

Palomino Place

Local Transportation Analysis

Prepared for:
The City of Davis

August 2024

RS22-4193

FEHR  PEERS

Table of Contents

1. Introduction.....	6
2. Analysis Methodology	7
Analysis Locations.....	7
Roadway System Operations.....	10
Travel Demand Forecasting	13
Roadway Operations Performance Criteria	15
City of Davis	15
Yolo County.....	16
Caltrans	16
3. Existing Conditions	18
Roadway System	18
Data Collection.....	19
Analysis Results.....	19
4. Existing Plus Project Conditions.....	25
Project Travel Characteristics.....	25
Analysis Results.....	25
East Covell Boulevard/Monarch Lane Intersection	36
5. Recommendations	38

List of Figures

Figure 1: Study Area and Analysis Locations.....	9
Figure 2: Peak Hour Traffic Volumes and Lane Configurations – Existing Conditions.....	22
Figure 3: Peak Hour Traffic Volumes and Lane Configurations – Existing Plus Project Conditions.....	26

List of Tables

Table 1: Signalized Intersection LOS Criteria	11
Table 2: Stop-Controlled Intersection LOS Criteria	11
Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions	29
Table 4: Freeway Off-Ramp Queuing – Existing and Existing Plus Project Conditions	34
Table 5: Peak Hour Signal Warrants – Existing and Existing Plus Project Conditions	35
Table 6: East Covell Boulevard/Monarch Lane – Existing Plus Project Conditions.....	37
Table 7: East Covell Boulevard/Monarch Lane – Phasing Plan A	39
Table 8: East Covell Boulevard/Monarch Lane – Phasing Plan B.....	40

This page intentionally left blank.

1. Introduction

This document presents an analysis of the potential effects of the proposed Palomino Place project with respect to peak hour traffic operations, vehicle delay, and level of service (LOS) on roadway facilities within the vicinity of the project site.

Analysis Scenarios

The following scenarios are analyzed in this study:

- **Existing Conditions** – Establishes the existing setting, which is used to measure project-specific transportation effects.
- **Existing Plus Project Conditions** – Adds changes to travel demand resulting from buildout of the proposed project to existing conditions.

Evaluations of peak hour traffic operations are performed for each of these scenarios. An evaluation of peak hour traffic operations under future Cumulative Plus Project conditions is underway as part of the Village Farms Davis project and Shriners Property project review processes.



2. Analysis Methodology

This section describes the methods utilized to analyze roadway traffic operations.

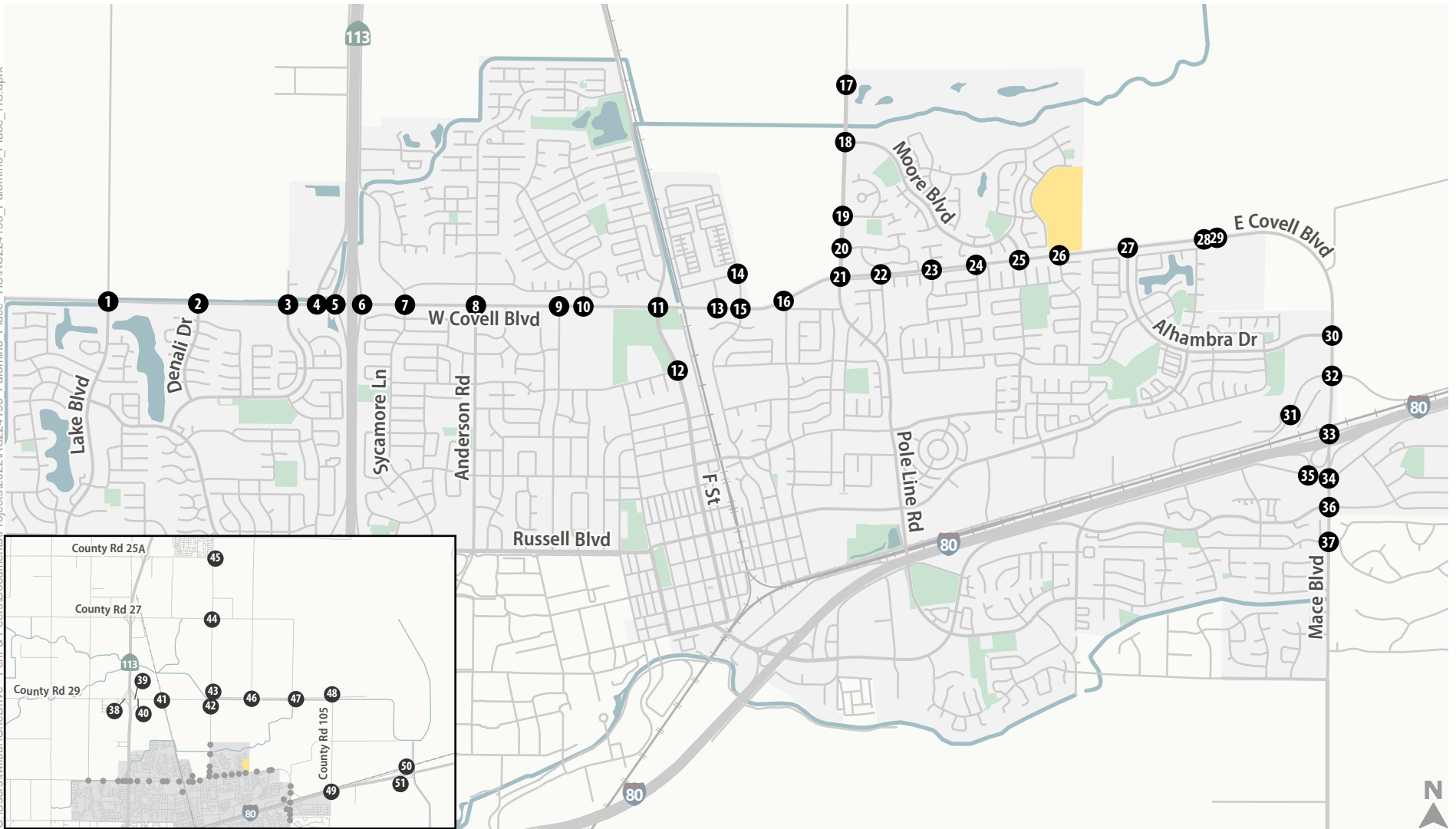
Analysis Locations

Figure 1 displays the locations of the study intersections, which were selected in consultation with City of Davis staff and based on the project's expected travel characteristics (i.e., project location and amount of project trips) as well as facilities susceptible to being affected by the project. This analysis includes the following study intersections:

1. West Covell Boulevard/Lake Boulevard
2. West Covell Boulevard/Denali Drive
3. West Covell Boulevard/Shasta Drive
4. West Covell Boulevard/John Jones Road
5. West Covell Boulevard/SR 113 SB Ramps
6. West Covell Boulevard/SR 113 NB Ramps
7. West Covell Boulevard/Sycamore Lane
8. West Covell Boulevard/Anderson Road
9. West Covell Boulevard/Oak Avenue
10. West Covell Boulevard/Catalina Drive
11. East Covell Boulevard/F Street
12. F Street/East Fourteenth Street
13. East Covell Boulevard/Market Avenue
14. Cannery Avenue/Cannery Loop
15. East Covell Boulevard/J Street/Cannery Avenue
16. East Covell Boulevard/L Street
17. Pole Line Road/Village Farms Road North (Future Intersection)
18. Pole Line Road/Moore Boulevard
19. Pole Line Road/Donner Avenue
20. Pole Line Road/Picasso Avenue
21. East Covell Boulevard/Pole Line Road
22. East Covell Boulevard/Birch Lane
23. East Covell Boulevard/Baywood Lane
24. East Covell Boulevard/Manzanita Lane
25. East Covell Boulevard/Wright Boulevard

26. East Covell Boulevard/Monarch Lane
27. East Covell Boulevard/Alhambra Drive
28. East Covell Boulevard/Shriner's Property Road East (Future Intersection)
29. East Covell Boulevard/Harper Junior High School
30. Mace Boulevard/Alhambra Drive
31. Second Street/Fermi Place/Target Driveway
32. Mace Boulevard/Second Street/County Road 32A
33. Mace Boulevard/I-80 WB Ramps
34. Mace Boulevard/Chiles Road
35. Chiles Road/I-80 EB Ramp
36. Mace Boulevard/Cowell Boulevard
37. Mace Boulevard/North El Macero Drive
38. County Road 29/SR 113 SB Ramps
39. County Road 29/SR 113 NB Ramps
40. County Road 29/County Road 100A
41. County Road 29/County Road 101A
42. County Road 102/County Road 29
43. County Road 102/County Road 28H
44. County Road 102/County Road 27
45. County Road 102/County Road 25A
46. County Road 28H/County Road 103
47. County Road 28H/Yolo County Landfill Driveway
48. County Road 28H/County Road 105
49. County Road 105/County Road 32A
50. County Road 32A/I-80 WB Ramps
51. County Road 32B/Chiles Road/I-80 EB Ramps





● Study Intersections

■ Project Site



Figure 1

Study Intersections

Roadway System Operations

This study analyzes roadway operating conditions using intersection LOS as a primary measure of operational performance. Motorized vehicle LOS is a qualitative measure of traffic flow from the perspective of motorists and is an indication of the comfort and convenience associated with driving. Typical factors that affect motorized vehicle LOS include speed, travel time, traffic interruptions, and freedom to maneuver. Empirical LOS criteria and methods of calculation have been documented in the *Highway Capacity Manual, 7th Edition* (HCM) published by the Transportation Research Board of the National Academies of Science (Transportation Research Board, 2022). The HCM defines six levels of service ranging from LOS A (representing free-flow vehicular traffic conditions with little to no congestion) to LOS F (oversaturated conditions where traffic demand exceeds capacity resulting in long queues and delays). The LOS definitions and calculations contained in the HCM are the prevailing measurement standard used throughout the United States and are used in this study. Motorized vehicle LOS definitions for signalized and unsignalized intersection are discussed on the following pages.

Study Intersections

The LOS at signalized intersections is based on the average control delay (i.e., delay resulting from initial deceleration, queue move-up time, time stopped on an intersection approach, and final acceleration) experienced per vehicle traveling through the intersection. **Table 1** summarizes the relationship between delay and LOS for signalized intersections.



Table 1: Signalized Intersection LOS Criteria

Level of Service	Description	Average Control Delay ¹
A	Volume-to-capacity ratio is low and either progression is exceptionally favorable or cycle length is very short.	≤ 10
B	Volume-to-capacity ratio is low and either progression is highly favorable or the cycle length is short. More vehicles stop than with LOS A.	> 10 to 20
C	Progression is favorable or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	> 20 to 35
D	Volume-to-capacity ratio is high and either progression is ineffective or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.	> 35 to 55
E	Volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.	> 55 to 80
F	Volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	> 80

Note: ¹ Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A).

Source: *Highway Capacity Manual, 7th Edition*, Transportation Research Board, 2022.

Similar to signalized intersections, the HCM 7th Edition methodology for stop-controlled intersections reports the LOS based on the control delay experienced by motorists traveling through the intersection. As shown in **Table 2**, the delay ranges for stop-controlled intersections are lower than for signalized intersections. The HCM anticipates that motorists expect signalized intersections to carry higher traffic volume that results in greater delay than a stop-controlled intersection. Stop controls are associated with more uncertainty as delays are less predictable, which can reduce users' delay tolerance.

Table 2: Stop-Controlled Intersection LOS Criteria

Level of Service	Average Control Delay ¹
A	≤ 10
B	> 10 to 15
C	> 15 to 25
D	> 25 to 35
E	> 35 to 50
F	> 50

Note: ¹ Average control delay presented in seconds per vehicle. Delay values are rounded to the nearest second and evaluated for LOS based on the above thresholds (i.e., 10 seconds per vehicle = LOS A).

Source: *Highway Capacity Manual, 7th Edition*, Transportation Research Board, 2022.

As described in Chapter 21 of the HCM 7th Edition, the LOS for all-way stop controlled intersections is based on the average control delay for the entire intersection. For side-street stop-controlled intersections, the LOS is determined separately for each minor-street movement (or shared movement) and may also be basis on major-street left-turn movements, per Chapter 20 of the HCM 7th Edition. However, in previous City of Davis traffic studies, the LOS for side-street stop-controlled intersections was based on the average control delay for the intersection as a whole.

To be consistent with both the HCM 7th Edition and recent City of Davis studies, this analysis documents the LOS for side-street stop-controlled intersections in two forms:

- Intersection LOS: based on the weighted average of the control delay experienced by each movement of the intersection. Note that this is not a recognized LOS metric for side-street stop-controlled intersections per the HCM 7th Edition. However, the City of Davis has previously expressed side-street stop-controlled intersection delay using this measure for informational purposes.
- Worst-case LOS: based on the movement (or shared movement) with the greatest control delay at the intersection, which may consist of minor-street stop-controlled movements or major street left-turns.

Note that the term LOS only applies to intersection delay as measured per the HCM 7th Edition. Other forms of assessing intersection delay are acceptable but they should not be associated with a LOS term that was only intended for the specific HCM measurement.

Use of Micro-Simulation Traffic Operations Analysis

This study analyzes study intersections 1 through 37 and 50 through 51 using Trafficware's SimTraffic 11 micro-simulation software and study intersections 38 through 49 using Synchro 11. SimTraffic was used to account for the effects of turn-pocket overflows, vehicle queuing interactions between adjacent intersections, freeway ramp meters, and interactions between vehicles, bicyclists, and pedestrians. It captures the nature of driver behavior and models the interaction between vehicles in a study network. SimTraffic better accounts for the effects of turn-pocket queue overflows, queue blocking, queue interactions between adjacent intersections, and pedestrian crossing interactions when compared to conventional, deterministic analysis methods, such as those outlined in the HCM and applied in Synchro 11. The SimTraffic model was calibrated and validated to existing conditions based on travel time data, peak hour volumes, and observed maximum queue lengths.

Because micro-simulation models rely on the random arrival of vehicles into the network, multiple runs are needed to provide a reasonable level of statistical accuracy and validity. The SimTraffic models were



run up to thirty times (each using a different random seed number) and ten of those runs were selected and averaged to determine final model outputs. Selected runs were screened to exclude outliers that under- or over-emphasized delay compared to observed conditions.

Travel Demand Forecasting

For the purposes of forecasting traffic volumes for the study intersections, the local UC Davis/City of Davis travel demand model was utilized. The model was developed in close coordination with the City of Davis and UC Davis in order to incorporate planned land use and transportation system changes both within the City and its sphere of influence and on the UC Davis campus. The coordination effort included the following elements of model development:

- **TAZ system** – The traffic analysis zone (TAZ) development included review by City and UC Davis staff to ensure sufficient detail for both existing and new growth areas.
- **Land use inputs** – Inputs were initially obtained from the SACOG 2012 parcel database used in developing regional model inputs for the 2016 SACOG MTP/SCS. These inputs were reviewed for each TAZ with City and UC Davis staff to develop a complete inventory representing 2016 conditions, which is the model's original base year. For the purposes of this study, the base year model land use inputs were updated to Fall 2023 conditions, which coincides with the timing of the traffic counts conducted for this study.

For the model's original future years of 2030 and 2036, land use forecasts were based on future land use changes throughout the region projected in the 2016 SACOG MTP/SCS. The land use forecasts were refined based on input from City staff and UC Davis staff according to planned City of Davis General Plan growth, planned UC Davis 2018 Long Range Development Plan (LRDP) growth, approved development projects, pipeline development projects, and other reasonably foreseeable land development activities. For the purposes of this study, the 2036 land use inputs were modified in consultation with City staff to create a cumulative scenario that captures potential future land development activity that could affect traffic operations at the study intersections. Major cumulative land use projects included in this study include the UC Davis 2018 LRDP, the Downtown Davis Specific Plan, the Bretton Woods project (formerly known as the West Davis Active Adult Community project), The Promenade project (formerly known as the Nishi project), the DiSC 2022 project, the Village Farms Davis project, the Shriners Property project, the buildout of the remainder commercial parcels at The Cannery, the Chiles Ranch Subdivision project, and the Sutter Davis Hospital Expansion.

- **Roadway network inputs** – The local model roadway network was developed from GIS data representing local, collector, arterial, and freeway functional classifications. Input data included

the number of travel lanes and free-flow travel speeds based on the previous UC Davis/City of Davis Local Model developed for the 2003 LRDP update, plus new data from field observations and Google Maps imagery. Capacity inputs for each roadway classification were estimated from reference documents including the HCM 6th Edition and the *Travel Demand Forecasting: Parameters and Techniques, National Cooperative Highway Research Program, Report 716*, (Transportation Research Board, 2012). Changes to the roadway networks for future year scenarios were provided by City and UC Davis staff as noted above.

- **Vehicle trip rates** – The vehicle trip rates were derived from a variety of sources including the UC Davis Campus Travel Survey, the California Household Travel Survey, local residential trip generation estimates based on observed traffic counts, and the Trip Generation Manual, 10th Edition (Institute of Transportation Engineers, 2017). The rates were estimated for the following trip purposes.
 - Home-Based Work (HBW): trips between a residence and a workplace
 - Home-Based Shop (HBS): trips between a residence and a retail destination
 - Home-Based School (HBK): trips between a residence and a school (K-12)
 - Home-Based Other (HBO): trips between a residence and any other destination
 - Non-Home-Based (OO): trips that do not begin or end at a residence, such as traveling from a workplace to a restaurant, or from a retail store to a bank
 - College (COLL): trips to and from a Community College
 - UC Davis (UCD): trips to and from UC Davis
 - Highway Commercial (HC): trips to and from highway commercial destinations
- **Vehicle trip lengths and external trip patterns** – The vehicle trip lengths and the proportion of vehicle trips that occur exclusively within the model area versus those that have origins or destinations external to the model area were obtained from the UC Davis Campus Travel Survey, the California Household Travel Survey, and the American Community Survey. This information was extracted for each trip purpose above. Trips traveling through the model area without stopping such as those on I-80, were estimated from the regional SACOG SACSIM model developed for the 2016 SACOG MTP/SCS and the 2020 SACOG MTP/SCS.
- **Trip assignment** – Trip assignment relies on conventional algorithms that assign trips between origin and destination zones based on travel times that reflect the influence of roadway capacity and speeds. A unique aspect of the assignment process is that UC Davis generated trips had to be associated with parking areas on and off-campus since that is where trips start and end. These



parking areas were mapped in collaboration with UC Davis staff and iterative testing of the assignment results was used to refine the association.

The UC Davis/City of Davis travel demand model was applied to generate study intersection traffic volume forecast inputs for the cumulative analysis scenarios described above, as well as to inform the distribution and assignment of project trips under the “plus project” analysis scenarios. Separate model runs were performed for each scenario and the model-produced volume forecasts were extracted for final adjustments to account for differences between the model’s base year volume estimates and observed traffic counts. The adjustment involves isolating the incremental change in volume between the base year model and the future year analysis scenario and adding that difference to the baseline traffic counts. This adjustment process helps to minimize potential errors in the model’s base year estimates and is based on the methodology contained in *Analytical Travel Forecasting Approaches for Project-Level Planning and Design, National Cooperative Highway Research Program (NCHRP) Report 765* (Transportation Research Board, 2014).

Roadway Operations Performance Criteria

The following criteria are used to identify operational deficiencies based on the traffic operations analysis.

City of Davis

Per the City of Davis General Plan Transportation Element, LOS E is the minimum acceptable LOS for the majority of intersections within the City, and for each City-operated study intersection in the study area. LOS F is acceptable for other areas (e.g., Downtown Davis and the Richards Boulevard corridor) as established in the General Plan and contingent on approval by the City Council. For the purposes of this analysis, adverse effects to City of Davis roadway operations are defined when the addition of project traffic would cause any of the following:

- For signalized intersections, cause overall intersection operations to deteriorate from an acceptable level (LOS E or better) to an unacceptable level (LOS F);
- For signalized intersections, exacerbate unacceptable (LOS F) operations by increasing an intersection’s average delay by five seconds or more;
- For unsignalized intersections, cause the worst-case movement (or average of all movements for all-way stop-controlled intersections) to worsen from an acceptable level (LOS E or better) to an unacceptable level (LOS F) and meet the peak hour signal warrant;
- For unsignalized intersections that operate unacceptably (LOS F) and meet the peak hour signal warrant without the project, worsen operations by increasing the overall intersection’s volume served by more than one percent; or

- For unsignalized intersections that operate unacceptably but do not meet the peak hour signal warrant without the project, add sufficient volume to meet the warrant.

Yolo County

Per the Yolo County General Plan and the Yolo County Transportation Impact Study Guidelines, LOS C is the minimum acceptable LOS in the unincorporated county, except as specified on designated roadways. LOS D is the minimum acceptable LOS for County Road 32A and County Road 102. For the purposes of this analysis, adverse effects to Yolo County roadway operations are defined when the addition of project traffic would cause any of the following:

- For intersections in the unincorporated county with the exceptions noted below, cause peak hour intersection operations to deteriorate from an acceptable level (LOS C) to an unacceptable level (LOS D or worse);
- For intersections on County Road 32A and County Road 102, cause peak hour intersection operations to deteriorate from an acceptable level (LOS D) to an unacceptable level (LOS E or worse);
- An intersection operates unacceptably under a no project scenario and the project adds 10 or more peak hour trips; or
- The addition of project traffic causes an all-way stop-controlled or side street stop-controlled intersection to meet MUTCD signal warrant criteria.

Caltrans

Caltrans' Local Development – Intergovernmental Review Program (LD-IGR) provides guidance on the evaluation of traffic effects on State highway facilities. In light of Senate Bill 743 and related changes to the CEQA Guidelines, Caltrans has announced in its *Caltrans Draft VMT-Focused Transportation Impact Study Guide (Caltrans, February 2020)* that it will use VMT as the CEQA transportation impact metric for projects on the State highway system and has indicated it will rely on the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* when preparing LD-IGR comments on local agency land use projects.

To analyze potential LOS impacts to the State highway system, this study utilizes the performance expectations established in the Caltrans District 3 Interstate 80 Transportation Concept Report (TCR) (2017) and the State Route 113 TCR (2014). According to the I-80 TCR, the horizon year LOS for I-80 within the study area (including ramp terminal intersections) is LOS F. Therefore, LOS F is considered the design operating goal on the I-80 mainline and at I-80 ramp terminal intersections within the study area. The SR 113 TCR identifies a concept LOS E for SR 113 between I-80 and I-5. Therefore, LOS E is considered



the design operating goal on the SR 113 mainline and at SR 113 ramp terminal intersection within the study area.

For the purposes of this analysis, adverse effects to Caltrans roadway operations are defined when the addition of project traffic would cause any of the following:

- For signalized intersections, cause overall intersection operations to deteriorate from an acceptable level (LOS F for I-80 and LOS E or better for SR 113) to an unacceptable level;
- For signalized intersections, exacerbate unacceptable operations by increasing an intersection's average delay by five seconds or more;
- For unsignalized intersections, cause the worst-case movement (or average of all movements for all-way stop-controlled intersections) to worsen from an acceptable level to an unacceptable level and meet the California Manual on Uniform Traffic Control Devices (MUTCD) peak hour signal warrant;
- For unsignalized intersections that operate unacceptably and meet the peak hour signal warrant without the project, worsen operations by increasing the overall intersection's volume by more than one percent;
- For unsignalized intersections that operate unacceptably but do not meet the peak hour signal warrant without the project, add sufficient volume to meet the warrant; or
- Causes off-ramp queues to spill onto freeway mainline.

3. Existing Conditions

Roadway System

Vehicular access to the project site is provided via East Covell Boulevard and Monarch Lane. Other key roadways that would accommodate project-generated vehicular traffic include Mace Boulevard, Pole Line Road, State Route 113 (SR 113) and Interstate 80 (I-80).

East Covell Boulevard is a four-lane east-west major arterial that traverses the City of Davis. To the west, East Covell Boulevard connects to Pole Line Road, F Street, Anderson Road, State Route 113 (SR 113), and points west. To the east, East Covell Boulevard transitions into Mace Boulevard at the Mace Curve. East Covell Boulevard borders the south edge of the project site. Vehicular access to and from the project site is provided via the existing East Covell Boulevard/Monarch Lane side-street stop-controlled intersection. Within the vicinity of the project site, East Covell Boulevard has a posted speed limit of 40 miles per hour (mph).

Mace Boulevard is a two- to four-lane north-south major arterial. Mace Boulevard transitions from East Covell Boulevard at the Mace Curve and extends south with connections to Interstate 80 (I-80), South Davis, and points south. Mace Boulevard is four lanes on the segment between Alhambra Drive and Cowell Boulevard and two lanes north and south of this segment.

Pole Line Road is a two-lane north-south road that connects East Davis and South Davis across I-80. Pole Line Road is a major arterial and minor arterial north and south of East Covell Boulevard, respectively. Pole Line Road transitions into Lillard Drive south of I-80 and County Road 102 north of the city limits. County Road 102 continues north to the City of Woodland and Interstate 5 (I-5).

Monarch Lane is a two-lane north-south road that extends between East Covell Boulevard and Loyola Drive in East Davis. Monarch Lane is a collector between East Covell Boulevard and Temple Drive and a residential street between Temple Drive and Loyola Drive.

State Route 113 (SR 113) is a four-lane, north-south freeway that extends from Interstate 80 (I-80) at the Yolo/Solano County line north to Interstate 5 (I-5) in Woodland. SR 113 serves Davis via interchanges at Covell Boulevard and Russell Boulevard. Additional SR 113 interchanges within the vicinity of Davis include the Hutchison Drive interchange at the UC Davis campus and the County Road 29 interchange in Yolo County. SR 113 and its interchanges are owned and operated by Caltrans.



Interstate 80 (I-80) is an east-west interstate freeway near the southern boundary of the project site. From Davis, I-80 connects with the San Francisco Bay Area to the west and Sacramento and the Lake Tahoe Basin to the east. I-80 provides three travel lanes per direction in the vicinity of the project site. I-80 serves Davis via interchanges at Mace Boulevard and Richards Boulevard, as well as a westbound off-ramp at Olive Drive. Additional I-80 interchanges within the vicinity of Davis include the Old Davis Road interchange at the UC Davis campus and the County Road 32A interchange in Yolo County. I-80 and its interchanges are owned and operated by Caltrans.

Data Collection

Intersection turning movement counts were conducted during the morning (7:00 a.m. to 9:00 a.m.) and evening (4:00 p.m. to 6:00 p.m.) peak periods on Thursday, October 26, 2023 at intersections 1 through 37 and Tuesday, February 13, 2024 at intersections 38 through 51. Intersection counts included volumes for vehicles, bicyclists, and pedestrians. During the traffic counts, local schools and UC Davis were in regular session and weather conditions were dry and clear. Based on the traffic data collection, the a.m. peak hour within the study area occurred from 7:45 to 8:45 a.m., and the p.m. peak hour occurred from 4:30 to 5:30 p.m.. Peak hour traffic volumes derived from the intersection turning movement counts are illustrated in **Figure 2**.

Additionally, peak period field observations were conducted by Fehr & Peers staff during the traffic counts. The field observations, including observed maximum queues, were utilized to calibrate the existing conditions traffic operations analysis described in the subsequent section.

