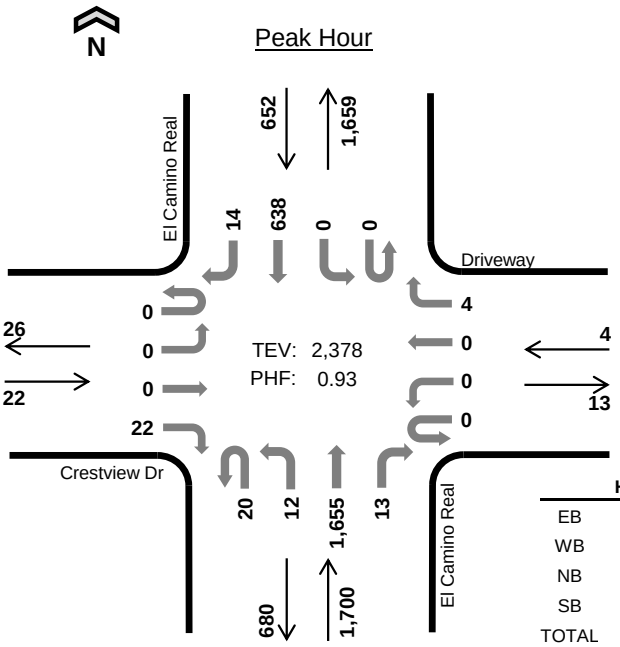
Interval Start	S Bernardo Ave			S Bernardo Ave			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	0	0	1	1	0	0	0	0	1	0	3	7
5:00 PM	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**5**	12
5:15 PM	**1**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	16
5:30 PM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	15
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**14**
Count Total	1	2	1	0	10	3	0	1	0	1	2	0	21	0
Peak Hour	**1**	**0**	**1**	**0**	**7**	**2**	**0**	**1**	**0**	**1**	**1**	**0**	**14**	**0**

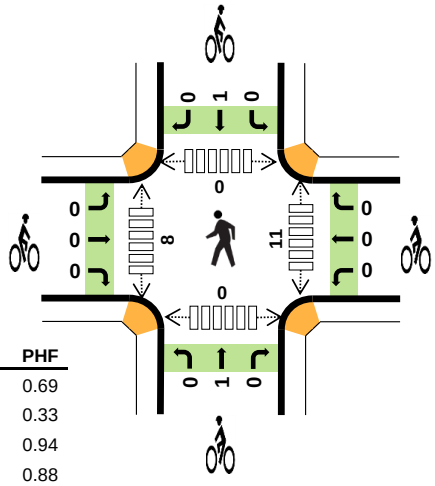
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
Crestview Dr

Date: 08/03/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	0.0%	0.69
WB	0.0%	0.33
NB	2.2%	0.94
SB	5.5%	0.88
TOTAL	3.1%	0.93

Two-Hour Count Summaries

Interval Start	Crestview Dr Eastbound				Driveway Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	3	0	0	0	0	0	2	179	0	0	0	104	1	289	0
7:15 AM	0	0	0	2	0	0	0	0	0	1	206	0	0	0	102	2	313	0
7:30 AM	0	0	0	4	0	0	0	0	2	3	345	0	0	0	122	1	477	0
7:45 AM	0	0	0	6	0	0	0	0	2	1	389	0	0	0	161	2	561	1,640
8:00 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**3**	**3**	**365**	**0**	**0**	**0**	**131**	**5**	**512**	1,863
8:15 AM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**5**	**3**	**432**	**1**	**0**	**0**	**170**	**3**	**619**	2,169
8:30 AM	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**3**	**5**	**4**	**424**	**4**	**0**	**0**	**155**	**3**	**606**	2,298
8:45 AM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**7**	**2**	**434**	**8**	**0**	**0**	**182**	**3**	**641**	**2,378**
Count Total	0	0	0	37	0	0	0	4	24	19	2,774	13	0	0	1,127	20	4,018	0
Peak Hour All	**0**	**0**	**0**	**22**	**0**	**0**	**0**	**4**	**20**	**12**	**1,655**	**13**	**0**	**0**	**638**	**14**	**2,378**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**36**	**0**	**0**	**0**	**35**	**1**	**74**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**5%**	**8%**	**2%**	**0%**	**-**	**-**	**5%**	**7%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	7	*9*	1	0	0	0	*1*	0	1	0	0	*1*
7:15 AM	0	0	6	4	*10*	0	0	1	0	*1*	0	2	0	0	*2*
7:30 AM	0	0	11	5	*16*	0	0	0	1	*1*	0	3	0	0	*3*
7:45 AM	0	0	7	11	*18*	0	0	1	0	*1*	0	2	0	0	*2*
8:00 AM	**0**	**0**	**8**	**8**	***16***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	*2*
8:15 AM	**0**	**0**	**10**	**8**	***18***	**0**	**0**	**0**	**1**	***1***	**4**	**4**	**0**	**0**	*8*
8:30 AM	**0**	**0**	**10**	**8**	***18***	**0**	**0**	**1**	**0**	***1***	**1**	**3**	**0**	**0**	*4*
8:45 AM	**0**	**0**	**10**	**12**	***22***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**0**	**0**	***5***
Count Total	0	0	64	63	*127*	1	0	3	2	*6*	11	16	0	0	*27*
Peak Hour	**0**	**0**	**38**	**36**	***74***	**0**	**0**	**1**	**1**	***2***	**11**	**8**	**0**	**0**	***19***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Crestview Dr				Driveway				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	7	0	9	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	4	0	10	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	11	0	0	0	5	0	16	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	11	0	18	53
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**7**	**0**	**0**	**0**	**7**	**1**	**16**	60
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**8**	**0**	**18**	68
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**	**0**	**0**	**8**	**0**	**18**	70
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**12**	**0**	**22**	**74**
Count Total	0	0	0	0	0	0	0	0	1	1	62	0	0	0	62	1	127	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**36**	**0**	**0**	**0**	**35**	**1**	**74**	**0**

Two-Hour Count Summaries - Bikes

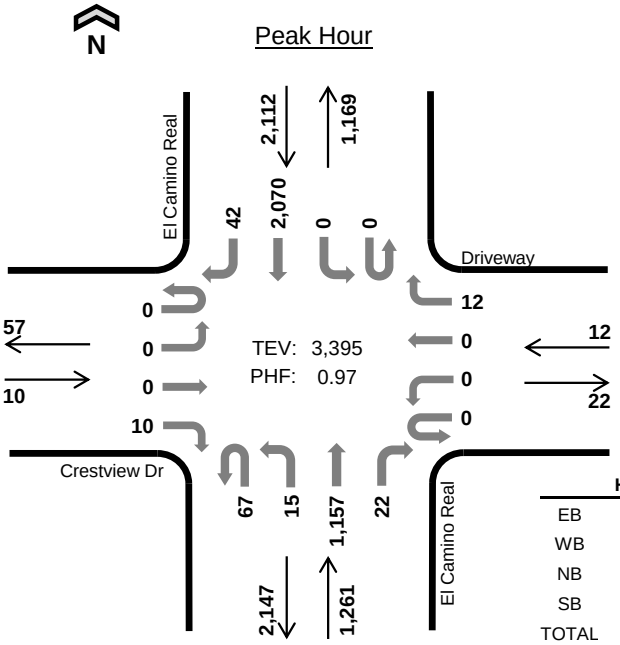
Interval Start	Crestview Dr			Driveway			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	0	1	0	0	0	0	3	0	0	2	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

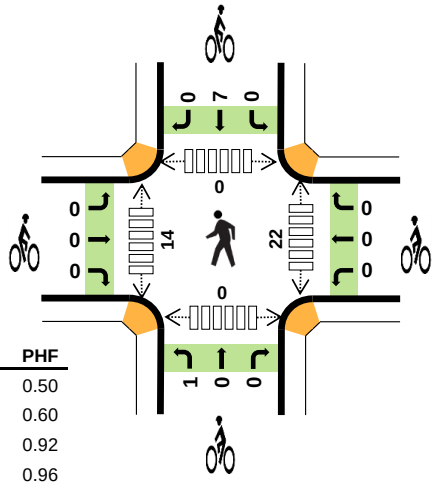
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

El Camino Real
Crestview Dr

Date: 08/03/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.0%	0.50
WB	0.0%	0.60
NB	1.2%	0.92
SB	0.8%	0.96
TOTAL	0.9%	0.97



Two-Hour Count Summaries

Interval Start	Crestview Dr Eastbound				Driveway Westbound				El Camino Real Northbound				El Camino Real Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	5	0	0	0	3	9	3	230	1	0	0	401	3	655	0
4:15 PM	0	0	0	4	0	0	0	1	17	5	264	1	0	0	425	5	722	0
4:30 PM	0	0	0	6	0	0	0	2	14	2	250	3	0	0	449	4	730	0
4:45 PM	0	0	0	5	0	0	0	0	7	7	284	1	0	0	531	3	838	2,945
5:00 PM	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**3**	**19**	**6**	**282**	**5**	**0**	**0**	**495**	**12**	**827**	3,117
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**19**	**4**	**313**	**8**	**0**	**0**	**516**	**10**	**871**	3,266
5:30 PM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**13**	**3**	**274**	**3**	**0**	**0**	**541**	**9**	**852**	3,388
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**16**	**2**	**288**	**6**	**0**	**0**	**518**	**11**	**845**	**3,395**
Count Total	0	0	0	30	0	0	0	18	114	32	2,185	28	0	0	3,876	57	6,340	0
Peak Hour All	**0**	**0**	**0**	**10**	**0**	**0**	**0**	**12**	**67**	**15**	**1,157**	**22**	**0**	**0**	**2,070**	**42**	**3,395**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**17**	**0**	**32**	**0**
Peak Hour HV%	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**-**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	5	7	*13*	0	0	0	0	*0*	0	6	1	0	*7*
4:15 PM	0	0	6	9	*15*	0	0	0	0	*0*	1	12	0	1	*14*
4:30 PM	0	1	7	7	*15*	0	0	1	0	*1*	0	5	0	0	*5*
4:45 PM	0	0	1	7	*8*	0	0	1	0	*1*	0	6	0	0	*6*
5:00 PM	**0**	**0**	**2**	**4**	***6***	**0**	**0**	**0**	**2**	***2***	**8**	**2**	**0**	**0**	*10*
5:15 PM	**0**	**0**	**3**	**3**	***6***	**0**	**0**	**0**	**3**	***3***	**2**	**7**	**0**	**0**	*9*
5:30 PM	**0**	**0**	**8**	**4**	***12***	**0**	**0**	**0**	**2**	***2***	**7**	**3**	**0**	**0**	*10*
5:45 PM	**0**	**0**	**2**	**6**	***8***	**0**	**0**	**1**	**0**	***1***	**5**	**2**	**0**	**0**	***7***
Count Total	1	1	34	47	*83*	0	0	3	7	*10*	23	43	1	1	*68*
Peak Hour	**0**	**0**	**15**	**17**	***32***	**0**	**0**	**1**	**7**	***8***	**22**	**14**	**0**	**0**	***36***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Crestview Dr				Driveway				El Camino Real				El Camino Real				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	0	5	0	0	0	7	0	13	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	9	0	15	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	7	0	0	0	7	0	15	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	7	0	8	51
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**6**	44
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**6**	35
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**4**	**0**	**12**	32
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**8**	**32**
Count Total	0	0	0	1	0	0	0	1	0	0	34	0	0	0	47	0	83	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**17**	**0**	**32**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Crestview Dr			Driveway			El Camino Real			El Camino Real			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	7
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	8
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
Count Total	0	0	0	0	0	0	2	1	0	0	7	0	10	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**7**	**0**	**8**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

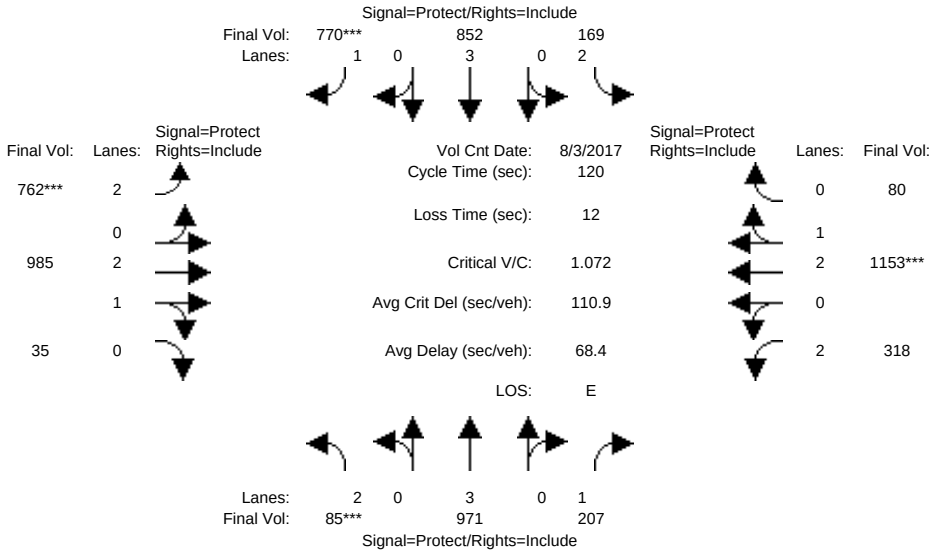
Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Appendix C – Existing Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



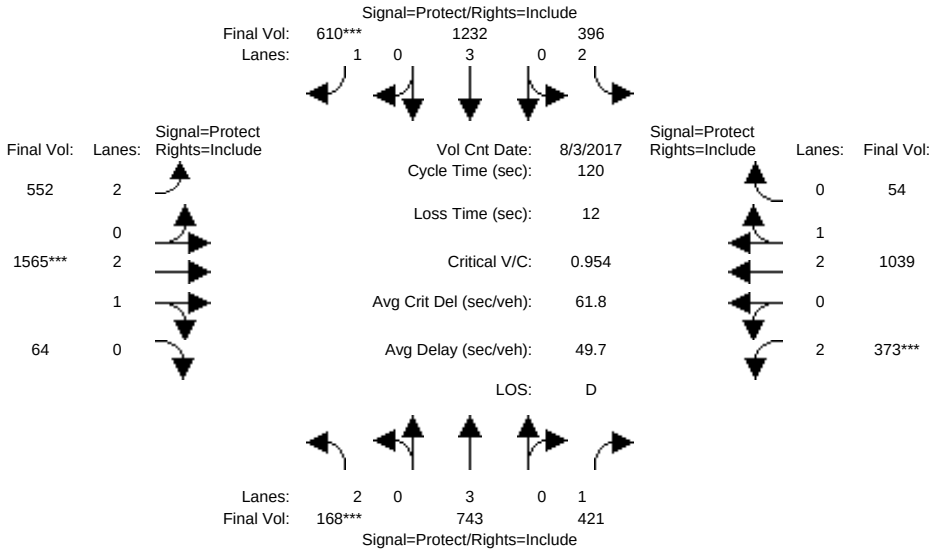
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	81	925	197	161	811	733	726	938	33	303	1098	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	85	971	207	169	852	770	762	985	35	318	1153	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	971	207	169	852	770	762	985	35	318	1153	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	971	207	169	852	770	762	985	35	318	1153	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	971	207	169	852	770	762	985	35	318	1153	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	971	207	169	852	770	762	985	35	318	1153	80
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.84	0.92	0.91	0.84	0.92	0.91	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.90	0.10	2.00	2.81	0.19
Final Sat.:	3502	5187	1592	3502	5187	1594	3502	4986	175	3502	4803	332
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.13	0.05	0.16	0.48	0.22	0.20	0.20	0.09	0.24	0.24
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.37	0.37	0.12	0.43	0.43	0.19	0.28	0.28	0.13	0.21	0.21
Volume/Cap:	0.42	0.50	0.35	0.41	0.38	1.12	1.12	0.70	0.70	0.70	1.12	1.12
Delay/Veh:	55.9	29.1	27.4	49.9	23.3	105.4	119.8	40.3	40.3	55.1	113	112.6
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:	55.9	29.1	27.4	49.9	23.3	105.4	119.8	40.3	40.3	55.1	113	112.6
LOS by Move:	E	C	C	D	C	F	F	D	D	E	F	F
HCM2k95thQ:	105	466	267	168	363	1627	964	594	594	272	947	946

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



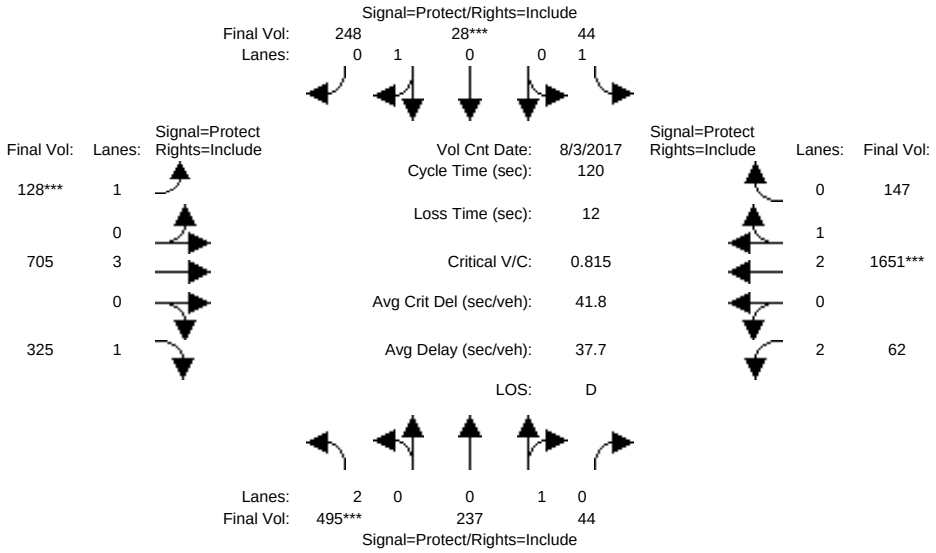
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	743	421	396	1232	610	552	1565	64	373	1039	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	743	421	396	1232	610	552	1565	64	373	1039	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.83	0.92	0.91	0.83	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.88	0.12	2.00	2.85	0.15
Final Sat.:	3502	5187	1583	3502	5187	1571	3502	4953	203	3502	4896	254
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.27	0.11	0.24	0.39	0.16	0.32	0.32	0.11	0.21	0.21
Crit Moves:	****					****		****			****	
Green/Cycle:	0.06	0.32	0.32	0.14	0.40	0.40	0.19	0.33	0.33	0.11	0.25	0.25
Volume/Cap:	0.82	0.44	0.82	0.82	0.59	0.96	0.84	0.96	0.96	0.96	0.84	0.84
Delay/Veh:	78.6	32.2	47.6	61.1	28.5	61.7	56.8	53.8	53.8	89.2	47.9	47.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.6	32.2	47.6	61.1	28.5	61.7	56.8	53.8	53.8	89.2	47.9	47.9
LOS by Move:	E	C	D	E	C	E	E	D	D	F	D	D
HCM2k95thQ:	252	374	716	445	589	1111	569	1098	1097	395	643	643

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



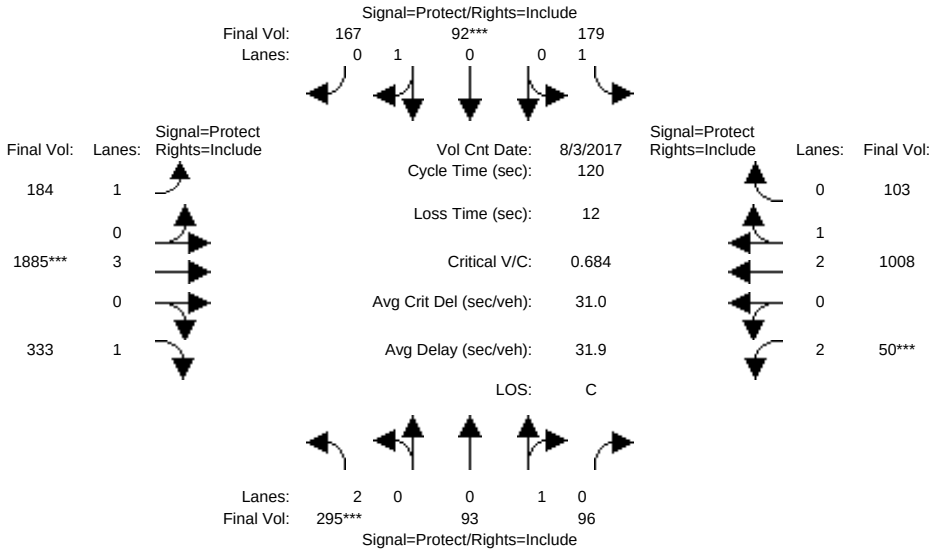
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	450	215	40	40	25	225	116	641	295	56	1501	134
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	495	237	44	44	28	248	128	705	325	62	1651	147
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	495	237	44	44	28	248	128	705	325	62	1651	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	495	237	44	44	28	248	128	705	325	62	1651	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	495	237	44	44	28	248	128	705	325	62	1651	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	495	237	44	44	28	248	128	705	325	62	1651	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.97	0.95	0.87	0.85	0.95	0.91	0.80	0.92	0.90	0.90
Lanes:	2.00	0.84	0.16	1.00	0.10	0.90	1.00	3.00	1.00	2.00	2.75	0.25
Final Sat.:	3502	1563	291	1805	162	1456	1805	5187	1522	3502	4704	420
Capacity Analysis Module:												
Vol/Sat:	0.14	0.15	0.15	0.02	0.17	0.17	0.07	0.14	0.21	0.02	0.35	0.35
Crit Moves:	****				****		****				****	
Green/Cycle:	0.17	0.28	0.28	0.11	0.21	0.21	0.09	0.41	0.41	0.11	0.43	0.43
Volume/Cap:	0.81	0.55	0.55	0.23	0.81	0.81	0.81	0.33	0.52	0.16	0.81	0.81
Delay/Veh:	56.0	38.3	38.3	49.7	59.4	59.4	80.7	24.6	27.7	48.4	32.4	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.0	38.3	38.3	49.7	59.4	59.4	80.7	24.6	27.7	48.4	32.4	32.4
LOS by Move:	E	D	D	D	E	E	F	C	C	D	C	C
HCM2k95thQ:	513	426	424	84	543	537	236	296	402	51	876	874