Analysis Results

Table 3 presents the a.m. and p.m. peak hour LOS for each study intersection under existing conditions.

During the a.m. peak hour, vehicle traffic within the study area generally progresses smoothly and all study intersections operate acceptably. Queues generally do not extend to the adjacent upstream intersection and clear within one cycle at signalized intersections.

During the p.m. peak hour, higher levels of delay and queuing occur on local roadways within the vicinity of the Mace Boulevard interchange at I-80. Three intersections operate at LOS F, including the Mace Boulevard/Chiles Road, Chiles Road/I-80 EB Ramp, and Chiles Road/County Road 32B/I-80 EB Ramps intersections. LOS F conditions at the Mace Boulevard/Chiles Road intersection do not meet the City's LOS standards.

These conditions can be attributed to the following factors:

- Ramp metering at the eastbound I-80 on-ramps controls the amount of study area traffic that can enter the freeway from northbound and southbound Mace Boulevard. The ramp meters are designed to improve operating conditions on eastbound I-80 by increasing or decreasing on-ramp flow rates according to mainline traffic volumes. Therefore, when congested conditions occur on eastbound I-80, flow rates decrease for the Mace Boulevard on-ramps, causing additional delays and queueing on Mace Boulevard and connecting local roadways such as Chiles Road. Similar conditions exist at the eastbound I-80 on-ramp at Chiles Road east of Davis. Field observations confirmed that the on-ramp meters were operating during the p.m. peak hour.
- Diverted local and regional traffic onto study area roadways due to extended periods of very low travel speeds on eastbound I-80 from the causeway, through Davis, and into Solano County. During congested conditions, low mainline travel speeds substantially increase travel times for motorists on eastbound I-80. Hence, diverting off I-80 onto local roadways often provides a faster alternative to remaining on the freeway through Davis. Similarly, locally generated traffic utilizing eastbound I-80 can experience faster travel times by accessing I-80 as far east as possible (e.g., motorists departing Downtown Davis for Sacramento accessing I-80 at Mace Boulevard or CR 32A instead of Richards Boulevard). Moreover, the increased prevalence and use of navigation apps (e.g., Google Maps, WAZE, etc.) in recent years provides motorists with real-time and predictive travel time information that can influence route selection.

On the day that traffic counts were collected for this study, field observations indicated that congested conditions were present on both eastbound I-80 and local roadways surrounding the Mace Boulevard interchange during the p.m. peak hour. Queue spillbacks were observed on southbound Mace Boulevard from the eastbound I-80 loop on-ramp ramp meter to Alhambra Drive and on northbound Mace Boulevard from the eastbound I-80 slip on-ramp ramp meter to Cowell Boulevard. Queue spillbacks were also observed on eastbound Chiles Road from Mace Boulevard to the Hanlees Davis Toyota car dealership/service center. Lastly, queue spillbacks were observed on eastbound and westbound Chiles Road at the eastbound I-80 ramps (east of Davis). These conditions are reflected in the results shown in Table 3.

Table 4 displays the maximum freeway off-ramp queues at the SR 113/Covell Boulevard and I-80/Mace Boulevard/Chiles Road interchanges under existing conditions. Under existing conditions, all maximum queues are accommodated within the available off-ramp storage.



Table 5 displays the peak hour signal warrant analysis results (CA MUTCD Warrants 3A and 3B) for study intersections owned and operated by Yolo County and unsignalized Caltrans ramp terminal intersections under existing conditions.¹ Three of these study intersections currently meet a peak hour signal warrant, including County Road 29/SR 113 SB Ramps (Warrant 3B during the a.m. peak hour), County Road 102/SR 29 (Warrant 3B during the a.m. and p.m. peak hours) and County Road 102/County Road 27 (Warrant 3B during the p.m. peak hour).

¹ This analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration Manual on Uniform Traffic Control Devices and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured, rather than forecast, traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The City of Davis should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

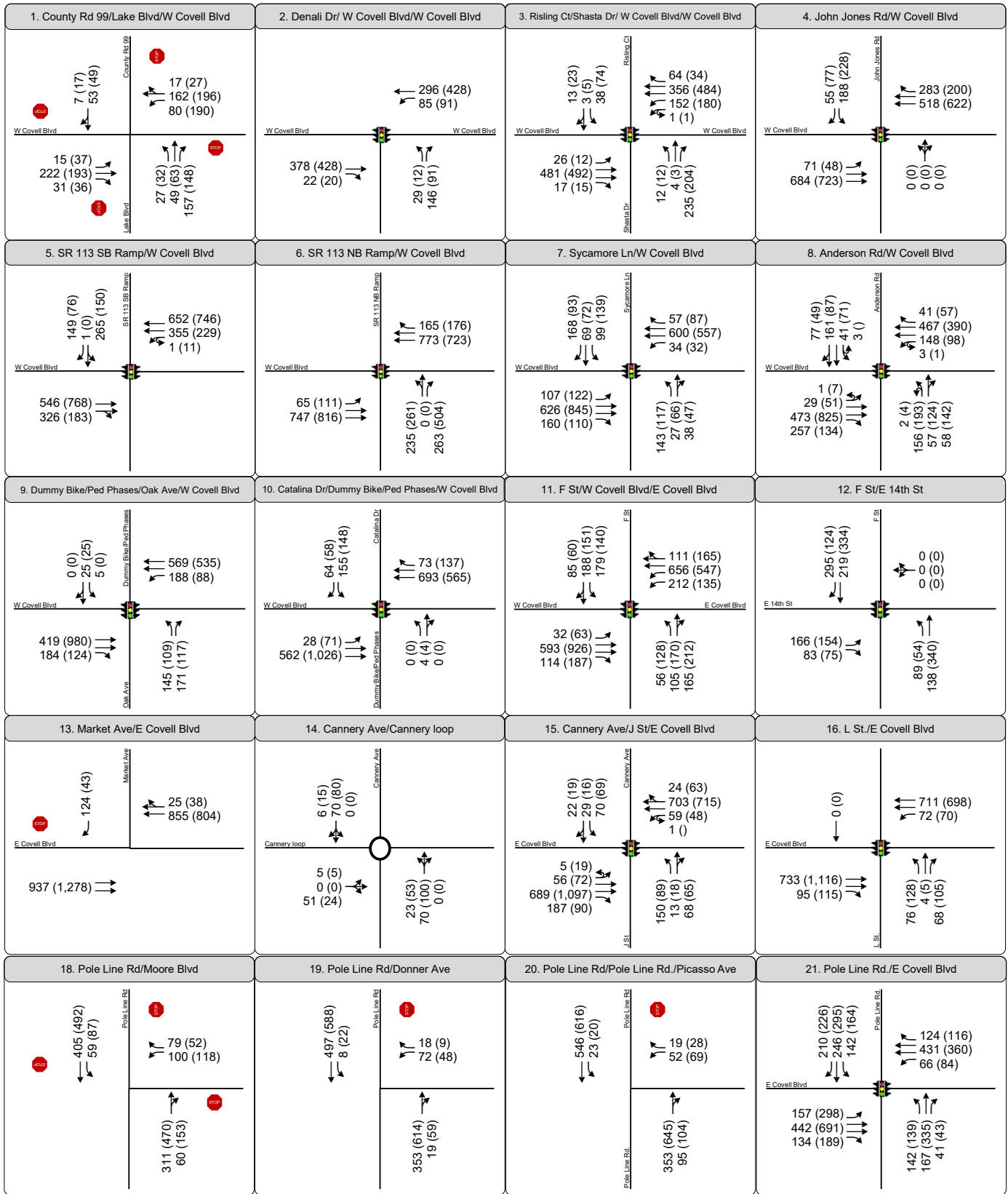


Figure 1

Peak Hour Traffic Volumes and Lane Configurations - Existing



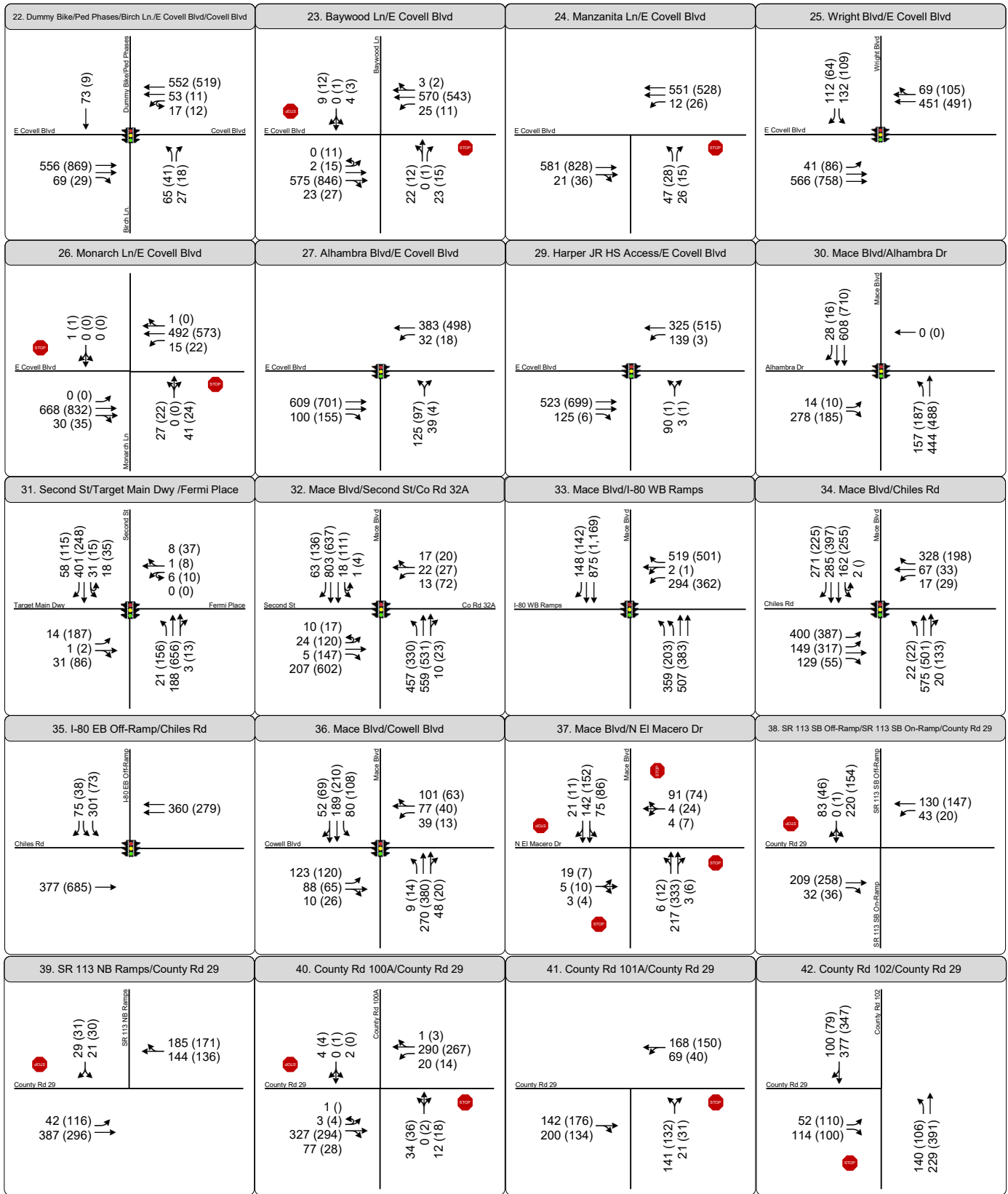


Figure 1

Peak Hour Traffic Volumes
and Lane Configurations -
Existing



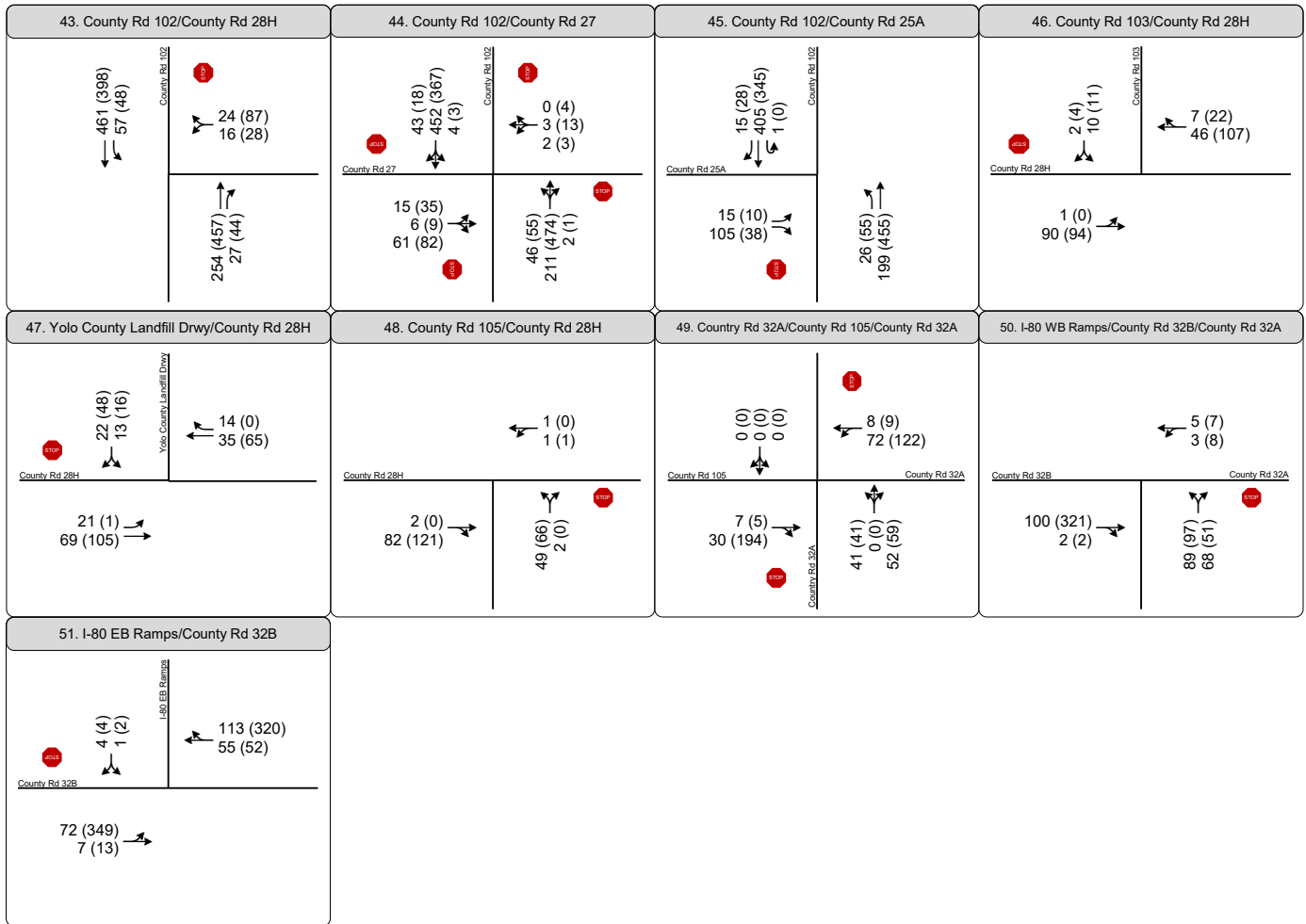


Figure 1
Peak Hour Traffic Volumes
and Lane Configurations -
Existing



4. Existing Plus Project Conditions

Project Travel Characteristics

Project trips were assigned to the study intersections in accordance with the estimated project trip generation described in Chapter 4 of the Palomino Place Project Transportation Impact Study, and the geographic distribution of project trips, which was determined using the UC Davis/City of Davis travel demand model. The project would generate an estimated 2,096 daily trips, 155 AM peak hour trips, and 231 PM peak hour trips during a typical weekday. Peak hour traffic volumes under Existing Plus Project conditions are illustrated in **Figure 3**.

Analysis Results

Table 3 presents the a.m. and p.m. peak hour LOS for each study intersection under Existing Plus Project conditions.

The project would increase study intersection vehicle travel demand and vehicle delay during the a.m. and p.m. peak hours. Generally, project-related increases to delay would be relatively small and would not result in changes to LOS grades relative to existing conditions. The project would cause one intersection – the County Road 102/County Road 29 intersection in Yolo County – to degrade from acceptable to unacceptable levels during the p.m. peak hour.

The project would increase traffic volumes at three study intersections that operate at LOS F under existing conditions, including the Mace Boulevard/Chiles Road, Chiles Road/I-80 EB Ramp, and Chiles Road/County Road 32B/I-80 EB Ramps intersections during the p.m. peak hour. However, the project would not cause a sufficient increase to delay and/or volume such that the project would result in an adverse effect at these intersections as established by the performance criteria.

Note that the results presented in Table 3 indicate that the project would decrease delay at several intersections. This decrease is the result of variation that occurs when averaging the results of multiple microsimulation model runs. Variation in model runs is particularly common when congested conditions are present, as is the case in portions of the roadway network evaluated in this study. From this, it can be concluded that the effect of project trips is less noticeable than variations in results between model runs.

Table 4 displays the maximum freeway off-ramp queues at the SR 113/Covell Boulevard and I-80/Mace Boulevard/Chiles Road interchanges under Existing Plus Project conditions. Under Existing Plus Project conditions, all maximum queues would be accommodated within the available off-ramp storage.

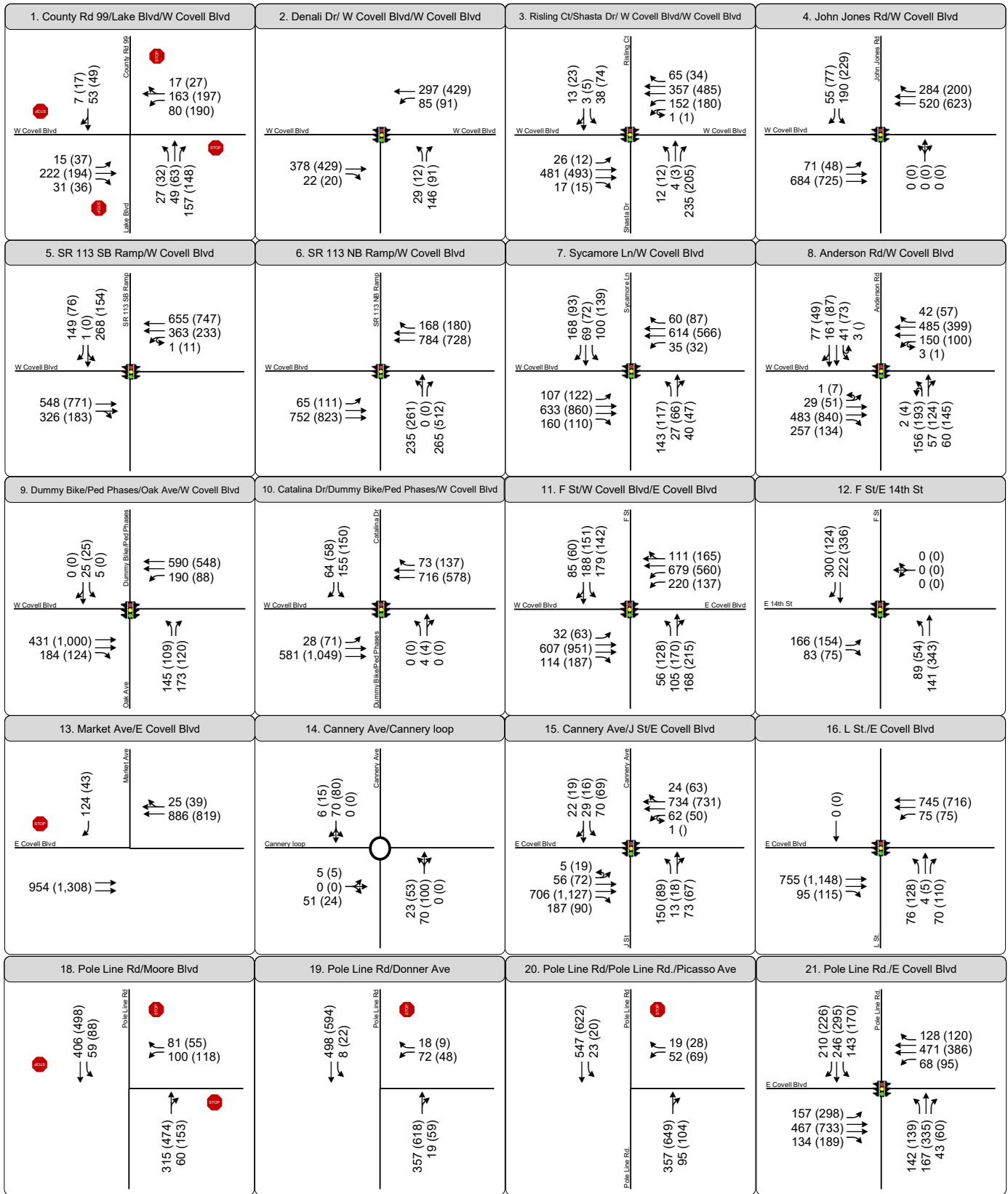


Figure 1

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project



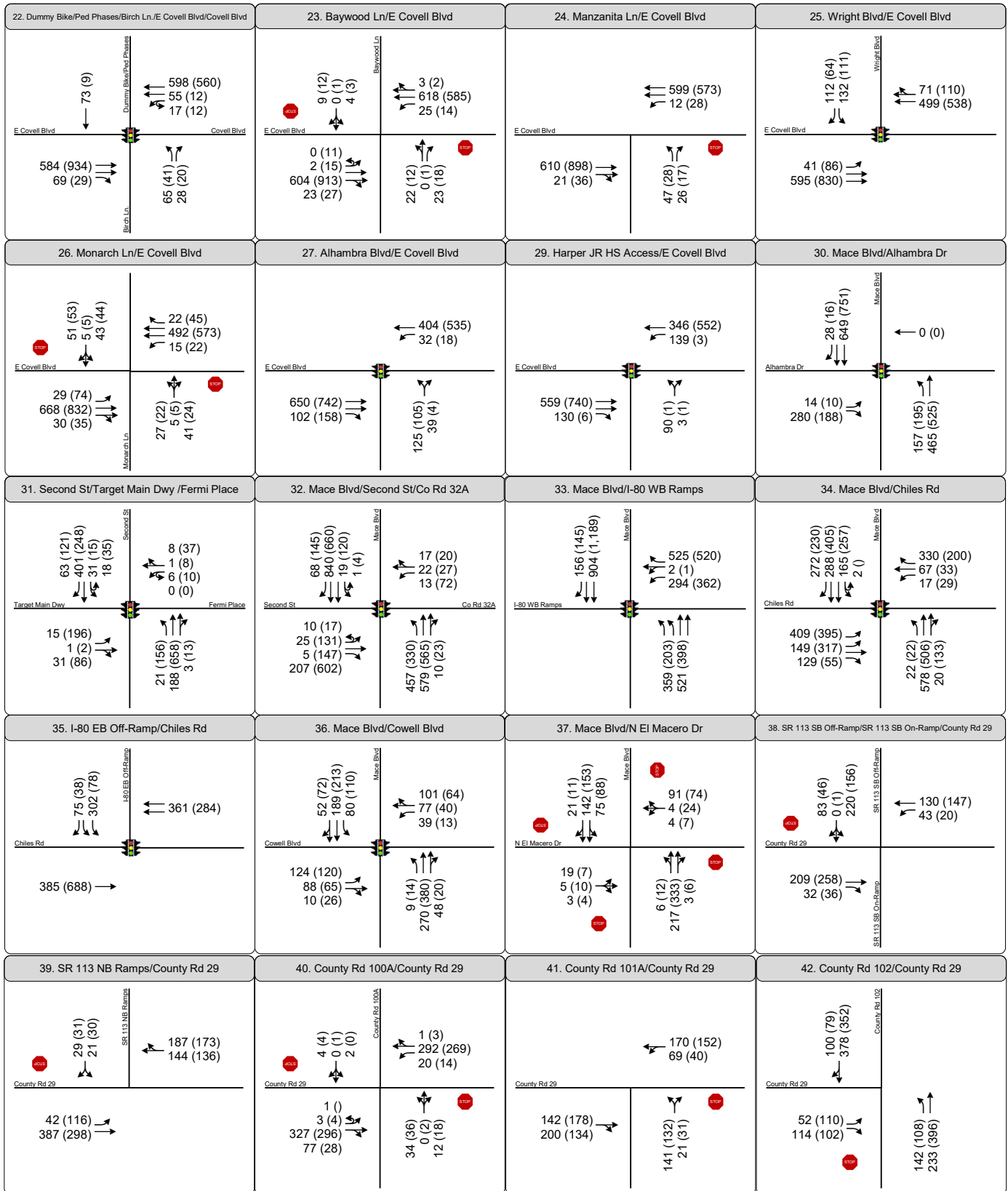


Figure 1

Peak Hour Traffic Volumes and Lane Configurations - Existing Plus Project



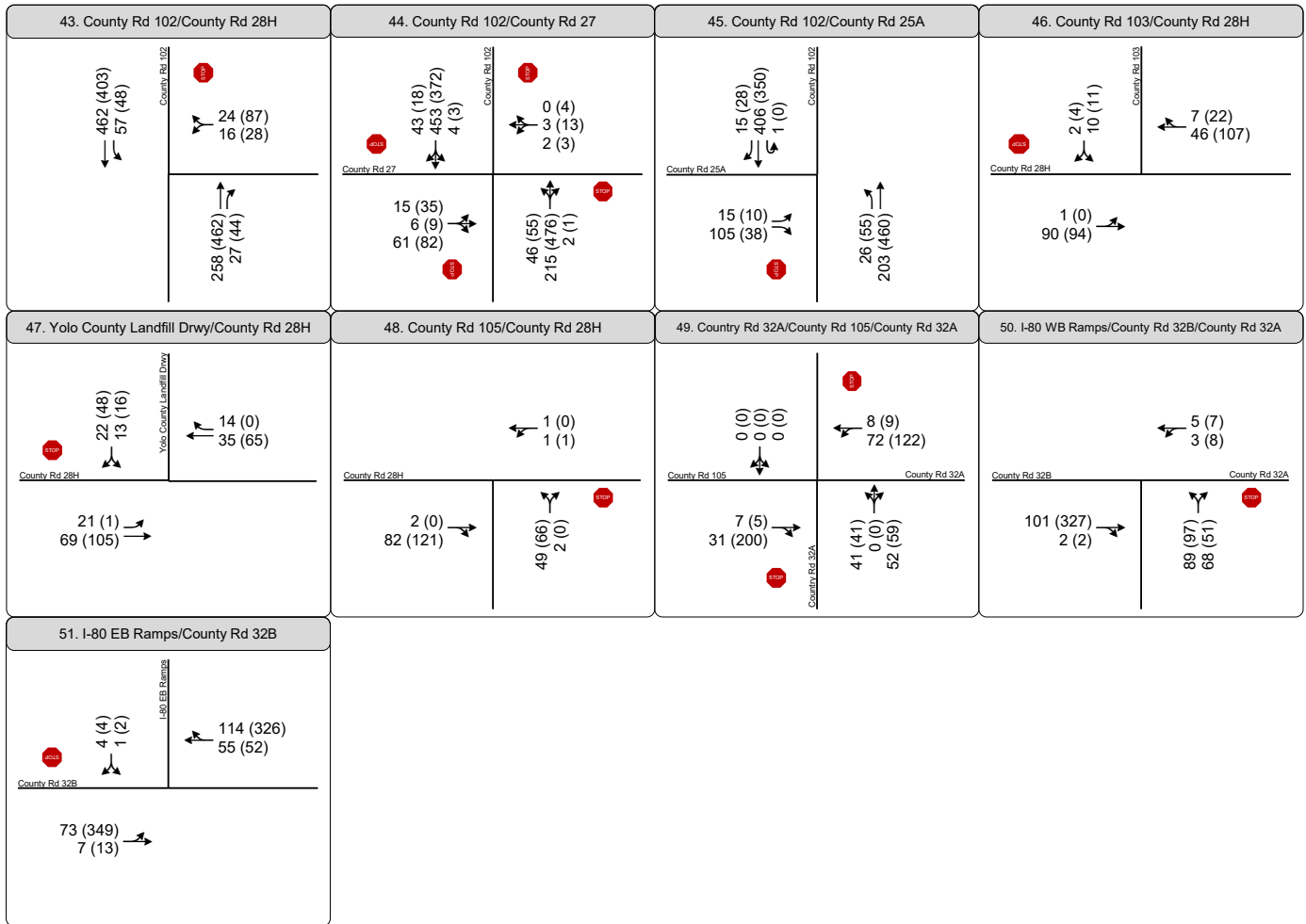


Figure 1
Peak Hour Traffic Volumes
and Lane Configurations -
Existing Plus Project



Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1. West Covell Boulevard/Lake Boulevard	AWSC	City of Davis	10	A	9	A	10	B	9	A
2. West Covell Boulevard/Denali Drive	Signal	City of Davis	9	A	8	A	9	A	8	A
3. West Covell Boulevard/Shasta Drive	Signal	City of Davis	13	B	11	B	14	B	11	B
4. West Covell Boulevard/John Jones Road	Signal	City of Davis	15	B	12	B	14	B	13	B
5. West Covell Boulevard/SR 113 SB Ramps	Signal	Caltrans	33	C	17	B	32	C	16	B
6. West Covell Boulevard/SR 113 NB Ramps	Signal	Caltrans	16	B	21	C	16	B	22	C
7. West Covell Boulevard/Sycamore Lane	Signal	City of Davis	25	C	25	C	25	C	24	C
8. West Covell Boulevard/Anderson Road	Signal	City of Davis	27	C	29	C	27	C	31	C
9. West Covell Boulevard/Oak Avenue	Signal	City of Davis	22	C	20	B	22	C	22	C
10. West Covell Boulevard/Catalina Drive	Signal	City of Davis	14	B	14	B	15	B	14	B
11. East Covell Boulevard/F Street	Signal	City of Davis	30	C	30	C	33	C	30	C
12. F Street/East Fourteenth Street	Signal	City of Davis	24	C	18	B	26	C	19	B

Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
13. East Covell Boulevard/Market Avenue	TWSC	City of Davis	5 (10)	A (B)	12 (17)	B (C)	5 (9)	A (A)	10 (13)	A (B)
14. Cannery Avenue/Cannery Loop	Roundabout	City of Davis	3	A	3	A	3	A	3	A
15. East Covell Boulevard/J Street/Cannery Avenue	Signal	City of Davis	35	C	50	D	36	D	48	D
16. East Covell Boulevard/L Street	Signal	City of Davis	15	B	19	B	15	B	20	C
17. Pole Line Road/Village Farms Road North (Future Intersection)	-	-	-	-	-	-	-	-	-	-
18. Pole Line Road/Moore Boulevard	AWSC	City of Davis	13	B	21	C	13	B	23	C
19. Pole Line Road/Donner Avenue	TWSC	City of Davis	4 (14)	A (B)	4 (23)	A (C)	5 (12)	A (B)	6 (19)	A (C)
20. Pole Line Road/Picasso Avenue	TWSC	City of Davis	4 (23)	A (C)	5 (33)	A (D)	6 (18)	A (C)	7 (32)	A (D)
21. East Covell Boulevard/Pole Line Road	Signal	City of Davis	28	C	37	D	29	C	40	D
22. East Covell Boulevard/Birch Lane	Signal	City of Davis	23	C	11	B	21	C	11	B
23. East Covell Boulevard/Baywood Lane	TWSC	City of Davis	4 (14)	A (B)	4 (20)	A (C)	4 (16)	A (C)	4 (17)	A (C)



Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
24. East Covell Boulevard/Manzanita Lane	TWSC	City of Davis	4 (15)	A (B)	5 (16)	A (C)	5 (15)	A (B)	5 (17)	A (C)
25. East Covell Boulevard/Wright Boulevard	Signal	City of Davis	10	B	12	B	11	B	12	B
26. East Covell Boulevard/Monarch Lane	TWSC	City of Davis	3 (14)	A (B)	3 (20)	A (C)	4 (20)	A (C)	5 (21)	A (C)
27. East Covell Boulevard/Alhambra Drive	Signal	City of Davis	8	A	7	A	8	A	7	A
28. East Covell Boulevard/Shriner's Property Road East (Future Intersection)	-	-	-	-	-	-	-	-	-	-
29. East Covell Boulevard/Harper Junior High School	Signal	City of Davis	14	B	8	A	15	B	9	A
30. Mace Boulevard/Alhambra Drive	Signal	City of Davis	12	B	12	B	12	B	15	B
31. Second Street/Fermi Place/Target Driveway	Signal	City of Davis	5	A	15	B	5	A	15	B
32. Mace Boulevard/Second Street/County Road 32A	Signal	City of Davis	33	C	29	C	36	D	39	D
33. Mace Boulevard/I-80 WB Ramps	Signal	Caltrans	22	C	57	E	20	B	73	E

Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
34. Mace Boulevard/Chiles Road	Signal	City of Davis	36	D	89	F	36	D	86	F
35. Chiles Road/I-80 EB Ramp	Signal	Caltrans	10	B	245	F	9	A	236	F
36. Mace Boulevard/Cowell Boulevard	Signal	City of Davis	21	C	29	C	19	B	28	C
37. Mace Boulevard/North El Macero Drive	AWSC	City of Davis	8	A	8	A	7	A	8	A
38. County Road 29/SR 113 SB Ramps	TWSC	Caltrans	9 (20)	A (C)	5 (16)	A (C)	9 (20)	A (C)	5 (16)	A (C)
39. County Road 29/SR 113 NB Ramps	TWSC	Caltrans	1 (13)	A (B)	2 (15)	A (C)	2 (13)	A (B)	2 (15)	A (C)
40. County Road 29/County Road 100A	TWSC	Yolo County	1 (17)	A (C)	2 (15)	A (C)	1 (17)	A (C)	2 (16)	A (C)
41. County Road 29/County Road 101A	TWSC	Yolo County	5 (19)	A (C)	4 (16)	A (C)	5 (19)	A (C)	4 (16)	A (C)
42. County Road 102/County Road 29	TWSC	Yolo County	4 (30)	A (D)	5 (34)	A (D)	4 (31)	A (D)	5 (36)	A (E)
43. County Road 102/County Road 28H	TWSC	Yolo County	1 (19)	A (C)	1 (21)	A (C)	1 (20)	A (C)	1 (21)	A (C)
44. County Road 102/County Road 27	AWSC	Yolo County	14	B	18	C	14	B	18	C
45. County Road 102/County Road 25A	TWSC	Yolo County	2 (15)	A (C)	1 (19)	A (C)	2 (15)	A (C)	1 (19)	A (C)



Table 3: Peak Hour Intersection Operations – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
46. County Road 28H/County Road 103	TWSC	Yolo County	1 (9)	A (A)	1 (10)	A (A)	1 (9)	A (A)	1 (10)	A (A)
47. County Road 28H/Yolo County Landfill Driveway	TWSC	Yolo County	3 (9)	A (A)	3 (9)	A (A)	3 (9)	A (A)	3 (9)	A (A)
48. County Road 28H/County Road 105	TWSC	Yolo County	4 (9)	A (A)	3 (9)	A (A)	4 (9)	A (A)	3 (9)	A (A)
49. County Road 105/County Road 32A	TWSC	Yolo County	7 (11)	A (B)	10 (15)	A (B)	7 (11)	A (B)	10 (15)	A (C)
50. County Road 32A/I-80 WB Ramps	TWSC	Caltrans	6 (9)	A (A)	4 (6)	A (A)	6 (9)	A (A)	4 (7)	A (A)
51. County Road 32B/Chiles Road/I-80 EB Ramps	TWSC	Caltrans	3 (8)	A (A)	276 (>300)	F (F)	3 (8)	A (A)	283 (>300)	F (F)

Notes: For signalized intersections, average intersection delay is reported in seconds per vehicle for all approaches. For two-way stop-controlled intersections, average intersection delay is reported in seconds per vehicle for all approaches with the delay and LOS for the worst-case movement reported in parentheses.

Shaded cells indicate locations with unacceptable peak hour LOS.

Shaded and bold cells indicate locations where the project would cause adverse effects to peak hour intersection operations in accordance with the performance criteria.

TWSC = Two-Way Stop Control. AWSC = All-Way Stop Control. "-" = Does not exist.

Source: Fehr & Peers, 2024.

Table 4: Freeway Off-Ramp Queuing – Existing and Existing Plus Project Conditions

Off-Ramp	Off-Ramp Distance ¹	Maximum Queue Length ²			
		Existing Conditions		Existing Plus Project Conditions ³	
		A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
West Covell Boulevard/SR 113 SB Ramps	1,375 feet	475 feet	250 feet	375 feet	275 feet
West Covell Boulevard/SR 113 NB Ramps	1,275 feet	300 feet	375 feet	275 feet	400 feet
Mace Boulevard/I-80 WB Off-Ramp	1,200 feet	200 feet	175 feet	200 feet	200 feet
Chiles Road/I-80 EB Off-Ramp	1,100 feet	125 feet	175 feet	125 feet	200 feet

Notes: ¹ Measured from the intersection stop bar to the gore point of the freeway off-ramp. Does not include auxiliary lane on freeway mainline.
² Maximum queue estimates are based on results from SimTraffic micro-simulation model. Queues are maximum per lane, rounded up to the nearest 25 feet.
³ Shaded cells represent conditions in which the queue would spill onto the freeway mainline.
 Source: Fehr & Peers, 2024.

Table 5 displays the peak hour signal warrant analysis results (CA MUTCD Warrants 3A and 3B) for study intersections owned and operated by Yolo County and unsignalized Caltrans ramp terminal intersections under Existing Plus Project conditions. The project would not cause any additional of the selected study intersections to meet the peak hour signal warrant.



Table 5: Peak Hour Signal Warrants – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions			
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour	
			Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B
38. County Road 29/SR 113 SB Ramps	TWSC	Caltrans	Not Met	Met	Not Met	Not Met	Not Met	Met	Not Met	Not Met
39. County Road 29/SR 113 NB Ramps	TWSC	Caltrans	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
40. County Road 29/County Road 100A	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
41. County Road 29/County Road 101A	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
42. County Road 102/County Road 29	TWSC	Yolo County	Not Met	Met	Not Met	Met	Not Met	Met	Not Met	Met
43. County Road 102/County Road 28H	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
44. County Road 102/County Road 27	AWSC	Yolo County	Not Met	Not Met	Not Met	Met	Not Met	Not Met	Not Met	Met
45. County Road 102/County Road 25A	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
46. County Road 28H/County Road 103	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
47. County Road 28H/Yolo County Landfill Driveway	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
48. County Road 28H/County Road 105	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
49. County Road 105/County Road 32A	TWSC	Yolo County	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met

Table 5: Peak Hour Signal Warrants – Existing and Existing Plus Project Conditions

Intersection	Traffic Control	Jurisdiction	Existing Conditions				Existing Plus Project Conditions				
			A.M. Peak Hour		P.M. Peak Hour		A.M. Peak Hour		P.M. Peak Hour		
			Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B	Warrant 3A	Warrant 3B	
50. County Road 32A/I-80 WB Ramps	TWSC	Caltrans	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met
51. County Road 32B/Chiles Road/I-80 EB Ramps	TWSC	Caltrans	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met	Not Met

Notes: Shaded cells indicate locations that meet the peak hour signal warrant.
 Source: Fehr & Peers, 2024.

East Covell Boulevard/Monarch Lane Intersection

A key question of this analysis is the need for potential modifications to lane configurations and/or traffic control at the East Covell Boulevard/Monarch Lane intersection, which would serve as the lone vehicular access point for the project site. Currently, the intersection is side-street stop-controlled. The project would construct a new north leg, a new eastbound left-turn pocket, and a new westbound right-turn pocket. The project does not propose changes to the existing traffic control.

Table 6 summarizes the a.m. and p.m. peak hour delay and 95th percentile queue for each movement at the East Covell Boulevard/Monarch Lane intersection under Existing Plus Project conditions. Under Existing Plus Project conditions, this intersection would operate at acceptable LOS C and LOS D (worst-case movement) during the a.m. and p.m. peak hours, respectively. 95th percentile queues would be accommodated within the available queue storage for each critical movement. This intersection would meet the four-hour vehicular volume signal warrant (CA MUTCD Warrant 2) and the peak hour signal warrant (CA MUTCD Warrant 3B) under Existing Plus Project conditions.

While this intersection would comply with applicable LOS standards during Existing Plus Project conditions, the lack of adequate bicycle and pedestrian crossing amenities across Covell Boulevard at Monarch Lane would result in the project causing adverse effects on bicycle and pedestrian travel and safety, as described in Impact 2 of the Palomino Place Transportation Impact Study. These adverse effects would be inconsistent with City plans and policies that promote bicycle and pedestrian travel, including City of Davis General Plan Goals #1, #2, #3, and #4 and Policies TRANS 1.6, 2.1, 2.2, 2.5, and 4.3 and the City of Davis Beyond Platinum Bicycle Action Plan.



Table 6: East Covell Boulevard/Monarch Lane – Existing Plus Project Conditions

Approach	Critical Movement	Queue Storage Distance	Intersection Performance					
			A.M. Peak Hour			P.M. Peak Hour		
			Delay	LOS	95 th Percentile Queue ¹	Delay	LOS	95 th Percentile Queue ¹
Eastbound	Left	105 feet	4	A	50 feet	6	A	75 feet
	Through	790 feet ²	3	A	25 feet	3	A	25 feet
	Right		2	A	25 feet	2	A	50 feet
Westbound	Left	100 feet	7	A	50 feet	9	A	50 feet
	Through	1,380 feet ²	3	A	25 feet	3	A	25 feet
	Right	100 feet	2	A	25 feet	3	A	25 feet
Northbound	Left	110 feet ²	20	C	75 feet	21	C	75 feet
	Through		14	B		13	B	
	Right		5	A		6	A	
Southbound	Left	150 feet ²	14	B	75 feet	20	C	100 feet
	Through		9	A		27	D	
	Right		7	A		9	A	

Notes: ¹ 95th percentile queue estimates are based on results from SimTraffic micro-simulation model. Queues are per lane, rounded up to the nearest 25 feet.

² Measured from nearest curb return of adjacent upstream intersection.

Source: Fehr & Peers, 2024.

5. Recommendations

Fehr & Peers recommends the following improvements to address project-related adverse effects on the surrounding transportation system under Existing Plus Project conditions:

- County Road 102/County Road 29: Install all-way stop-control. The modification would improve a.m. and p.m. peak hour intersection operations to acceptable LOS C.
- East Covell Boulevard/Monarch Lane: Install a traffic signal and designated bicycle and pedestrian facilities and crossings. It is also recommended that the proposed westbound right-turn lane be excluded from the planned intersection modifications due to a lack of sufficient right-turn volume and due to the additional "Walk" time it could incur for the east leg pedestrian crossing phase.

Two conceptual signal phasing plans were evaluated as part of this study:

- Phasing Plan A: Operate with protected left-turns for the northbound and southbound approaches and provide pedestrian crossings on the east and west legs. This phasing plan would require the provision of left-turn pockets for the northbound and southbound approaches.
- Phasing Plan B: Operate with split phasing for the northbound and southbound approaches and provide a pedestrian crossing on the east leg only. This phasing plan was evaluated with a single-lane approach for the northbound and southbound approaches. Northbound and southbound left-turn pockets could be provided as part of this phasing plan, however, they would increase the required "Walk" times for the north and south leg pedestrian crossing phases.

Table 7 and **Table 8** present the intersection performance for Phasing Plans A and B, respectively. Overall, delay and queuing would be similar between Phasing Plans A and B. Phasing Plans A and B would improve a.m. and p.m. peak hour intersections operations to acceptable LOS B. 95th percentile queues for critical turning movements would be sufficiently accommodated within the proposed queue storage for both Phasing Plans A and B. While delay and queuing would be comparable between Phasing Plans A and B, Phasing Plan A is recommended because it provides superior travel options for bicyclists and pedestrians by virtue of providing pedestrians crossings on both the east and west legs of the intersection.



Table 7: East Covell Boulevard/Monarch Lane – Phasing Plan A

Approach	Critical Movement	Queue Storage Distance	Intersection Performance					
			A.M. Peak Hour			P.M. Peak Hour		
			Delay	LOS	95 th Percentile Queue ¹	Delay	LOS	95 th Percentile Queue ¹
Eastbound	Left	105 feet	28	--	75 feet	27	--	100 feet
	Through	790 feet ²	11		200 feet	12		225 feet
	Right		5		150 feet	5		175 feet
Westbound	Left	100 feet	25		50 feet	28		75 feet
	Through	1,380 feet ²	11		150 feet	14		175 feet
	Right		4		100 feet	6		150 feet
Northbound	Left	100 feet	18		50 feet	20		50 feet
	Through	110 feet ²	12		75 feet	13		50 feet
	Right		4			5		
Southbound	Left	100 feet	23	75 feet	26	75 feet		
	Through	150 feet ²	16	75 feet	16	75 feet		
	Right		4		5			
Intersection Total			12	B	--	13	B	--

Notes: ¹ 95th percentile queue estimates are based on results from SimTraffic micro-simulation model. Queues are per lane, rounded up to the nearest 25 feet.

² Measured from nearest curb return of adjacent upstream intersection.

Source: Fehr & Peers, 2024.

Table 8: East Covell Boulevard/Monarch Lane – Phasing Plan B

Approach	Critical Movement	Queue Storage Distance	Intersection Performance									
			A.M. Peak Hour			P.M. Peak Hour						
			Delay	LOS	95 th Percentile Queue ¹	Delay	LOS	95 th Percentile Queue ¹				
Eastbound	Left	105 feet	28	--	75 feet	29	--	100 feet				
	Through	790 feet ²	11		200 feet	11		200 feet				
	Right		4		150 feet	6		175 feet				
Westbound	Left	100 feet	25		50 feet	31		75 feet				
	Through	1,380 feet ²	11		150 feet	12		175 feet				
	Right		4		125 feet	5		125 feet				
Northbound	Left	110 feet ²	15		--	75 feet		18	--	75 feet		
	Through		14					19				
	Right		6					7				
Southbound	Left	150 feet ²	15	--		100 feet	19	--		100 feet		
	Through		11				22					
	Right		6				8					
Intersection Total			13			B	--			14	B	--

Notes: ¹ 95th percentile queue estimates are based on results from SimTraffic micro-simulation model. Queues are per lane, rounded up to the nearest 25 feet.

² Measured from nearest curb return of adjacent upstream intersection.

Source: Fehr & Peers, 2024.



Technical Appendix



SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 1

County Rd 99-Lake Blvd/W Covell Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	27	24	88.5%	5.8	1.1	A
	Through	49	49	99.8%	7.6	1.3	A
	Right Turn	157	158	100.6%	2.4	1.1	A
	Subtotal	233	231	99.1%	4.0	1.0	A
SB	Left Turn	30	31	101.7%	5.3	1.9	A
	Through	53	56	105.7%	10.4	1.0	B
	Right Turn	7	9	131.4%	3.7	2.1	A
	Subtotal	90	96	106.3%	8.3	0.9	A
EB	Left Turn	15	13	86.7%	5.5	1.8	A
	Through	222	229	102.9%	12.1	0.8	B
	Right Turn	31	33	104.8%	2.9	0.6	A
	Subtotal	268	274	102.2%	10.7	0.9	B
WB	Left Turn	80	81	101.3%	11.5	0.7	B
	Through	162	161	99.3%	15.5	1.2	C
	Right Turn	17	17	100.6%	12.1	1.9	B
	Subtotal	259	259	100.0%	14.0	1.0	B
Total		850	859	101.1%	9.6	0.5	A

Intersection 2

Denali Dr/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	29	27	91.7%	15.4	4.4	B
	Through						
	Right Turn	146	146	99.7%	1.4	0.2	A
	Subtotal	175	172	98.3%	3.7	1.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	378	383	101.2%	11.7	1.6	B
	Right Turn	22	26	119.1%	8.9	1.2	A
	Subtotal	400	409	102.2%	11.5	1.5	B
WB	Left Turn	85	81	95.1%	14.2	2.2	B
	Through	296	296	99.9%	5.9	0.9	A
	Right Turn						
	Subtotal	381	377	98.8%	7.6	0.9	A
Total		956	958	100.2%	8.5	1.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 3 **Risling Ct-Shasta Dr/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	12	101.7%	20.6	6.3	C
	Through	4	5	132.5%	19.3	16.5	B
	Right Turn	235	239	101.5%	2.3	0.6	A
	Subtotal	251	256	102.0%	3.6	1.0	A
SB	Left Turn	38	41	107.6%	25.8	7.8	C
	Through	3	3	93.3%	26.3	28.1	C
	Right Turn	13	11	86.9%	4.8	2.5	A
	Subtotal	54	55	101.9%	22.3	6.7	C
EB	Left Turn	26	26	99.6%	31.3	8.9	C
	Through	481	490	101.8%	17.3	3.5	B
	Right Turn	17	16	91.2%	7.4	1.2	A
	Subtotal	524	531	101.4%	17.6	3.2	B
WB	Left Turn	153	152	99.2%	23.1	5.6	C
	Through	356	353	99.1%	10.0	2.2	B
	Right Turn	64	65	101.3%	2.8	0.7	A
	Subtotal	573	569	99.3%	12.9	2.4	B
Total		1,402	1,411	100.7%	13.3	1.8	B

Intersection 4 **John Jones Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	188	184	97.9%	31.3	3.2	C
	Through						
	Right Turn	55	50	90.2%	7.6	2.3	A
	Subtotal	243	234	96.1%	26.3	2.8	C
EB	Left Turn	71	73	103.0%	55.9	12.9	E
	Through	684	694	101.4%	14.0	3.9	B
	Right Turn						
	Subtotal	755	767	101.6%	18.1	3.4	B
WB	Left Turn						
	Through	518	521	100.6%	8.9	2.1	A
	Right Turn	283	289	102.2%	4.8	1.0	A
	Subtotal	801	811	101.2%	7.4	1.7	A
Total		1,799	1,811	100.7%	14.6	2.1	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 5 **SR 113 SB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	265	273	103.1%	70.2	29.4	E
	Through	1	1	140.0%	21.7	29.9	C
	Right Turn	149	149	99.8%	36.4	4.1	D
	Subtotal	415	423	102.0%	58.6	19.9	E
EB	Left Turn						
	Through	546	552	101.0%	26.6	2.7	C
	Right Turn	326	328	100.7%	26.1	4.1	C
	Subtotal	872	880	100.9%	26.5	3.0	C
WB	Left Turn	356	354	99.5%	57.5	5.7	E
	Through	652	661	101.3%	10.6	1.3	B
	Right Turn						
	Subtotal	1,008	1,015	100.7%	26.8	2.8	C
Total		2,295	2,318	101.0%	32.7	3.0	C

Intersection 6 **SR 113 NB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	235	238	101.3%	37.7	5.9	D
	Through						
	Right Turn	263	260	98.8%	12.5	2.8	B
	Subtotal	498	498	100.0%	24.7	4.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	65	63	96.6%	33.2	6.5	C
	Through	747	761	101.9%	8.4	1.4	A
	Right Turn						
	Subtotal	812	824	101.5%	10.2	1.6	B
WB	Left Turn						
	Through	773	778	100.6%	18.1	1.8	B
	Right Turn	165	174	105.5%	7.9	0.6	A
	Subtotal	938	952	101.5%	16.2	1.5	B
Total		2,248	2,274	101.2%	15.9	1.9	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 7 **Sycamore Ln/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	143	141	98.3%	43.1	5.5	D
	Through	27	25	91.1%	39.1	10.5	D
	Right Turn	38	41	106.8%	7.8	4.7	A
	Subtotal	208	206	98.9%	35.8	5.1	D
SB	Left Turn	99	100	100.5%	40.4	8.1	D
	Through	69	60	87.5%	26.7	4.0	C
	Right Turn	168	174	103.3%	4.8	1.9	A
	Subtotal	336	333	99.2%	19.6	4.0	B
EB	Left Turn	107	106	99.0%	41.7	4.5	D
	Through	626	634	101.3%	23.1	2.7	C
	Right Turn	160	165	103.3%	11.1	3.2	B
	Subtotal	893	905	101.4%	23.1	2.6	C
WB	Left Turn	34	30	86.8%	57.9	11.7	E
	Through	600	606	100.9%	26.5	7.6	C
	Right Turn	57	58	101.4%	11.9	6.3	B
	Subtotal	691	693	100.3%	26.5	7.0	C
Total		2,128	2,137	100.4%	25.0	2.8	C

Intersection 8 **Anderson Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	158	158	100.3%	38.3	4.8	D
	Through	57	58	101.6%	27.7	7.1	C
	Right Turn	58	64	110.9%	3.8	3.1	A
	Subtotal	273	281	102.8%	28.8	3.2	C
SB	Left Turn	44	44	99.3%	55.6	16.7	E
	Through	161	163	101.1%	28.1	7.0	C
	Right Turn	77	81	104.9%	3.6	4.8	A
	Subtotal	282	287	101.8%	26.2	7.3	C
EB	Left Turn	30	29	97.7%	47.8	15.4	D
	Through	473	484	102.3%	33.8	6.3	C
	Right Turn	257	261	101.5%	13.4	3.8	B
	Subtotal	760	774	101.9%	27.3	5.1	C
WB	Left Turn	151	140	92.5%	46.2	7.6	D
	Through	467	468	100.2%	23.4	6.1	C
	Right Turn	41	45	109.0%	5.6	1.2	A
	Subtotal	659	652	99.0%	27.4	6.1	C
Total		1,974	1,995	101.0%	27.4	4.2	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 9 **Dummy Bike/Ped-Oak Ave/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	145	139	96.1%	32.9	5.8	C
	Through						
	Right Turn	171	182	106.7%	2.6	0.4	A
	Subtotal	316	322	101.8%	15.3	3.1	B
SB	Left Turn	5	4	82.0%	27.1	21.5	C
	Through	25	24	95.6%	22.1	7.5	C
	Right Turn						
	Subtotal	30	28	93.3%	23.8	6.7	C
EB	Left Turn						
	Through	419	437	104.3%	26.4	6.3	C
	Right Turn	184	184	100.2%	11.5	2.4	B
	Subtotal	603	621	103.1%	21.8	4.9	C
WB	Left Turn	188	198	105.4%	40.0	8.4	D
	Through	569	569	99.9%	18.6	2.4	B
	Right Turn						
	Subtotal	757	767	101.3%	24.1	3.5	C
Total		1,706	1,738	101.9%	21.6	3.1	C

Intersection 10 **Catalina Dr-Dummy Bike/Ped/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	4	5	122.5%	28.0	17.9	C
	Right Turn						
Subtotal		4	5	122.5%	28.0	17.9	C
SB	Left Turn	155	159	102.4%	18.3	3.8	B
	Through						
	Right Turn	64	68	105.6%	1.3	0.2	A
	Subtotal	219	226	103.3%	13.4	3.1	B
EB	Left Turn	28	27	97.1%	33.7	8.7	C
	Through	562	596	106.0%	12.0	2.6	B
	Right Turn						
	Subtotal	590	623	105.6%	12.7	2.7	B
WB	Left Turn						
	Through	693	698	100.7%	16.8	2.3	B
	Right Turn	73	73	100.3%	7.0	0.8	A
	Subtotal	766	771	100.7%	15.9	2.2	B
Total		1,579	1,625	102.9%	14.4	2.1	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 11 **F St/W Covell Blvd-E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	56	53	94.5%	42.5	8.9	D
	Through	105	102	97.2%	37.2	6.7	D
	Right Turn	165	164	99.3%	8.2	2.4	A
	Subtotal	326	319	97.8%	24.0	2.7	C
SB	Left Turn	179	177	98.8%	56.2	32.3	E
	Through	188	185	98.3%	41.8	26.0	D
	Right Turn	85	88	103.4%	25.1	32.4	C
	Subtotal	452	450	99.4%	43.8	29.2	D
EB	Left Turn	32	33	101.9%	51.5	8.3	D
	Through	593	621	104.7%	26.1	4.4	C
	Right Turn	114	120	105.4%	6.6	1.3	A
	Subtotal	739	774	104.7%	24.1	3.5	C
WB	Left Turn	212	209	98.5%	52.7	7.9	D
	Through	656	657	100.2%	25.3	2.8	C
	Right Turn	111	105	94.7%	19.3	4.6	B
	Subtotal	979	971	99.2%	30.1	2.9	C
Total		2,496	2,513	100.7%	29.7	4.9	C

Intersection 12 **F St/E 14th St** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	89	89	100.0%	32.9	3.3	C
	Through	138	134	96.7%	13.8	3.8	B
	Right Turn						
	Subtotal	227	223	98.0%	21.8	3.5	C
SB	Left Turn						
	Through	219	213	97.3%	33.1	4.9	C
	Right Turn	295	302	102.3%	18.9	3.8	B
	Subtotal	514	515	100.2%	25.0	4.0	C
EB	Left Turn	166	165	99.5%	31.2	3.9	C
	Through						
	Right Turn	83	87	105.3%	7.6	0.9	A
	Subtotal	249	253	101.4%	23.0	3.0	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		990	990	100.0%	23.7	2.3	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 13

Market Ave/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	124	122	98.3%	10.4	3.4	B
	Subtotal	124	122	98.3%	10.4	3.4	B
EB	Left Turn						
	Through	937	957	102.2%	5.6	0.7	A
	Right Turn						
	Subtotal	937	957	102.2%	5.6	0.7	A
WB	Left Turn						
	Through	855	850	99.4%	3.1	0.3	A
	Right Turn	25	25	98.8%	2.4	0.7	A
	Subtotal	880	875	99.4%	3.0	0.3	A
Total		1,941	1,954	100.6%	4.8	0.3	A

Intersection 14

Cannery Ave/Cannery Loop

Roundabout

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	23	23	101.7%	2.8	0.5	A
	Through	70	69	97.9%	3.4	0.5	A
	Right Turn						
	Subtotal	93	92	98.8%	3.2	0.4	A
SB	Left Turn						
	Through	70	67	96.3%	2.2	0.2	A
	Right Turn	6	6	103.3%	1.7	0.6	A
	Subtotal	76	74	96.8%	2.1	0.2	A
EB	Left Turn	5	5	94.0%	0.8	0.9	A
	Through						
	Right Turn	51	51	100.8%	1.9	0.2	A
	Subtotal	56	56	100.2%	1.9	0.2	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		225	222	98.5%	2.5	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 15 Cannery Ave-J St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	150	150	100.1%	38.1	6.5	D
	Through	13	12	90.8%	31.4	28.9	C
	Right Turn	68	67	98.1%	13.8	3.7	B
	Subtotal	231	229	99.0%	30.8	4.6	C
SB	Left Turn	70	69	97.9%	40.4	9.2	D
	Through	29	30	103.1%	43.9	17.7	D
	Right Turn	22	21	93.6%	15.6	11.3	B
	Subtotal	121	119	98.3%	36.2	8.8	D
EB	Left Turn	61	58	95.1%	57.1	11.1	E
	Through	689	706	102.5%	34.6	6.4	C
	Right Turn	187	196	104.9%	25.1	5.9	C
	Subtotal	937	961	102.5%	34.2	6.2	C
WB	Left Turn	60	60	99.2%	57.4	13.5	E
	Through	703	700	99.5%	33.9	6.8	C
	Right Turn	24	24	101.3%	25.3	10.7	C
	Subtotal	787	784	99.6%	35.5	6.7	D
Total		2,076	2,092	100.8%	34.5	5.3	C

Intersection 16 L St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	76	71	92.8%	23.3	5.4	C
	Through	4	4	107.5%	17.9	18.8	B
	Right Turn	68	69	101.3%	16.9	4.8	B
	Subtotal	148	144	97.1%	20.2	3.8	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	733	743	101.3%	14.4	4.7	B
	Right Turn	95	99	103.9%	27.4	4.5	C
	Subtotal	828	841	101.6%	15.9	4.4	B
WB	Left Turn	72	72	99.9%	41.1	13.3	D
	Through	711	712	100.1%	9.1	2.0	A
	Right Turn						
	Subtotal	783	784	100.1%	12.4	2.8	B
Total		1,759	1,769	100.5%	14.8	3.5	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 18

Pole Line Rd/Moore Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	311	313	100.5%	15.2	3.1	C
	Right Turn	60	60	100.0%	12.1	3.0	B
	Subtotal	371	373	100.5%	14.7	3.0	B
SB	Left Turn	59	58	98.1%	9.2	1.2	A
	Through	405	408	100.6%	15.6	1.6	C
	Right Turn						
	Subtotal	464	466	100.3%	14.9	1.5	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	100	98	98.3%	6.8	0.9	A
	Through						
	Right Turn	79	78	98.2%	5.7	0.6	A
	Subtotal	179	176	98.3%	6.3	0.5	A
Total		1,014	1,014	100.0%	13.3	1.6	B

Intersection 19

Pole Line Rd/Donner Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	353	353	100.1%	1.3	0.2	A
	Right Turn	19	22	114.2%	0.8	0.4	A
	Subtotal	372	375	100.8%	1.3	0.2	A
SB	Left Turn	8	7	86.3%	5.9	4.1	A
	Through	497	499	100.3%	4.0	0.3	A
	Right Turn						
	Subtotal	505	505	100.1%	4.1	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	72	71	98.3%	14.3	4.5	B
	Through						
	Right Turn	18	20	111.7%	5.7	1.2	A
	Subtotal	90	91	101.0%	12.4	3.8	B
Total		967	971	100.4%	3.8	0.5	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 20

Pole Line Rd/Picasso Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	353	355	100.6%	4.7	1.2	A
	Right Turn	95	99	104.5%	3.3	1.2	A
	Subtotal	448	455	101.5%	4.4	1.1	A
SB	Left Turn	23	19	82.6%	5.3	3.8	A
	Through	546	551	100.9%	1.3	0.4	A
	Right Turn						
	Subtotal	569	570	100.2%	1.5	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	52	53	101.9%	23.0	16.1	C
	Through						
	Right Turn	19	20	104.2%	9.2	8.3	A
	Subtotal	71	73	102.5%	19.1	13.4	C
Total		1,088	1,097	100.9%	3.9	1.1	A

Intersection 21

Pole Line Rd/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	142	141	98.9%	37.6	5.9	D
	Through	167	168	100.4%	28.3	3.0	C
	Right Turn	41	44	106.3%	12.8	6.5	B
	Subtotal	350	352	100.5%	30.1	3.2	C
SB	Left Turn	142	141	99.2%	44.8	5.2	D
	Through	246	250	101.4%	39.4	6.7	D
	Right Turn	210	214	101.7%	19.2	4.5	B
	Subtotal	598	604	101.0%	33.7	5.0	C
EB	Left Turn	157	155	98.6%	36.8	7.0	D
	Through	442	443	100.3%	24.6	4.4	C
	Right Turn	134	141	105.3%	7.0	0.9	A
	Subtotal	733	739	100.8%	23.9	3.1	C
WB	Left Turn	66	66	99.4%	39.8	8.2	D
	Through	431	431	99.9%	29.7	4.3	C
	Right Turn	124	129	104.0%	5.5	1.6	A
	Subtotal	621	625	100.7%	25.7	2.6	C
Total		2,302	2,320	100.8%	28.1	2.0	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 22 **Dummy Bike/Ped-Birch Ln/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	65	63	96.6%	27.2	5.5	C
	Through						
	Right Turn	27	29	105.9%	27.7	8.9	C
	Subtotal	92	91	99.3%	27.5	5.0	C
SB	Left Turn						
	Through	73	72	99.2%	20.5	5.6	C
	Right Turn	4	5	112.5%	3.8	3.3	A
	Subtotal	77	77	99.9%	19.2	4.6	B
EB	Left Turn						
	Through	556	562	101.0%	24.0	5.9	C
	Right Turn	69	69	99.6%	24.5	8.1	C
	Subtotal	625	630	100.8%	24.1	6.1	C
WB	Left Turn	70	71	101.9%	37.4	7.2	D
	Through	552	557	100.9%	19.1	3.3	B
	Right Turn						
	Subtotal	622	629	101.0%	21.1	3.3	C
Total		1,416	1,427	100.8%	22.8	4.1	C

Intersection 23 **Baywood Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	21	93.6%	14.0	5.8	B
	Through						
	Right Turn	23	24	106.1%	4.6	1.4	A
	Subtotal	45	45	100.0%	8.5	2.7	A
SB	Left Turn	4	4	97.5%	6.5	5.5	A
	Through						
	Right Turn	9	10	110.0%	0.8	0.3	A
	Subtotal	13	14	106.2%	3.1	2.1	A
EB	Left Turn	2	2	105.0%	4.5	2.2	A
	Through	575	580	100.9%	3.6	0.8	A
	Right Turn	23	21	90.9%	3.2	0.6	A
	Subtotal	600	603	100.5%	3.6	0.8	A
WB	Left Turn	25	24	95.6%	9.8	3.8	A
	Through	570	578	101.4%	3.4	0.6	A
	Right Turn	3	4	123.3%	3.4	0.8	A
	Subtotal	598	605	101.2%	3.6	0.6	A
Total		1,256	1,267	100.9%	3.8	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 24

Manzanita Ln/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	47	44	94.5%	14.8	3.2	B
	Through						
	Right Turn	26	26	101.5%	6.6	2.8	A
	Subtotal	73	71	97.0%	11.3	2.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	581	586	100.8%	5.2	0.8	A
	Right Turn	21	22	105.2%	5.4	1.6	A
	Subtotal	602	608	101.0%	5.2	0.9	A
WB	Left Turn	12	11	88.3%	5.9	4.0	A
	Through	551	561	101.8%	2.5	0.4	A
	Right Turn						
	Subtotal	563	572	101.5%	2.5	0.4	A
Total		1,238	1,250	101.0%	4.4	0.5	A

Intersection 25

Wright Blvd/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	132	132	100.2%	15.2	2.3	B
	Through						
	Right Turn	112	116	103.6%	1.5	0.2	A
	Subtotal	244	248	101.7%	8.8	1.6	A
EB	Left Turn	41	40	96.6%	24.1	4.9	C
	Through	566	574	101.4%	10.8	1.0	B
	Right Turn						
	Subtotal	607	614	101.1%	11.8	1.3	B
WB	Left Turn						
	Through	451	456	101.1%	9.7	1.0	A
	Right Turn	69	72	104.2%	4.9	0.7	A
	Subtotal	520	528	101.5%	9.1	0.9	A
Total		1,371	1,390	101.4%	10.2	0.6	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 26

Monarch Ln/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	27	27	98.5%	13.6	5.4	B
	Through						
	Right Turn	41	42	102.4%	3.6	1.7	A
	Subtotal	68	69	100.9%	7.1	2.4	A
SB	Left Turn						
	Through						
	Right Turn	1	1	90.0%	2.2	3.1	A
	Subtotal	1	1	90.0%	2.2	3.1	A
EB	Left Turn						
	Through	668	673	100.7%	2.4	0.4	A
	Right Turn	30	32	106.7%	2.5	0.9	A
	Subtotal	698	705	101.0%	2.4	0.4	A
WB	Left Turn	15	13	84.0%	6.2	2.8	A
	Through	492	499	101.4%	2.5	0.2	A
	Right Turn	1	2	160.0%	2.0	0.2	A
	Subtotal	508	513	101.0%	2.6	0.2	A
Total		1,275	1,288	101.0%	2.7	0.3	A

Intersection 27

Alhambra Dr/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	125	124	99.5%	12.6	2.4	B
	Through						
	Right Turn	39	40	103.1%	4.0	1.6	A
	Subtotal	164	165	100.4%	10.6	2.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	609	615	101.0%	7.9	1.1	A
	Right Turn	100	100	100.0%	3.2	0.4	A
	Subtotal	709	715	100.8%	7.2	1.0	A
WB	Left Turn	32	33	102.2%	17.6	3.8	B
	Through	383	389	101.5%	7.1	0.8	A
	Right Turn						
	Subtotal	415	421	101.5%	7.8	0.8	A
Total		1,288	1,301	101.0%	7.9	1.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 29

Harper Hr HS Access/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	87	96.6%	18.3	2.5	B
	Through						
	Right Turn	3	4	130.0%	6.0	8.2	A
	Subtotal	93	91	97.6%	17.6	2.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	523	531	101.5%	12.4	2.4	B
	Right Turn	125	123	98.0%	5.7	1.1	A
	Subtotal	648	654	100.8%	11.1	2.1	B
WB	Left Turn	139	135	97.3%	26.3	3.8	C
	Through	325	335	102.9%	13.9	3.0	B
	Right Turn						
	Subtotal	464	470	101.3%	17.4	3.1	B
Total		1,205	1,214	100.8%	14.1	2.2	B

Intersection 30

Mace Blvd/Alhambra Dr

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	157	156	99.3%	23.8	3.8	C
	Through	444	450	101.3%	7.7	2.3	A
	Right Turn						
	Subtotal	601	606	100.8%	12.0	2.0	B
SB	Left Turn						
	Through	608	612	100.7%	17.0	1.9	B
	Right Turn	28	27	97.5%	9.6	1.5	A
	Subtotal	636	640	100.6%	16.7	1.9	B
EB	Left Turn	14	16	115.0%	23.0	10.1	C
	Through						
	Right Turn	278	277	99.5%	1.9	0.2	A
	Subtotal	292	293	100.2%	3.4	0.7	A
NW	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,529	1,538	100.6%	12.1	0.8	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 31 **2nd St/Target Main Dwy-Fermi Place** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	21	21	101.0%	15.7	6.4	B
	Through	188	191	101.8%	2.6	0.6	A
	Right Turn	3	4	126.7%	0.9	1.1	A
	Subtotal	212	216	102.0%	3.9	1.0	A
SB	Left Turn	49	48	98.8%	14.6	6.2	B
	Through	401	390	97.2%	3.2	0.9	A
	Right Turn	58	60	102.8%	0.9	0.3	A
	Subtotal	508	498	98.0%	4.3	1.3	A
EB	Left Turn	14	14	100.7%	13.3	7.5	B
	Through	1	2	200.0%	8.3	10.0	A
	Right Turn	31	33	106.8%	6.2	1.4	A
	Subtotal	46	49	107.0%	9.1	2.4	A
WB	Left Turn	6	6	103.3%	10.5	7.0	B
	Through	1	1	80.0%	6.9	14.5	A
	Right Turn	8	9	106.3%	4.4	2.0	A
	Subtotal	15	16	103.3%	9.1	3.7	A
Total		781	779	99.7%	4.6	0.9	A

Intersection 32 **Mace Blvd/2nd St-County Rd 32A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	457	444	97.1%	34.9	6.6	C
	Through	559	560	100.1%	18.7	5.7	B
	Right Turn	10	10	101.0%	4.8	1.0	A
	Subtotal	1,026	1,014	98.8%	25.4	6.1	C
SB	Left Turn	19	21	109.5%	40.5	13.2	D
	Through	803	800	99.6%	51.7	19.4	D
	Right Turn	63	66	104.4%	14.0	9.5	B
	Subtotal	885	887	100.2%	48.7	18.5	D
EB	Left Turn						
	Through	668	6	0.8%	37.3	27.3	D
	Right Turn	30	210	700.7%	3.3	0.4	A
	Subtotal	698	216	30.9%	4.0	0.9	A
WB	Left Turn	15	13	86.7%	43.7	13.8	D
	Through	492	25	5.1%	33.2	14.5	C
	Right Turn	1	17	1740.0%	9.8	6.0	A
	Subtotal	508	56	10.9%	28.4	9.5	C
Total		3,117	2,171	69.7%	32.7	9.5	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 33

Mace Blvd/I-80 WB Ramps

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	359	357	99.3%	27.1	3.2	C
	Through	507	505	99.7%	7.9	1.4	A
	Right Turn						
	Subtotal	866	862	99.5%	15.6	2.1	B
SB	Left Turn						
	Through	875	876	100.1%	38.1	18.9	D
	Right Turn	148	150	101.1%	15.7	5.5	B
	Subtotal	1,023	1,026	100.3%	34.8	17.0	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	294	300	102.0%	24.2	3.8	C
	Through	2	3	160.0%	4.0	8.4	A
	Right Turn	519	508	97.9%	2.9	0.2	A
	Subtotal	815	811	99.5%	10.8	1.6	B
Total		2,704	2,699	99.8%	22.0	7.3	C

Intersection 34

Mace Blvd/Chiles Rd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	21	94.5%	60.9	17.5	E
	Through	575	580	100.8%	39.8	4.2	D
	Right Turn	20	22	110.0%	18.7	6.1	B
	Subtotal	617	623	100.9%	39.6	4.2	D
SB	Left Turn	164	163	99.3%	69.7	27.8	E
	Through	285	295	103.4%	31.4	10.7	C
	Right Turn	271	275	101.4%	6.9	0.6	A
	Subtotal	720	732	101.7%	30.6	11.2	C
EB	Left Turn	400	402	100.4%	63.1	16.5	E
	Through	149	151	101.3%	42.5	5.8	D
	Right Turn	129	129	99.8%	2.1	0.2	A
	Subtotal	678	681	100.5%	46.1	10.9	D
WB	Left Turn	17	17	97.6%	49.2	18.6	D
	Through	67	63	93.3%	31.0	5.5	C
	Right Turn	328	327	99.8%	23.1	4.7	C
	Subtotal	412	406	98.6%	25.4	3.5	C
Total		2,427	2,442	100.6%	36.4	5.9	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 35 **I-80 EB Off Ramp/Chiles Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	301	300	99.7%	5.4	1.0	A
	Through						
	Right Turn	75	74	98.0%	3.0	0.7	A
	Subtotal	376	374	99.4%	5.0	0.9	A
EB	Left Turn						
	Through	377	375	99.5%	15.0	3.9	B
	Right Turn						
	Subtotal	377	375	99.5%	15.0	3.9	B
WB	Left Turn						
	Through	360	357	99.2%	10.3	1.2	B
	Right Turn						
	Subtotal	360	357	99.2%	10.3	1.2	B
Total		1,113	1,106	99.3%	10.1	1.4	B

Intersection 36 **Mace Blvd/Cowell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	9	8	87.8%	33.0	13.4	C
	Through	270	268	99.1%	20.9	3.1	C
	Right Turn	48	47	97.5%	14.2	4.7	B
	Subtotal	327	322	98.6%	20.2	3.4	C
SB	Left Turn	80	80	100.0%	32.5	4.7	C
	Through	189	188	99.6%	18.8	3.1	B
	Right Turn	52	56	107.3%	9.3	2.9	A
	Subtotal	321	324	101.0%	20.6	2.9	C
EB	Left Turn	123	127	102.9%	23.6	3.5	C
	Through	88	89	100.7%	20.9	4.0	C
	Right Turn	10	10	100.0%	7.0	4.0	A
	Subtotal	221	225	101.9%	21.8	2.7	C
WB	Left Turn	39	38	97.9%	35.2	10.9	D
	Through	77	76	98.8%	25.9	4.0	C
	Right Turn	101	104	102.6%	12.9	3.1	B
	Subtotal	217	218	100.4%	20.8	3.1	C
Total		1,086	1,090	100.3%	20.8	1.8	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
AM Peak Hour

Intersection 37

Mace Blvd/N El Macero Dr

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	6	5	88.3%	4.3	1.7	A
	Through	217	212	97.7%	7.1	0.2	A
	Right Turn	3	3	106.7%	1.5	1.6	A
	Subtotal	226	221	97.6%	7.0	0.2	A
SB	Left Turn	75	74	98.4%	10.3	2.2	B
	Through	142	139	98.1%	11.9	1.7	B
	Right Turn	21	22	106.7%	3.5	1.0	A
	Subtotal	238	236	98.9%	10.6	1.7	B
EB	Left Turn	19	19	100.5%	4.8	0.8	A
	Through	5	5	106.0%	5.4	4.9	A
	Right Turn	3	4	123.3%	1.9	1.3	A
	Subtotal	27	28	104.1%	5.0	1.8	A
WB	Left Turn	4	2	57.5%	2.9	2.7	A
	Through	4	4	95.0%	4.3	3.3	A
	Right Turn	91	92	100.9%	3.7	0.5	A
	Subtotal	99	98	98.9%	3.8	0.6	A
Total		590	582	98.6%	7.8	0.8	A

Intersection

Int Delay, s/veh 9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑						↕	
Traffic Vol, veh/h	0	209	32	43	130	0	0	0	0	220	0	83
Future Vol, veh/h	0	209	32	43	130	0	0	0	0	220	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	195	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	238	36	49	148	0	0	0	0	250	0	94

Major/Minor	Major1			Major2			Minor2				
Conflicting Flow All	-	0	0	274	0	0			502	520	148
Stage 1	-	-	-	-	-	-			246	246	-
Stage 2	-	-	-	-	-	-			256	274	-
Critical Hdwy	-	-	-	4.13	-	-			6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-			5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-			3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	1283	-	0			527	459	896
Stage 1	0	-	-	-	-	0			793	701	-
Stage 2	0	-	-	-	-	0			784	681	-
Platoon blocked, %	-	-	-	-	-	-			-	-	-
Mov Cap-1 Maneuver	-	-	-	1283	-	-			507	0	896
Mov Cap-2 Maneuver	-	-	-	-	-	-			507	0	-
Stage 1	-	-	-	-	-	-			793	0	-
Stage 2	-	-	-	-	-	-			754	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1283	-	575
HCM Lane V/C Ratio	-	-	0.038	-	0.599
HCM Control Delay (s)	-	-	7.9	-	20.2
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	3.9

HCM 6th TWSC
 39: County Rd 29 & SR 113 NB Ramps

08/06/2024

Intersection							
Int Delay, s/veh	1.3						
Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations	↙	↑	↗			↘	
Traffic Vol, veh/h	42	387	144	185	1	21	29
Future Vol, veh/h	42	387	144	185	1	21	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	-	None
Storage Length	115	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	-	0	-
Grade, %	-	0	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	48	440	164	210	1	24	33

Major/Minor	Major1	Major2	Minor2				
Conflicting Flow All	374	0	-	0	0	805	269
Stage 1	-	-	-	-	0	269	-
Stage 2	-	-	-	-	0	536	-
Critical Hdwy	4.13	-	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1179	-	-	-	0	350	767
Stage 1	-	-	-	-	0	774	-
Stage 2	-	-	-	-	0	585	-
Platoon blocked, %		-	-	-	-		
Mov Cap-1 Maneuver	1179	-	-	-	0	336	767
Mov Cap-2 Maneuver	-	-	-	-	0	336	-
Stage 1	-	-	-	-	0	742	-
Stage 2	-	-	-	-	0	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1179	-	-	-	498
HCM Lane V/C Ratio	0.04	-	-	-	0.114
HCM Control Delay (s)	8.2	-	-	-	13.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection

Int Delay, s/veh 1.3

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	1	3	327	77	20	290	1	34	0	12	2	0	4
Future Vol, veh/h	1	3	327	77	20	290	1	34	0	12	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	115	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	3	372	88	23	330	1	39	0	14	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	-	331	0	0	460	0	0	801	801	416	806	845	331
Stage 1	-	-	-	-	-	-	-	422	424	-	377	377	-
Stage 2	-	-	-	-	-	-	-	379	377	-	429	468	-
Critical Hdwy	-	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	-	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	-	1223	-	-	1096	-	-	301	317	634	299	298	708
Stage 1	-	-	-	-	-	-	-	607	585	-	642	614	-
Stage 2	-	-	-	-	-	-	-	641	614	-	602	560	-
Platoon blocked, %			-	-	-	-	-						
Mov Cap-1 Maneuver	~ -4	~ -4	-	-	1096	-	-	294	310	634	288	292	708
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	294	310	-	288	292	-
Stage 1	-	-	-	-	-	-	-	607	585	-	642	601	-
Stage 2	-	-	-	-	-	-	-	624	601	-	589	560	-

Approach	EB			WB			NB			SB			
HCM Control Delay, s					0.5			17.4			12.7		
HCM LOS								C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	342	+	-	-	1096	-	-	476
HCM Lane V/C Ratio	0.153	-	-	-	0.021	-	-	0.014
HCM Control Delay (s)	17.4	-	-	-	8.4	-	-	12.7
HCM Lane LOS	C	-	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.1	-	-	0

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	142	200	69	168	141	21
Future Vol, veh/h	142	200	69	168	141	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	163	230	79	193	162	24

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	393	0	629 278
Stage 1	-	-	-	-	278 -
Stage 2	-	-	-	-	351 -
Critical Hdwy	-	-	4.13	-	6.43 6.23
Critical Hdwy Stg 1	-	-	-	-	5.43 -
Critical Hdwy Stg 2	-	-	-	-	5.43 -
Follow-up Hdwy	-	-	2.227	-	3.527 3.327
Pot Cap-1 Maneuver	-	-	1160	-	445 758
Stage 1	-	-	-	-	767 -
Stage 2	-	-	-	-	710 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1160	-	411 758
Mov Cap-2 Maneuver	-	-	-	-	411 -
Stage 1	-	-	-	-	767 -
Stage 2	-	-	-	-	656 -