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



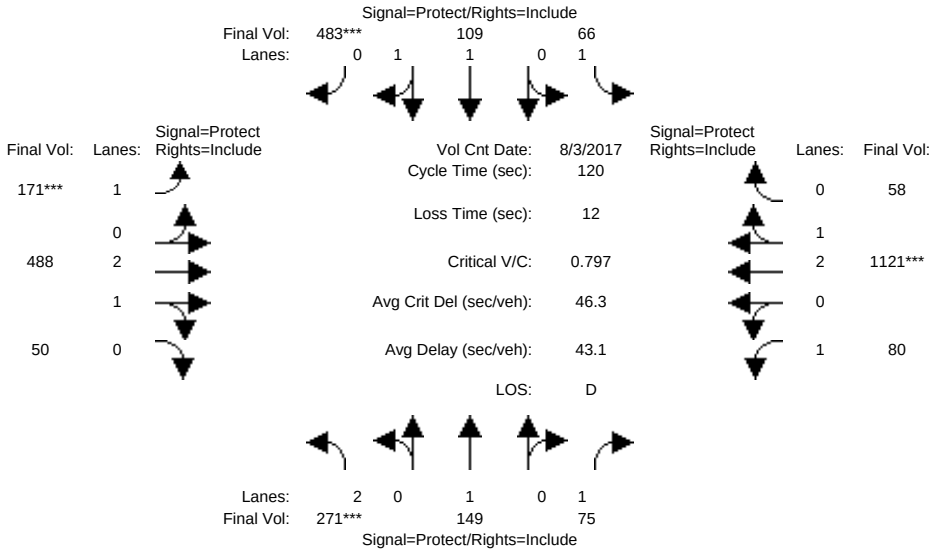
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	295	93	96	179	92	167	184	1885	333	50	1008	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	295	93	96	179	92	167	184	1885	333	50	1008	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	93	96	179	92	167	184	1885	333	50	1008	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	295	93	96	179	92	167	184	1885	333	50	1008	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	295	93	96	179	92	167	184	1885	333	50	1008	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	93	96	179	92	167	184	1885	333	50	1008	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.91	0.95	0.90	0.88	0.95	0.91	0.78	0.92	0.90	0.89
Lanes:	2.00	0.49	0.51	1.00	0.35	0.65	1.00	3.00	1.00	2.00	2.72	0.28
Final Sat.:	3502	859	886	1805	600	1089	1805	5187	1487	3502	4638	474
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.10	0.15	0.15	0.10	0.36	0.22	0.01	0.22	0.22
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.17	0.17	0.16	0.21	0.21	0.18	0.51	0.51	0.06	0.39	0.39
Volume/Cap:	0.71	0.62	0.62	0.62	0.71	0.71	0.56	0.71	0.44	0.24	0.56	0.56
Delay/Veh:	56.8	50.0	50.0	51.3	50.3	50.3	47.0	23.7	19.0	54.6	29.3	29.3
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:	56.8	50.0	50.0	51.3	50.3	50.3	47.0	23.7	19.0	54.6	29.3	29.3
LOS by Move:	E	D	D	D	D	D	D	C	B	D	C	C
HCM2k95thQ:	328	350	347	336	473	464	275	778	339	45	514	512

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



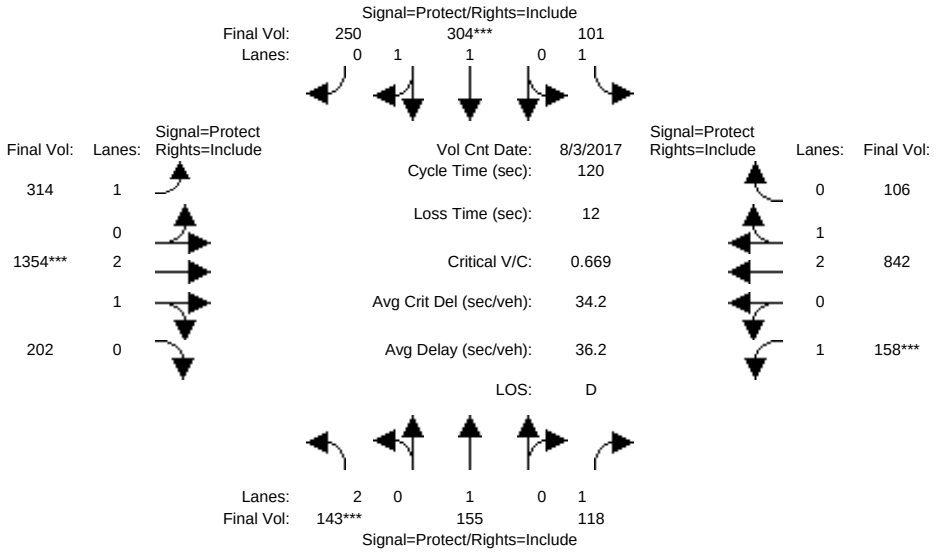
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	271	149	75	66	109	483	171	488	50	80	1121	58
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	271	149	75	66	109	483	171	488	50	80	1121	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	271	149	75	66	109	483	171	488	50	80	1121	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	271	149	75	66	109	483	171	488	50	80	1121	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	271	149	75	66	109	483	171	488	50	80	1121	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.82	0.95	0.83	0.80	0.95	0.90	0.89	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	0.28	1.00	2.85	0.15
Final Sat.:	3502	1900	1552	1805	1585	1524	1805	4641	470	1805	4895	255
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.05	0.04	0.07	0.32	0.09	0.11	0.11	0.04	0.23	0.23
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.29	0.20	0.40	0.40	0.12	0.26	0.26	0.14	0.29	0.29
Volume/Cap:	0.80	0.27	0.17	0.18	0.17	0.80	0.80	0.40	0.40	0.31	0.80	0.80
Delay/Veh:	65.5	33.0	31.9	39.7	23.4	37.9	70.1	36.8	36.8	46.6	42.7	42.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	65.5	33.0	31.9	39.7	23.4	37.9	70.1	36.8	36.8	46.6	42.7	42.7
LOS by Move:	E	C	C	D	C	D	E	D	D	D	D	D
HCM2k95thQ:	336	206	105	104	135	783	314	279	277	142	718	716

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



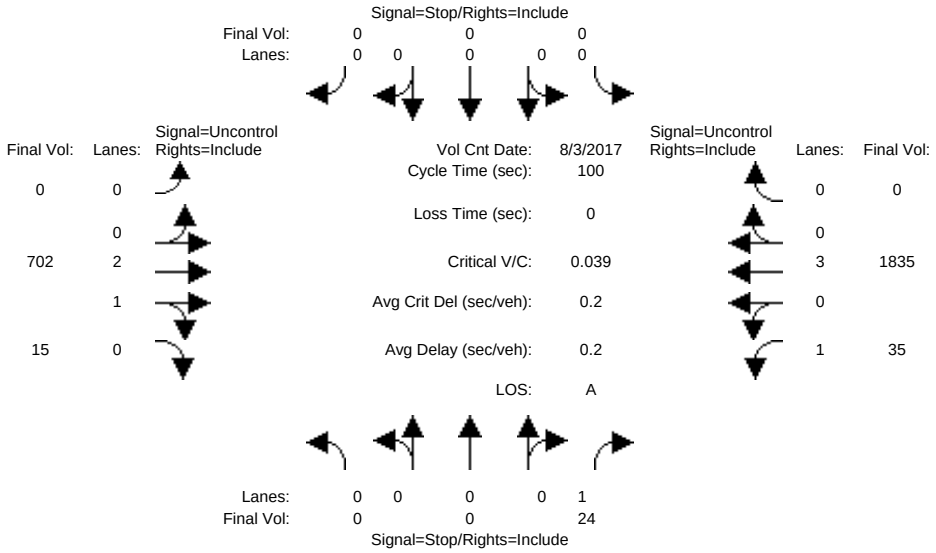
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	155	118	101	304	250	314	1354	202	158	842	106
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	155	118	101	304	250	314	1354	202	158	842	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	155	118	101	304	250	314	1354	202	158	842	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	155	118	101	304	250	314	1354	202	158	842	106
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.95	0.89	0.85	0.95	0.89	0.88	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.08	0.92	1.00	2.61	0.39	1.00	2.66	0.34
Final Sat.:	3502	1900	1586	1805	1814	1492	1805	4421	660	1805	4525	570
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.07	0.06	0.17	0.17	0.17	0.31	0.31	0.09	0.19	0.19
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.28	0.46	0.46	0.13	0.30	0.30
Volume/Cap:	0.67	0.45	0.41	0.44	0.67	0.67	0.61	0.67	0.67	0.67	0.61	0.61
Delay/Veh:	63.1	44.5	44.2	49.6	42.6	42.6	39.4	26.2	26.2	56.9	36.4	36.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.1	44.5	44.2	49.6	42.6	42.6	39.4	26.2	26.2	56.9	36.4	36.4
LOS by Move:	E	D	D	D	D	D	D	C	C	E	D	D
HCM2k95thQ:	194	261	204	191	492	478	445	691	684	322	518	515

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	0	0	22	0	0	0	0	638	14	32	1668	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	24	0	0	0	0	702	15	35	1835	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	24	0	0	0	0	702	15	35	1835	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	24	0	0	0	0	702	15	35	1835	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	24	0	0	0	0	702	15	35	1835	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	242	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	717	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	765	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	893	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	765	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	893	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.4	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	3.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.2	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	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:	9.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	24	0	0	0	0	702	15	35	1835	0
ApproachDel:	9.9			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=24]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2611]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	24	0	0	0	0	702	15	35	1835	0

Major Street Volume: 2587
Minor Approach Volume: 24
Minor Approach Volume Threshold: -43 [less than minimum of 100]

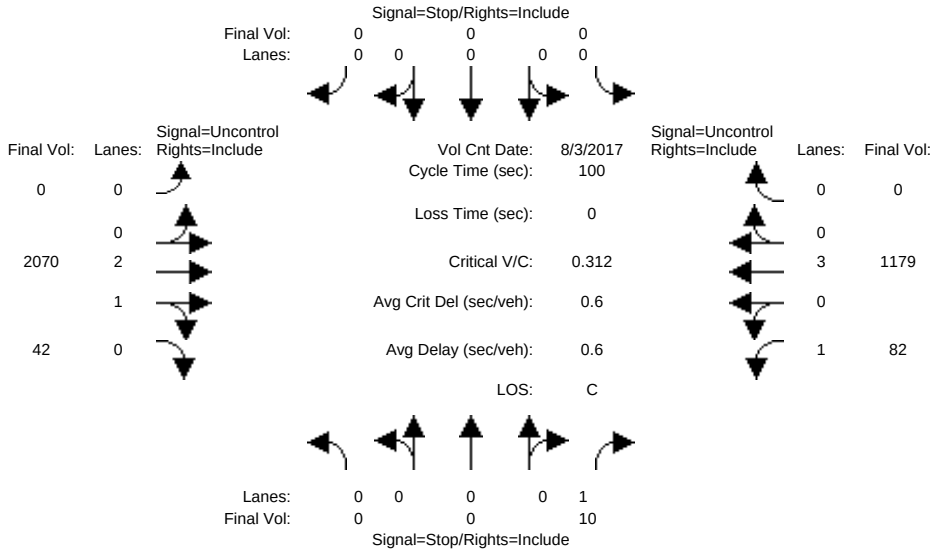
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	2070	42	82	1179	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	10	0	0	0	0	2070	42	82	1179	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	2070	42	82	1179	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	10	0	0	0	0	2070	42	82	1179	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	711	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2112	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	380	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	263	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	380	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	263	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.31	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	32.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.8	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	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:	14.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0
ApproachDel:	14.7			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=10]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3383]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0

Major Street Volume: 3373
Minor Approach Volume: 10
Minor Approach Volume Threshold: -134 [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).

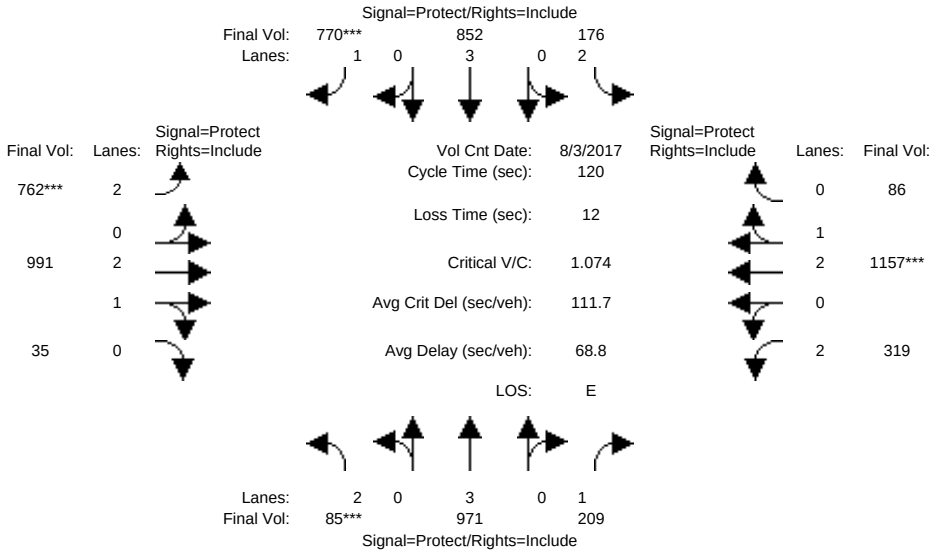
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Appendix D – Existing plus Project Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



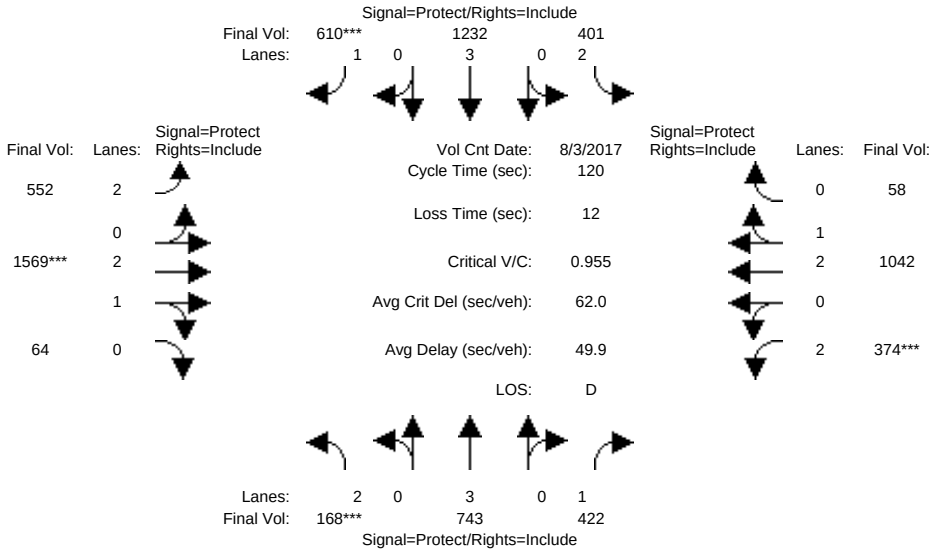
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	81	925	197	161	811	733	726	938	33	303	1098	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	85	971	207	169	852	770	762	985	35	318	1153	80
Added Vol:	0	0	2	7	0	0	0	6	0	1	4	6
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	85	971	209	176	852	770	762	991	35	319	1157	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	971	209	176	852	770	762	991	35	319	1157	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	971	209	176	852	770	762	991	35	319	1157	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	971	209	176	852	770	762	991	35	319	1157	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.84	0.92	0.91	0.84	0.92	0.91	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.90	0.10	2.00	2.79	0.21
Final Sat.:	3502	5187	1592	3502	5187	1594	3502	4987	174	3502	4780	355
Capacity Analysis Module:												
Vol/Sat:	0.02	0.19	0.13	0.05	0.16	0.48	0.22	0.20	0.20	0.09	0.24	0.24
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.37	0.37	0.12	0.43	0.43	0.19	0.28	0.28	0.13	0.22	0.22
Volume/Cap:	0.42	0.50	0.35	0.43	0.38	1.12	1.12	0.71	0.71	0.71	1.12	1.12
Delay/Veh:	55.9	29.2	27.5	50.1	23.3	106.4	120.7	40.3	40.3	55.1	113	113.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	29.2	27.5	50.1	23.3	106.4	120.7	40.3	40.3	55.1	113	113.3
LOS by Move:	E	C	C	D	C	F	F	D	D	E	F	F
HCM2k95thQ:	105	466	270	176	363	1632	966	598	597	273	955	955

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



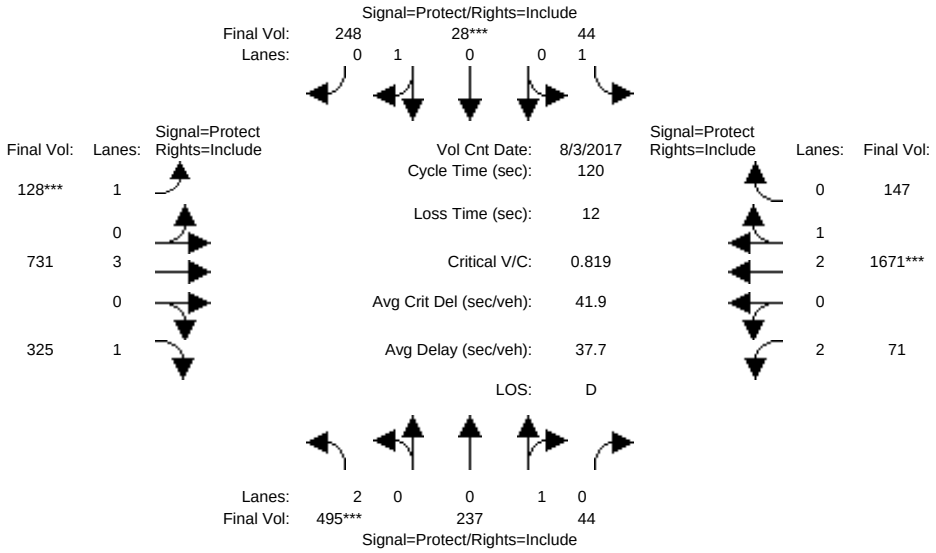
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Added Vol:	0	0	1	5	0	0	0	4	0	1	3	4
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	168	743	422	401	1232	610	552	1569	64	374	1042	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	168	743	422	401	1232	610	552	1569	64	374	1042	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	168	743	422	401	1232	610	552	1569	64	374	1042	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	168	743	422	401	1232	610	552	1569	64	374	1042	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.83	0.92	0.91	0.83	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.88	0.12	2.00	2.84	0.16
Final Sat.:	3502	5187	1583	3502	5187	1571	3502	4953	202	3502	4874	271
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.27	0.11	0.24	0.39	0.16	0.32	0.32	0.11	0.21	0.21
Crit Moves:	****					****		****		****		
Green/Cycle:	0.06	0.32	0.32	0.14	0.40	0.40	0.19	0.33	0.33	0.11	0.25	0.25
Volume/Cap:	0.82	0.44	0.83	0.83	0.59	0.96	0.85	0.96	0.96	0.96	0.85	0.85
Delay/Veh:	78.6	32.3	48.3	61.5	28.5	62.1	57.1	54.0	54.0	89.5	47.9	47.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	78.6	32.3	48.3	61.5	28.5	62.1	57.1	54.0	54.0	89.5	47.9	47.9
LOS by Move:	E	C	D	E	C	E	E	D	D	F	D	D
HCM2k95thQ:	252	375	721	451	589	1114	571	1102	1101	396	648	648