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	19.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	437	-	-	1160	-
HCM Lane V/C Ratio	0.426	-	-	0.068	-
HCM Control Delay (s)	19.2	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0.2	-

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	114	140	229	377	100
Future Vol, veh/h	52	114	140	229	377	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	65	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	60	131	161	263	433	115

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1076	491	548	0	-	0
Stage 1	491	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	241	573	1011	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	203	573	1011	-	-	-
Mov Cap-2 Maneuver	203	-	-	-	-	-
Stage 1	514	-	-	-	-	-
Stage 2	553	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.4	3.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1011	-	203	573	-	-
HCM Lane V/C Ratio	0.159	-	0.294	0.229	-	-
HCM Control Delay (s)	9.2	-	30	13.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.9	-	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↘		↑	↗	↘	↑
Traffic Vol, veh/h	16	24	254	27	57	461
Future Vol, veh/h	16	24	254	27	57	461
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	-	-	280	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	18	28	292	31	66	530

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	954	-	0	0	292
Stage 1	292	-	-	-	-
Stage 2	662	-	-	-	-
Critical Hdwy	6.44	-	-	-	4.14
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	-	-	-	2.236
Pot Cap-1 Maneuver	285	0	-	-	1258
Stage 1	753	0	-	-	-
Stage 2	509	0	-	-	-
Platoon blocked, %		-	-	-	-
Mov Cap-1 Maneuver	270	-	-	-	1258
Mov Cap-2 Maneuver	270	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	483	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.3	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	270	1258
HCM Lane V/C Ratio	-	-	0.068	0.052
HCM Control Delay (s)	-	-	19.3	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	6	61	2	3	0	46	211	2	4	452	43
Future Vol, veh/h	15	6	61	2	3	0	46	211	2	4	452	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	16	6	66	2	3	0	49	227	2	4	486	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	9.2	10.7	16.1
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	18%	40%	1%
Vol Thru, %	81%	7%	60%	91%
Vol Right, %	1%	74%	0%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	259	82	5	499
LT Vol	46	15	2	4
Through Vol	211	6	3	452
RT Vol	2	61	0	43
Lane Flow Rate	278	88	5	537
Geometry Grp	1	1	1	1
Degree of Util (X)	0.373	0.131	0.009	0.668
Departure Headway (Hd)	4.819	5.356	6.021	4.483
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	664	588	805
Service Time	2.871	3.434	4.119	2.525
HCM Lane V/C Ratio	0.374	0.133	0.009	0.667
HCM Control Delay	10.7	9.3	9.2	16.1
HCM Lane LOS	B	A	A	C
HCM 95th-tile Q	1.7	0.4	0	5.2

Intersection							
Int Delay, s/veh	2.3						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↘	↗	↘	↗	↘	↗	↗
Traffic Vol, veh/h	15	105	26	199	1	405	15
Future Vol, veh/h	15	105	26	199	1	405	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	250	0	390	-	370	-	370
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	17	118	29	224	1	455	17

Major/Minor	Minor2	Major1	Major2				
Conflicting Flow All	737	455	472	0	-	-	0
Stage 1	455	-	-	-	-	-	-
Stage 2	282	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	384	603	1085	-	-	-	-
Stage 1	637	-	-	-	-	-	-
Stage 2	763	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	374	603	1085	-	-	-	-
Mov Cap-2 Maneuver	374	-	-	-	-	-	-
Stage 1	620	-	-	-	-	-	-
Stage 2	763	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	1	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1085	-	374	603	-	-	-
HCM Lane V/C Ratio	0.027	-	0.045	0.196	-	-	-
HCM Control Delay (s)	8.4	-	15.1	12.4	-	-	-
HCM Lane LOS	A	-	C	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.7	-	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	1	90	46	7	10	2
Future Vol, veh/h	1	90	46	7	10	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	1	95	48	7	11	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	55	0	-	0	149 52
Stage 1	-	-	-	-	52 -
Stage 2	-	-	-	-	97 -
Critical Hdwy	4.3	-	-	-	6.6 6.4
Critical Hdwy Stg 1	-	-	-	-	5.6 -
Critical Hdwy Stg 2	-	-	-	-	5.6 -
Follow-up Hdwy	2.38	-	-	-	3.68 3.48
Pot Cap-1 Maneuver	1442	-	-	-	803 967
Stage 1	-	-	-	-	926 -
Stage 2	-	-	-	-	884 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1442	-	-	-	802 967
Mov Cap-2 Maneuver	-	-	-	-	802 -
Stage 1	-	-	-	-	925 -
Stage 2	-	-	-	-	884 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1442	-	-	-	825
HCM Lane V/C Ratio	0.001	-	-	-	0.015
HCM Control Delay (s)	7.5	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑	↑	↗	↘	↘
Traffic Vol, veh/h	21	69	35	14	13	22
Future Vol, veh/h	21	69	35	14	13	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	305	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	25	25	25	25	25	25
Mvmt Flow	22	73	37	15	14	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	52	0	-	0	154 37
Stage 1	-	-	-	-	37 -
Stage 2	-	-	-	-	117 -
Critical Hdwy	4.35	-	-	-	6.65 6.45
Critical Hdwy Stg 1	-	-	-	-	5.65 -
Critical Hdwy Stg 2	-	-	-	-	5.65 -
Follow-up Hdwy	2.425	-	-	-	3.725 3.525
Pot Cap-1 Maneuver	1419	-	-	-	787 973
Stage 1	-	-	-	-	929 -
Stage 2	-	-	-	-	854 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1419	-	-	-	774 973
Mov Cap-2 Maneuver	-	-	-	-	774 -
Stage 1	-	-	-	-	914 -
Stage 2	-	-	-	-	854 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1419	-	-	-	888
HCM Lane V/C Ratio	0.016	-	-	-	0.041
HCM Control Delay (s)	7.6	-	-	-	9.2
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	3.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	82	1	1	49	2
Future Vol, veh/h	2	82	1	1	49	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	2	95	1	1	57	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	97	0	53
Stage 1	-	-	-	-	50
Stage 2	-	-	-	-	3
Critical Hdwy	-	-	4.3	-	6.6
Critical Hdwy Stg 1	-	-	-	-	5.6
Critical Hdwy Stg 2	-	-	-	-	5.6
Follow-up Hdwy	-	-	2.38	-	3.68
Pot Cap-1 Maneuver	-	-	1391	-	912
Stage 1	-	-	-	-	928
Stage 2	-	-	-	-	975
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1391	-	911
Mov Cap-2 Maneuver	-	-	-	-	911
Stage 1	-	-	-	-	928
Stage 2	-	-	-	-	974

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	913	-	-	1391	-
HCM Lane V/C Ratio	0.065	-	-	0.001	-
HCM Control Delay (s)	9.2	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	7	30	72	8	0	41	0	52	0	0	0
Future Vol, veh/h	0	7	30	72	8	0	41	0	52	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	83	83	83	83	84	83	84	83	84	84	84
Heavy Vehicles, %	10	9	9	9	9	10	9	10	9	10	10	10
Mvmt Flow	0	8	36	87	10	0	49	0	63	0	0	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	162	1	153	131	-	1	0	0	63	0	0
Stage 1	-	1	-	130	130	-	-	-	-	-	-	-
Stage 2	-	161	-	23	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.59	6.29	7.19	6.59	-	4.19	-	-	4.2	-	-
Critical Hdwy Stg 1	-	5.59	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.59	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.081	3.381	3.581	4.081	-	2.281	-	-	2.29	-	-
Pot Cap-1 Maneuver	0	718	1063	798	747	0	1577	-	-	1490	-	-
Stage 1	0	881	-	857	775	0	-	-	-	-	-	-
Stage 2	0	752	-	977	881	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	695	1063	745	723	-	1577	-	-	1490	-	-
Mov Cap-2 Maneuver	-	695	-	745	723	-	-	-	-	-	-	-
Stage 1	-	881	-	830	750	-	-	-	-	-	-	-
Stage 2	-	728	-	935	881	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.9		10.6		3.2		0	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1577	-	-	966	743	1490	-	-
HCM Lane V/C Ratio	0.031	-	-	0.046	0.13	-	-	-
HCM Control Delay (s)	7.4	0	-	8.9	10.6	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.4	0	-	-

2: I-80 EB Ramps Performance by movement

Movement	EBR	NBL	NBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.4	5.8	7.2	6.6

50: I-80 WB Ramps & County Rd 32A Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.2	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	1.3	3.4	6.5	1.6	8.9	8.6	5.7

51: Chiles Road & I-80 EB Ramps Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.0		0.0	0.0	0.1
Total Del/Veh (s)	2.4	3.3	7.5	1.5		2.4	2.8	3.5

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	13.1

Intersection: 2: I-80 EB Ramps

Movement	EB	NB	NB
Directions Served	R	L	T
Maximum Queue (ft)	45	72	82
Average Queue (ft)	4	39	44
95th Queue (ft)	24	70	77
Link Distance (ft)	143	68	68
Upstream Blk Time (%)		1	1
Queuing Penalty (veh)		1	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 50: I-80 WB Ramps & County Rd 32A

Movement	NB
Directions Served	LR
Maximum Queue (ft)	90
Average Queue (ft)	46
95th Queue (ft)	77
Link Distance (ft)	446
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 51: Chiles Road & I-80 EB Ramps

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	64	67	29
Average Queue (ft)	8	5	4
95th Queue (ft)	37	34	20
Link Distance (ft)	5890	2911	68
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 2

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 1

County Rd 99-Lake Blvd/W Covell Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	32	31	95.9%	5.7	0.7	A
	Through	63	63	100.2%	8.2	1.1	A
	Right Turn	148	149	100.9%	2.0	0.3	A
	Subtotal	243	243	100.1%	4.0	0.6	A
SB	Left Turn	12	12	96.7%	3.7	1.5	A
	Through	49	51	103.9%	10.2	1.2	B
	Right Turn	17	16	96.5%	3.5	1.6	A
	Subtotal	78	79	101.2%	7.9	1.4	A
EB	Left Turn	37	35	93.5%	5.4	1.0	A
	Through	193	189	98.1%	11.8	1.0	B
	Right Turn	36	35	98.3%	2.7	0.6	A
	Subtotal	266	259	97.5%	9.7	1.1	A
WB	Left Turn	190	188	98.7%	10.4	1.2	B
	Through	196	197	100.4%	13.0	1.1	B
	Right Turn	27	27	99.3%	7.8	1.8	A
	Subtotal	413	411	99.6%	11.4	1.1	B
Total		1,000	993	99.3%	8.9	0.7	A

Intersection 2

Denali Dr/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	13	105.0%	16.0	7.5	B
	Through						
	Right Turn	91	93	101.9%	1.2	0.1	A
	Subtotal	103	105	102.2%	2.9	0.7	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	428	423	98.8%	11.2	1.7	B
	Right Turn	20	21	105.0%	9.0	1.2	A
	Subtotal	448	444	99.0%	11.1	1.7	B
WB	Left Turn	91	87	95.3%	12.0	1.7	B
	Through	428	425	99.3%	4.9	1.1	A
	Right Turn						
	Subtotal	519	512	98.6%	6.2	1.2	A
Total		1,070	1,061	99.1%	8.0	1.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 3 **Risling Ct-Shasta Dr/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	13	11	83.8%	17.1	10.0	B
	Through	3	3	100.0%	29.5	27.2	C
	Right Turn	204	204	100.1%	1.6	0.2	A
	Subtotal	220	218	99.2%	3.0	0.6	A
SB	Left Turn	74	73	98.0%	17.6	4.5	B
	Through	5	5	96.0%	18.9	14.4	B
	Right Turn	23	25	107.8%	4.8	2.8	A
	Subtotal	102	102	100.1%	14.7	3.5	B
EB	Left Turn	12	12	99.2%	26.0	16.5	C
	Through	492	490	99.5%	13.0	2.6	B
	Right Turn	15	14	94.7%	5.2	0.8	A
	Subtotal	519	516	99.4%	13.1	2.4	B
WB	Left Turn	181	180	99.6%	18.9	3.9	B
	Through	484	480	99.1%	7.5	1.5	A
	Right Turn	34	33	95.9%	2.3	0.8	A
	Subtotal	699	692	99.1%	10.2	1.2	B
Total		1,540	1,529	99.3%	10.5	1.1	B

Intersection 4 **John Jones Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	228	220	96.3%	34.5	4.3	C
	Through						
	Right Turn	77	75	96.9%	5.9	1.0	A
	Subtotal	305	294	96.5%	27.7	3.1	C
EB	Left Turn	48	45	92.7%	52.6	7.9	D
	Through	723	723	100.0%	8.4	1.7	A
	Right Turn						
	Subtotal	771	768	99.5%	10.8	2.0	B
WB	Left Turn						
	Through	622	622	100.0%	9.1	1.9	A
	Right Turn	200	198	99.1%	3.0	0.5	A
	Subtotal	822	820	99.8%	7.5	1.4	A
Total		1,898	1,882	99.2%	12.0	1.8	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 5 **SR 113 SB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	150	148	98.9%	51.7	17.2	D
	Through						
	Right Turn	76	75	98.0%	35.9	6.7	D
	Subtotal	226	223	98.6%	47.1	12.2	D
EB	Left Turn						
	Through	768	752	97.9%	12.3	2.7	B
	Right Turn	183	189	103.3%	9.3	3.4	A
	Subtotal	951	941	98.9%	11.7	2.5	B
WB	Left Turn	240	244	101.5%	45.2	4.5	D
	Through	746	744	99.8%	4.4	1.1	A
	Right Turn						
	Subtotal	986	988	100.2%	15.0	2.4	B
Total		2,163	2,152	99.5%	17.0	1.7	B

Intersection 6 **SR 113 NB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	261	258	98.8%	34.8	6.0	C
	Through						
	Right Turn	504	504	100.0%	27.5	7.8	C
	Subtotal	765	762	99.6%	30.2	5.3	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	113	110	97.1%	59.8	9.7	E
	Through	816	799	97.9%	7.1	1.1	A
	Right Turn						
	Subtotal	929	909	97.8%	13.0	2.9	B
WB	Left Turn						
	Through	723	726	100.5%	23.3	2.1	C
	Right Turn	176	181	102.6%	9.6	0.6	A
	Subtotal	899	907	100.9%	20.6	1.4	C
Total		2,593	2,577	99.4%	20.7	2.6	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 7 Sycamore Ln/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	117	116	99.2%	42.4	3.8	D
	Through	66	62	94.2%	30.1	7.7	C
	Right Turn	47	45	95.5%	8.5	4.2	A
	Subtotal	230	223	97.0%	31.9	5.0	C
SB	Left Turn	139	138	99.6%	47.8	8.8	D
	Through	72	76	105.3%	36.8	8.2	D
	Right Turn	93	91	98.0%	7.7	4.9	A
	Subtotal	304	305	100.4%	33.3	7.9	C
EB	Left Turn	122	122	99.8%	49.6	8.1	D
	Through	845	827	97.9%	19.7	2.6	B
	Right Turn	110	113	102.3%	8.3	2.9	A
	Subtotal	1,077	1,062	98.6%	21.9	2.4	C
WB	Left Turn	32	30	94.1%	52.1	9.2	D
	Through	557	557	100.1%	23.4	2.2	C
	Right Turn	87	86	99.2%	9.5	2.1	A
	Subtotal	676	674	99.7%	22.9	1.9	C
Total		2,287	2,264	99.0%	24.8	2.2	C

Intersection 8 Anderson Rd/W Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	197	199	101.1%	38.0	6.8	D
	Through	124	122	98.0%	28.1	8.9	C
	Right Turn	142	141	99.6%	7.1	4.4	A
	Subtotal	463	462	99.8%	25.8	5.7	C
SB	Left Turn	71	77	107.9%	47.1	6.8	D
	Through	87	92	106.2%	35.1	5.3	D
	Right Turn	49	52	105.1%	2.3	2.4	A
	Subtotal	207	221	106.5%	30.3	4.9	C
EB	Left Turn	58	56	95.7%	53.1	8.9	D
	Through	825	812	98.4%	33.5	6.5	C
	Right Turn	134	133	99.3%	16.3	4.3	B
	Subtotal	1,017	1,001	98.4%	32.2	5.8	C
WB	Left Turn	99	102	103.1%	49.2	6.2	D
	Through	390	388	99.6%	23.1	3.3	C
	Right Turn	57	57	99.1%	4.8	0.5	A
	Subtotal	546	547	100.2%	26.3	3.6	C
Total		2,233	2,230	99.9%	29.3	3.5	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 9 **Dummy Bike/Ped-Oak Ave/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	109	110	100.8%	27.7	8.2	C
	Through						
	Right Turn	117	125	106.5%	2.3	0.7	A
	Subtotal	226	235	103.8%	14.1	4.4	B
SB	Left Turn						
	Through	25	25	98.8%	23.6	8.1	C
	Right Turn						
	Subtotal	25	25	98.8%	23.6	8.1	C
EB	Left Turn						
	Through	980	977	99.7%	24.9	4.6	C
	Right Turn	124	123	99.0%	18.8	4.4	B
	Subtotal	1,104	1,100	99.6%	24.2	4.4	C
WB	Left Turn	88	85	96.5%	31.0	7.6	C
	Through	535	537	100.3%	11.7	4.0	B
	Right Turn						
	Subtotal	623	622	99.8%	14.3	4.7	B
Total		1,978	1,981	100.2%	19.8	4.0	B

Intersection 10 **Catalina Dr-Dummy Bike/Ped/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	4	4	107.5%	20.2	16.6	C
	Right Turn						
	Subtotal	4	4	107.5%	20.2	16.6	C
SB	Left Turn	148	149	100.6%	17.1	2.2	B
	Through						
	Right Turn	58	57	98.3%	1.2	0.2	A
	Subtotal	206	206	100.0%	13.1	1.4	B
EB	Left Turn	71	72	100.8%	32.2	7.2	C
	Through	1,026	1,029	100.3%	13.9	2.7	B
	Right Turn						
	Subtotal	1,097	1,101	100.4%	15.1	2.8	B
WB	Left Turn						
	Through	565	558	98.7%	14.0	2.9	B
	Right Turn	137	139	101.1%	6.3	0.6	A
	Subtotal	702	696	99.1%	12.6	2.5	B
Total		2,009	2,007	99.9%	14.1	2.0	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 11 **F St/W Covell Blvd-E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	128	130	101.6%	44.0	4.3	D
	Through	170	172	101.2%	37.0	4.5	D
	Right Turn	212	210	98.9%	10.5	2.4	B
	Subtotal	510	512	100.4%	27.2	3.1	C
SB	Left Turn	140	145	103.3%	46.8	8.0	D
	Through	151	152	100.7%	35.4	6.7	D
	Right Turn	60	65	108.0%	11.5	6.2	B
	Subtotal	351	362	103.0%	35.9	5.9	D
EB	Left Turn	63	65	102.4%	56.2	5.4	E
	Through	926	936	101.1%	29.8	4.3	C
	Right Turn	187	181	96.8%	11.8	2.2	B
	Subtotal	1,176	1,182	100.5%	28.5	4.1	C
WB	Left Turn	135	135	99.9%	53.6	8.8	D
	Through	547	534	97.6%	27.0	4.2	C
	Right Turn	165	160	96.8%	18.5	4.9	B
	Subtotal	847	829	97.8%	29.3	4.1	C
Total		2,884	2,884	100.0%	29.5	3.5	C

Intersection 12 **F St/E 14th St** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	54	54	99.4%	29.1	5.5	C
	Through	340	342	100.6%	15.4	3.5	B
	Right Turn						
	Subtotal	394	396	100.4%	17.2	3.2	B
SB	Left Turn						
	Through	334	327	98.0%	21.9	4.3	C
	Right Turn	124	126	101.8%	9.0	1.0	A
	Subtotal	458	453	99.0%	18.3	3.5	B
EB	Left Turn	154	155	100.5%	23.8	5.8	C
	Through						
	Right Turn	75	79	105.7%	7.7	1.0	A
	Subtotal	229	234	102.2%	18.5	4.1	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,081	1,083	100.2%	17.9	3.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 13

Market Ave/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	43	41	95.8%	6.8	3.0	A
	Subtotal	43	41	95.8%	6.8	3.0	A
EB	Left Turn						
	Through	1,278	1,290	101.0%	17.3	15.7	C
	Right Turn						
	Subtotal	1,278	1,290	101.0%	17.3	15.7	C
WB	Left Turn						
	Through	804	789	98.1%	3.5	0.5	A
	Right Turn	38	37	96.1%	3.0	0.7	A
	Subtotal	842	825	98.0%	3.5	0.5	A
Total		2,163	2,157	99.7%	11.9	9.5	B

Intersection 14

Cannery Ave/Cannery Loop

Roundabout

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	53	54	102.5%	2.8	0.5	A
	Through	100	98	97.8%	3.1	0.2	A
	Right Turn						
	Subtotal	153	152	99.4%	3.0	0.2	A
SB	Left Turn						
	Through	80	77	95.6%	2.4	0.2	A
	Right Turn	15	16	105.3%	1.6	0.6	A
	Subtotal	95	92	97.2%	2.3	0.2	A
EB	Left Turn	5	4	80.0%	0.9	0.8	A
	Through						
	Right Turn	24	24	100.8%	1.8	0.5	A
	Subtotal	29	28	97.2%	1.7	0.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		277	273	98.4%	2.6	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 15 Cannery Ave-J St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	89	88	98.3%	31.3	8.6	C
	Through	18	16	87.8%	34.4	20.0	C
	Right Turn	65	67	103.2%	18.5	7.2	B
	Subtotal	172	170	99.1%	27.1	6.7	C
SB	Left Turn	69	68	98.6%	39.0	9.1	D
	Through	16	17	105.0%	37.0	19.7	D
	Right Turn	19	18	92.6%	13.2	10.9	B
	Subtotal	104	102	98.5%	35.5	6.2	D
EB	Left Turn	91	88	96.8%	88.6	30.5	F
	Through	1,097	1,115	101.6%	63.9	30.8	E
	Right Turn	90	88	98.2%	58.2	29.8	E
	Subtotal	1,278	1,291	101.0%	64.9	30.3	E
WB	Left Turn	48	46	95.2%	48.6	8.4	D
	Through	715	702	98.2%	33.0	6.2	C
	Right Turn	63	67	106.3%	28.4	5.2	C
	Subtotal	826	815	98.6%	33.5	5.7	C
Total		2,380	2,379	99.9%	49.8	16.7	D

Intersection 16 L St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	128	128	99.6%	22.2	4.1	C
	Through	5	6	114.0%	7.4	11.7	A
	Right Turn	105	113	108.0%	15.6	2.2	B
	Subtotal	238	247	103.6%	19.1	2.5	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,116	1,139	102.0%	23.0	6.2	C
	Right Turn	115	116	100.6%	13.5	2.6	B
	Subtotal	1,231	1,255	101.9%	22.1	5.8	C
WB	Left Turn	70	72	102.7%	37.4	11.3	D
	Through	698	682	97.7%	12.6	3.5	B
	Right Turn						
	Subtotal	768	754	98.2%	14.9	3.8	B
Total		2,237	2,255	100.8%	19.3	4.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 18

Pole Line Rd/Moore Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	470	479	101.8%	31.3	10.1	D
	Right Turn	153	156	102.0%	26.2	8.7	D
	Subtotal	623	635	101.9%	30.0	9.6	D
SB	Left Turn	87	83	95.5%	11.2	1.4	B
	Through	492	493	100.2%	16.8	1.9	C
	Right Turn						
	Subtotal	579	576	99.5%	15.9	1.9	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	118	118	100.0%	7.3	0.8	A
	Through						
	Right Turn	52	53	102.1%	5.2	0.7	A
	Subtotal	170	171	100.6%	6.6	0.7	A
Total		1,372	1,382	100.7%	21.2	4.7	C

Intersection 19

Pole Line Rd/Donner Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	614	626	102.0%	1.2	0.1	A
	Right Turn	59	58	98.0%	1.6	0.3	A
	Subtotal	673	684	101.6%	1.3	0.1	A
SB	Left Turn	22	22	97.7%	10.3	2.2	B
	Through	588	591	100.5%	4.0	0.2	A
	Right Turn						
	Subtotal	610	613	100.4%	4.1	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	48	48	100.4%	23.5	6.2	C
	Through						
	Right Turn	9	10	107.8%	8.6	2.2	A
	Subtotal	57	58	101.6%	20.6	4.6	C
Total		1,340	1,355	101.1%	3.5	0.4	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 20

Pole Line Rd/Picasso Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	645	655	101.6%	5.2	0.9	A
	Right Turn	104	108	103.8%	6.0	1.7	A
	Subtotal	749	763	101.9%	5.3	0.7	A
SB	Left Turn	20	22	110.0%	15.0	5.5	B
	Through	616	619	100.5%	1.4	0.3	A
	Right Turn						
	Subtotal	636	641	100.8%	1.9	0.4	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	69	71	102.3%	33.4	8.3	D
	Through						
	Right Turn	28	29	103.9%	14.0	8.8	B
	Subtotal	97	100	102.8%	27.4	7.0	D
Total		1,482	1,504	101.5%	5.3	0.6	A

Intersection 21

Pole Line Rd/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	139	136	98.1%	63.0	18.1	E
	Through	335	345	103.1%	52.5	15.3	D
	Right Turn	43	43	99.5%	38.4	15.5	D
	Subtotal	517	525	101.5%	54.2	15.6	D
SB	Left Turn	164	162	98.5%	55.4	6.8	E
	Through	295	298	100.9%	38.6	4.9	D
	Right Turn	226	230	101.6%	16.6	3.0	B
	Subtotal	685	689	100.6%	35.4	4.5	D
EB	Left Turn	298	306	102.7%	47.1	6.7	D
	Through	691	701	101.4%	32.3	4.2	C
	Right Turn	189	192	101.3%	9.9	1.3	A
	Subtotal	1,178	1,198	101.7%	32.7	3.1	C
WB	Left Turn	84	83	98.6%	41.0	5.0	D
	Through	360	349	97.1%	36.1	4.7	D
	Right Turn	116	111	96.0%	5.2	2.4	A
	Subtotal	560	544	97.1%	29.8	3.5	C
Total		2,940	2,955	100.5%	36.7	3.8	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 22 **Dummy Bike/Ped-Birch Ln/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	41	40	98.5%	18.0	5.1	B
	Through						
	Right Turn	18	19	106.7%	15.8	9.5	B
	Subtotal	59	60	101.0%	16.8	3.9	B
SB	Left Turn						
	Through	9	8	91.1%	10.5	8.1	B
	Right Turn						
	Subtotal	9	8	91.1%	10.5	8.1	B
EB	Left Turn						
	Through	869	875	100.7%	10.6	2.8	B
	Right Turn	29	29	99.3%	10.5	6.4	B
	Subtotal	898	904	100.7%	10.5	2.9	B
WB	Left Turn	23	23	97.8%	22.2	9.2	C
	Through	519	500	96.3%	10.0	2.5	A
	Right Turn						
	Subtotal	542	523	96.4%	10.5	2.5	B
Total		1,508	1,494	99.1%	10.8	2.7	B