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



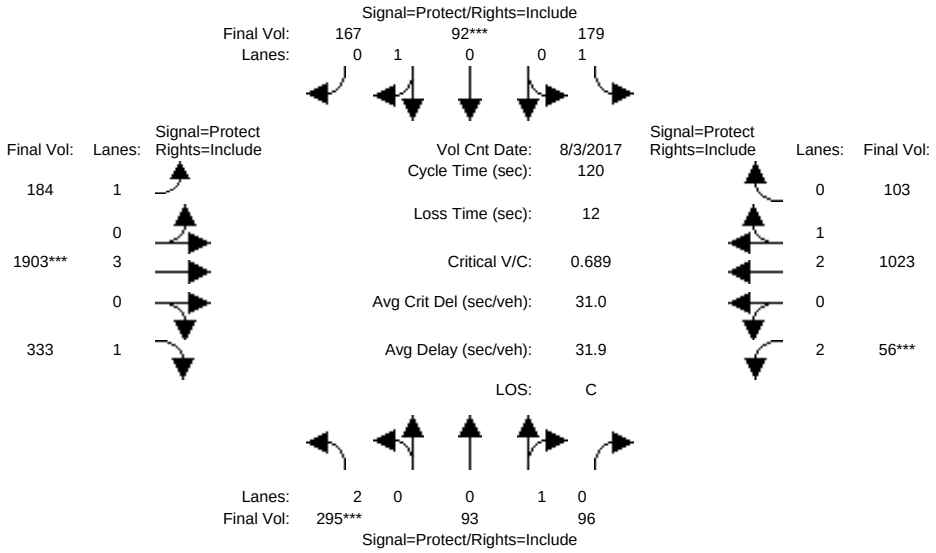
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	450	215	40	40	25	225	116	641	295	56	1501	134
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	495	237	44	44	28	248	128	705	325	62	1651	147
Added Vol:	0	0	0	0	0	0	0	26	0	9	20	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	495	237	44	44	28	248	128	731	325	71	1671	147
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	495	237	44	44	28	248	128	731	325	71	1671	147
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	495	237	44	44	28	248	128	731	325	71	1671	147
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	495	237	44	44	28	248	128	731	325	71	1671	147
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.97	0.95	0.87	0.85	0.95	0.91	0.80	0.92	0.90	0.90
Lanes:	2.00	0.84	0.16	1.00	0.10	0.90	1.00	3.00	1.00	2.00	2.76	0.24
Final Sat.:	3502	1563	291	1805	162	1456	1805	5187	1522	3502	4708	415
Capacity Analysis Module:												
Vol/Sat:	0.14	0.15	0.15	0.02	0.17	0.17	0.07	0.14	0.21	0.02	0.35	0.35
Crit Moves:	****				****		****				****	
Green/Cycle:	0.17	0.27	0.27	0.11	0.21	0.21	0.09	0.41	0.41	0.11	0.43	0.43
Volume/Cap:	0.82	0.55	0.55	0.23	0.82	0.82	0.82	0.35	0.52	0.18	0.82	0.82
Delay/Veh:	56.5	38.5	38.5	49.8	60.0	60.0	81.6	24.6	27.5	48.5	32.4	32.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.5	38.5	38.5	49.8	60.0	60.0	81.6	24.6	27.5	48.5	32.4	32.4
LOS by Move:	E	D	D	D	E	E	F	C	C	D	C	C
HCM2k95thQ:	515	427	426	84	546	539	237	307	401	58	885	883

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



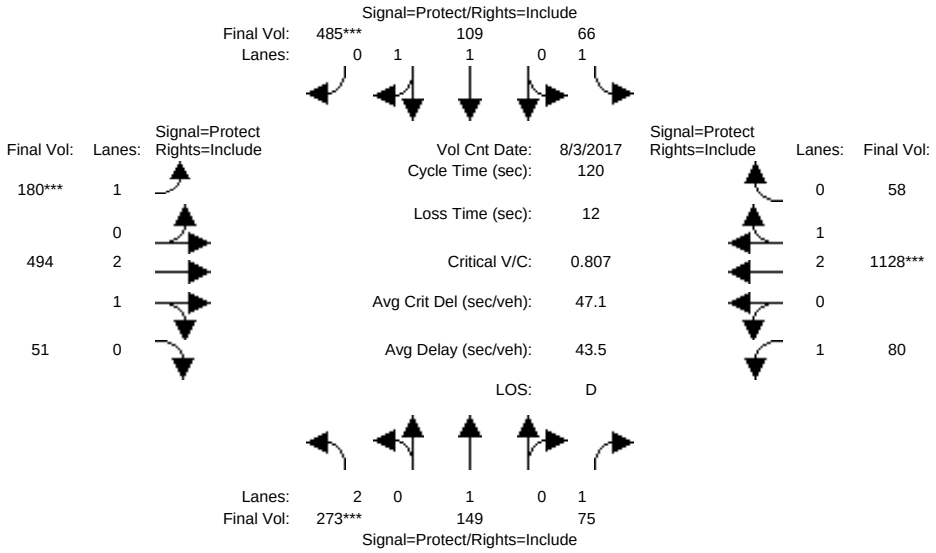
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	295	93	96	179	92	167	184	1885	333	50	1008	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	295	93	96	179	92	167	184	1885	333	50	1008	103
Added Vol:	0	0	0	0	0	0	0	18	0	6	15	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	295	93	96	179	92	167	184	1903	333	56	1023	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	295	93	96	179	92	167	184	1903	333	56	1023	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	295	93	96	179	92	167	184	1903	333	56	1023	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	93	96	179	92	167	184	1903	333	56	1023	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.91	0.95	0.90	0.88	0.95	0.91	0.78	0.92	0.90	0.89
Lanes:	2.00	0.49	0.51	1.00	0.35	0.65	1.00	3.00	1.00	2.00	2.72	0.28
Final Sat.:	3502	859	886	1805	600	1089	1805	5187	1487	3502	4645	468
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.10	0.15	0.15	0.10	0.37	0.22	0.02	0.22	0.22
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.17	0.17	0.16	0.21	0.21	0.18	0.51	0.51	0.06	0.39	0.39
Volume/Cap:	0.72	0.63	0.63	0.63	0.72	0.72	0.57	0.72	0.44	0.27	0.57	0.57
Delay/Veh:	57.1	50.2	50.2	51.6	50.7	50.7	47.2	23.6	18.9	54.8	29.1	29.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	50.2	50.2	51.6	50.7	50.7	47.2	23.6	18.9	54.8	29.1	29.1
LOS by Move:	E	D	D	D	D	D	D	C	B	D	C	C
HCM2k95thQ:	329	351	348	337	474	466	276	786	338	51	519	517

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



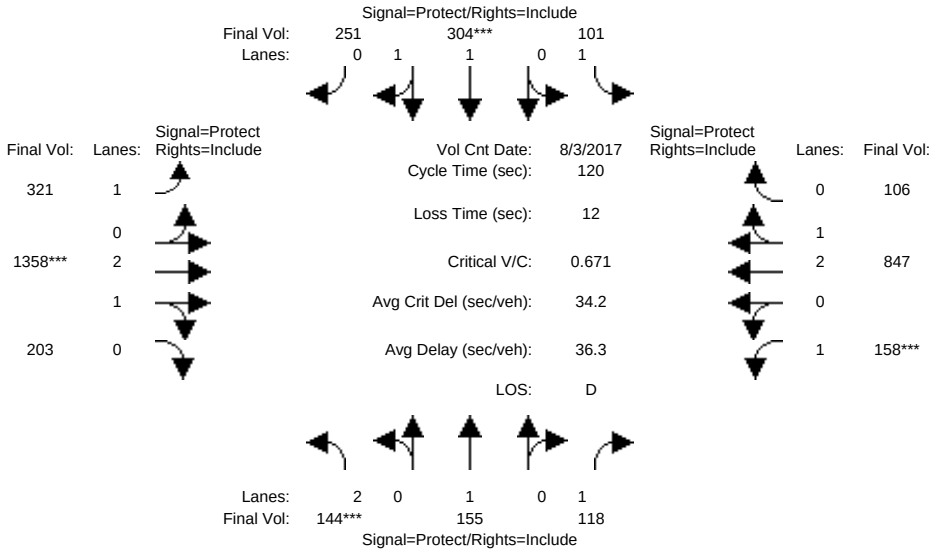
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	271	149	75	66	109	483	171	488	50	80	1121	58
Added Vol:	2	0	0	0	0	2	9	6	1	0	7	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	273	149	75	66	109	485	180	494	51	80	1128	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	273	149	75	66	109	485	180	494	51	80	1128	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	273	149	75	66	109	485	180	494	51	80	1128	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	273	149	75	66	109	485	180	494	51	80	1128	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.82	0.95	0.83	0.80	0.95	0.90	0.89	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	0.28	1.00	2.85	0.15
Final Sat.:	3502	1900	1552	1805	1583	1522	1805	4638	474	1805	4897	253
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.05	0.04	0.07	0.32	0.10	0.11	0.11	0.04	0.23	0.23
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.29	0.20	0.39	0.39	0.12	0.26	0.26	0.14	0.29	0.29
Volume/Cap:	0.81	0.27	0.17	0.18	0.17	0.81	0.81	0.40	0.40	0.31	0.81	0.81
Delay/Veh:	66.5	33.2	32.0	39.9	23.6	38.8	70.4	36.6	36.6	46.6	43.2	43.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	66.5	33.2	32.0	39.9	23.6	38.8	70.4	36.6	36.6	46.6	43.2	43.2
LOS by Move:	E	C	C	D	C	D	E	D	D	D	D	D
HCM2k95thQ:	341	207	105	104	136	794	330	282	280	143	728	726

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



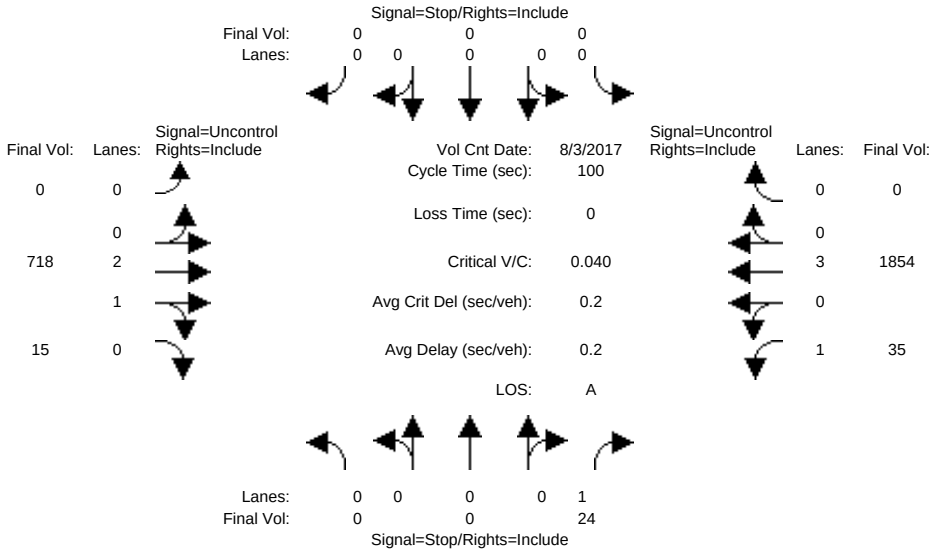
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	155	118	101	304	250	314	1354	202	158	842	106
Added Vol:	1	0	0	0	0	1	7	4	1	0	5	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	144	155	118	101	304	251	321	1358	203	158	847	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	155	118	101	304	251	321	1358	203	158	847	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	155	118	101	304	251	321	1358	203	158	847	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	155	118	101	304	251	321	1358	203	158	847	106
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.95	0.89	0.85	0.95	0.89	0.88	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.08	0.92	1.00	2.61	0.39	1.00	2.66	0.34
Final Sat.:	3502	1900	1586	1805	1811	1495	1805	4420	661	1805	4528	567
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.07	0.06	0.17	0.17	0.18	0.31	0.31	0.09	0.19	0.19
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.29	0.46	0.46	0.13	0.30	0.30
Volume/Cap:	0.67	0.45	0.41	0.44	0.67	0.67	0.62	0.67	0.67	0.67	0.62	0.62
Delay/Veh:	63.1	44.5	44.2	49.6	42.7	42.7	39.4	26.2	26.2	57.0	36.8	36.8
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:	63.1	44.5	44.2	49.6	42.7	42.7	39.4	26.2	26.2	57.0	36.8	36.8
LOS by Move:	E	D	D	D	D	D	D	C	C	E	D	D
HCM2k95thQ:	196	261	204	191	493	479	454	693	687	323	524	521

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	0	0	22	0	0	0	0	638	14	32	1668	0
Growth Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Initial Bse:	0	0	24	0	0	0	0	702	15	35	1835	0
Added Vol:	0	0	0	0	0	0	0	16	0	0	19	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	24	0	0	0	0	718	15	35	1854	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	24	0	0	0	0	718	15	35	1854	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	24	0	0	0	0	718	15	35	1854	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	247	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	733	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	759	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	881	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	759	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	881	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.04	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.5	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	3.1	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.3	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	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:	9.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	24	0	0	0	0	718	15	35	1854	0
ApproachDel:	9.9			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=24]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2646]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	24	0	0	0	0	718	15	35	1854	0

Major Street Volume: 2622
Minor Approach Volume: 24
Minor Approach Volume Threshold: -47 [less than minimum of 100]

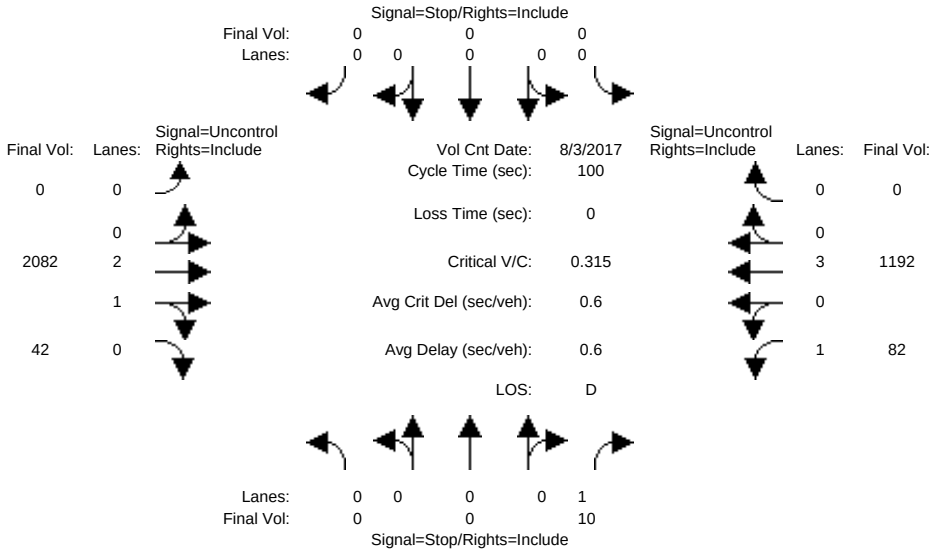
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	2070	42	82	1179	0
Added Vol:	0	0	0	0	0	0	0	12	0	0	13	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	10	0	0	0	0	2082	42	82	1192	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	2082	42	82	1192	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	10	0	0	0	0	2082	42	82	1192	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	715	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2124	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	378	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	260	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	378	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	260	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.32	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	32.6	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.1	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	D	*	*
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:	14.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2082	42	82	1192	0
ApproachDel:	14.8			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=10]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3408]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2082	42	82	1192	0

Major Street Volume: 3398
Minor Approach Volume: 10
Minor Approach Volume Threshold: -137 [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).

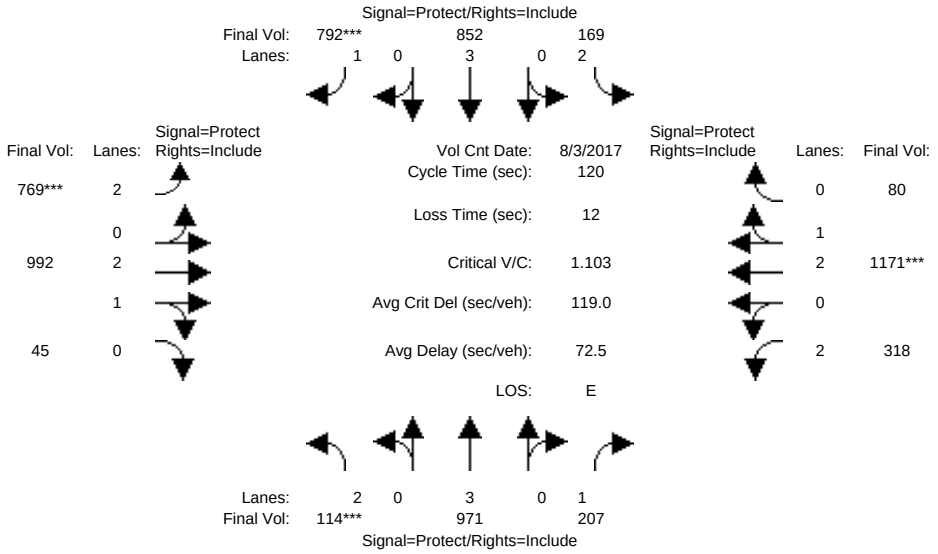
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Appendix E – Background Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



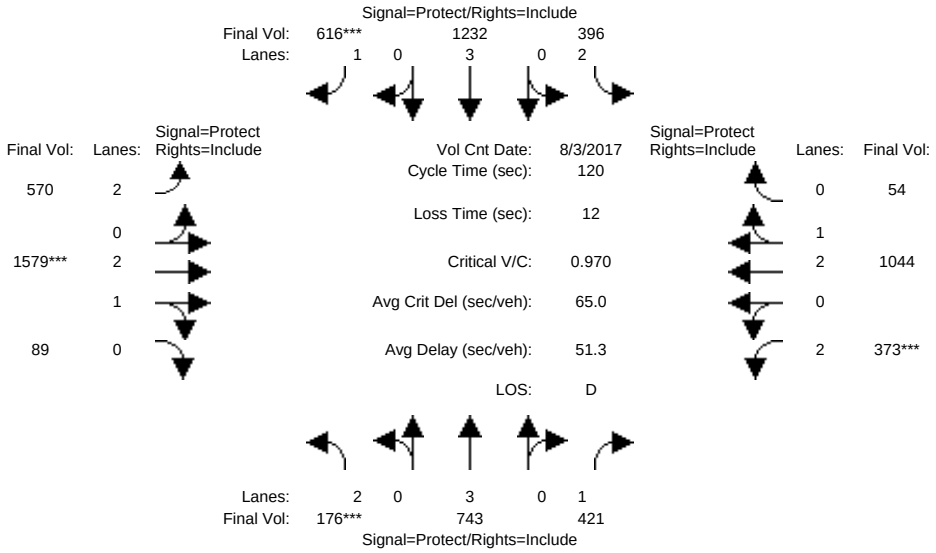
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	81	925	197	161	811	733	726	938	33	303	1098	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	85	971	207	169	852	770	762	985	35	318	1153	80
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	29	0	0	0	0	22	7	7	10	0	18	0
Initial Fut:	114	971	207	169	852	792	769	992	45	318	1171	80
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	971	207	169	852	792	769	992	45	318	1171	80
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	971	207	169	852	792	769	992	45	318	1171	80
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	971	207	169	852	792	769	992	45	318	1171	80
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.84	0.92	0.91	0.84	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.87	0.13	2.00	2.81	0.19
Final Sat.:	3502	5187	1592	3502	5187	1594	3502	4934	222	3502	4807	328
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.13	0.05	0.16	0.50	0.22	0.20	0.20	0.09	0.24	0.24
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.38	0.38	0.12	0.44	0.44	0.19	0.28	0.28	0.13	0.21	0.21
Volume/Cap:	0.56	0.50	0.35	0.41	0.38	1.14	1.14	0.72	0.72	0.72	1.14	1.14
Delay/Veh:	58.4	28.9	27.2	49.8	23.0	113.8	128.8	40.7	40.7	56.0	122	121.8
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:	58.4	28.9	27.2	49.8	23.0	113.8	128.8	40.7	40.7	56.0	122	121.8
LOS by Move:	E	C	C	D	C	F	F	D	D	E	F	F
HCM2k95thQ:	149	464	265	168	361	1713	993	609	609	277	1000	999

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



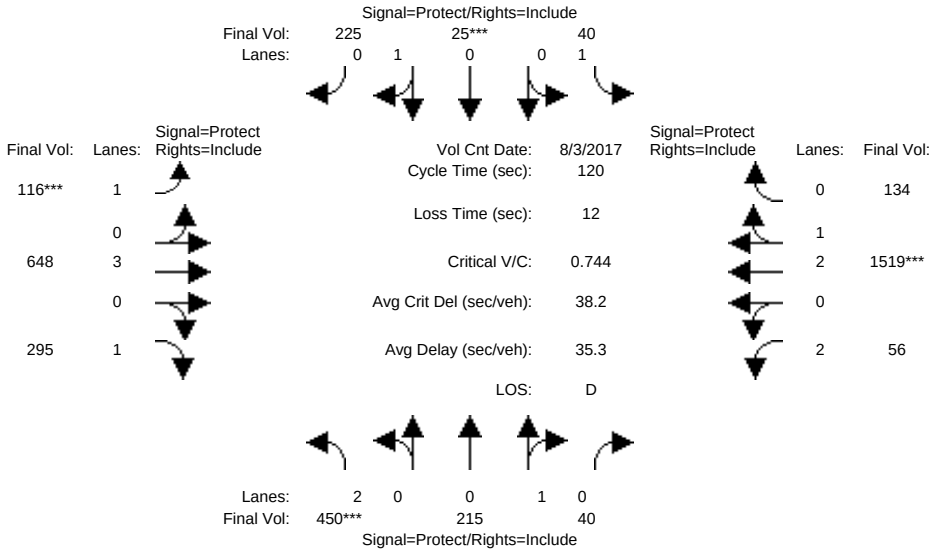
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	8	0	0	0	0	6	18	14	25	0	5	0
Initial Fut:	176	743	421	396	1232	616	570	1579	89	373	1044	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	743	421	396	1232	616	570	1579	89	373	1044	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	743	421	396	1232	616	570	1579	89	373	1044	54
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	743	421	396	1232	616	570	1579	89	373	1044	54
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.83	0.92	0.91	0.83	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.84	0.16	2.00	2.85	0.15
Final Sat.:	3502	5187	1583	3502	5187	1571	3502	4870	275	3502	4897	253
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.27	0.11	0.24	0.39	0.16	0.32	0.32	0.11	0.21	0.21
Crit Moves:	****					****		****		****		
Green/Cycle:	0.06	0.32	0.32	0.14	0.40	0.40	0.19	0.33	0.33	0.11	0.25	0.25
Volume/Cap:	0.86	0.44	0.83	0.83	0.59	0.98	0.85	0.98	0.98	0.98	0.85	0.85
Delay/Veh:	85.1	32.4	48.1	61.5	28.7	65.5	57.3	56.4	56.4	93.3	48.6	48.6
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:	85.1	32.4	48.1	61.5	28.7	65.5	57.3	56.4	56.4	93.3	48.6	48.6
LOS by Move:	F	C	D	E	C	E	E	E	E	F	D	D
HCM2k95thQ:	270	375	719	446	591	1145	588	1141	1139	401	651	651

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



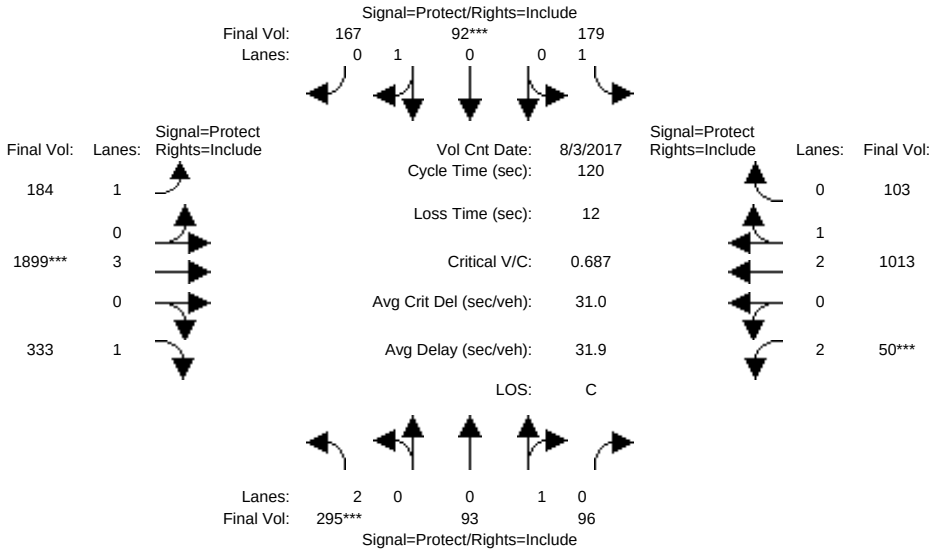
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	450	215	40	40	25	225	116	641	295	56	1501	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	215	40	40	25	225	116	641	295	56	1501	134
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	450	215	40	40	25	225	116	648	295	56	1519	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	450	215	40	40	25	225	116	648	295	56	1519	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	215	40	40	25	225	116	648	295	56	1519	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	450	215	40	40	25	225	116	648	295	56	1519	134
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.97	0.95	0.87	0.85	0.95	0.91	0.80	0.92	0.90	0.90
Lanes:	2.00	0.84	0.16	1.00	0.10	0.90	1.00	3.00	1.00	2.00	2.76	0.24
Final Sat.:	3502	1563	291	1805	162	1456	1805	5187	1522	3502	4708	415
Capacity Analysis Module:												
Vol/Sat:	0.13	0.14	0.14	0.02	0.15	0.15	0.06	0.12	0.19	0.02	0.32	0.32
Crit Moves:	****				****		****				****	
Green/Cycle:	0.17	0.27	0.27	0.11	0.21	0.21	0.09	0.40	0.40	0.12	0.43	0.43
Volume/Cap:	0.74	0.52	0.52	0.20	0.74	0.74	0.74	0.31	0.49	0.13	0.74	0.74
Delay/Veh:	52.1	38.3	38.3	48.7	53.3	53.3	71.1	24.8	27.4	47.3	29.8	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.1	38.3	38.3	48.7	53.3	53.3	71.1	24.8	27.4	47.3	29.8	29.8
LOS by Move:	D	D	D	D	D	D	E	C	C	D	C	C
HCM2k95thQ:	448	388	387	74	474	468	209	273	363	46	779	777

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



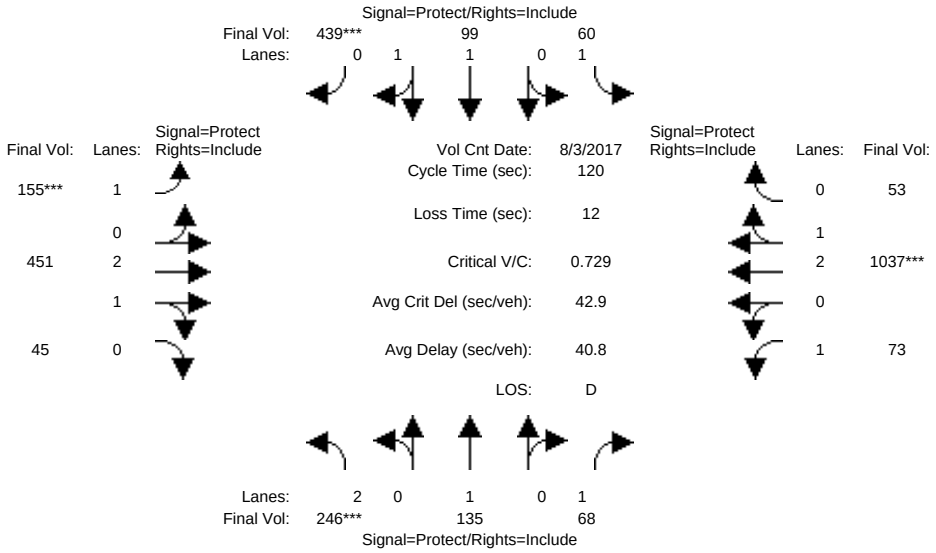
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	295	93	96	179	92	167	184	1885	333	50	1008	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	295	93	96	179	92	167	184	1885	333	50	1008	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	295	93	96	179	92	167	184	1899	333	50	1013	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	295	93	96	179	92	167	184	1899	333	50	1013	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	295	93	96	179	92	167	184	1899	333	50	1013	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	93	96	179	92	167	184	1899	333	50	1013	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.91	0.95	0.90	0.88	0.95	0.91	0.78	0.92	0.90	0.89
Lanes:	2.00	0.49	0.51	1.00	0.35	0.65	1.00	3.00	1.00	2.00	2.72	0.28
Final Sat.:	3502	859	886	1805	600	1089	1805	5187	1487	3502	4640	472
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.10	0.15	0.15	0.10	0.37	0.22	0.01	0.22	0.22
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.17	0.17	0.16	0.21	0.21	0.18	0.51	0.51	0.06	0.39	0.39
Volume/Cap:	0.72	0.63	0.63	0.63	0.72	0.72	0.56	0.72	0.44	0.24	0.56	0.56
Delay/Veh:	57.0	50.2	50.2	51.5	50.6	50.6	47.1	23.6	18.9	54.6	29.1	29.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.0	50.2	50.2	51.5	50.6	50.6	47.1	23.6	18.9	54.6	29.1	29.1
LOS by Move:	E	D	D	D	D	D	D	C	B	D	C	C
HCM2k95thQ:	329	351	348	337	474	466	275	782	337	45	515	513

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



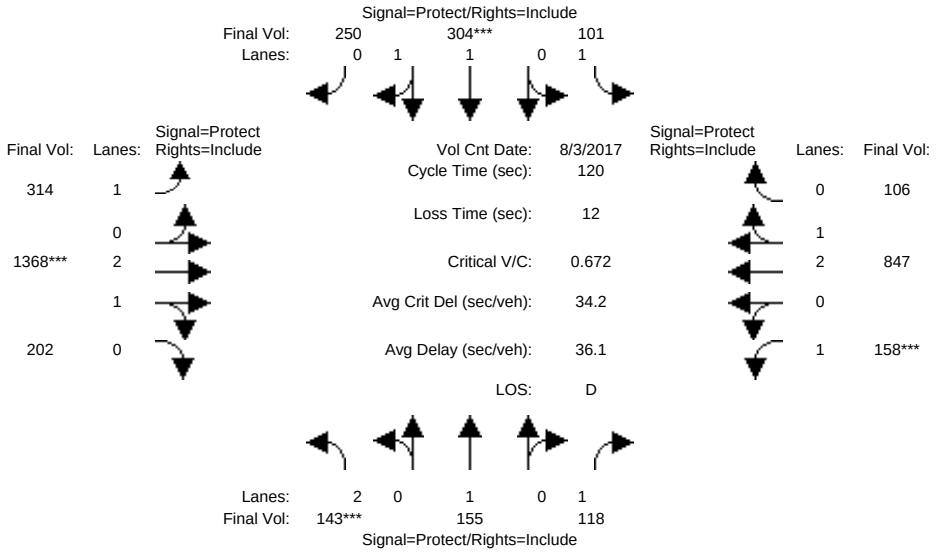
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	246	135	68	60	99	439	155	444	45	73	1019	53
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	246	135	68	60	99	439	155	451	45	73	1037	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	246	135	68	60	99	439	155	451	45	73	1037	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	246	135	68	60	99	439	155	451	45	73	1037	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	246	135	68	60	99	439	155	451	45	73	1037	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.82	0.95	0.83	0.80	0.95	0.90	0.89	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.73	0.27	1.00	2.85	0.15
Final Sat.:	3502	1900	1552	1805	1585	1524	1805	4648	464	1805	4899	250
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.04	0.03	0.06	0.29	0.09	0.10	0.10	0.04	0.21	0.21
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.29	0.20	0.40	0.40	0.12	0.25	0.25	0.15	0.29	0.29
Volume/Cap:	0.73	0.25	0.15	0.16	0.16	0.73	0.73	0.38	0.38	0.26	0.73	0.73
Delay/Veh:	60.5	32.9	31.9	39.7	23.4	34.5	63.1	37.1	37.1	45.3	40.2	40.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	60.5	32.9	31.9	39.7	23.4	34.5	63.1	37.1	37.1	45.3	40.2	40.2
LOS by Move:	E	C	C	D	C	C	E	D	D	D	D	D
HCM2k95thQ:	295	187	95	94	123	679	278	258	257	126	636	634

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



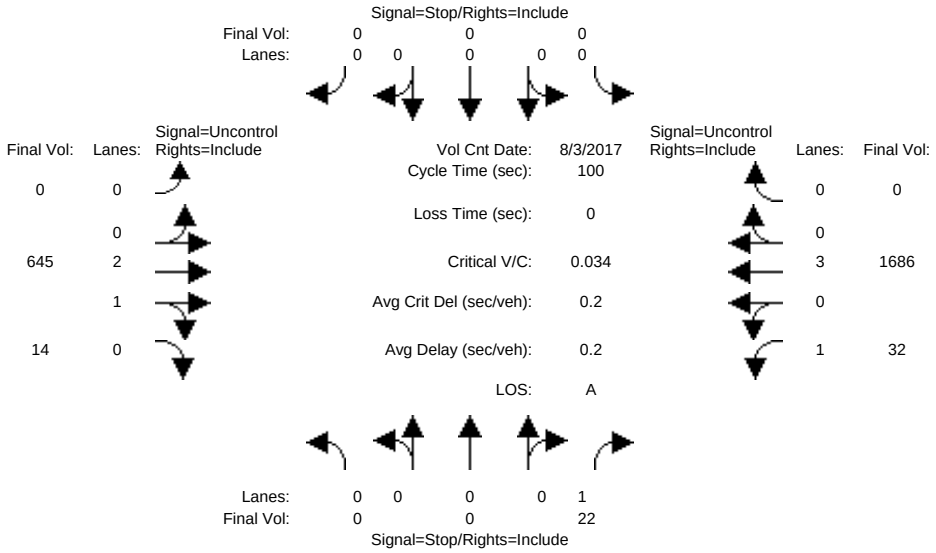
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	155	118	101	304	250	314	1354	202	158	842	106
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	143	155	118	101	304	250	314	1368	202	158	847	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	143	155	118	101	304	250	314	1368	202	158	847	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	143	155	118	101	304	250	314	1368	202	158	847	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	143	155	118	101	304	250	314	1368	202	158	847	106
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.95	0.89	0.85	0.95	0.89	0.88	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.08	0.92	1.00	2.61	0.39	1.00	2.66	0.34
Final Sat.:	3502	1900	1586	1805	1814	1492	1805	4427	654	1805	4528	567
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.07	0.06	0.17	0.17	0.17	0.31	0.31	0.09	0.19	0.19
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.28	0.46	0.46	0.13	0.31	0.31
Volume/Cap:	0.67	0.45	0.41	0.44	0.67	0.67	0.61	0.67	0.67	0.67	0.61	0.61
Delay/Veh:	63.3	44.6	44.3	49.7	42.8	42.8	39.4	26.1	26.1	57.1	36.3	36.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.3	44.6	44.3	49.7	42.8	42.8	39.4	26.1	26.1	57.1	36.3	36.3
LOS by Move:	E	D	D	D	D	D	D	C	C	E	D	D
HCM2k95thQ:	195	262	205	191	493	479	444	697	690	323	520	517

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	0	0	22	0	0	0	0	638	14	32	1668	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	22	0	0	0	0	638	14	32	1668	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	0	0	22	0	0	0	0	645	14	32	1686	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	22	0	0	0	0	645	14	32	1686	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	22	0	0	0	0	645	14	32	1686	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	222	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	659	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	788	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	939	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	788	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	939	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2.6	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	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:		9.7			xxxxxx			xxxxxx			xxxxxx	
ApproachLOS:		A			*			*			*	

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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				Uncontrolled				Uncontrolled			
Lanes:	0	0	0	0 1	0	0	0	0 0	0	0	2	1 0	1	0	3	0 0
Initial Vol:	0	0	22		0	0	0		0	645	14		32	1686	0	
ApproachDel:	9.7				xxxxxx				xxxxxx				xxxxxx			

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=22]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2399]
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 El Camino Real and Crestview Drive

****

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				Uncontrolled				Uncontrolled			
Lanes:	0	0	0	0 1	0	0	0	0 0	0	0	2	1 0	1	0	3	0 0
Initial Vol:	0	0	22		0	0	0		0	645	14		32	1686	0	

Major Street Volume: 2377
Minor Approach Volume: 22
Minor Approach Volume Threshold: -13 [less than minimum of 100]

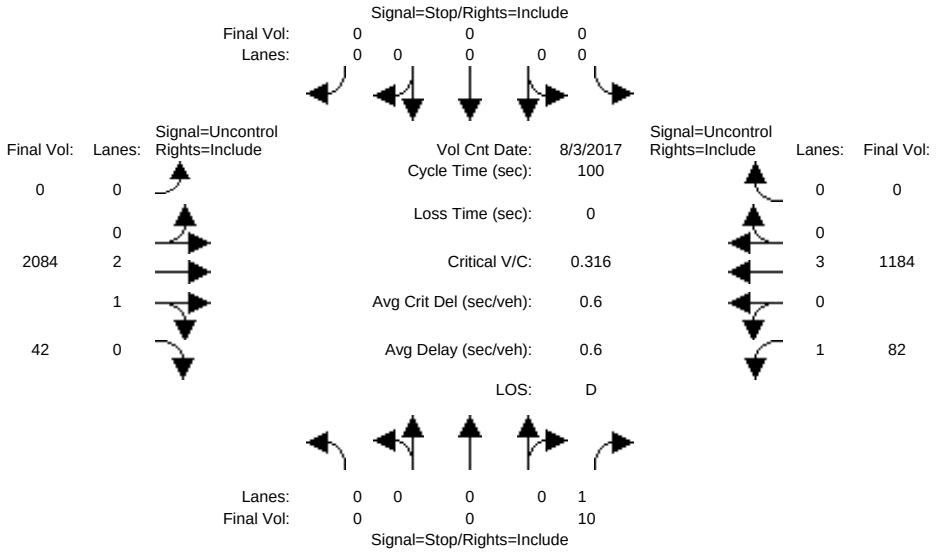
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	2070	42	82	1179	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	0	0	10	0	0	0	0	2084	42	82	1184	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	2084	42	82	1184	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	10	0	0	0	0	2084	42	82	1184	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	716	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2126	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	377	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	260	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	377	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	260	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.32	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.0	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	32.7	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.8	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.1	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	D	*	*
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:	14.8			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2084	42	82	1184	0
ApproachDel:	14.8			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=10]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3402]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	10	0	0	0	0	2084	42	82	1184	0

Major Street Volume: 3392
Minor Approach Volume: 10
Minor Approach Volume Threshold: -136 [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).

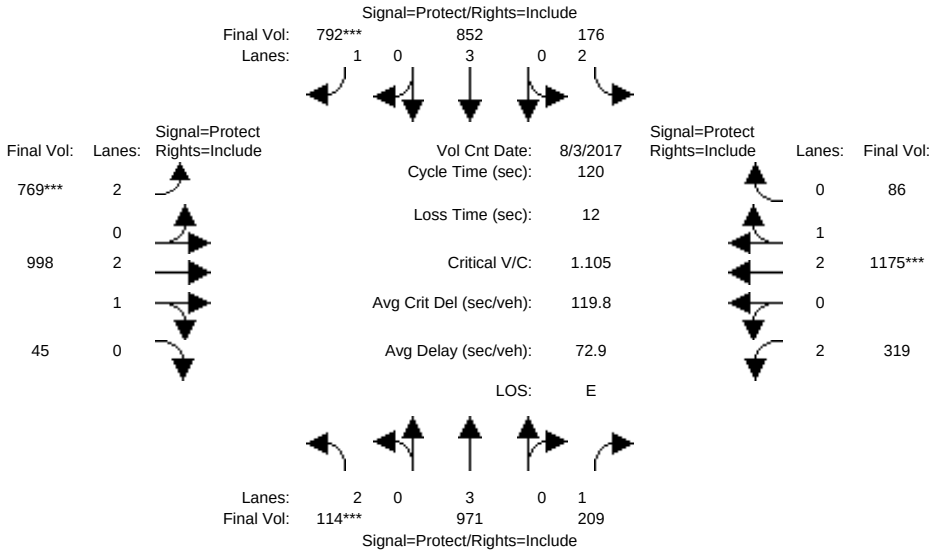
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Appendix F – Background plus Project Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



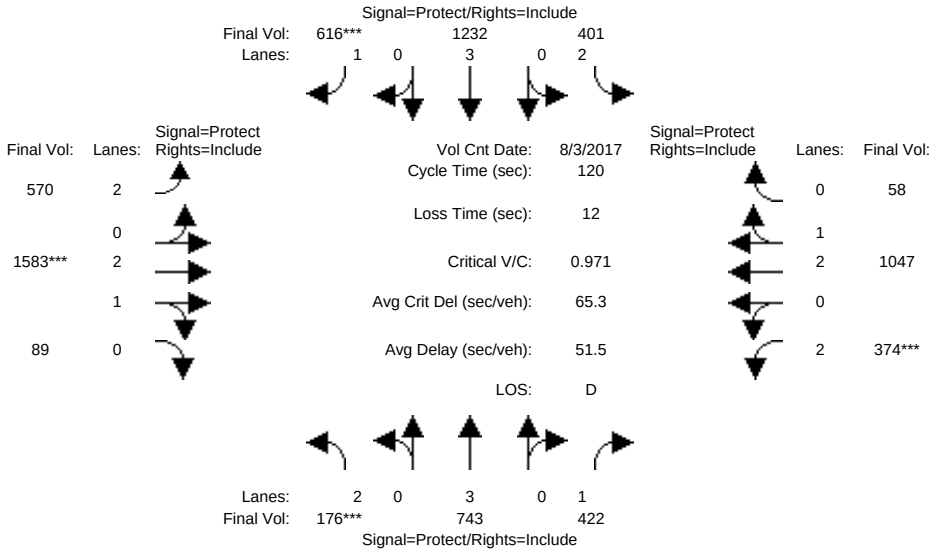
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	81	925	197	161	811	733	726	938	33	303	1098	76
Growth Adj:	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Initial Bse:	85	971	207	169	852	770	762	985	35	318	1153	80
Added Vol:	0	0	2	7	0	0	0	6	0	1	4	6
ATI:	29	0	0	0	0	22	7	7	10	0	18	0
Initial Fut:	114	971	209	176	852	792	769	998	45	319	1175	86
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	114	971	209	176	852	792	769	998	45	319	1175	86
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	971	209	176	852	792	769	998	45	319	1175	86
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	114	971	209	176	852	792	769	998	45	319	1175	86
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.84	0.92	0.91	0.84	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.87	0.13	2.00	2.80	0.20
Final Sat.:	3502	5187	1592	3502	5187	1594	3502	4935	221	3502	4785	349
Capacity Analysis Module:												
Vol/Sat:	0.03	0.19	0.13	0.05	0.16	0.50	0.22	0.20	0.20	0.09	0.25	0.25
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.38	0.38	0.12	0.43	0.43	0.19	0.28	0.28	0.13	0.21	0.21
Volume/Cap:	0.56	0.50	0.35	0.43	0.38	1.14	1.14	0.72	0.72	0.72	1.14	1.14
Delay/Veh:	58.4	29.0	27.3	50.0	23.1	114.8	129.7	40.7	40.7	56.1	123	122.5
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:	58.4	29.0	27.3	50.0	23.1	114.8	129.7	40.7	40.7	56.1	123	122.5
LOS by Move:	E	C	C	D	C	F	F	D	D	E	F	F
HCM2k95thQ:	149	464	268	176	361	1718	995	613	612	278	1009	1008