Intersection 23 **Baywood Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	12	98.3%	19.5	7.9	C
	Through	1	1	90.0%	1.4	4.4	A
	Right Turn	15	16	104.7%	8.0	3.2	A
	Subtotal	28	28	101.4%	12.4	3.5	B
SB	Left Turn	3	2	73.3%	3.6	8.1	A
	Through	1	1	110.0%	3.2	6.3	A
	Right Turn	12	14	120.0%	1.0	0.2	A
	Subtotal	16	18	110.6%	3.0	3.9	A
EB	Left Turn	26	26	98.5%	4.8	0.8	A
	Through	846	850	100.5%	3.4	0.6	A
	Right Turn	27	28	105.2%	3.2	0.6	A
	Subtotal	899	904	100.6%	3.4	0.6	A
WB	Left Turn	11	10	90.9%	14.2	9.6	B
	Through	543	521	95.9%	3.6	0.7	A
	Right Turn	2	2	105.0%	3.0	1.4	A
	Subtotal	556	533	95.8%	3.8	0.7	A
Total		1,499	1,483	98.9%	3.8	0.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 24 **Manzanita Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	28	23	80.4%	16.2	7.9	C
	Through						
	Right Turn	15	17	113.3%	8.2	4.5	A
	Subtotal	43	40	91.9%	13.2	4.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	828	827	99.8%	5.5	0.9	A
	Right Turn	36	40	110.3%	5.8	1.4	A
	Subtotal	864	866	100.3%	5.5	0.9	A
WB	Left Turn	27	22	83.0%	11.4	5.6	B
	Through	528	511	96.8%	2.6	0.5	A
	Right Turn						
	Subtotal	555	534	96.1%	3.0	0.7	A
Total		1,462	1,439	98.4%	4.8	0.7	A

Intersection 25 **Wright Blvd/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	109	103	94.3%	19.0	3.1	B
	Through						
	Right Turn	64	65	101.3%	1.5	0.1	A
	Subtotal	173	168	96.9%	12.9	2.7	B
EB	Left Turn	86	84	97.4%	26.8	5.7	C
	Through	758	757	99.9%	11.7	1.4	B
	Right Turn						
	Subtotal	844	841	99.7%	13.2	1.6	B
WB	Left Turn						
	Through	491	469	95.4%	11.0	1.6	B
	Right Turn	105	106	100.5%	5.4	1.0	A
	Subtotal	596	574	96.3%	10.0	1.5	B
Total		1,613	1,583	98.1%	12.1	1.3	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 26

Monarch Ln/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	22	100.9%	20.0	9.4	C
	Through						
	Right Turn	24	25	103.8%	5.2	2.7	A
	Subtotal	46	47	102.4%	11.2	4.4	B
SB	Left Turn						
	Through						
	Right Turn	1	1	110.0%	0.9	2.1	A
	Subtotal	1	1	110.0%	0.9	2.1	A
EB	Left Turn						
	Through	832	822	98.8%	2.5	0.6	A
	Right Turn	35	35	100.0%	2.7	0.4	A
	Subtotal	867	857	98.8%	2.5	0.5	A
WB	Left Turn	22	20	92.7%	8.0	4.8	A
	Through	573	549	95.8%	2.6	0.4	A
	Right Turn						
	Subtotal	595	570	95.7%	2.8	0.4	A
Total		1,509	1,474	97.7%	3.0	0.6	A

Intersection 27

Alhambra Dr/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	97	93	96.0%	11.2	2.1	B
	Through						
	Right Turn	4	4	87.5%	0.9	1.0	A
	Subtotal	101	97	95.6%	10.8	2.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	701	688	98.1%	6.0	1.4	A
	Right Turn	155	160	103.5%	4.0	0.2	A
	Subtotal	856	848	99.1%	5.7	1.2	A
WB	Left Turn	18	18	101.1%	15.8	7.5	B
	Through	498	473	94.9%	6.9	1.3	A
	Right Turn						
	Subtotal	516	491	95.2%	7.2	1.3	A
Total		1,473	1,436	97.5%	6.5	1.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 29 Harper Hr HS Access/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	1	1	70.0%	2.0	6.3	A
	Through						
	Right Turn	1	1	140.0%	1.6	2.1	A
	Subtotal	2	2	105.0%	2.5	3.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	699	685	98.1%	5.1	1.0	A
	Right Turn	6	7	121.7%	2.3	2.1	A
	Subtotal	705	693	98.3%	5.0	1.0	A
WB	Left Turn	3	4	116.7%	15.6	3.2	B
	Through	515	491	95.3%	12.5	1.7	B
	Right Turn						
	Subtotal	518	494	95.4%	12.5	1.6	B
Total		1,225	1,189	97.1%	8.1	0.6	A

Intersection 30 Mace Blvd/Alhambra Dr Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	187	178	95.2%	21.6	2.3	C
	Through	488	465	95.3%	6.2	2.0	A
	Right Turn						
	Subtotal	675	643	95.3%	10.5	2.0	B
SB	Left Turn						
	Through	710	697	98.2%	14.5	1.0	B
	Right Turn	16	19	116.9%	8.4	0.7	A
	Subtotal	726	716	98.6%	14.3	1.0	B
EB	Left Turn	10	10	103.0%	19.9	13.0	B
	Through						
	Right Turn	185	177	95.5%	1.7	0.2	A
	Subtotal	195	187	95.9%	2.4	0.7	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,596	1,546	96.9%	11.5	1.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 31 **2nd St/Target Main Dwy-Fermi Place** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	156	153	98.3%	25.7	3.1	C
	Through	656	661	100.7%	11.5	1.9	B
	Right Turn	13	15	117.7%	9.0	5.5	A
	Subtotal	825	829	100.5%	14.2	2.0	B
SB	Left Turn	50	46	91.0%	25.6	5.8	C
	Through	248	238	95.9%	15.1	3.0	B
	Right Turn	115	111	96.6%	4.1	0.8	A
	Subtotal	413	395	95.5%	13.3	2.4	B
EB	Left Turn	187	181	96.7%	21.7	3.1	C
	Through	2	2	120.0%	7.9	20.5	A
	Right Turn	86	83	96.4%	5.8	2.0	A
	Subtotal	275	266	96.8%	17.1	2.7	B
WB	Left Turn	10	11	109.0%	19.6	11.7	B
	Through	8	9	106.3%	33.7	22.5	C
	Right Turn	37	36	98.4%	11.4	4.4	B
	Subtotal	55	56	101.5%	17.5	5.3	B
Total		1,568	1,546	98.6%	14.6	1.2	B

Intersection 32 **Mace Blvd/2nd St-County Rd 32A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	330	308	93.3%	34.1	4.5	C
	Through	531	504	94.9%	23.1	3.5	C
	Right Turn	23	24	105.7%	5.8	1.5	A
	Subtotal	884	836	94.6%	26.7	3.1	C
SB	Left Turn	115	113	97.9%	46.8	11.8	D
	Through	637	621	97.4%	39.2	14.2	D
	Right Turn	136	131	96.3%	5.9	2.7	A
	Subtotal	888	864	97.3%	35.2	11.0	D
EB	Left Turn	137	132	96.1%	33.8	7.9	C
	Through	147	146	99.5%	30.7	3.9	C
	Right Turn	602	599	99.5%	17.1	13.4	B
	Subtotal	886	877	99.0%	22.1	8.6	C
WB	Left Turn	72	69	95.7%	49.8	23.5	D
	Through	27	27	98.9%	38.9	14.1	D
	Right Turn	20	21	103.5%	10.9	8.8	B
	Subtotal	119	116	97.7%	39.6	13.4	D
Total		2,777	2,693	97.0%	28.6	6.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 33 Mace Blvd/I-80 WB Ramps Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	203	172	84.9%	33.3	5.0	C
	Through	383	336	87.8%	8.7	1.9	A
	Right Turn						
	Subtotal	586	509	86.8%	16.9	2.5	B
SB	Left Turn						
	Through	1,169	1,130	96.6%	106.7	62.3	F
	Right Turn	142	146	102.7%	58.6	44.2	E
	Subtotal	1,311	1,276	97.3%	101.1	60.3	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	362	357	98.7%	24.9	4.1	C
	Through	1	3	280.0%	3.1	5.4	A
	Right Turn	501	497	99.2%	2.8	0.3	A
	Subtotal	864	857	99.2%	11.9	1.8	B
Total		2,761	2,641	95.7%	56.6	29.7	E

Intersection 34 Mace Blvd/Chiles Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	24	107.3%	83.4	28.7	F
	Through	501	501	100.0%	79.6	34.6	E
	Right Turn	133	131	98.1%	57.2	35.9	E
	Subtotal	656	655	99.9%	75.2	35.0	E
SB	Left Turn	255	235	92.3%	187.8	72.0	F
	Through	397	389	98.0%	68.1	25.5	E
	Right Turn	225	219	97.5%	35.2	21.2	D
	Subtotal	877	844	96.2%	93.8	37.6	F
EB	Left Turn	387	204	52.7%	241.0	29.9	F
	Through	317	177	55.7%	64.7	10.1	E
	Right Turn	55	28	50.9%	2.4	0.4	A
	Subtotal	759	409	53.8%	153.8	19.6	F
WB	Left Turn	29	28	97.2%	36.2	12.9	D
	Through	33	33	98.8%	30.9	10.1	C
	Right Turn	198	192	97.0%	21.6	9.8	C
	Subtotal	260	253	97.3%	24.5	8.0	C
Total		2,552	2,160	84.7%	89.3	16.9	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 35

I-80 EB Off Ramp/Chiles Rd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	73	72	98.5%	48.9	28.0	D
	Through						
	Right Turn	38	39	102.4%	3.0	0.7	A
	Subtotal	111	111	99.8%	33.0	19.4	C
EB	Left Turn						
	Through	685	333	48.6%	561.5	87.1	F
	Right Turn						
	Subtotal	685	333	48.6%	561.5	87.1	F
WB	Left Turn	1	0	20.0%	2.6	#DIV/0!	A
	Through	279	277	99.3%	7.5	1.8	A
	Right Turn						
	Subtotal	280	277	99.0%	7.5	1.8	A
Total		1,076	721	67.0%	245.1	19.7	F

Intersection 36

Mace Blvd/Cowell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	14	14	101.4%	38.1	29.5	D
	Through	380	380	99.9%	41.8	40.9	D
	Right Turn	20	23	114.5%	38.9	40.3	D
	Subtotal	414	417	100.6%	41.7	40.4	D
SB	Left Turn	108	102	94.2%	40.6	6.7	D
	Through	210	198	94.4%	18.3	3.5	B
	Right Turn	69	65	94.5%	9.2	2.0	A
	Subtotal	387	365	94.3%	22.5	3.3	C
EB	Left Turn	120	119	99.3%	23.1	9.7	C
	Through	65	66	101.2%	23.8	8.9	C
	Right Turn	26	26	101.5%	9.7	5.5	A
	Subtotal	211	211	100.2%	21.6	8.8	C
WB	Left Turn	13	12	93.8%	39.3	15.9	D
	Through	40	40	100.8%	25.3	11.2	C
	Right Turn	63	63	100.5%	14.4	9.1	B
	Subtotal	116	116	99.8%	21.0	8.1	C
Total		1,128	1,109	98.3%	28.6	15.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Davis Village Farms
Existing Conditions
PM Peak Hour

Intersection 37

Mace Blvd/N El Macero Dr

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	11	92.5%	4.9	2.5	A
	Through	333	332	99.7%	7.4	0.3	A
	Right Turn	6	7	110.0%	3.2	1.9	A
	Subtotal	351	350	99.7%	7.3	0.3	A
SB	Left Turn	86	84	97.9%	11.5	3.3	B
	Through	152	144	94.6%	12.5	1.9	B
	Right Turn	11	10	90.0%	2.0	1.4	A
	Subtotal	249	238	95.5%	11.7	2.2	B
EB	Left Turn	7	7	94.3%	4.6	2.8	A
	Through	10	11	113.0%	5.5	1.3	A
	Right Turn	4	4	107.5%	1.6	1.4	A
	Subtotal	21	22	105.7%	4.9	1.0	A
WB	Left Turn	8	7	90.0%	4.5	2.3	A
	Through	24	24	98.3%	6.0	1.3	A
	Right Turn	74	77	104.2%	4.1	0.7	A
	Subtotal	106	108	101.8%	4.6	0.8	A
Total		727	718	98.7%	8.3	1.0	A

Intersection

Int Delay, s/veh 5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑						↕	
Traffic Vol, veh/h	0	258	36	20	147	0	0	0	0	154	1	46
Future Vol, veh/h	0	258	36	20	147	0	0	0	0	154	1	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	195	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	297	41	23	169	0	0	0	0	177	1	53

Major/Minor	Major1			Major2			Minor2				
Conflicting Flow All	-	0	0	338	0	0			533	533	169
Stage 1	-	-	-	-	-	-			215	215	-
Stage 2	-	-	-	-	-	-			318	338	-
Critical Hdwy	-	-	-	4.12	-	-			6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-			5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-			5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-			3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1221	-	0			507	441	875
Stage 1	0	-	-	-	-	0			821	725	-
Stage 2	0	-	-	-	-	0			738	641	-
Platoon blocked, %		-	-	-							
Mov Cap-1 Maneuver	-	-	-	1221	-	-			497	0	875
Mov Cap-2 Maneuver	-	-	-	-	-	-			497	0	-
Stage 1	-	-	-	-	-	-			821	0	-
Stage 2	-	-	-	-	-	-			724	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	1	16.1
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1221	-	552
HCM Lane V/C Ratio	-	-	0.019	-	0.419
HCM Control Delay (s)	-	-	8	-	16.1
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	2.1

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	116	296	136	171	30	31
Future Vol, veh/h	116	296	136	171	30	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	115	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	340	156	197	34	36

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	353	0	-	0	861 255
Stage 1	-	-	-	-	255 -
Stage 2	-	-	-	-	606 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1206	-	-	-	326 784
Stage 1	-	-	-	-	788 -
Stage 2	-	-	-	-	545 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1206	-	-	-	290 784
Mov Cap-2 Maneuver	-	-	-	-	290 -
Stage 1	-	-	-	-	701 -
Stage 2	-	-	-	-	545 -

Approach	EB	WB	SB
HCM Control Delay, s	2.4	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1206	-	-	-	427
HCM Lane V/C Ratio	0.111	-	-	-	0.164
HCM Control Delay (s)	8.4	-	-	-	15.1
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	0.6

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	4	294	28	14	267	3	36	2	18	0	1	4
Future Vol, veh/h	4	294	28	14	267	3	36	2	18	0	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	338	32	16	307	3	41	2	21	0	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	310	0	0	370	0	0	708	706	354	717	721	309
Stage 1	-	-	-	-	-	-	364	364	-	341	341	-
Stage 2	-	-	-	-	-	-	344	342	-	376	380	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1250	-	-	1189	-	-	350	361	690	345	353	731
Stage 1	-	-	-	-	-	-	655	624	-	674	639	-
Stage 2	-	-	-	-	-	-	671	638	-	645	614	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1250	-	-	1189	-	-	342	355	690	328	347	731
Mov Cap-2 Maneuver	-	-	-	-	-	-	342	355	-	328	347	-
Stage 1	-	-	-	-	-	-	652	622	-	671	631	-
Stage 2	-	-	-	-	-	-	657	630	-	621	612	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			15.4			11.1		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	409	1250	-	-	1189	-	-	599
HCM Lane V/C Ratio	0.157	0.004	-	-	0.014	-	-	0.01
HCM Control Delay (s)	15.4	7.9	-	-	8.1	-	-	11.1
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0

Intersection							
Int Delay, s/veh	3.9						
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↔				↔	↔	
Traffic Vol, veh/h	176	134	1	40	150	132	31
Future Vol, veh/h	176	134	1	40	150	132	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	210	160	1	48	179	157	37

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	370
Stage 1	-	-	290
Stage 2	-	-	275
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1189
Stage 1	-	-	759
Stage 2	-	-	771
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	~ -42	~ -42
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	759
Stage 2	-	-	771

Approach	EB	WB	NB
HCM Control Delay, s	0		16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	521	-	-	+	-
HCM Lane V/C Ratio	0.372	-	-	-	-
HCM Control Delay (s)	16	-	-	-	-
HCM Lane LOS	C	-	-	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	5.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	110	100	106	391	347	79
Future Vol, veh/h	110	100	106	391	347	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	65	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	104	110	407	361	82

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1029	402	443	0	-	0
Stage 1	402	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	259	648	1117	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	532	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	234	648	1117	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	532	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.5	1.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1117	-	234	648	-	-
HCM Lane V/C Ratio	0.099	-	0.49	0.161	-	-
HCM Control Delay (s)	8.6	-	34.3	11.6	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	2.5	0.6	-	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↗↘	↘↗	↑
Traffic Vol, veh/h	28	87	457	44	48	398
Future Vol, veh/h	28	87	457	44	48	398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	-	-	280	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	91	476	46	50	415

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	991	-	0	0	476
Stage 1	476	-	-	-	-
Stage 2	515	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218
Pot Cap-1 Maneuver	273	0	-	-	1086
Stage 1	625	0	-	-	-
Stage 2	600	0	-	-	-
Platoon blocked, %		-	-	-	-
Mov Cap-1 Maneuver	260	-	-	-	1086
Mov Cap-2 Maneuver	260	-	-	-	-
Stage 1	625	-	-	-	-
Stage 2	572	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.6	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	260	1086
HCM Lane V/C Ratio	-	-	0.112	0.046
HCM Control Delay (s)	-	-	20.6	8.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

Intersection	
Intersection Delay, s/veh	17.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	9	82	3	13	4	55	474	1	3	367	18
Future Vol, veh/h	35	9	82	3	13	4	55	474	1	3	367	18
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	9	85	3	13	4	57	489	1	3	378	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	9.8	21.6	14.5
HCM LOS	B	A	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	28%	15%	1%
Vol Thru, %	89%	7%	65%	95%
Vol Right, %	0%	65%	20%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	530	126	20	388
LT Vol	55	35	3	3
Through Vol	474	9	13	367
RT Vol	1	82	4	18
Lane Flow Rate	546	130	21	400
Geometry Grp	1	1	1	1
Degree of Util (X)	0.755	0.213	0.037	0.564
Departure Headway (Hd)	4.974	5.904	6.461	5.078
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	732	607	552	712
Service Time	2.974	3.951	4.521	3.109
HCM Lane V/C Ratio	0.746	0.214	0.038	0.562
HCM Control Delay	21.6	10.6	9.8	14.5
HCM Lane LOS	C	B	A	B
HCM 95th-tile Q	7	0.8	0.1	3.6

Intersection							
Int Delay, s/veh	1.1						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↘	↗	↘	↑	↓	↑	↗
Traffic Vol, veh/h	10	38	55	455	0	345	28
Future Vol, veh/h	10	38	55	455	0	345	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	250	0	390	-	370	-	370
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	11	40	59	484	0	367	30

Major/Minor	Minor2	Major1	Major2				
Conflicting Flow All	969	367	397	0	-	-	0
Stage 1	367	-	-	-	-	-	-
Stage 2	602	-	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	-
Pot Cap-1 Maneuver	281	678	1162	-	-	-	-
Stage 1	701	-	-	-	-	-	-
Stage 2	547	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	267	678	1162	-	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-	-
Stage 1	665	-	-	-	-	-	-
Stage 2	547	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1162	-	267	678	-	-	-
HCM Lane V/C Ratio	0.05	-	0.04	0.06	-	-	-
HCM Control Delay (s)	8.3	-	19	10.6	0	-	-
HCM Lane LOS	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.2	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	0	94	107	22	11	4
Future Vol, veh/h	0	94	107	22	11	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	0	111	126	26	13	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	152	0	-	0	250 139
Stage 1	-	-	-	-	139 -
Stage 2	-	-	-	-	111 -
Critical Hdwy	4.22	-	-	-	6.52 6.32
Critical Hdwy Stg 1	-	-	-	-	5.52 -
Critical Hdwy Stg 2	-	-	-	-	5.52 -
Follow-up Hdwy	2.308	-	-	-	3.608 3.408
Pot Cap-1 Maneuver	1370	-	-	-	717 883
Stage 1	-	-	-	-	864 -
Stage 2	-	-	-	-	889 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1370	-	-	-	717 883
Mov Cap-2 Maneuver	-	-	-	-	717 -
Stage 1	-	-	-	-	864 -
Stage 2	-	-	-	-	889 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1370	-	-	-	755
HCM Lane V/C Ratio	-	-	-	-	0.023
HCM Control Delay (s)	0	-	-	-	9.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	1	105	65	0	16	48
Future Vol, veh/h	1	105	65	0	16	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	305	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	1	127	78	0	19	58

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	78	0	-	0	207 78
Stage 1	-	-	-	-	78 -
Stage 2	-	-	-	-	129 -
Critical Hdwy	4.19	-	-	-	6.49 6.29
Critical Hdwy Stg 1	-	-	-	-	5.49 -
Critical Hdwy Stg 2	-	-	-	-	5.49 -
Follow-up Hdwy	2.281	-	-	-	3.581 3.381
Pot Cap-1 Maneuver	1477	-	-	-	766 964
Stage 1	-	-	-	-	928 -
Stage 2	-	-	-	-	880 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1477	-	-	-	765 964
Mov Cap-2 Maneuver	-	-	-	-	765 -
Stage 1	-	-	-	-	927 -
Stage 2	-	-	-	-	880 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1477	-	-	-	905
HCM Lane V/C Ratio	0.001	-	-	-	0.085
HCM Control Delay (s)	7.4	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	3.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	0	121	1	0	66	0
Future Vol, veh/h	0	121	1	0	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	0	142	1	0	78	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	142	0	73
Stage 1	-	-	-	-	71
Stage 2	-	-	-	-	2
Critical Hdwy	-	-	4.17	-	6.47
Critical Hdwy Stg 1	-	-	-	-	5.47
Critical Hdwy Stg 2	-	-	-	-	5.47
Follow-up Hdwy	-	-	2.263	-	3.563
Pot Cap-1 Maneuver	-	-	1411	-	919
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	1008
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1411	-	918
Mov Cap-2 Maneuver	-	-	-	-	918
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	1007

Approach	EB	WB	NB
HCM Control Delay, s	0	7.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	918	-	-	1411	-
HCM Lane V/C Ratio	0.085	-	-	0.001	-
HCM Control Delay (s)	9.3	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection												
Int Delay, s/veh	9.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷			↷			↷	
Traffic Vol, veh/h	0	5	194	122	9	0	41	0	59	0	0	0
Future Vol, veh/h	0	5	194	122	9	0	41	0	59	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	81	81	81	81	87	81	87	81	87	87	87
Heavy Vehicles, %	2	3	3	3	3	2	3	2	3	2	2	2
Mvmt Flow	0	6	240	151	11	0	51	0	73	0	0	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	176	1	263	140	-	1	0	0	73	0	0
Stage 1	-	1	-	139	139	-	-	-	-	-	-	-
Stage 2	-	175	-	124	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.53	6.23	7.13	6.53	-	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.027	3.327	3.527	4.027	-	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	716	1081	688	749	0	1615	-	-	1527	-	-
Stage 1	0	893	-	862	780	0	-	-	-	-	-	-
Stage 2	0	752	-	878	893	0	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	692	1081	519	724	-	1615	-	-	1527	-	-
Mov Cap-2 Maneuver	-	692	-	519	724	-	-	-	-	-	-	-
Stage 1	-	893	-	834	754	-	-	-	-	-	-	-
Stage 2	-	727	-	679	893	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	14.8	3	0
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1066	529	1527	-	-
HCM Lane V/C Ratio	0.031	-	-	0.23	0.306	-	-	-
HCM Control Delay (s)	7.3	0	-	9.4	14.8	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	1.3	0	-	-

2: I-80 EB Ramps Performance by movement

Movement	EBR	NBL	NBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	3.0	25.2	24.0	24.4

50: I-80 WB Ramps & County Rd 32A Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.1	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	3.2	3.3	5.7	5.3	6.1	4.4	3.9

51: Chiles Road & I-80 EB Ramps Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.2	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	392.2	387.4	157.7	161.5	4.4	2.4	275.5

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	261.7

Intersection: 2: I-80 EB Ramps

Movement	EB	NB	NB
Directions Served	R	L	T
Maximum Queue (ft)	28	86	86
Average Queue (ft)	4	83	82
95th Queue (ft)	20	86	91
Link Distance (ft)	143	68	68
Upstream Blk Time (%)		69	62
Queuing Penalty (veh)		229	209
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 50: I-80 WB Ramps & County Rd 32A

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	21	84
Average Queue (ft)	1	41
95th Queue (ft)	10	68
Link Distance (ft)	2911	446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 51: Chiles Road & I-80 EB Ramps

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	1797	936	27
Average Queue (ft)	1128	500	5
95th Queue (ft)	2000	1112	21
Link Distance (ft)	5890	2911	68
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 438

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 1

County Rd 99-Lake Blvd/W Covell Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	27	26	94.4%	6.1	0.8	A
	Through	49	48	98.4%	7.7	1.0	A
	Right Turn	157	155	98.9%	2.5	0.6	A
	Subtotal	233	229	98.2%	4.0	0.6	A
SB	Left Turn	30	29	95.0%	5.5	1.7	A
	Through	53	55	103.6%	10.4	0.9	B
	Right Turn	7	8	107.1%	3.5	4.3	A
	Subtotal	90	91	101.0%	8.5	1.1	A
EB	Left Turn	15	16	108.0%	5.7	1.3	A
	Through	222	226	101.6%	12.3	1.0	B
	Right Turn	31	32	102.3%	3.2	0.4	A
	Subtotal	268	274	102.1%	10.8	1.0	B
WB	Left Turn	80	78	97.0%	13.1	2.6	B
	Through	163	172	105.5%	16.9	3.0	C
	Right Turn	17	17	100.0%	13.7	2.9	B
	Subtotal	260	267	102.5%	15.5	2.8	C
Total		851	860	101.0%	10.1	0.9	B

Intersection 2

Denali Dr/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	29	28	95.2%	16.4	4.9	B
	Through						
	Right Turn	146	148	101.1%	1.4	0.3	A
	Subtotal	175	175	100.1%	3.8	1.0	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	378	378	99.9%	12.8	1.7	B
	Right Turn	22	21	97.3%	9.3	1.5	A
	Subtotal	400	399	99.8%	12.6	1.7	B
WB	Left Turn	85	84	98.9%	15.6	1.6	B
	Through	297	299	100.6%	6.1	0.9	A
	Right Turn						
	Subtotal	382	383	100.2%	8.2	0.9	A
Total		957	957	100.0%	9.2	0.8	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 3 **Risling Ct-Shasta Dr/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	11	87.5%	24.1	10.3	C
	Through	4	5	122.5%	22.2	5.8	C
	Right Turn	235	233	99.2%	2.2	0.4	A
	Subtotal	251	249	99.0%	3.7	0.8	A
SB	Left Turn	38	40	105.3%	27.0	6.3	C
	Through	3	4	123.3%	14.4	13.0	B
	Right Turn	13	13	102.3%	5.5	1.7	A
	Subtotal	54	57	105.6%	20.5	5.3	C
EB	Left Turn	26	24	92.7%	33.3	8.3	C
	Through	481	481	99.9%	18.4	3.1	B
	Right Turn	17	19	111.2%	7.8	1.5	A
	Subtotal	524	524	99.9%	18.6	3.0	B
WB	Left Turn	153	153	100.2%	24.5	5.1	C
	Through	357	359	100.4%	10.0	2.7	A
	Right Turn	65	65	100.3%	2.7	0.5	A
	Subtotal	575	577	100.3%	13.1	1.8	B
Total		1,404	1,406	100.2%	13.7	1.7	B

Intersection 4 **John Jones Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	190	187	98.6%	30.3	5.6	C
	Through						
	Right Turn	55	55	100.4%	6.1	1.4	A
	Subtotal	245	243	99.0%	25.3	4.9	C
EB	Left Turn	71	70	98.0%	50.2	8.7	D
	Through	684	687	100.4%	13.1	1.8	B
	Right Turn						
	Subtotal	755	756	100.1%	16.6	2.2	B
WB	Left Turn						
	Through	520	521	100.1%	9.3	2.0	A
	Right Turn	284	290	102.0%	4.8	0.9	A
	Subtotal	804	811	100.8%	7.7	1.4	A
Total		1,804	1,809	100.3%	13.9	1.4	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 5 **SR 113 SB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	268	267	99.6%	56.8	9.6	E
	Through	1	2	190.0%	14.5	25.6	B
	Right Turn	149	152	101.8%	41.6	4.7	D
	Subtotal	418	420	100.6%	51.3	6.3	D
EB	Left Turn						
	Through	548	551	100.5%	27.0	5.6	C
	Right Turn	326	325	99.7%	26.5	5.4	C
	Subtotal	874	876	100.2%	26.8	5.3	C
WB	Left Turn	364	363	99.7%	59.4	5.9	E
	Through	655	657	100.3%	11.1	1.7	B
	Right Turn						
	Subtotal	1,019	1,020	100.1%	27.1	2.9	C
Total		2,311	2,316	100.2%	31.7	2.6	C

Intersection 6 **SR 113 NB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	235	231	98.1%	36.4	3.8	D
	Through						
	Right Turn	265	267	100.6%	14.0	2.6	B
	Subtotal	500	497	99.4%	24.4	2.6	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	65	62	95.7%	33.1	6.3	C
	Through	752	756	100.6%	8.5	2.2	A
	Right Turn						
	Subtotal	817	818	100.2%	10.2	2.0	B
WB	Left Turn						
	Through	784	785	100.2%	18.9	3.3	B
	Right Turn	168	170	100.9%	8.7	1.2	A
	Subtotal	952	955	100.3%	17.1	2.9	B
Total		2,269	2,271	100.1%	16.2	1.7	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 7

Sycamore Ln/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	143	143	99.9%	42.3	7.0	D
	Through	27	26	97.4%	33.6	11.8	C
	Right Turn	40	40	101.0%	6.5	3.7	A
	Subtotal	210	210	99.8%	33.6	5.1	C
SB	Left Turn	100	101	101.1%	39.4	6.7	D
	Through	69	67	96.7%	29.9	7.7	C
	Right Turn	168	167	99.1%	4.7	1.5	A
	Subtotal	337	334	99.2%	20.0	3.0	C
EB	Left Turn	107	100	93.3%	46.1	5.1	D
	Through	633	634	100.1%	23.4	2.5	C
	Right Turn	160	173	107.9%	11.5	2.8	B
	Subtotal	900	906	100.7%	23.5	2.1	C
WB	Left Turn	35	34	98.0%	57.6	12.0	E
	Through	614	614	100.0%	27.2	4.8	C
	Right Turn	60	60	100.7%	11.2	4.5	B
	Subtotal	709	709	100.0%	27.2	4.9	C
Total		2,156	2,159	100.1%	25.2	2.3	C

Intersection 8

Anderson Rd/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	158	157	99.4%	37.5	5.1	D
	Through	57	56	97.4%	27.9	9.9	C
	Right Turn	60	62	102.5%	3.6	2.4	A
	Subtotal	275	274	99.7%	27.8	3.4	C
SB	Left Turn	44	47	106.6%	50.6	11.1	D
	Through	161	162	100.8%	29.1	4.3	C
	Right Turn	77	77	100.3%	1.8	0.7	A
	Subtotal	282	286	101.6%	25.6	4.4	C
EB	Left Turn	30	32	106.7%	51.4	10.8	D
	Through	483	482	99.8%	33.9	5.5	C
	Right Turn	257	264	102.8%	13.5	2.8	B
	Subtotal	770	778	101.1%	27.9	4.2	C
WB	Left Turn	153	159	104.1%	43.5	8.9	D
	Through	485	489	100.9%	23.8	5.2	C
	Right Turn	42	45	106.0%	5.7	0.4	A
	Subtotal	680	693	101.9%	27.4	4.8	C
Total		2,007	2,032	101.2%	27.4	3.2	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 9 **Dummy Bike/Ped-Oak Ave/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	145	146	100.6%	34.7	5.7	C
	Through						
	Right Turn	173	177	102.2%	3.0	1.1	A
	Subtotal	318	323	101.5%	17.3	3.7	B
SB	Left Turn	5	4	86.0%	32.2	38.4	C
	Through	25	23	92.0%	29.8	15.8	C
	Right Turn						
	Subtotal	30	27	91.0%	30.5	12.3	C
EB	Left Turn						
	Through	431	435	101.0%	26.0	6.9	C
	Right Turn	184	182	98.7%	12.4	4.0	B
	Subtotal	615	617	100.3%	22.3	5.9	C
WB	Left Turn	190	189	99.6%	41.9	8.0	D
	Through	590	599	101.4%	18.0	4.0	B
	Right Turn						
	Subtotal	780	788	101.0%	23.6	4.5	C
Total		1,743	1,754	100.7%	22.0	3.2	C

Intersection 10 **Catalina Dr-Dummy Bike/Ped/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	4	5	135.0%	19.4	14.3	B
	Right Turn						
	Subtotal	4	5	135.0%	19.4	14.3	B
SB	Left Turn	155	158	102.0%	19.6	3.9	B
	Through						
	Right Turn	64	65	100.9%	1.4	0.4	A
	Subtotal	219	223	101.7%	14.2	3.2	B
EB	Left Turn	28	28	100.0%	33.1	5.6	C
	Through	581	589	101.3%	11.7	2.1	B
	Right Turn						
	Subtotal	609	617	101.2%	12.7	2.1	B
WB	Left Turn						
	Through	716	721	100.7%	18.4	3.1	B
	Right Turn	73	74	101.8%	7.5	0.7	A
	Subtotal	789	795	100.8%	17.4	2.9	B
Total		1,621	1,640	101.2%	15.2	1.5	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 11 F St/W Covell Blvd-E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	56	57	102.3%	40.3	6.6	D
	Through	105	112	107.0%	37.3	7.1	D
	Right Turn	168	172	102.5%	6.5	2.3	A
	Subtotal	329	342	103.9%	22.4	4.0	C
SB	Left Turn	179	178	99.3%	68.8	38.1	E
	Through	188	188	100.1%	49.7	36.6	D
	Right Turn	85	87	102.4%	30.3	35.4	C
	Subtotal	452	453	100.2%	53.4	36.4	D
EB	Left Turn	32	34	107.5%	59.2	15.4	E
	Through	607	619	102.0%	28.2	4.6	C
	Right Turn	114	114	99.8%	8.0	1.7	A
	Subtotal	753	768	101.9%	26.5	3.5	C
WB	Left Turn	220	211	95.9%	60.2	10.1	E
	Through	679	682	100.4%	26.9	4.8	C
	Right Turn	111	106	95.7%	18.3	3.6	B
	Subtotal	1,010	999	98.9%	32.8	4.9	C
Total		2,544	2,561	100.7%	33.1	7.9	C

Intersection 12 F St/E 14th St Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	89	83	93.0%	33.4	6.0	C
	Through	141	148	104.7%	12.5	3.8	B
	Right Turn						
	Subtotal	230	230	100.2%	20.8	2.9	C
SB	Left Turn						
	Through	222	215	96.9%	37.4	5.0	D
	Right Turn	300	297	99.1%	22.9	4.4	C
	Subtotal	522	513	98.2%	28.7	4.5	C
EB	Left Turn	166	170	102.2%	30.8	4.6	C
	Through						
	Right Turn	83	87	104.5%	6.8	1.9	A
	Subtotal	249	256	102.9%	22.6	3.1	C
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,001	999	99.8%	25.6	3.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 13 **Market Ave/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	124	127	102.3%	8.7	2.9	A
	Subtotal	124	127	102.3%	8.7	2.9	A
EB	Left Turn						
	Through	954	968	101.5%	6.2	1.1	A
	Right Turn						
	Subtotal	954	968	101.5%	6.2	1.1	A
WB	Left Turn						
	Through	886	873	98.6%	3.1	0.3	A
	Right Turn	25	28	110.8%	2.6	0.8	A
	Subtotal	911	901	98.9%	3.1	0.3	A
Total		1,989	1,996	100.4%	5.0	0.6	A

Intersection 14 **Cannery Ave/Cannery Loop** **Roundabout**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	23	23	100.9%	3.1	0.5	A
	Through	70	70	99.4%	3.1	0.5	A
	Right Turn						
	Subtotal	93	93	99.8%	3.1	0.3	A
SB	Left Turn						
	Through	70	68	97.1%	2.2	0.2	A
	Right Turn	6	6	101.7%	1.0	0.9	A
	Subtotal	76	74	97.5%	2.1	0.2	A
EB	Left Turn	5	5	98.0%	1.4	0.7	A
	Through						
	Right Turn	51	54	106.1%	1.8	0.1	A
	Subtotal	56	59	105.4%	1.7	0.1	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		225	226	100.4%	2.5	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 15 Cannery Ave-J St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	150	141	94.1%	38.8	6.6	D
	Through	13	15	111.5%	40.2	26.5	D
	Right Turn	73	71	97.5%	14.1	5.4	B
	Subtotal	236	227	96.1%	30.9	7.2	C
SB	Left Turn	70	70	99.7%	38.6	8.5	D
	Through	29	31	106.9%	34.5	4.2	C
	Right Turn	22	23	105.9%	16.2	9.1	B
	Subtotal	121	124	102.6%	33.2	5.6	C
EB	Left Turn	61	61	99.2%	60.1	11.0	E
	Through	706	719	101.8%	36.3	7.8	D
	Right Turn	187	194	104.0%	28.7	8.6	C
	Subtotal	954	974	102.1%	36.2	7.9	D
WB	Left Turn	63	61	97.0%	52.1	11.0	D
	Through	734	730	99.5%	36.2	7.4	D
	Right Turn	24	23	96.7%	37.9	16.4	D
	Subtotal	821	815	99.2%	37.3	7.1	D
Total		2,132	2,139	100.3%	35.9	4.3	D

Intersection 16 L St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	76	71	93.8%	24.7	7.1	C
	Through	4	3	75.0%	23.6	21.2	C
	Right Turn	70	69	98.1%	15.7	3.4	B
	Subtotal	150	143	95.3%	20.8	4.6	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	755	768	101.7%	14.8	4.1	B
	Right Turn	95	93	98.3%	27.2	3.8	C
	Subtotal	850	861	101.3%	16.1	3.6	B
WB	Left Turn	75	73	96.9%	34.3	5.3	C
	Through	745	736	98.8%	9.3	3.5	A
	Right Turn						
	Subtotal	820	809	98.7%	11.7	3.5	B
Total		1,820	1,813	99.6%	14.6	2.7	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 18

Pole Line Rd/Moore Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	315	308	97.7%	14.1	2.4	B
	Right Turn	60	60	100.0%	11.7	2.7	B
	Subtotal	375	368	98.0%	13.7	2.4	B
SB	Left Turn	59	54	91.5%	9.8	1.1	A
	Through	406	395	97.2%	15.0	2.7	C
	Right Turn						
	Subtotal	465	449	96.5%	14.4	2.5	B
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	100	92	92.3%	6.5	1.0	A
	Through						
	Right Turn	81	82	101.4%	5.4	0.7	A
	Subtotal	181	174	96.4%	6.0	0.7	A
Total		1,021	991	97.0%	12.7	2.1	B

Intersection 19

Pole Line Rd/Donner Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	357	346	97.0%	6.0	1.2	A
	Right Turn	19	18	96.3%	5.8	1.3	A
	Subtotal	376	365	97.0%	6.0	1.2	A
SB	Left Turn	8	6	78.8%	6.8	2.6	A
	Through	498	481	96.7%	4.0	0.3	A
	Right Turn						
	Subtotal	506	488	96.4%	4.1	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	72	69	96.4%	11.9	2.4	B
	Through						
	Right Turn	18	20	110.6%	6.0	2.0	A
	Subtotal	90	89	99.2%	10.6	1.8	B
Total		972	942	96.9%	5.4	0.6	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 20

Pole Line Rd/Picasso Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	357	349	97.7%	4.8	1.1	A
	Right Turn	95	97	102.1%	4.5	1.9	A
	Subtotal	452	446	98.6%	4.7	1.1	A
SB	Left Turn	23	22	93.5%	8.8	1.8	A
	Through	547	530	96.8%	5.4	0.7	A
	Right Turn						
	Subtotal	570	551	96.7%	5.5	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	52	52	99.8%	17.6	9.4	C
	Through						
	Right Turn	19	17	90.5%	8.3	3.9	A
	Subtotal	71	69	97.3%	15.3	7.8	C
Total		1,093	1,066	97.5%	5.8	1.1	A

Intersection 21

Pole Line Rd/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	142	142	99.7%	34.0	4.2	C
	Through	167	160	95.8%	26.2	3.3	C
	Right Turn	43	45	103.5%	13.5	6.4	B
	Subtotal	352	346	98.3%	27.7	2.8	C
SB	Left Turn	143	143	99.7%	47.0	10.1	D
	Through	246	239	97.3%	38.5	6.7	D
	Right Turn	210	200	95.4%	17.2	3.0	B
	Subtotal	599	582	97.2%	33.1	5.6	C
EB	Left Turn	157	155	98.8%	37.3	5.0	D
	Through	467	478	102.2%	29.3	3.3	C
	Right Turn	134	135	101.0%	7.5	1.0	A
	Subtotal	758	768	101.3%	27.1	2.4	C
WB	Left Turn	68	65	95.6%	40.0	8.9	D
	Through	471	465	98.7%	32.0	5.1	C
	Right Turn	128	130	101.7%	6.1	0.9	A
	Subtotal	667	660	99.0%	27.6	3.1	C
Total		2,376	2,357	99.2%	28.9	2.6	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 22 **Dummy Bike/Ped-Birch Ln/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	65	65	100.0%	27.4	5.2	C
	Through						
	Right Turn	28	28	98.2%	27.1	8.7	C
	Subtotal	93	93	99.5%	27.2	5.0	C
SB	Left Turn						
	Through	73	69	93.8%	21.4	3.7	C
	Right Turn	4	6	137.5%	6.7	9.8	A
	Subtotal	77	74	96.1%	20.6	2.9	C
EB	Left Turn						
	Through	584	595	101.8%	20.6	3.8	C
	Right Turn	69	72	103.6%	22.5	5.5	C
	Subtotal	653	666	102.0%	20.8	3.7	C
WB	Left Turn	72	70	96.8%	39.0	4.4	D
	Through	598	590	98.6%	17.9	2.0	B
	Right Turn						
	Subtotal	670	659	98.4%	20.3	1.9	C
Total		1,493	1,492	99.9%	20.8	2.3	C

Intersection 23 **Baywood Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	24	108.2%	15.5	6.1	C
	Through						
	Right Turn	23	26	111.3%	5.0	1.9	A
	Subtotal	45	49	109.8%	10.0	4.2	B
SB	Left Turn	4	3	75.0%	9.9	12.5	A
	Through						
	Right Turn	9	10	105.6%	0.8	0.3	A
	Subtotal	13	13	96.2%	4.3	5.5	A
EB	Left Turn	2	1	55.0%	4.5	2.8	A
	Through	604	610	101.0%	3.7	0.8	A
	Right Turn	23	23	100.4%	3.3	0.8	A
	Subtotal	629	634	100.8%	3.7	0.8	A
WB	Left Turn	25	25	99.6%	9.4	3.8	A
	Through	618	610	98.6%	3.7	0.5	A
	Right Turn	3	4	133.3%	3.4	0.8	A
	Subtotal	646	638	98.8%	3.9	0.6	A
Total		1,333	1,334	100.1%	4.1	0.6	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 24 **Manzanita Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	47	44	92.8%	14.8	5.0	B
	Through						
	Right Turn	26	25	97.3%	7.3	2.4	A
	Subtotal	73	69	94.4%	12.3	3.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	610	613	100.5%	5.6	1.0	A
	Right Turn	21	23	108.1%	5.2	0.7	A
	Subtotal	631	636	100.7%	5.5	1.0	A
WB	Left Turn	12	12	100.0%	9.6	5.4	A
	Through	599	595	99.3%	2.6	0.3	A
	Right Turn						
	Subtotal	611	607	99.3%	2.8	0.3	A
Total		1,315	1,311	99.7%	4.6	0.6	A

Intersection 25 **Wright Blvd/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	132	134	101.5%	15.8	2.9	B
	Through						
	Right Turn	112	111	99.0%	1.7	0.3	A
	Subtotal	244	245	100.4%	9.3	1.9	A
EB	Left Turn	41	43	104.1%	26.7	5.9	C
	Through	595	595	100.0%	11.8	1.2	B
	Right Turn						
	Subtotal	636	638	100.3%	12.8	1.1	B
WB	Left Turn						
	Through	499	497	99.6%	9.6	1.0	A
	Right Turn	71	77	108.5%	5.2	0.9	A
	Subtotal	570	574	100.7%	9.1	0.9	A
Total		1,450	1,456	100.4%	10.7	0.7	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 26

Monarch Ln/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	27	26	95.2%	19.5	8.4	C
	Through	5	4	84.0%	14.0	21.7	B
	Right Turn	41	42	103.2%	5.2	3.9	A
	Subtotal	73	72	98.9%	11.8	8.2	B
SB	Left Turn	43	39	89.8%	14.2	4.8	B
	Through	5	4	80.0%	8.8	7.6	A
	Right Turn	51	51	100.2%	6.6	2.2	A
	Subtotal	99	94	94.6%	10.0	3.7	B
EB	Left Turn	29	29	100.0%	4.4	1.9	A
	Through	668	670	100.3%	2.5	0.3	A
	Right Turn	30	31	104.3%	2.2	0.9	A
	Subtotal	727	730	100.4%	2.6	0.3	A
WB	Left Turn	15	14	90.0%	6.6	4.2	A
	Through	492	498	101.3%	2.5	0.3	A
	Right Turn	22	19	87.7%	2.2	0.4	A
	Subtotal	529	531	100.4%	2.6	0.3	A
Total		1,428	1,427	99.9%	3.6	0.6	A

Intersection 27

Alhambra Dr/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	125	123	98.6%	14.4	3.2	B
	Through						
	Right Turn	39	39	99.7%	4.5	3.4	A
	Subtotal	164	162	98.9%	12.0	3.0	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	650	642	98.8%	7.5	1.3	A
	Right Turn	102	106	104.2%	3.2	0.4	A
	Subtotal	752	749	99.5%	6.8	1.1	A
WB	Left Turn	32	30	95.0%	16.8	4.4	B
	Through	404	405	100.3%	6.7	0.9	A
	Right Turn						
	Subtotal	436	436	100.0%	7.3	0.9	A
Total		1,352	1,347	99.6%	7.6	1.1	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 29

Harper Hr HS Access/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	90	89	99.3%	20.4	4.1	C
	Through						
	Right Turn	3	5	150.0%	9.2	7.6	A
	Subtotal	93	94	101.0%	19.8	4.1	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	559	553	98.9%	13.1	1.4	B
	Right Turn	130	129	99.5%	6.7	1.1	A
	Subtotal	689	682	99.0%	11.9	1.1	B
WB	Left Turn	139	133	96.0%	28.2	3.6	C
	Through	346	346	99.9%	14.6	1.1	B
	Right Turn						
	Subtotal	485	479	98.8%	18.5	1.7	B
Total		1,267	1,256	99.1%	15.1	1.0	B

Intersection 30

Mace Blvd/Alhambra Dr

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	157	152	96.6%	22.9	3.5	C
	Through	465	460	98.9%	7.3	1.4	A
	Right Turn						
	Subtotal	622	612	98.4%	11.1	2.0	B
SB	Left Turn						
	Through	649	648	99.9%	16.9	2.0	B
	Right Turn	28	28	100.7%	11.2	1.2	B
	Subtotal	677	677	99.9%	16.6	1.9	B
EB	Left Turn	14	15	103.6%	27.5	6.5	C
	Through						
	Right Turn	280	282	100.8%	2.1	0.3	A
	Subtotal	294	297	100.9%	3.3	0.6	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,593	1,585	99.5%	11.8	1.7	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 31 **2nd St/Target Main Dwy-Fermi Place** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	21	22	103.3%	13.0	4.0	B
	Through	188	186	98.9%	3.3	1.0	A
	Right Turn	3	3	113.3%	1.1	2.5	A
	Subtotal	212	211	99.6%	4.4	0.9	A
SB	Left Turn	49	49	99.0%	14.9	4.6	B
	Through	401	403	100.5%	3.4	1.2	A
	Right Turn	63	64	101.3%	1.0	0.5	A
	Subtotal	513	515	100.4%	4.2	1.2	A
EB	Left Turn	15	16	104.0%	15.6	6.3	B
	Through	1	1	90.0%	1.5	3.2	A
	Right Turn	31	30	97.1%	5.9	2.1	A
	Subtotal	47	47	99.1%	9.8	3.0	A
WB	Left Turn	6	7	113.3%	9.4	6.6	A
	Through	1	2	150.0%	7.8	10.8	A
	Right Turn	8	7	85.0%	4.5	2.6	A
	Subtotal	15	15	100.7%	9.8	4.5	A
Total		787	788	100.1%	4.8	1.0	A

Intersection 32 **Mace Blvd/2nd St-County Rd 32A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	457	458	100.2%	34.4	7.0	C
	Through	579	570	98.5%	14.7	4.0	B
	Right Turn	10	8	79.0%	7.7	8.2	A
	Subtotal	1,046	1,036	99.0%	23.6	4.8	C
SB	Left Turn	20	20	100.0%	49.8	16.2	D
	Through	840	836	99.5%	58.6	14.8	E
	Right Turn	68	74	108.5%	16.2	6.6	B
	Subtotal	928	930	100.2%	55.7	14.1	E
EB	Left Turn	35	33	94.9%	37.1	6.6	D
	Through	5	7	140.0%	35.0	16.9	C
	Right Turn	207	203	98.2%	3.0	0.6	A
	Subtotal	247	244	98.6%	8.4	1.1	A
WB	Left Turn	13	13	101.5%	37.1	14.5	D
	Through	22	24	109.1%	35.9	7.6	D
	Right Turn	17	17	97.6%	11.8	7.4	B
	Subtotal	52	54	103.5%	29.8	6.7	C
Total		2,273	2,263	99.6%	35.9	7.0	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 33 **Mace Blvd/I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	359	351	97.7%	30.1	2.8	C
	Through	521	517	99.3%	8.8	1.0	A
	Right Turn						
	Subtotal	880	868	98.6%	17.2	1.7	B
SB	Left Turn						
	Through	904	901	99.6%	33.1	12.6	C
	Right Turn	156	161	103.3%	13.8	2.9	B
	Subtotal	1,060	1,062	100.2%	30.2	11.2	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	294	293	99.7%	24.2	1.5	C
	Through	2	4	180.0%	18.0	24.7	B
	Right Turn	525	524	99.8%	3.7	0.5	A
	Subtotal	821	821	100.0%	11.0	0.8	B
Total		2,761	2,750	99.6%	19.9	4.3	B

Intersection 34 **Mace Blvd/Chiles Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	23	105.5%	71.6	14.6	E
	Through	578	576	99.7%	40.3	4.3	D
	Right Turn	20	19	94.5%	21.7	9.5	C
	Subtotal	620	618	99.7%	40.7	4.2	D
SB	Left Turn	167	162	97.2%	69.2	21.8	E
	Through	288	296	102.6%	30.8	6.6	C
	Right Turn	272	271	99.6%	6.6	0.7	A
	Subtotal	727	729	100.2%	30.9	8.6	C
EB	Left Turn	409	404	98.9%	54.7	8.1	D
	Through	149	148	99.3%	42.9	6.1	D
	Right Turn	129	127	98.1%	2.2	0.3	A
	Subtotal	687	679	98.8%	42.1	6.0	D
WB	Left Turn	17	18	106.5%	58.9	23.5	E
	Through	67	68	101.9%	33.3	9.0	C
	Right Turn	330	328	99.3%	22.6	6.2	C
	Subtotal	414	414	100.0%	25.7	5.1	C
Total		2,448	2,440	99.7%	35.8	2.7	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 35 **I-80 EB Off Ramp/Chiles Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	302	296	98.0%	5.6	0.7	A
	Through						
	Right Turn	75	76	100.8%	3.2	0.6	A
	Subtotal	377	372	98.5%	5.2	0.7	A
EB	Left Turn						
	Through	385	379	98.5%	13.8	2.1	B
	Right Turn						
	Subtotal	385	379	98.5%	13.8	2.1	B
WB	Left Turn						
	Through	361	363	100.6%	8.9	1.2	A
	Right Turn						
	Subtotal	361	363	100.6%	8.9	1.2	A
Total		1,123	1,114	99.2%	9.4	1.0	A

Intersection 36 **Mace Blvd/Cowell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	9	8	88.9%	32.6	10.4	C
	Through	270	267	98.9%	20.2	2.3	C
	Right Turn	48	53	110.0%	12.3	4.7	B
	Subtotal	327	328	100.2%	19.1	2.8	B
SB	Left Turn	80	79	98.5%	32.6	6.4	C
	Through	189	185	97.6%	15.9	2.5	B
	Right Turn	52	55	106.2%	6.4	1.3	A
	Subtotal	321	319	99.2%	18.0	2.2	B
EB	Left Turn	124	120	97.0%	22.6	3.5	C
	Through	88	94	106.9%	22.1	3.0	C
	Right Turn	10	10	102.0%	9.4	7.4	A
	Subtotal	222	225	101.2%	21.6	3.2	C
WB	Left Turn	39	40	102.1%	28.2	7.4	C
	Through	77	75	97.3%	19.5	6.3	B
	Right Turn	101	106	104.9%	10.4	5.0	B
	Subtotal	217	221	101.7%	16.6	4.3	B
Total		1,087	1,091	100.4%	18.8	2.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
AM Peak Hour