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



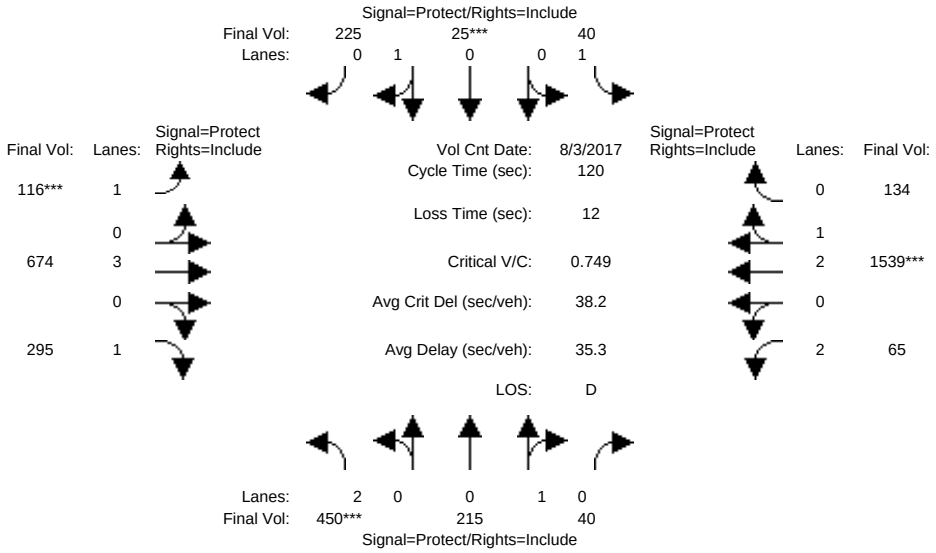
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	743	421	396	1232	610	552	1565	64	373	1039	54
Added Vol:	0	0	1	5	0	0	0	4	0	1	3	4
ATI:	8	0	0	0	0	6	18	14	25	0	5	0
Initial Fut:	176	743	422	401	1232	616	570	1583	89	374	1047	58
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	743	422	401	1232	616	570	1583	89	374	1047	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	743	422	401	1232	616	570	1583	89	374	1047	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	743	422	401	1232	616	570	1583	89	374	1047	58
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.83	0.92	0.91	0.83	0.92	0.90	0.90	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.84	0.16	2.00	2.84	0.16
Final Sat.:	3502	5187	1583	3502	5187	1571	3502	4871	274	3502	4875	270
Capacity Analysis Module:												
Vol/Sat:	0.05	0.14	0.27	0.11	0.24	0.39	0.16	0.32	0.32	0.11	0.21	0.21
Crit Moves:	****					****		****		****		
Green/Cycle:	0.06	0.32	0.32	0.14	0.40	0.40	0.19	0.33	0.33	0.11	0.25	0.25
Volume/Cap:	0.86	0.45	0.83	0.83	0.59	0.98	0.86	0.98	0.98	0.98	0.86	0.86
Delay/Veh:	85.1	32.5	48.8	61.9	28.7	65.9	57.6	56.6	56.6	93.6	48.7	48.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.1	32.5	48.8	61.9	28.7	65.9	57.6	56.6	56.6	93.6	48.7	48.7
LOS by Move:	F	C	D	E	C	E	E	E	E	F	D	D
HCM2k95thQ:	270	376	725	453	591	1147	589	1145	1143	403	656	656

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



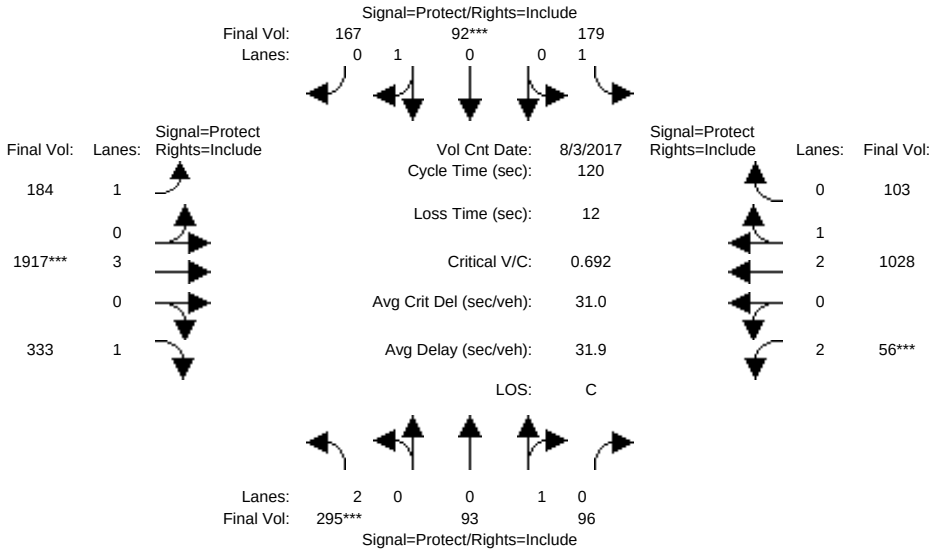
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	450	215	40	40	25	225	116	641	295	56	1501	134
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	450	215	40	40	25	225	116	641	295	56	1501	134
Added Vol:	0	0	0	0	0	0	0	26	0	9	20	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	450	215	40	40	25	225	116	674	295	65	1539	134
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	450	215	40	40	25	225	116	674	295	65	1539	134
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	450	215	40	40	25	225	116	674	295	65	1539	134
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	450	215	40	40	25	225	116	674	295	65	1539	134
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.98	0.97	0.95	0.87	0.85	0.95	0.91	0.80	0.92	0.90	0.90
Lanes:	2.00	0.84	0.16	1.00	0.10	0.90	1.00	3.00	1.00	2.00	2.76	0.24
Final Sat.:	3502	1563	291	1805	162	1456	1805	5187	1522	3502	4713	410
Capacity Analysis Module:												
Vol/Sat:	0.13	0.14	0.14	0.02	0.15	0.15	0.06	0.13	0.19	0.02	0.33	0.33
Crit Moves:	****				****		****				****	
Green/Cycle:	0.17	0.27	0.27	0.11	0.21	0.21	0.09	0.40	0.40	0.12	0.44	0.44
Volume/Cap:	0.75	0.52	0.52	0.20	0.75	0.75	0.75	0.32	0.48	0.15	0.75	0.75
Delay/Veh:	52.4	38.5	38.5	48.8	53.7	53.7	71.7	24.8	27.3	47.4	29.8	29.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.4	38.5	38.5	48.8	53.7	53.7	71.7	24.8	27.3	47.4	29.8	29.8
LOS by Move:	D	D	D	D	D	D	E	C	C	D	C	C
HCM2k95thQ:	450	389	388	75	476	470	209	284	362	54	787	785

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



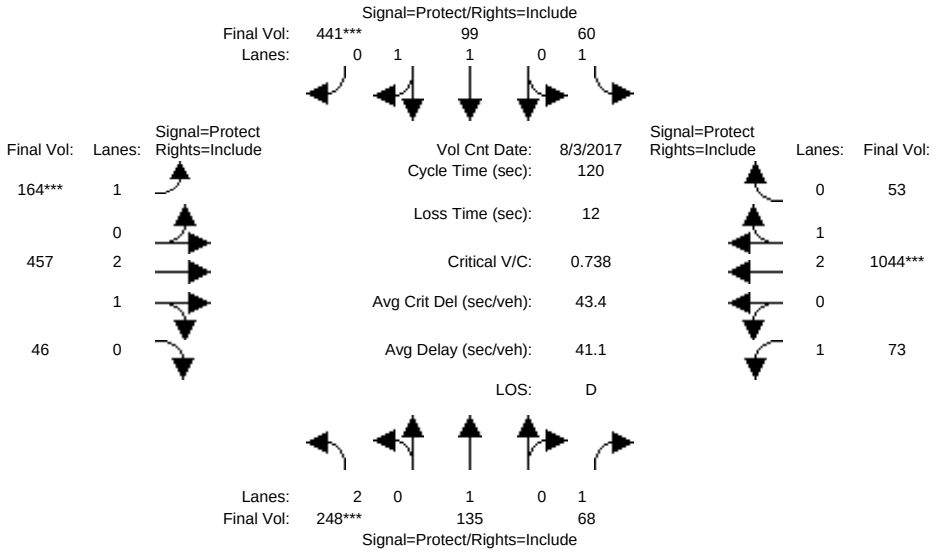
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	295	93	96	179	92	167	184	1885	333	50	1008	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	295	93	96	179	92	167	184	1885	333	50	1008	103
Added Vol:	0	0	0	0	0	0	0	18	0	6	15	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	295	93	96	179	92	167	184	1917	333	56	1028	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	295	93	96	179	92	167	184	1917	333	56	1028	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	295	93	96	179	92	167	184	1917	333	56	1028	103
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	93	96	179	92	167	184	1917	333	56	1028	103
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.91	0.95	0.90	0.88	0.95	0.91	0.78	0.92	0.90	0.89
Lanes:	2.00	0.49	0.51	1.00	0.35	0.65	1.00	3.00	1.00	2.00	2.73	0.27
Final Sat.:	3502	859	886	1805	600	1089	1805	5187	1487	3502	4647	466
Capacity Analysis Module:												
Vol/Sat:	0.08	0.11	0.11	0.10	0.15	0.15	0.10	0.37	0.22	0.02	0.22	0.22
Crit Moves:	****				****			****			****	
Green/Cycle:	0.12	0.17	0.17	0.16	0.21	0.21	0.18	0.51	0.51	0.06	0.39	0.39
Volume/Cap:	0.72	0.63	0.63	0.63	0.72	0.72	0.57	0.72	0.44	0.27	0.57	0.57
Delay/Veh:	57.3	50.4	50.4	51.8	50.9	50.9	47.3	23.6	18.8	54.8	29.0	29.0
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:	57.3	50.4	50.4	51.8	50.9	50.9	47.3	23.6	18.8	54.8	29.0	29.0
LOS by Move:	E	D	D	D	D	D	D	C	B	D	C	C
HCM2k95thQ:	330	352	349	338	476	468	275	789	336	51	521	519

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



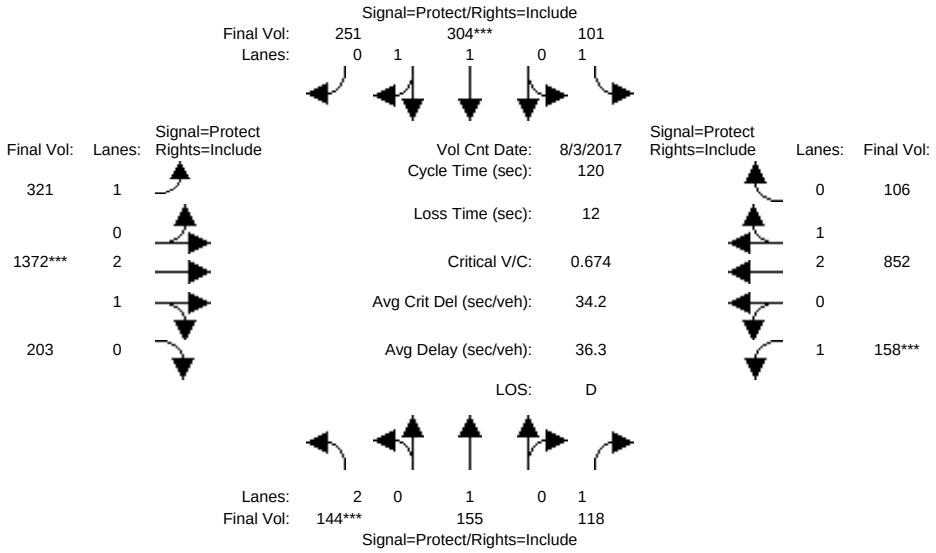
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	246	135	68	60	99	439	155	444	45	73	1019	53
Added Vol:	2	0	0	0	0	2	9	6	1	0	7	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	248	135	68	60	99	441	164	457	46	73	1044	53
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	248	135	68	60	99	441	164	457	46	73	1044	53
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	248	135	68	60	99	441	164	457	46	73	1044	53
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	248	135	68	60	99	441	164	457	46	73	1044	53
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.82	0.95	0.83	0.80	0.95	0.90	0.89	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	0.28	1.00	2.85	0.15
Final Sat.:	3502	1900	1552	1805	1583	1522	1805	4644	467	1805	4901	249
Capacity Analysis Module:												
Vol/Sat:	0.07	0.07	0.04	0.03	0.06	0.29	0.09	0.10	0.10	0.04	0.21	0.21
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.29	0.29	0.20	0.39	0.39	0.12	0.26	0.26	0.15	0.29	0.29
Volume/Cap:	0.74	0.25	0.15	0.17	0.16	0.74	0.74	0.38	0.38	0.26	0.74	0.74
Delay/Veh:	61.2	33.0	32.0	39.8	23.6	35.2	63.0	36.8	36.8	45.4	40.6	40.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	61.2	33.0	32.0	39.8	23.6	35.2	63.0	36.8	36.8	45.4	40.6	40.6
LOS by Move:	E	C	C	D	C	D	E	D	D	D	D	D
HCM2k95thQ:	299	188	95	94	123	689	293	261	259	126	644	643

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



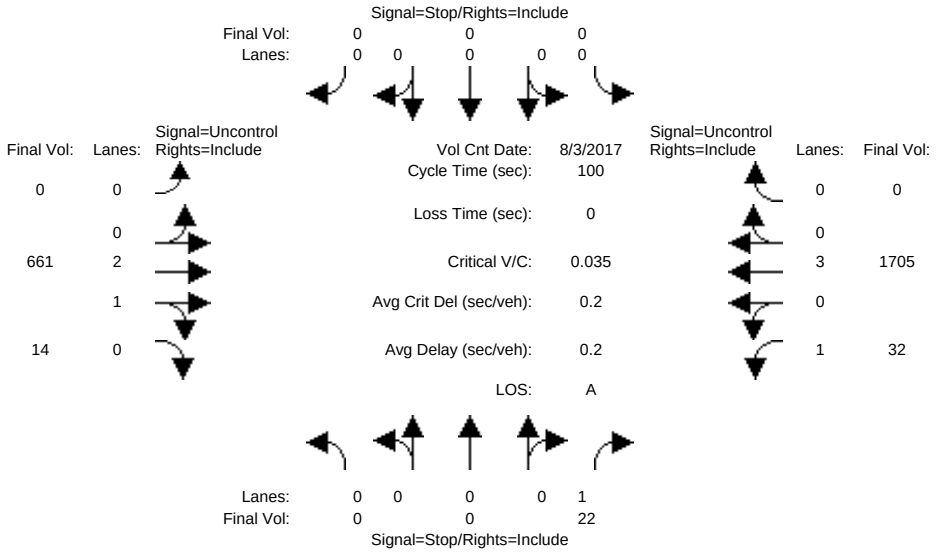
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	155	118	101	304	250	314	1354	202	158	842	106
Added Vol:	1	0	0	0	0	1	7	4	1	0	5	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	144	155	118	101	304	251	321	1372	203	158	852	106
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	155	118	101	304	251	321	1372	203	158	852	106
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	155	118	101	304	251	321	1372	203	158	852	106
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	155	118	101	304	251	321	1372	203	158	852	106
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.83	0.95	0.89	0.85	0.95	0.89	0.88	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.08	0.92	1.00	2.61	0.39	1.00	2.67	0.33
Final Sat.:	3502	1900	1586	1805	1811	1495	1805	4426	655	1805	4531	564
Capacity Analysis Module:												
Vol/Sat:	0.04	0.08	0.07	0.06	0.17	0.17	0.18	0.31	0.31	0.09	0.19	0.19
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.29	0.46	0.46	0.13	0.30	0.30
Volume/Cap:	0.67	0.45	0.41	0.44	0.67	0.67	0.62	0.67	0.67	0.67	0.62	0.62
Delay/Veh:	63.4	44.6	44.3	49.7	42.9	42.9	39.4	26.1	26.1	57.3	36.7	36.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.4	44.6	44.3	49.7	42.9	42.9	39.4	26.1	26.1	57.3	36.7	36.7
LOS by Move:	E	D	D	D	D	D	D	C	C	E	D	D
HCM2k95thQ:	196	262	205	191	494	480	454	699	692	324	526	523

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 7:00-9:00 AM												
Base Vol:	0	0	22	0	0	0	0	638	14	32	1668	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	22	0	0	0	0	638	14	32	1668	0
Added Vol:	0	0	0	0	0	0	0	16	0	0	19	0
ATI:	0	0	0	0	0	0	0	7	0	0	18	0
Initial Fut:	0	0	22	0	0	0	0	661	14	32	1705	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	22	0	0	0	0	661	14	32	1705	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	22	0	0	0	0	661	14	32	1705	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	227	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	675	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	782	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	926	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	782	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	926	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.03	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2.7	xxxx	xxxxx
Control Del:	xxxxx	xxxx	9.7	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.0	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	*	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	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:	9.7			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	A			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	22	0	0	0	0	661	14	32	1705	0
ApproachDel:	9.7			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=22]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=2434]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	22	0	0	0	0	661	14	32	1705	0

Major Street Volume: 2412
Minor Approach Volume: 22
Minor Approach Volume Threshold: -18 [less than minimum of 100]

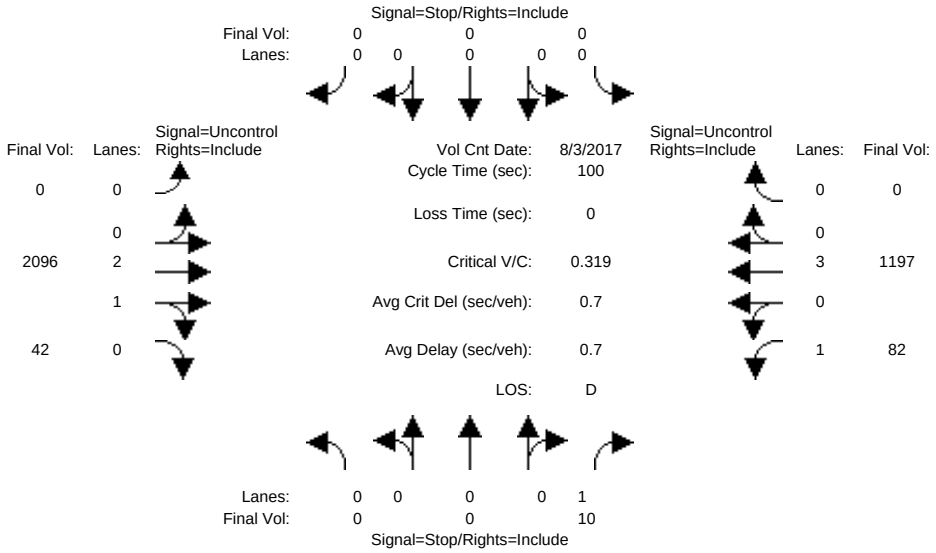
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Volume Module: >> Count Date: 3 Aug 2017 << 4:00-6:00 PM												
Base Vol:	0	0	10	0	0	0	0	2070	42	82	1179	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	10	0	0	0	0	2070	42	82	1179	0
Added Vol:	0	0	0	0	0	0	0	12	0	0	13	0
ATI:	0	0	0	0	0	0	0	14	0	0	5	0
Initial Fut:	0	0	10	0	0	0	0	2096	42	82	1197	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	10	0	0	0	0	2096	42	82	1197	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	10	0	0	0	0	2096	42	82	1197	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	720	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	2138	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	375	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	257	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	375	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	257	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.03	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.32	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	2.1	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	33.2	xxxx	xxxxx
Control Del:	xxxxx	xxxx	14.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	25.5	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	D	*	*
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:	14.9			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****


```
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       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  2  1  0    1  0  3  0  0
Initial Vol:    0    0    10     0    0     0     0 2096    42    82 1197     0
ApproachDel:      14.9           xxxxxx           xxxxxx           xxxxxx
------------|--------------||--------------||--------------||--------------|
Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=10]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3427]
   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 El Camino Real and Crestview Drive
********************************************************************************
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       Uncontrolled     Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  2  1  0    1  0  3  0  0
Initial Vol:    0    0    10     0    0     0     0 2096    42    82 1197     0
------------|--------------||--------------||--------------||--------------|
Major Street Volume:             3417
Minor Approach Volume:           10
Minor Approach Volume Threshold: -138 [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.
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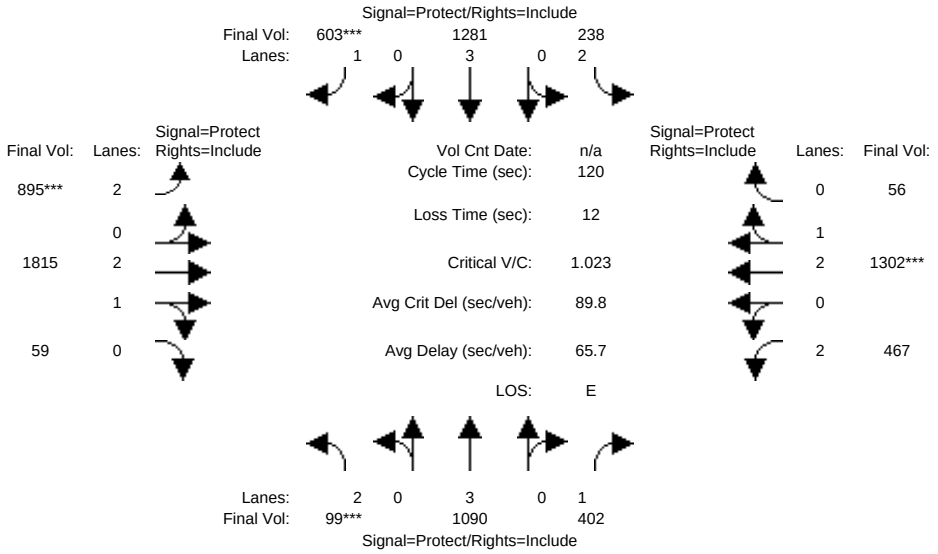
Appendix G – Cumulative Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



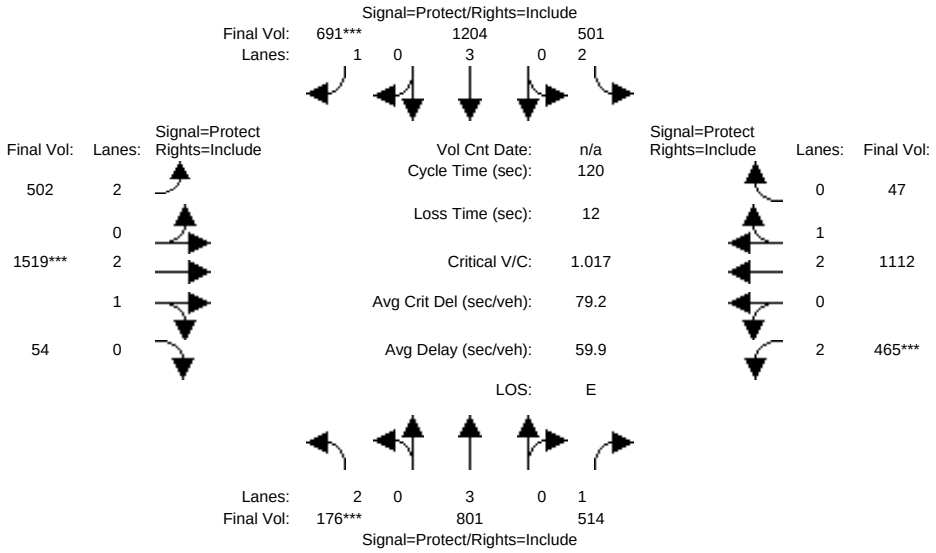
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.91	0.09	2.00	2.88	0.12
Final Sat.:	3502	5187	1615	3502	5187	1615	3502	4999	162	3502	4943	213
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.25	0.07	0.25	0.37	0.26	0.36	0.36	0.13	0.26	0.26
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.32	0.32	0.09	0.35	0.35	0.24	0.36	0.36	0.13	0.25	0.25
Volume/Cap:	0.48	0.65	0.77	0.77	0.70	1.06	1.06	1.01	1.01	1.01	1.06	1.06
Delay/Veh:	56.6	35.8	43.7	64.9	34.7	93.6	93.7	63.0	63.0	97.7	87.9	87.9
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:	56.6	35.8	43.7	64.9	34.7	93.6	93.7	63.0	63.0	97.7	87.9	87.9
LOS by Move:	E	D	D	E	C	F	F	E	E	F	F	F
HCM2k95thQ:	126	589	658	301	684	1252	1023	1308	1308	456	912	912

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #1: El Camino Real and Grant Road



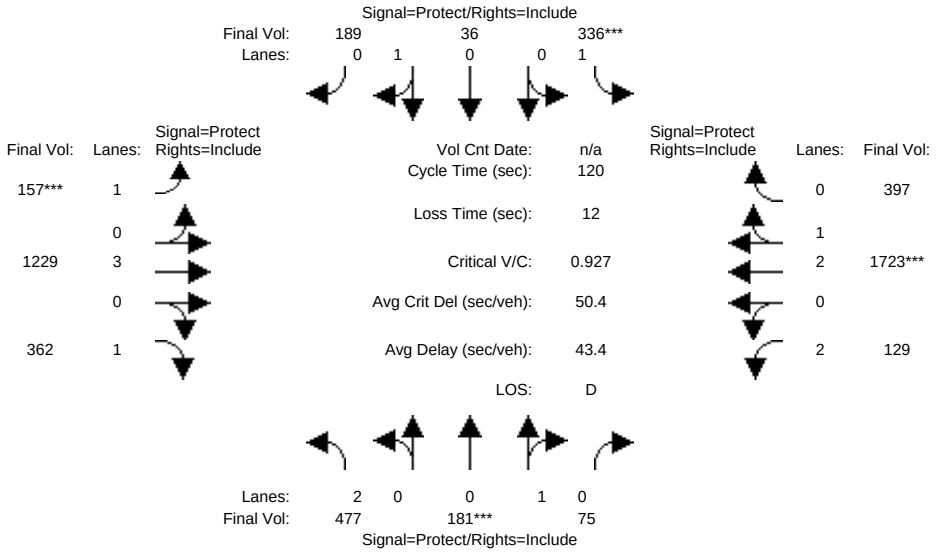
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	801	514	501	1204	691	502	1519	54	465	1112	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	801	514	501	1204	691	502	1519	54	465	1112	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.90	0.10	2.00	2.88	0.12
Final Sat.:	3502	5187	1615	3502	5187	1615	3502	4984	177	3502	4947	209
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.32	0.14	0.23	0.43	0.14	0.30	0.30	0.13	0.22	0.22
Crit Moves:	****					****		****		****		
Green/Cycle:	0.06	0.33	0.33	0.15	0.42	0.42	0.17	0.30	0.30	0.13	0.26	0.26
Volume/Cap:	0.86	0.47	0.97	0.97	0.56	1.03	0.87	1.03	1.03	1.03	0.87	0.87
Delay/Veh:	85.1	32.3	71.9	83.4	27.0	77.2	61.6	72.8	72.8	102.0	48.5	48.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	85.1	32.3	71.9	83.4	27.0	77.2	61.6	72.8	72.8	102.0	48.5	48.5
LOS by Move:	F	C	E	F	C	E	E	E	E	F	D	D
HCM2k95thQ:	270	405	997	614	559	1338	546	1165	1165	438	614	614

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



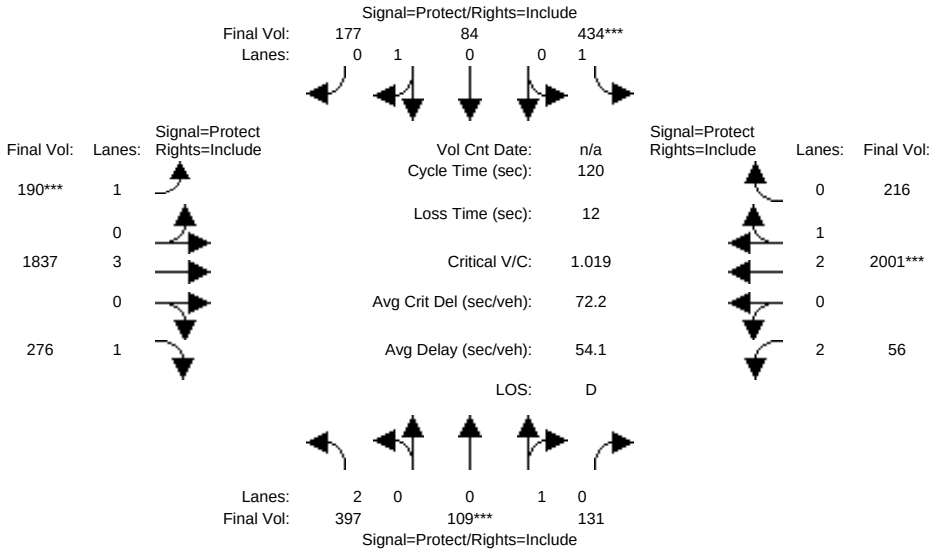
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	477	181	75	336	36	189	157	1229	362	129	1723	397
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	181	75	336	36	189	157	1229	362	129	1723	397
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	477	181	75	336	36	189	157	1229	362	129	1723	397
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	477	181	75	336	36	189	157	1229	362	129	1723	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	477	181	75	336	36	189	157	1229	362	129	1723	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	477	181	75	336	36	189	157	1229	362	129	1723	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.96	0.96	0.95	0.87	0.87	0.95	0.91	0.85	0.92	0.88	0.88
Lanes:	2.00	0.71	0.29	1.00	0.16	0.84	1.00	3.00	1.00	2.00	2.44	0.56
Final Sat.:	3502	1284	532	1805	266	1395	1805	5187	1615	3502	4098	944
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.19	0.14	0.14	0.09	0.24	0.22	0.04	0.42	0.42
Crit Moves:		****		****			****				****	
Green/Cycle:	0.18	0.15	0.15	0.20	0.18	0.18	0.09	0.44	0.44	0.11	0.45	0.45
Volume/Cap:	0.77	0.93	0.93	0.93	0.77	0.77	0.93	0.54	0.51	0.34	0.93	0.93
Delay/Veh:	53.0	85.6	85.6	76.6	59.0	59.0	102.3	25.0	25.0	50.1	38.2	38.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.0	85.6	85.6	76.6	59.0	59.0	102.3	25.0	25.0	50.1	38.2	38.2
LOS by Move:	D	F	F	E	E	E	F	C	C	D	D	D
HCM2k95thQ:	478	581	581	700	449	449	266	506	410	105	1038	1038

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #2: El Camino Real and Sylvan Avenue



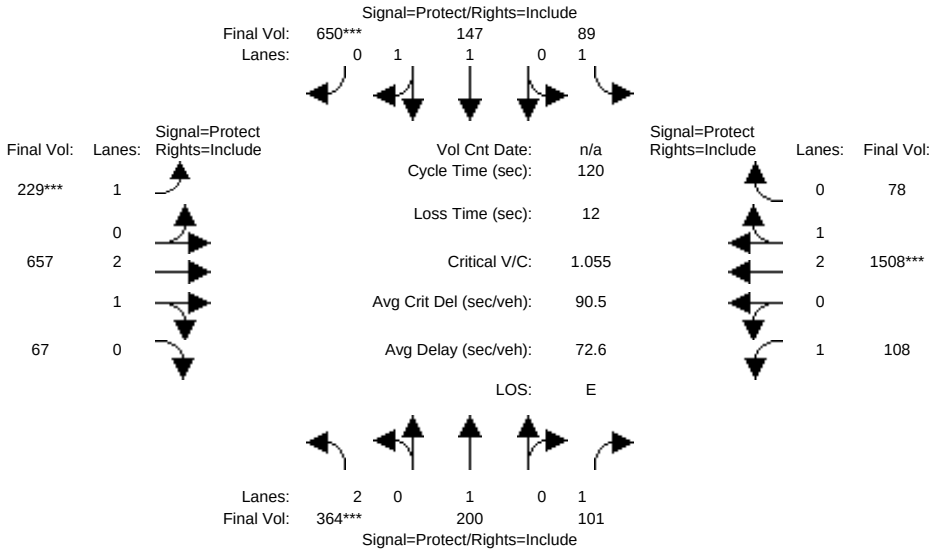
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	397	109	131	434	84	177	190	1837	276	56	2001	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	109	131	434	84	177	190	1837	276	56	2001	216
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	109	131	434	84	177	190	1837	276	56	2001	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	397	109	131	434	84	177	190	1837	276	56	2001	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	397	109	131	434	84	177	190	1837	276	56	2001	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	397	109	131	434	84	177	190	1837	276	56	2001	216
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.90	0.90	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	2.00	0.45	0.55	1.00	0.32	0.68	1.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	3502	792	952	1805	549	1157	1805	5187	1615	3502	4611	498
Capacity Analysis Module:												
Vol/Sat:	0.11	0.14	0.14	0.24	0.15	0.15	0.11	0.35	0.17	0.02	0.43	0.43
Crit Moves:		****			****			****			****	
Green/Cycle:	0.16	0.14	0.14	0.24	0.21	0.21	0.10	0.45	0.45	0.07	0.43	0.43
Volume/Cap:	0.72	1.02	1.02	1.02	0.72	0.72	1.02	0.78	0.38	0.21	1.02	1.02
Delay/Veh:	52.5	116	115.6	94.4	50.6	50.6	124.8	29.4	21.9	52.6	58.7	58.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.5	116	115.6	94.4	50.6	50.6	124.8	29.4	21.9	52.6	58.7	58.7
LOS by Move:	D	F	F	F	D	D	F	C	C	D	E	E
HCM2k95thQ:	402	612	612	935	472	472	351	819	294	48	1312	1312

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



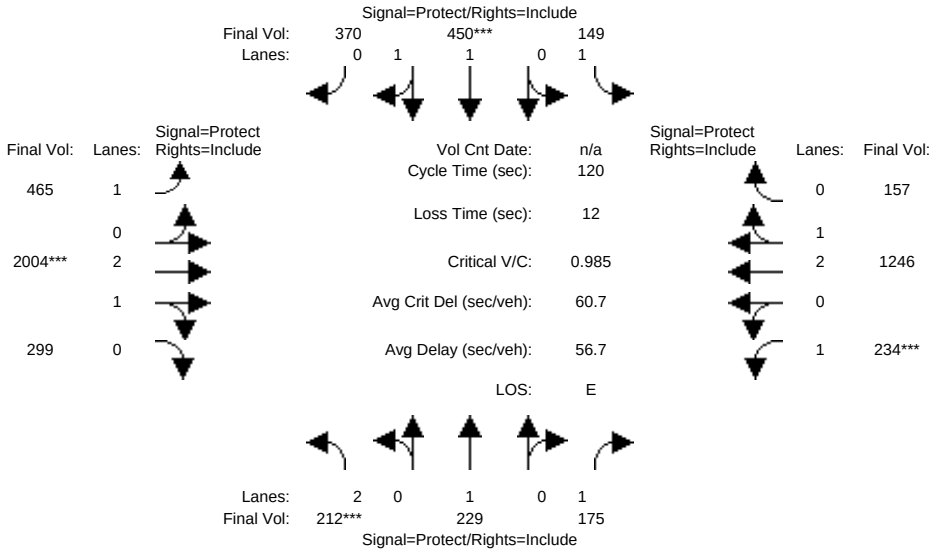
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	364	200	101	89	147	650	229	657	67	108	1508	78
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	364	200	101	89	147	650	229	657	67	108	1508	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	364	200	101	89	147	650	229	657	67	108	1508	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	200	101	89	147	650	229	657	67	108	1508	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	364	200	101	89	147	650	229	657	67	108	1508	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	0.83	0.83	0.95	0.90	0.90	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	0.28	1.00	2.85	0.15
Final Sat.:	3502	1900	1615	1805	1585	1585	1805	4644	471	1805	4896	255
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.06	0.05	0.09	0.41	0.13	0.14	0.14	0.06	0.31	0.31
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.31	0.31	0.17	0.39	0.39	0.12	0.29	0.29	0.12	0.29	0.29
Volume/Cap:	1.05	0.34	0.20	0.28	0.24	1.05	1.05	0.49	0.49	0.49	1.05	1.05
Delay/Veh:	117.6	31.9	30.4	43.6	24.7	84.7	128.9	35.5	35.5	50.8	81.5	81.5
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:	117.6	31.9	30.4	43.6	24.7	84.7	128.9	35.5	35.5	50.8	81.5	81.5
LOS by Move:	F	C	C	D	C	F	F	D	D	D	F	F
HCM2k95thQ:	532	272	136	149	187	1370	513	366	366	210	1209	1209

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #3: El Camino Real and S Bernardo Avenue



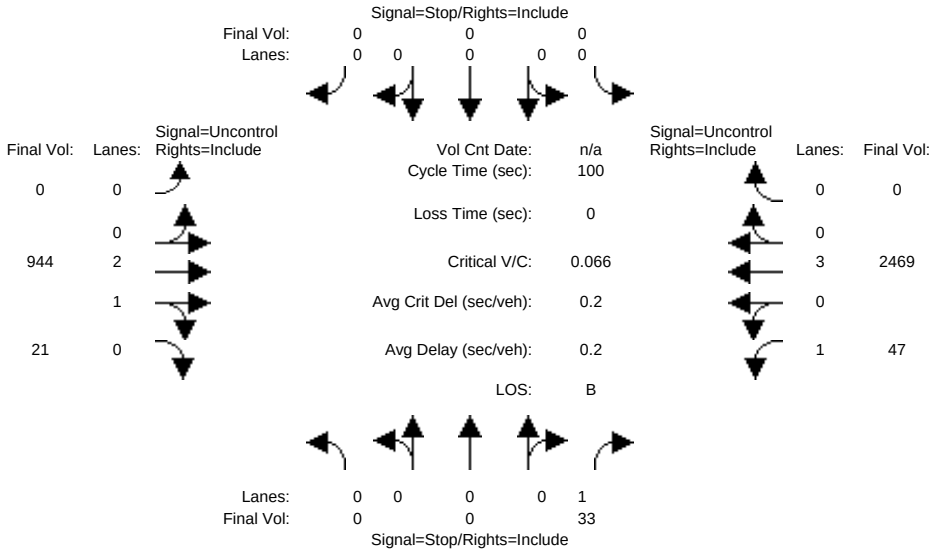
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	212	229	175	149	450	370	465	2004	299	234	1246	157
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	212	229	175	149	450	370	465	2004	299	234	1246	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	212	229	175	149	450	370	465	2004	299	234	1246	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	212	229	175	149	450	370	465	2004	299	234	1246	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	212	229	175	149	450	370	465	2004	299	234	1246	157
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	0.89	0.89	0.95	0.89	0.89	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.10	0.90	1.00	2.61	0.39	1.00	2.66	0.34
Final Sat.:	3502	1900	1615	1805	1846	1518	1805	4428	661	1805	4529	570
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.11	0.08	0.24	0.24	0.26	0.45	0.45	0.13	0.28	0.28
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.29	0.46	0.46	0.13	0.31	0.31
Volume/Cap:	0.98	0.66	0.59	0.66	0.98	0.98	0.90	0.98	0.98	0.98	0.90	0.90
Delay/Veh:	113.1	50.1	48.0	57.0	72.3	72.3	60.0	47.1	47.1	105.9	47.5	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:	113.1	50.1	48.0	57.0	72.3	72.3	60.0	47.1	47.1	105.9	47.5	47.5
LOS by Move:	F	D	D	E	E	E	E	D	D	F	D	D
HCM2k95thQ:	343	412	319	307	895	895	734	1333	1333	581	909	909

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
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	0	22	0	0	0	0	638	14	32	1668	0
Growth Adj:	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	0	0	33	0	0	0	0	944	21	47	2469	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	33	0	0	0	0	944	21	47	2469	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	33	0	0	0	0	944	21	47	2469	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	33	0	0	0	0	944	21	47	2469	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	325	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	965	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	677	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	722	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	677	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	722	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.05	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	3.8	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	5.3	xxxx	xxxxx
Control Del:	xxxxx	xxxx	10.6	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.3	xxxx	xxxxx
LOS by Move:	*	*	B	*	*	*	*	*	*	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:	10.6			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	B			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

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Intersection #4 El Camino Real and Crestview Drive

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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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	33	0	0	0	0	944	21	47	2469	0
ApproachDel:	10.6			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=33]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3514]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	33	0	0	0	0	944	21	47	2469	0

Major Street Volume: 3481
Minor Approach Volume: 33
Minor Approach Volume Threshold: -145 [less than minimum of 100]

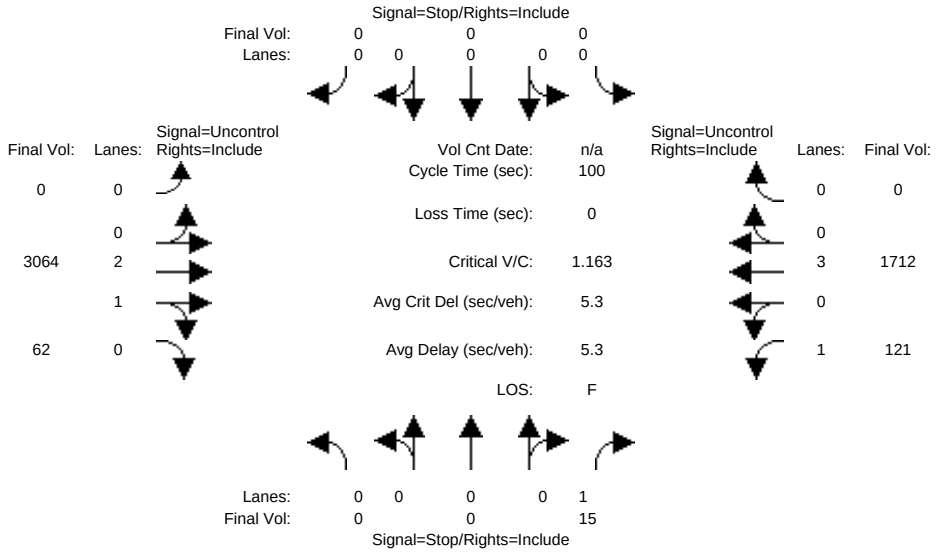
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

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

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
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	0	10	0	0	0	0	2070	42	82	1157	0
Growth Adj:	0.00	0.00	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	0	0	15	0	0	0	0	3064	62	121	1712	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	15	0	0	0	0	3064	62	121	1712	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	15	0	0	0	0	3064	62	121	1712	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	15	0	0	0	0	3064	62	121	1712	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	1052	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	3126	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	226	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	104	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	226	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	104	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.16	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	5.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	197	xxxx	xxxxx
Control Del:	xxxxx	xxxx	22.0	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	215.5	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	F	*	*
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:	22.0			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	15	0	0	0	0	3064	62	121	1712	0
ApproachDel:	22.0			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=15]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4974]
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 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	15	0	0	0	0	3064	62	121	1712	0

Major Street Volume: 4959
Minor Approach Volume: 15
Minor Approach Volume Threshold: -267 [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).

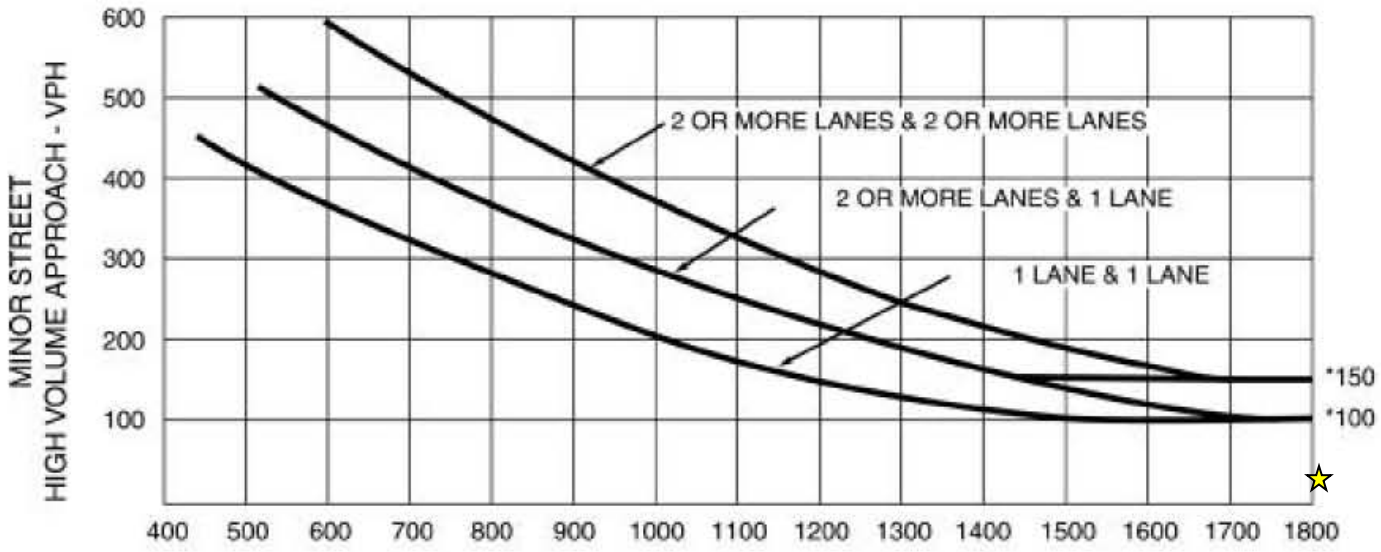
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Warrant (Urban Areas)

Intersection: East El Camino Real/Crestview Drive, Mountain View, CA
Scenario: Cumulative Conditions A.M. Peak Hour

Minor Street Volume =33 VPH

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major Street Volume = 3481 VPH

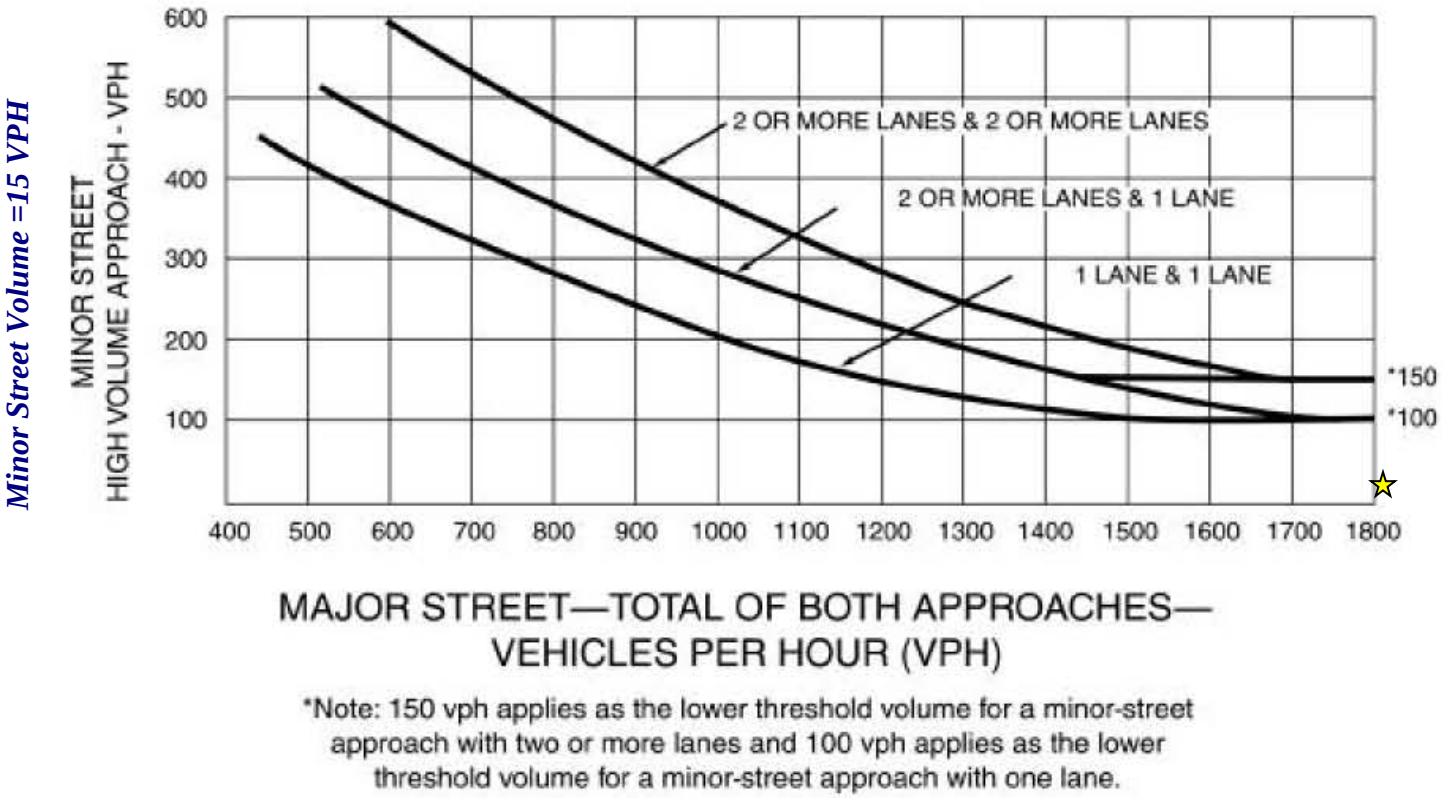
A signal is not warranted for the A.M. Peak Hour

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Warrant (Urban Areas)

Intersection: East El Camino Real/Crestview Drive, Mountain View, CA
Scenario: Cumulative Conditions P.M. Peak Hour

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Minor Street Volume =15 VPH

Major Street Volume = 4959 VPH

A signal is not warranted for the P.M. Peak Hour

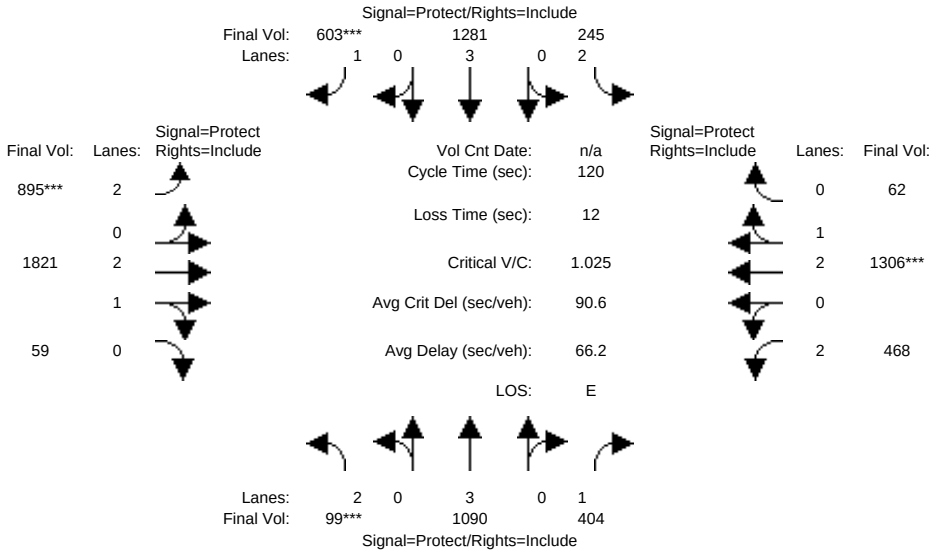
Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Appendix H – Cumulative plus Project Conditions Intersections Level of Service Work Sheets

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project AM

Intersection #1: El Camino Real and Grant Road



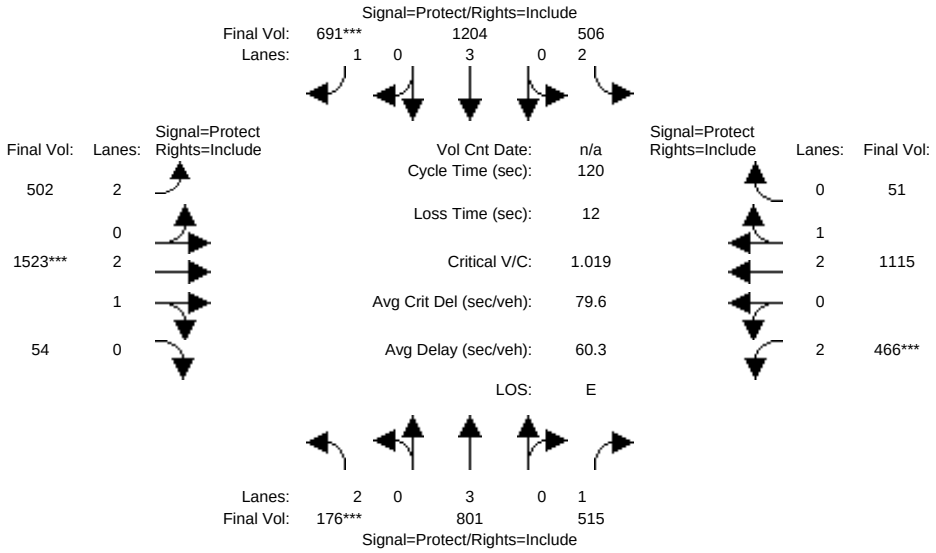
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	99	1090	402	238	1281	603	895	1815	59	467	1302	56
Added Vol:	0	0	2	7	0	0	0	6	0	1	4	6
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	99	1090	404	245	1281	603	895	1821	59	468	1306	62
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	99	1090	404	245	1281	603	895	1821	59	468	1306	62
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	99	1090	404	245	1281	603	895	1821	59	468	1306	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:	99	1090	404	245	1281	603	895	1821	59	468	1306	62
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.91	0.09	2.00	2.86	0.14
Final Sat.:	3502	5187	1615	3502	5187	1615	3502	4999	162	3502	4917	233
Capacity Analysis Module:												
Vol/Sat:	0.03	0.21	0.25	0.07	0.25	0.37	0.26	0.36	0.36	0.13	0.27	0.27
Crit Moves:	****					****	****				****	
Green/Cycle:	0.06	0.32	0.32	0.09	0.35	0.35	0.24	0.36	0.36	0.13	0.25	0.25
Volume/Cap:	0.48	0.66	0.78	0.78	0.70	1.06	1.06	1.02	1.02	1.02	1.06	1.06
Delay/Veh:	56.6	36.1	44.6	65.5	34.8	94.5	94.7	63.3	63.3	97.9	88.6	88.6
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:	56.6	36.1	44.6	65.5	34.8	94.5	94.7	63.3	63.3	97.9	88.6	88.6
LOS by Move:	E	D	D	E	C	F	F	E	E	F	F	F
HCM2k95thQ:	126	592	667	310	685	1256	1026	1313	1313	457	920	920

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project PM

Intersection #1: El Camino Real and Grant Road



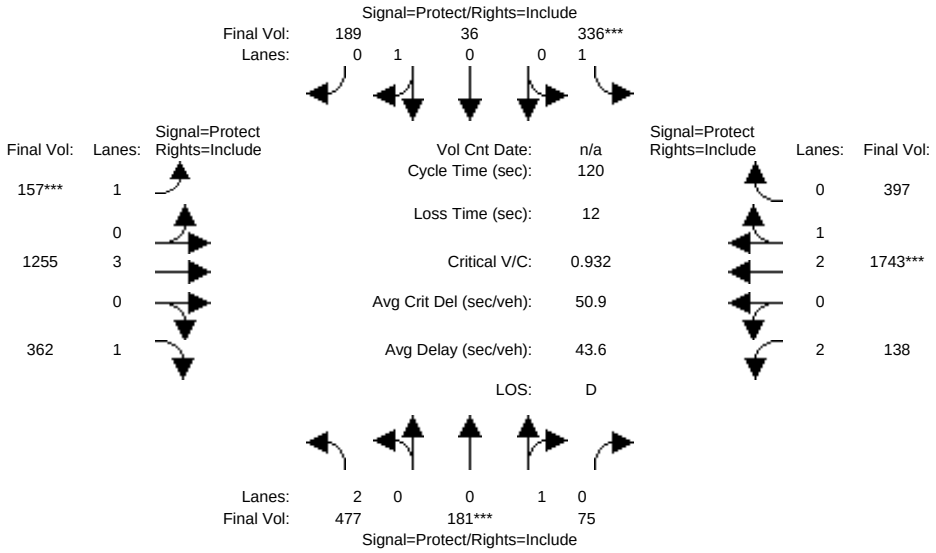
Street Name:	Grant Road						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	801	514	501	1204	691	502	1519	54	465	1112	47
Added Vol:	0	0	1	5	0	0	0	4	0	1	3	4
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	176	801	515	506	1204	691	502	1523	54	466	1115	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	176	801	515	506	1204	691	502	1523	54	466	1115	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	176	801	515	506	1204	691	502	1523	54	466	1115	51
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	176	801	515	506	1204	691	502	1523	54	466	1115	51
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	0.85	0.92	0.91	0.85	0.92	0.91	0.91	0.92	0.90	0.90
Lanes:	2.00	3.00	1.00	2.00	3.00	1.00	2.00	2.90	0.10	2.00	2.87	0.13
Final Sat.:	3502	5187	1615	3502	5187	1615	3502	4984	177	3502	4925	225
Capacity Analysis Module:												
Vol/Sat:	0.05	0.15	0.32	0.14	0.23	0.43	0.14	0.31	0.31	0.13	0.23	0.23
Crit Moves:	****					****		****		****		
Green/Cycle:	0.06	0.33	0.33	0.15	0.42	0.42	0.17	0.30	0.30	0.13	0.26	0.26
Volume/Cap:	0.86	0.47	0.98	0.98	0.56	1.03	0.87	1.03	1.03	1.03	0.87	0.87
Delay/Veh:	85.1	32.4	73.4	84.7	27.0	77.6	62.0	73.1	73.1	102.3	48.6	48.6
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:	85.1	32.4	73.4	84.7	27.0	77.6	62.0	73.1	73.1	102.3	48.6	48.6
LOS by Move:	F	C	E	F	C	E	E	E	E	F	D	D
HCM2k95thQ:	270	406	1006	622	559	1340	548	1169	1169	440	618	618

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project AM

Intersection #2: El Camino Real and Sylvan Avenue



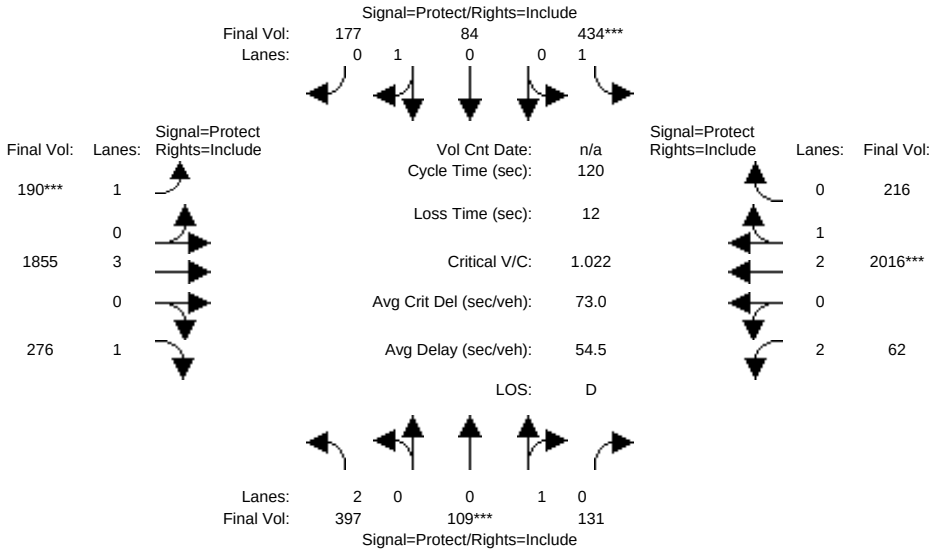
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	477	181	75	336	36	189	157	1229	362	129	1723	397
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	477	181	75	336	36	189	157	1229	362	129	1723	397
Added Vol:	0	0	0	0	0	0	0	26	0	9	20	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	477	181	75	336	36	189	157	1255	362	138	1743	397
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	477	181	75	336	36	189	157	1255	362	138	1743	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	477	181	75	336	36	189	157	1255	362	138	1743	397
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	477	181	75	336	36	189	157	1255	362	138	1743	397
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.96	0.96	0.95	0.87	0.87	0.95	0.91	0.85	0.92	0.88	0.88
Lanes:	2.00	0.71	0.29	1.00	0.16	0.84	1.00	3.00	1.00	2.00	2.44	0.56
Final Sat.:	3502	1284	532	1805	266	1395	1805	5187	1615	3502	4106	935
Capacity Analysis Module:												
Vol/Sat:	0.14	0.14	0.14	0.19	0.14	0.14	0.09	0.24	0.22	0.04	0.42	0.42
Crit Moves:		****			****			****			****	
Green/Cycle:	0.18	0.15	0.15	0.20	0.18	0.18	0.09	0.44	0.44	0.11	0.46	0.46
Volume/Cap:	0.77	0.93	0.93	0.93	0.77	0.77	0.93	0.55	0.51	0.37	0.93	0.93
Delay/Veh:	53.2	86.7	86.7	77.7	59.4	59.4	103.7	24.9	24.6	50.5	38.5	38.5
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:	53.2	86.7	86.7	77.7	59.4	59.4	103.7	24.9	24.6	50.5	38.5	38.5
LOS by Move:	D	F	F	E	E	E	F	C	C	D	D	D
HCM2k95thQ:	480	584	584	704	451	451	266	516	408	113	1050	1050

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project PM

Intersection #2: El Camino Real and Sylvan Avenue



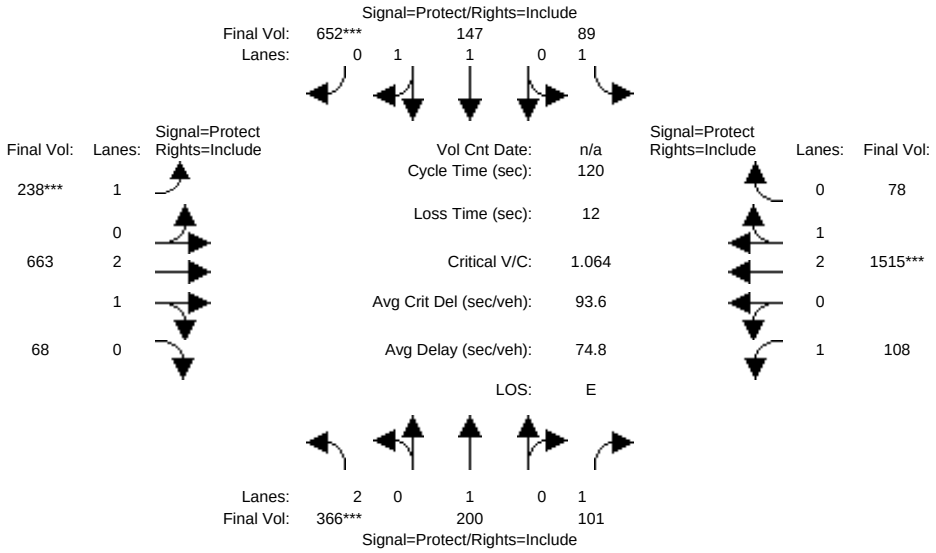
Street Name:	Sylvan Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	397	109	131	434	84	177	190	1837	276	56	2001	216
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	397	109	131	434	84	177	190	1837	276	56	2001	216
Added Vol:	0	0	0	0	0	0	0	18	0	6	15	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	397	109	131	434	84	177	190	1855	276	62	2016	216
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	397	109	131	434	84	177	190	1855	276	62	2016	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	397	109	131	434	84	177	190	1855	276	62	2016	216
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	397	109	131	434	84	177	190	1855	276	62	2016	216
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.92	0.92	0.95	0.90	0.90	0.95	0.91	0.85	0.92	0.90	0.90
Lanes:	2.00	0.45	0.55	1.00	0.32	0.68	1.00	3.00	1.00	2.00	2.71	0.29
Final Sat.:	3502	792	952	1805	549	1157	1805	5187	1615	3502	4615	494
Capacity Analysis Module:												
Vol/Sat:	0.11	0.14	0.14	0.24	0.15	0.15	0.11	0.36	0.17	0.02	0.44	0.44
Crit Moves:		****		****			****				****	
Green/Cycle:	0.16	0.13	0.13	0.24	0.21	0.21	0.10	0.46	0.46	0.07	0.43	0.43
Volume/Cap:	0.72	1.02	1.02	1.02	0.72	0.72	1.02	0.78	0.37	0.24	1.02	1.02
Delay/Veh:	52.7	117	116.6	95.4	50.8	50.8	125.8	29.4	21.7	52.8	59.5	59.5
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:	52.7	117	116.6	95.4	50.8	50.8	125.8	29.4	21.7	52.8	59.5	59.5
LOS by Move:	D	F	F	F	D	D	F	C	C	D	E	E
HCM2k95thQ:	403	614	614	939	473	473	353	828	293	53	1322	1322

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project AM

Intersection #3: El Camino Real and S Bernardo Avenue



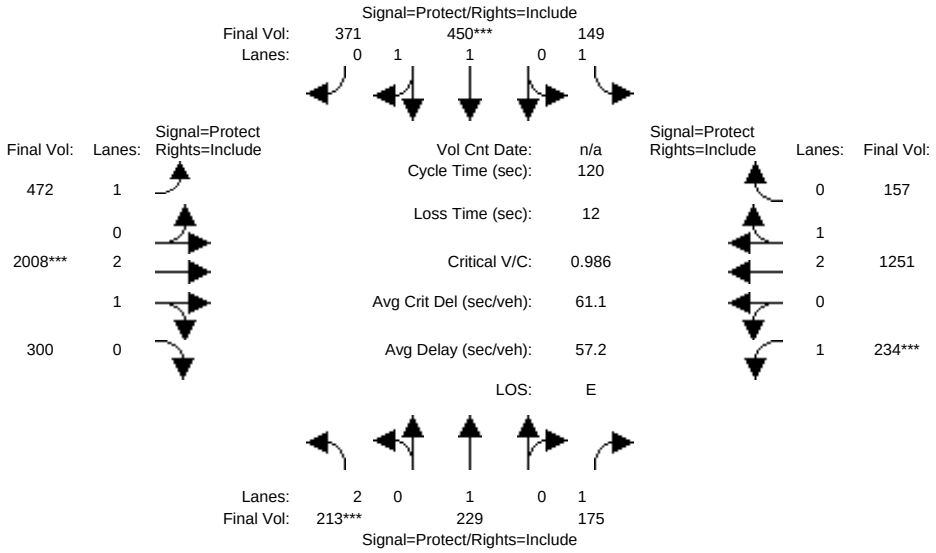
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L - T - R			L - T - R			L - T - R			L - T - R		
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	246	135	68	60	99	439	155	444	45	73	1019	53
Growth Adj:	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	364	200	101	89	147	650	229	657	67	108	1508	78
Added Vol:	2	0	0	0	0	2	9	6	1	0	7	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	366	200	101	89	147	652	238	663	68	108	1515	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	366	200	101	89	147	652	238	663	68	108	1515	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	366	200	101	89	147	652	238	663	68	108	1515	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	366	200	101	89	147	652	238	663	68	108	1515	78
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	0.83	0.83	0.95	0.90	0.90	0.95	0.90	0.90
Lanes:	2.00	1.00	1.00	1.00	1.00	1.00	1.00	2.72	0.28	1.00	2.85	0.15
Final Sat.:	3502	1900	1615	1805	1585	1585	1805	4641	473	1805	4897	254
Capacity Analysis Module:												
Vol/Sat:	0.10	0.11	0.06	0.05	0.09	0.41	0.13	0.14	0.14	0.06	0.31	0.31
Crit Moves:	****					****	****				****	
Green/Cycle:	0.10	0.31	0.31	0.17	0.39	0.39	0.12	0.29	0.29	0.12	0.29	0.29
Volume/Cap:	1.06	0.34	0.20	0.28	0.24	1.06	1.06	0.49	0.49	0.49	1.06	1.06
Delay/Veh:	120.5	32.1	30.5	43.7	24.9	87.9	130.5	35.3	35.3	50.8	84.8	84.8
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:	120.5	32.1	30.5	43.7	24.9	87.9	130.5	35.3	35.3	50.8	84.8	84.8
LOS by Move:	F	C	C	D	C	F	F	D	D	D	F	F
HCM2k95thQ:	539	273	137	149	188	1389	536	369	369	210	1226	1226

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Operations (Future Volume Alternative)
Cumulative plus Project PM

Intersection #3: El Camino Real and S Bernardo Avenue



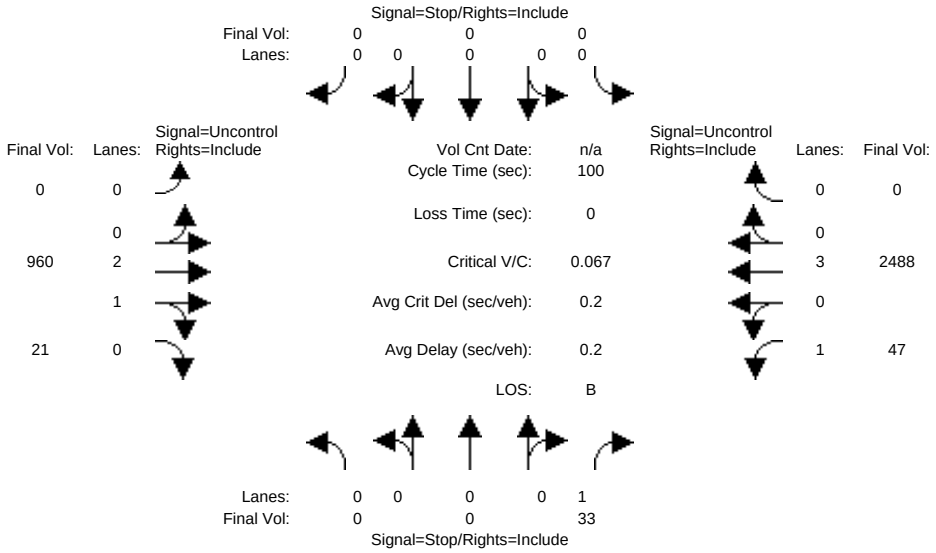
Street Name:	S Bernardo Avenue						El Camino Real					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L -	T -	R	L -	T -	R	L -	T -	R	L -	T -	R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module:												
Base Vol:	143	155	118	101	304	250	314	1354	202	158	842	106
Growth Adj:	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	212	229	175	149	450	370	465	2004	299	234	1246	157
Added Vol:	1	0	0	0	0	1	7	4	1	0	5	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	213	229	175	149	450	371	472	2008	300	234	1251	157
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	213	229	175	149	450	371	472	2008	300	234	1251	157
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	213	229	175	149	450	371	472	2008	300	234	1251	157
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	213	229	175	149	450	371	472	2008	300	234	1251	157
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	0.85	0.95	0.89	0.89	0.95	0.89	0.89	0.95	0.89	0.89
Lanes:	2.00	1.00	1.00	1.00	1.10	0.90	1.00	2.61	0.39	1.00	2.67	0.33
Final Sat.:	3502	1900	1615	1805	1844	1521	1805	4427	661	1805	4531	568
Capacity Analysis Module:												
Vol/Sat:	0.06	0.12	0.11	0.08	0.24	0.24	0.26	0.45	0.45	0.13	0.28	0.28
Crit Moves:	****				****			****			****	
Green/Cycle:	0.06	0.18	0.18	0.13	0.25	0.25	0.29	0.46	0.46	0.13	0.30	0.30
Volume/Cap:	0.99	0.66	0.59	0.66	0.99	0.99	0.91	0.99	0.99	0.99	0.91	0.91
Delay/Veh:	113.5	50.1	48.0	57.0	72.7	72.7	61.2	47.5	47.5	106.5	48.5	48.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	113.5	50.1	48.0	57.0	72.7	72.7	61.2	47.5	47.5	106.5	48.5	48.5
LOS by Move:	F	D	D	E	E	E	E	D	D	F	D	D
HCM2k95thQ:	345	412	319	307	898	898	748	1338	1338	582	921	921

Note: Queue reported is the distance per lane in feet.

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative plus Project AM

Intersection #4: El Camino Real and Crestview Drive




```
Street Name:         Crestview Drive                  El Camino Real
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    0    22     0    0     0     0  638    14    32 1668     0
Growth Adj:  1.48 1.48  1.48  1.48 1.48  1.48  1.48 1.48  1.48  1.48 1.48  1.48
Initial Bse:    0    0    33     0    0     0     0  944    21    47 2469     0
Added Vol:      0    0     0     0    0     0     0   16     0     0   19     0
ATI:            0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    33     0    0     0     0  960    21    47 2488     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:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Volume:     0    0    33     0    0     0     0  960    21    47 2488     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
FinalVolume:    0    0    33     0    0     0     0  960    21    47 2488     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   330  xxxx xxxx xxxxx  xxxx xxxx xxxxx   981 xxxx xxxxx
Potent Cap.: xxxx xxxx   671  xxxx xxxx xxxxx  xxxx xxxx xxxxx   712 xxxx xxxxx
Move Cap.:   xxxx xxxx   671  xxxx xxxx xxxxx  xxxx xxxx xxxxx   712 xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.07 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
2Way95thQ:   xxxx xxxx   3.8  xxxx xxxx xxxxx  xxxx xxxx xxxxx   5.3 xxxx xxxxx
Control Del:xxxxx xxxx  10.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx  10.4 xxxx xxxxx
LOS by Move:    *    *     B     *    *     *     *    *     *     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:      10.6           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         B              *                *                *
Note: Queue reported is the distance per lane in feet.
                    Peak Hour Delay Signal Warrant Report
********************************************************************************
Intersection #4 El Camino Real and Crestview Drive
********************************************************************************
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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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	33	0	0	0	0	960	21	47	2488	0
ApproachDel:	10.6			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=33]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=3549]
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]

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Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	33	0	0	0	0	960	21	47	2488	0

Major Street Volume: 3516
Minor Approach Volume: 33
Minor Approach Volume Threshold: -148 [less than minimum of 100]

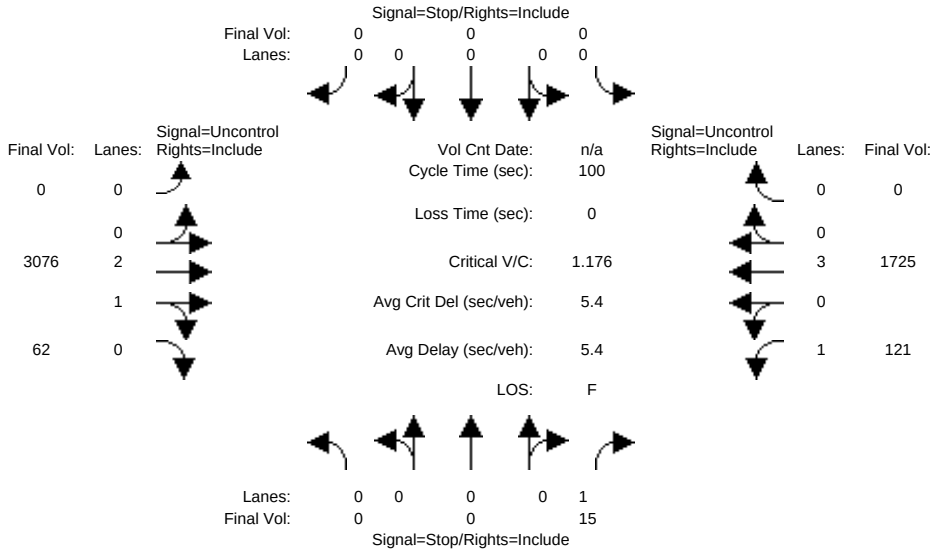
SIGNAL WARRANT DISCLAIMER
This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other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

840 East El Camino Real
City of Mountain View
TJKM Transportation Consultants

Level Of Service Computation Report
2000 HCM Unsignalized (Future Volume Alternative)
Cumulative plus Project PM

Intersection #4: El Camino Real and Crestview Drive



Street Name:	Crestview Drive						El Camino Real					
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	0	10	0	0	0	0	2070	42	82	1157	0
Growth Adj:	0.00	0.00	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
Initial Bse:	0	0	15	0	0	0	0	3064	62	121	1712	0
Added Vol:	0	0	0	0	0	0	0	12	0	0	13	0
ATI:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	15	0	0	0	0	3076	62	121	1725	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:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	15	0	0	0	0	3076	62	121	1725	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	15	0	0	0	0	3076	62	121	1725	0
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	6.9	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	3.3	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	1056	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	3138	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	225	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	103	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	225	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	103	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	0.07	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	1.18	xxxx	xxxx
Level Of Service Module:												
2Way95thQ:	xxxx	xxxx	5.2	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	199	xxxx	xxxxx
Control Del:	xxxxx	xxxx	22.1	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	221.0	xxxx	xxxxx
LOS by Move:	*	*	C	*	*	*	*	*	*	F	*	*
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:	22.1			xxxxxx			xxxxxx			xxxxxx		
ApproachLOS:	C			*			*			*		

Note: Queue reported is the distance per lane in feet.

Peak Hour Delay Signal Warrant Report

****

Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	15	0	0	0	0	3076	62	121	1725	0
ApproachDel:	22.1			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop Sign]
Signal Warrant Rule #1: [vehicle-hours=0.1]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=15]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=4999]
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]

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Intersection #4 El Camino Real and Crestview Drive

****

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			Uncontrolled			Uncontrolled		
Lanes:	0 0 0 0 1			0 0 0 0 0			0 0 2 1 0			1 0 3 0 0		
Initial Vol:	0	0	15	0	0	0	0	3076	62	121	1725	0

Major Street Volume: 4984
Minor Approach Volume: 15
Minor Approach Volume Threshold: -269 [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).

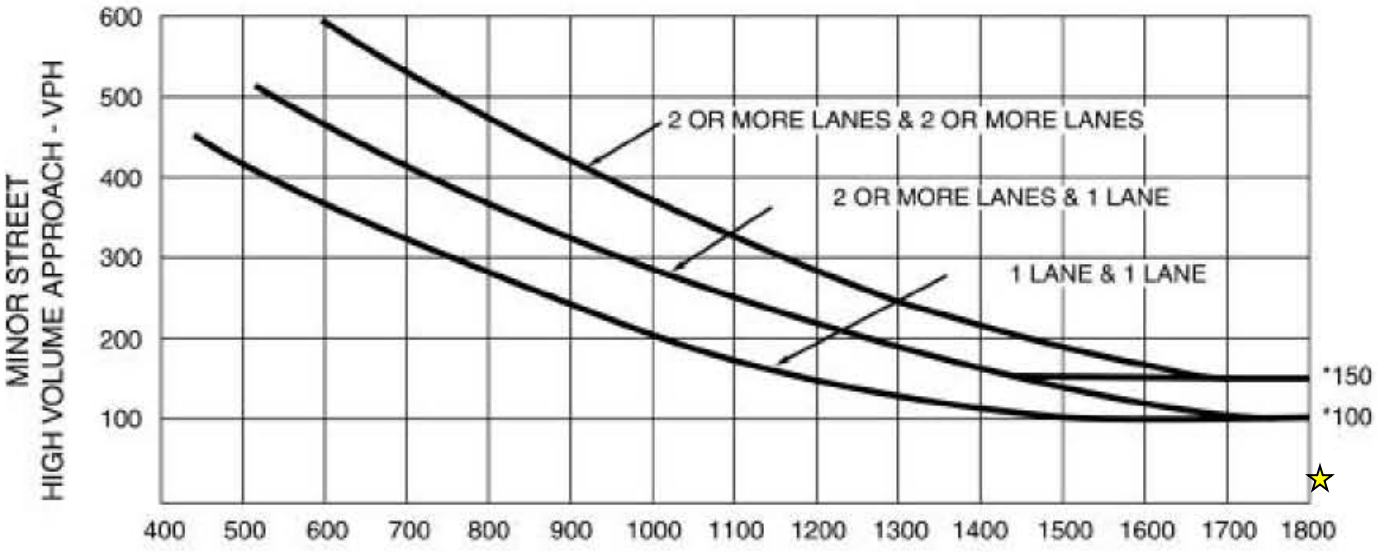
The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Warrant (Urban Areas)

Intersection: East El Camino Real/Crestview Drive, Mountain View, CA
Scenario: Cumulative plus Project Conditions A.M. Peak Hour

Minor Street Volume =33 VPH

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major Street Volume = 3516 VPH

A signal is not warranted for the A.M. Peak Hour

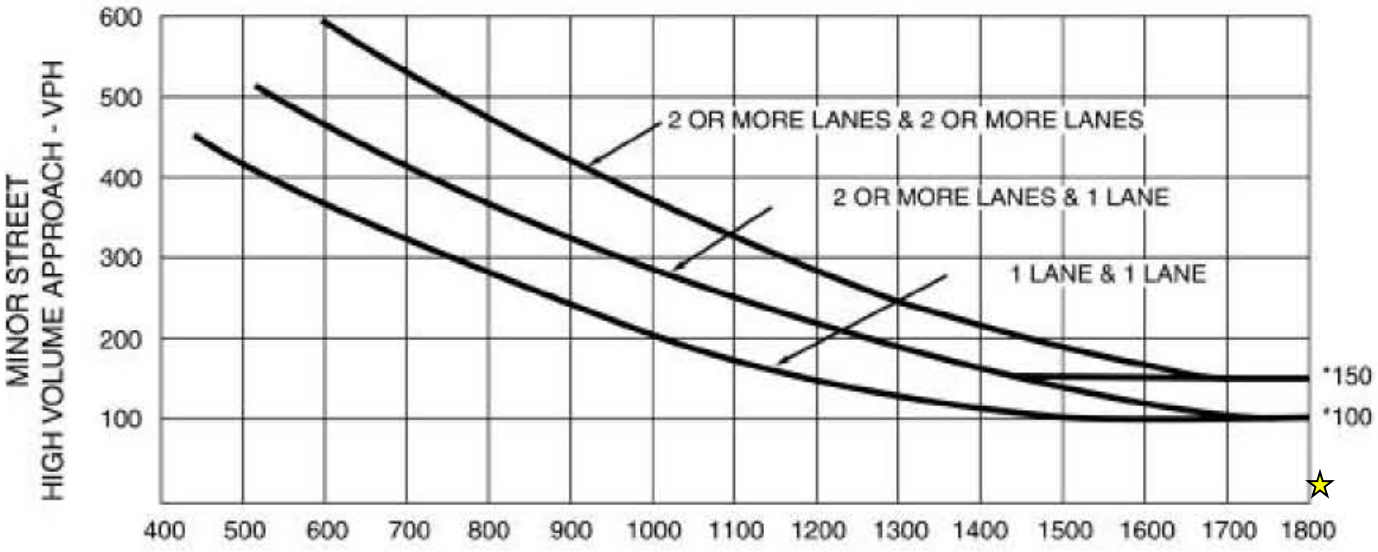
Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3

Peak Hour Warrant (Urban Areas)

Intersection: East El Camino Real/Crestview Drive, Mountain View, CA
Scenario: Cumulative plus Project Conditions P.M. Peak Hour

Minor Street Volume =15 VPH

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major Street Volume = 4984 VPH

A signal is not warranted for the P.M. Peak Hour

Source: CA MUTCD 2014, Chapter 4C – Traffic Control Signal Needs Studies, Part 4 - Highway Traffic Signals, Figure 4C-3