Intersection 37

Mace Blvd/N El Macero Dr

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	6	5	88.3%	2.7	2.4	A
	Through	217	214	98.8%	6.8	0.2	A
	Right Turn	3	4	146.7%	1.9	2.1	A
	Subtotal	226	224	99.1%	6.7	0.3	A
SB	Left Turn	75	74	98.3%	8.8	1.4	A
	Through	142	140	98.7%	10.9	1.7	B
	Right Turn	21	21	99.0%	2.6	1.1	A
	Subtotal	238	235	98.6%	9.5	1.5	A
EB	Left Turn	19	18	96.8%	4.2	0.4	A
	Through	5	5	96.0%	5.2	0.9	A
	Right Turn	3	5	176.7%	2.0	1.1	A
	Subtotal	27	29	105.6%	4.2	0.5	A
WB	Left Turn	4	3	62.5%	2.1	2.4	A
	Through	4	4	100.0%	3.9	2.9	A
	Right Turn	91	95	104.5%	3.6	0.4	A
	Subtotal	99	102	102.6%	3.7	0.4	A
Total		590	589	99.8%	7.2	0.7	A

Intersection												
Int Delay, s/veh	9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑						↕	
Traffic Vol, veh/h	0	209	32	43	130	0	0	0	0	220	0	83
Future Vol, veh/h	0	209	32	43	130	0	0	0	0	220	0	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	195	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	0	238	36	49	148	0	0	0	0	250	0	94

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	274	0	0		502	520	148
Stage 1	-	-	-	-	-	-		246	246	-
Stage 2	-	-	-	-	-	-		256	274	-
Critical Hdwy	-	-	-	4.13	-	-		6.43	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-		5.43	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.43	5.53	-
Follow-up Hdwy	-	-	-	2.227	-	-		3.527	4.027	3.327
Pot Cap-1 Maneuver	0	-	-	1283	-	0		527	459	896
Stage 1	0	-	-	-	-	0		793	701	-
Stage 2	0	-	-	-	-	0		784	681	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1283	-	-		507	0	896
Mov Cap-2 Maneuver	-	-	-	-	-	-		507	0	-
Stage 1	-	-	-	-	-	-		793	0	-
Stage 2	-	-	-	-	-	-		754	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	2	20.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1283	-	575
HCM Lane V/C Ratio	-	-	0.038	-	0.599
HCM Control Delay (s)	-	-	7.9	-	20.2
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	3.9

HCM 6th TWSC
 39: County Rd 29 & SR 113 NB Ramps

08/08/2024

Intersection							
Int Delay, s/veh	1.3						
Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations	↖	↑	↗			↖	
Traffic Vol, veh/h	42	387	144	187	1	21	29
Future Vol, veh/h	42	387	144	187	1	21	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	None	-	None	-	-	None
Storage Length	115	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	-	0	-
Grade, %	-	0	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	48	440	164	213	1	24	33

Major/Minor	Major1	Major2	Minor2				
Conflicting Flow All	377	0	-	0	0	807	271
Stage 1	-	-	-	-	0	271	-
Stage 2	-	-	-	-	0	536	-
Critical Hdwy	4.13	-	-	-	-	6.43	6.23
Critical Hdwy Stg 1	-	-	-	-	-	5.43	-
Critical Hdwy Stg 2	-	-	-	-	-	5.43	-
Follow-up Hdwy	2.227	-	-	-	-	3.527	3.327
Pot Cap-1 Maneuver	1176	-	-	-	0	349	765
Stage 1	-	-	-	-	0	772	-
Stage 2	-	-	-	-	0	585	-
Platoon blocked, %		-	-	-	-		
Mov Cap-1 Maneuver	1176	-	-	-	0	335	765
Mov Cap-2 Maneuver	-	-	-	-	0	335	-
Stage 1	-	-	-	-	0	740	-
Stage 2	-	-	-	-	0	585	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1176	-	-	-	497
HCM Lane V/C Ratio	0.041	-	-	-	0.114
HCM Control Delay (s)	8.2	-	-	-	13.2
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4

Intersection

Int Delay, s/veh 1.3

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	1	3	327	77	20	292	1	34	0	12	2	0	4
Future Vol, veh/h	1	3	327	77	20	292	1	34	0	12	2	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	115	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	1	3	372	88	23	332	1	39	0	14	2	0	5

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	-	333	0	0	460	0	0	803	803	416	808	847	333
Stage 1	-	-	-	-	-	-	-	422	424	-	379	379	-
Stage 2	-	-	-	-	-	-	-	381	379	-	429	468	-
Critical Hdwy	-	4.13	-	-	4.13	-	-	7.13	6.53	6.23	7.13	6.53	6.23
Critical Hdwy Stg 1	-	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	6.13	5.53	-	6.13	5.53	-
Follow-up Hdwy	-	2.227	-	-	2.227	-	-	3.527	4.027	3.327	3.527	4.027	3.327
Pot Cap-1 Maneuver	-	1221	-	-	1096	-	-	301	316	634	298	298	706
Stage 1	-	-	-	-	-	-	-	607	585	-	641	613	-
Stage 2	-	-	-	-	-	-	-	639	613	-	602	560	-
Platoon blocked, %			-	-	-	-	-						
Mov Cap-1 Maneuver	~ -4	~ -4	-	-	1096	-	-	294	309	634	287	292	706
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	294	309	-	287	292	-
Stage 1	-	-	-	-	-	-	-	607	585	-	641	600	-
Stage 2	-	-	-	-	-	-	-	622	600	-	589	560	-

Approach	EB			WB			NB			SB			
HCM Control Delay, s					0.5			17.4			12.7		
HCM LOS								C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	342	+	-	-	1096	-	-	475
HCM Lane V/C Ratio	0.153	-	-	-	0.021	-	-	0.014
HCM Control Delay (s)	17.4	-	-	-	8.4	-	-	12.7
HCM Lane LOS	C	-	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.1	-	-	0

Notes

~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	142	200	69	170	141	21
Future Vol, veh/h	142	200	69	170	141	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	163	230	79	195	162	24

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	393	0	631
Stage 1	-	-	-	-	278
Stage 2	-	-	-	-	353
Critical Hdwy	-	-	4.13	-	6.43
Critical Hdwy Stg 1	-	-	-	-	5.43
Critical Hdwy Stg 2	-	-	-	-	5.43
Follow-up Hdwy	-	-	2.227	-	3.527
Pot Cap-1 Maneuver	-	-	1160	-	443
Stage 1	-	-	-	-	767
Stage 2	-	-	-	-	709
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1160	-	409
Mov Cap-2 Maneuver	-	-	-	-	409
Stage 1	-	-	-	-	767
Stage 2	-	-	-	-	655

Approach	EB	WB	NB
HCM Control Delay, s	0	2.4	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	435	-	-	1160	-
HCM Lane V/C Ratio	0.428	-	-	0.068	-
HCM Control Delay (s)	19.3	-	-	8.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.1	-	-	0.2	-

Intersection						
Int Delay, s/veh	4.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	114	142	233	378	100
Future Vol, veh/h	52	114	142	233	378	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	65	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	60	131	163	268	434	115

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1086	492	549	0	-	0
Stage 1	492	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	6.44	6.24	4.14	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.336	2.236	-	-	-
Pot Cap-1 Maneuver	237	573	1011	-	-	-
Stage 1	610	-	-	-	-	-
Stage 2	548	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	199	573	1011	-	-	-
Mov Cap-2 Maneuver	199	-	-	-	-	-
Stage 1	512	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.6	3.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1011	-	199	573	-	-
HCM Lane V/C Ratio	0.161	-	0.3	0.229	-	-
HCM Control Delay (s)	9.2	-	30.7	13.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	1.2	0.9	-	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↗↘	↘↗	↑
Traffic Vol, veh/h	16	24	258	27	57	462
Future Vol, veh/h	16	24	258	27	57	462
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	-	-	280	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	18	28	297	31	66	531

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	960	-	0	0	297
Stage 1	297	-	-	-	-
Stage 2	663	-	-	-	-
Critical Hdwy	6.44	-	-	-	4.14
Critical Hdwy Stg 1	5.44	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-
Follow-up Hdwy	3.536	-	-	-	2.236
Pot Cap-1 Maneuver	282	0	-	-	1253
Stage 1	749	0	-	-	-
Stage 2	509	0	-	-	-
Platoon blocked, %		-	-	-	-
Mov Cap-1 Maneuver	267	-	-	-	1253
Mov Cap-2 Maneuver	267	-	-	-	-
Stage 1	749	-	-	-	-
Stage 2	482	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	267	1253
HCM Lane V/C Ratio	-	-	0.069	0.052
HCM Control Delay (s)	-	-	19.5	8
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	15	6	61	2	3	0	46	215	2	4	453	43
Future Vol, veh/h	15	6	61	2	3	0	46	215	2	4	453	43
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	16	6	66	2	3	0	49	231	2	4	487	46
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	9.2	10.8	16.2
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	17%	18%	40%	1%
Vol Thru, %	82%	7%	60%	91%
Vol Right, %	1%	74%	0%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	263	82	5	500
LT Vol	46	15	2	4
Through Vol	215	6	3	453
RT Vol	2	61	0	43
Lane Flow Rate	283	88	5	538
Geometry Grp	1	1	1	1
Degree of Util (X)	0.379	0.131	0.009	0.67
Departure Headway (Hd)	4.82	5.369	6.034	4.488
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	662	587	801
Service Time	2.872	3.447	4.133	2.531
HCM Lane V/C Ratio	0.38	0.133	0.009	0.672
HCM Control Delay	10.8	9.3	9.2	16.2
HCM Lane LOS	B	A	A	C
HCM 95th-tile Q	1.8	0.4	0	5.2

Intersection							
Int Delay, s/veh	2.3						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↖	↗	↖	↗	↖	↗	↖
Traffic Vol, veh/h	15	105	26	203	1	406	15
Future Vol, veh/h	15	105	26	203	1	406	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	250	0	390	-	370	-	370
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89
Heavy Vehicles, %	3	3	3	3	3	3	3
Mvmt Flow	17	118	29	228	1	456	17

Major/Minor	Minor2	Major1	Major2				
Conflicting Flow All	742	456	473	0	-	-	0
Stage 1	456	-	-	-	-	-	-
Stage 2	286	-	-	-	-	-	-
Critical Hdwy	6.43	6.23	4.13	-	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-	-
Follow-up Hdwy	3.527	3.327	2.227	-	-	-	-
Pot Cap-1 Maneuver	382	602	1084	-	-	-	-
Stage 1	636	-	-	-	-	-	-
Stage 2	760	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	372	602	1084	-	-	-	-
Mov Cap-2 Maneuver	372	-	-	-	-	-	-
Stage 1	619	-	-	-	-	-	-
Stage 2	760	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	1	
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1084	-	372	602	-	-	-
HCM Lane V/C Ratio	0.027	-	0.045	0.196	-	-	-
HCM Control Delay (s)	8.4	-	15.1	12.4	-	-	-
HCM Lane LOS	A	-	C	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	0.7	-	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	1	90	46	7	10	2
Future Vol, veh/h	1	90	46	7	10	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	1	95	48	7	11	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	55	0	-	0	149 52
Stage 1	-	-	-	-	52 -
Stage 2	-	-	-	-	97 -
Critical Hdwy	4.3	-	-	-	6.6 6.4
Critical Hdwy Stg 1	-	-	-	-	5.6 -
Critical Hdwy Stg 2	-	-	-	-	5.6 -
Follow-up Hdwy	2.38	-	-	-	3.68 3.48
Pot Cap-1 Maneuver	1442	-	-	-	803 967
Stage 1	-	-	-	-	926 -
Stage 2	-	-	-	-	884 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1442	-	-	-	802 967
Mov Cap-2 Maneuver	-	-	-	-	802 -
Stage 1	-	-	-	-	925 -
Stage 2	-	-	-	-	884 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1442	-	-	-	825
HCM Lane V/C Ratio	0.001	-	-	-	0.015
HCM Control Delay (s)	7.5	0	-	-	9.4
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	2.8					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	21	69	35	14	13	22
Future Vol, veh/h	21	69	35	14	13	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	305	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	25	25	25	25	25	25
Mvmt Flow	22	73	37	15	14	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	52	0	-	0	154 37
Stage 1	-	-	-	-	37 -
Stage 2	-	-	-	-	117 -
Critical Hdwy	4.35	-	-	-	6.65 6.45
Critical Hdwy Stg 1	-	-	-	-	5.65 -
Critical Hdwy Stg 2	-	-	-	-	5.65 -
Follow-up Hdwy	2.425	-	-	-	3.725 3.525
Pot Cap-1 Maneuver	1419	-	-	-	787 973
Stage 1	-	-	-	-	929 -
Stage 2	-	-	-	-	854 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1419	-	-	-	774 973
Mov Cap-2 Maneuver	-	-	-	-	774 -
Stage 1	-	-	-	-	914 -
Stage 2	-	-	-	-	854 -

Approach	EB	WB	SB
HCM Control Delay, s	1.8	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1419	-	-	-	888
HCM Lane V/C Ratio	0.016	-	-	-	0.041
HCM Control Delay (s)	7.6	-	-	-	9.2
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	3.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	2	82	1	1	49	2
Future Vol, veh/h	2	82	1	1	49	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	20	20	20	20	20	20
Mvmt Flow	2	95	1	1	57	2

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	97	0	53
Stage 1	-	-	-	-	50
Stage 2	-	-	-	-	3
Critical Hdwy	-	-	4.3	-	6.6
Critical Hdwy Stg 1	-	-	-	-	5.6
Critical Hdwy Stg 2	-	-	-	-	5.6
Follow-up Hdwy	-	-	2.38	-	3.68
Pot Cap-1 Maneuver	-	-	1391	-	912
Stage 1	-	-	-	-	928
Stage 2	-	-	-	-	975
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1391	-	911
Mov Cap-2 Maneuver	-	-	-	-	911
Stage 1	-	-	-	-	928
Stage 2	-	-	-	-	974

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	913	-	-	1391	-
HCM Lane V/C Ratio	0.065	-	-	0.001	-
HCM Control Delay (s)	9.2	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection												
Int Delay, s/veh	7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	0	7	31	72	8	0	41	0	52	0	0	0
Future Vol, veh/h	0	7	31	72	8	0	41	0	52	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	83	83	83	83	84	83	84	83	84	84	84
Heavy Vehicles, %	10	9	9	9	9	10	9	10	9	10	10	10
Mvmt Flow	0	8	37	87	10	0	49	0	63	0	0	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	162	1	154	131	-	1	0	0	63	0	0
Stage 1	-	1	-	130	130	-	-	-	-	-	-	-
Stage 2	-	161	-	24	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.59	6.29	7.19	6.59	-	4.19	-	-	4.2	-	-
Critical Hdwy Stg 1	-	5.59	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.59	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.081	3.381	3.581	4.081	-	2.281	-	-	2.29	-	-
Pot Cap-1 Maneuver	0	718	1063	797	747	0	1577	-	-	1490	-	-
Stage 1	0	881	-	857	775	0	-	-	-	-	-	-
Stage 2	0	752	-	976	881	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	695	1063	744	723	-	1577	-	-	1490	-	-
Mov Cap-2 Maneuver	-	695	-	744	723	-	-	-	-	-	-	-
Stage 1	-	881	-	830	750	-	-	-	-	-	-	-
Stage 2	-	728	-	933	881	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	8.9		10.6		3.2		0	
HCM LOS	A		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1577	-	-	969	742	1490	-	-
HCM Lane V/C Ratio	0.031	-	-	0.047	0.13	-	-	-
HCM Control Delay (s)	7.4	0	-	8.9	10.6	0	-	-
HCM Lane LOS	A	A	-	A	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.1	0.4	0	-	-

2: I-80 EB Ramps Performance by movement

Movement	EBR	NBL	NBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	5.2	5.7	7.1	6.5

50: I-80 WB Ramps & County Rd 32A Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	1.3	1.7	6.9	1.7	8.8	8.8	5.7

51: Chiles Road & I-80 EB Ramps Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.1	0.0	0.0		0.0	0.0	0.1
Total Del/Veh (s)	2.4	2.6	7.5	1.4		3.4	3.1	3.4

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	13.2

Intersection: 2: I-80 EB Ramps

Movement	EB	NB	NB
Directions Served	R	L	T
Maximum Queue (ft)	54	74	78
Average Queue (ft)	4	40	42
95th Queue (ft)	26	73	73
Link Distance (ft)	143	68	68
Upstream Blk Time (%)		1	1
Queuing Penalty (veh)		1	1
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 50: I-80 WB Ramps & County Rd 32A

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	14	95
Average Queue (ft)	1	48
95th Queue (ft)	7	81
Link Distance (ft)	2911	446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 51: Chiles Road & I-80 EB Ramps

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	65	63	35
Average Queue (ft)	7	3	3
95th Queue (ft)	37	27	19
Link Distance (ft)	5890	2911	68
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 2

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 1

County Rd 99-Lake Blvd/W Covell Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	32	31	97.8%	5.9	1.1	A
	Through	63	65	102.7%	7.6	0.8	A
	Right Turn	148	151	102.0%	2.1	0.4	A
	Subtotal	243	247	101.6%	3.9	0.4	A
SB	Left Turn	12	11	88.3%	3.1	2.4	A
	Through	49	52	105.3%	10.1	1.4	B
	Right Turn	17	18	104.7%	3.0	1.3	A
	Subtotal	78	80	102.6%	8.1	1.5	A
EB	Left Turn	37	38	101.9%	5.7	1.9	A
	Through	194	194	100.2%	11.4	0.9	B
	Right Turn	36	35	98.3%	2.3	0.2	A
	Subtotal	267	267	100.1%	9.4	0.8	A
WB	Left Turn	190	182	95.9%	10.6	1.8	B
	Through	197	193	98.1%	13.1	1.9	B
	Right Turn	27	27	101.1%	8.5	1.6	A
	Subtotal	414	403	97.3%	11.7	1.5	B
Total		1,002	997	99.5%	8.8	0.6	A

Intersection 2

Denali Dr/W Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	10	84.2%	11.3	4.8	B
	Through						
	Right Turn	91	88	96.7%	1.2	0.2	A
	Subtotal	103	98	95.2%	2.6	0.8	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	429	426	99.2%	11.2	1.5	B
	Right Turn	20	22	108.5%	9.0	2.0	A
	Subtotal	449	447	99.6%	11.1	1.4	B
WB	Left Turn	91	84	92.4%	12.7	2.9	B
	Through	429	420	97.9%	4.9	1.3	A
	Right Turn						
	Subtotal	520	504	96.9%	6.4	1.6	A
Total		1,072	1,049	97.9%	8.0	1.3	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 3 **Risling Ct-Shasta Dr/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	13	15	117.7%	19.5	7.8	B
	Through	3	5	150.0%	25.0	17.2	C
	Right Turn	205	212	103.3%	1.5	0.1	A
	Subtotal	221	232	104.8%	3.2	0.5	A
SB	Left Turn	74	72	97.4%	18.3	4.8	B
	Through	5	5	90.0%	15.7	15.5	B
	Right Turn	23	27	117.4%	4.6	1.3	A
	Subtotal	102	104	101.6%	15.1	3.8	B
EB	Left Turn	12	11	87.5%	32.0	6.4	C
	Through	493	486	98.5%	13.0	1.8	B
	Right Turn	15	16	105.3%	5.7	1.1	A
	Subtotal	520	512	98.5%	13.2	1.6	B
WB	Left Turn	181	173	95.6%	19.6	3.6	B
	Through	485	461	95.1%	7.3	1.5	A
	Right Turn	34	33	97.6%	2.2	0.4	A
	Subtotal	700	667	95.3%	10.3	1.6	B
Total		1,543	1,515	98.2%	10.7	1.1	B

Intersection 4 **John Jones Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	229	239	104.3%	32.9	3.1	C
	Through						
	Right Turn	77	75	96.9%	5.6	1.5	A
	Subtotal	306	313	102.4%	27.3	2.5	C
EB	Left Turn	48	47	98.3%	49.1	8.6	D
	Through	725	722	99.6%	8.4	0.9	A
	Right Turn						
	Subtotal	773	769	99.5%	11.2	1.2	B
WB	Left Turn						
	Through	623	591	94.8%	9.6	1.8	A
	Right Turn	200	198	98.9%	3.2	0.4	A
	Subtotal	823	789	95.8%	7.9	1.5	A
Total		1,902	1,871	98.4%	12.5	0.8	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 5 **SR 113 SB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	154	155	100.4%	53.6	9.0	D
	Through						
	Right Turn	76	67	88.4%	33.7	5.1	C
	Subtotal	230	222	96.4%	47.5	7.0	D
EB	Left Turn						
	Through	771	774	100.4%	11.6	1.9	B
	Right Turn	183	186	101.4%	9.0	2.2	A
	Subtotal	954	960	100.6%	11.1	1.9	B
WB	Left Turn	244	231	94.8%	44.9	4.7	D
	Through	747	724	96.9%	3.6	0.8	A
	Right Turn						
	Subtotal	991	955	96.4%	13.9	1.5	B
Total		2,175	2,137	98.2%	16.2	1.2	B

Intersection 6 **SR 113 NB Ramps/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	261	257	98.5%	36.0	3.8	D
	Through						
	Right Turn	512	508	99.2%	28.7	19.6	C
	Subtotal	773	765	99.0%	31.6	13.4	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn	113	120	106.1%	61.3	11.3	E
	Through	823	819	99.5%	7.9	2.6	A
	Right Turn						
	Subtotal	936	939	100.3%	15.3	3.9	B
WB	Left Turn						
	Through	728	697	95.7%	22.6	2.6	C
	Right Turn	180	184	102.0%	10.1	1.7	B
	Subtotal	908	880	96.9%	19.9	2.2	B
Total		2,617	2,584	98.7%	21.7	4.1	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 7 **Sycamore Ln/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	117	120	102.2%	40.1	4.7	D
	Through	66	66	100.6%	28.4	5.7	C
	Right Turn	47	50	106.0%	5.9	4.1	A
	Subtotal	230	236	102.5%	30.6	3.7	C
SB	Left Turn	139	141	101.2%	50.3	12.6	D
	Through	72	76	104.9%	40.6	9.5	D
	Right Turn	93	90	97.1%	6.9	9.9	A
	Subtotal	304	306	100.8%	36.3	12.6	D
EB	Left Turn	122	115	93.9%	50.3	6.3	D
	Through	860	851	98.9%	18.6	3.2	B
	Right Turn	110	115	104.2%	6.6	1.6	A
	Subtotal	1,092	1,080	98.9%	20.4	2.4	C
WB	Left Turn	32	30	94.1%	49.2	4.4	D
	Through	566	556	98.3%	23.5	3.8	C
	Right Turn	87	90	103.2%	9.8	3.1	A
	Subtotal	685	676	98.7%	22.7	3.8	C
Total		2,311	2,298	99.4%	24.2	2.8	C

Intersection 8 **Anderson Rd/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	197	198	100.3%	39.8	6.6	D
	Through	124	127	102.0%	27.9	6.3	C
	Right Turn	145	141	97.1%	7.6	4.0	A
	Subtotal	466	465	99.7%	27.1	4.2	C
SB	Left Turn	73	68	93.6%	48.9	14.6	D
	Through	87	86	98.7%	32.1	7.5	C
	Right Turn	49	47	95.5%	1.3	0.4	A
	Subtotal	209	201	96.2%	30.2	7.7	C
EB	Left Turn	58	52	90.0%	59.4	14.5	E
	Through	840	841	100.1%	35.9	7.5	D
	Right Turn	134	136	101.3%	18.9	4.7	B
	Subtotal	1,032	1,029	99.7%	34.8	6.8	C
WB	Left Turn	101	92	91.2%	46.1	5.7	D
	Through	399	396	99.3%	23.8	5.0	C
	Right Turn	57	58	102.3%	4.5	0.5	A
	Subtotal	557	547	98.1%	25.4	3.5	C
Total		2,264	2,241	99.0%	30.5	3.9	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 9 **Dummy Bike/Ped-Oak Ave/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	109	108	99.4%	25.5	3.5	C
	Through						
	Right Turn	120	120	100.3%	2.5	0.9	A
	Subtotal	229	229	99.8%	12.2	1.5	B
SB	Left Turn						
	Through	25	25	101.2%	27.8	6.6	C
	Right Turn						
	Subtotal	25	25	101.2%	27.8	6.6	C
EB	Left Turn						
	Through	1,000	985	98.5%	29.7	5.3	C
	Right Turn	124	125	100.5%	21.3	4.5	C
	Subtotal	1,124	1,110	98.8%	28.8	5.2	C
WB	Left Turn	88	80	91.4%	35.0	9.2	D
	Through	548	538	98.2%	9.4	1.5	A
	Right Turn						
	Subtotal	636	619	97.3%	13.0	2.0	B
Total		2,014	1,983	98.4%	21.9	3.4	C

Intersection 10 **Catalina Dr-Dummy Bike/Ped/W Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	4	4	107.5%	14.6	18.1	B
	Right Turn						
	Subtotal	4	4	107.5%	14.6	18.1	B
SB	Left Turn	150	143	95.3%	18.1	1.7	B
	Through						
	Right Turn	58	57	98.3%	1.2	0.2	A
	Subtotal	208	200	96.1%	13.2	1.9	B
EB	Left Turn	71	72	101.5%	31.0	4.7	C
	Through	1,049	1,033	98.5%	13.8	2.5	B
	Right Turn						
	Subtotal	1,120	1,106	98.7%	15.0	2.3	B
WB	Left Turn						
	Through	578	565	97.7%	13.3	2.5	B
	Right Turn	137	142	103.9%	6.2	0.8	A
	Subtotal	715	707	98.9%	11.9	2.2	B
Total		2,047	2,017	98.5%	13.7	1.9	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 11 **F St/W Covell Blvd-E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	128	122	95.2%	47.6	13.5	D
	Through	170	173	101.8%	37.8	10.8	D
	Right Turn	215	217	100.7%	11.3	7.5	B
	Subtotal	513	512	99.7%	29.2	9.4	C
SB	Left Turn	142	136	95.6%	45.0	8.9	D
	Through	151	156	103.6%	30.7	4.6	C
	Right Turn	60	61	101.2%	10.5	5.8	B
	Subtotal	353	353	100.0%	32.3	5.7	C
EB	Left Turn	63	63	100.3%	52.3	11.8	D
	Through	951	934	98.2%	30.9	6.7	C
	Right Turn	187	186	99.7%	11.1	3.2	B
	Subtotal	1,201	1,183	98.5%	28.9	6.2	C
WB	Left Turn	137	136	99.3%	53.5	5.3	D
	Through	560	558	99.7%	27.0	4.4	C
	Right Turn	165	161	97.5%	19.4	4.6	B
	Subtotal	862	855	99.2%	29.5	4.4	C
Total		2,929	2,903	99.1%	29.5	4.8	C

Intersection 12 **F St/E 14th St** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	54	52	96.3%	30.0	5.2	C
	Through	343	349	101.8%	13.4	2.4	B
	Right Turn						
	Subtotal	397	401	101.1%	15.6	2.0	B
SB	Left Turn						
	Through	336	343	102.0%	23.7	4.3	C
	Right Turn	124	123	98.8%	11.8	1.6	B
	Subtotal	460	465	101.1%	20.3	3.5	C
EB	Left Turn	154	150	97.4%	24.9	3.9	C
	Through						
	Right Turn	75	76	101.1%	9.0	1.2	A
	Subtotal	229	226	98.6%	19.9	2.8	B
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,086	1,092	100.6%	18.5	2.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 13

Market Ave/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn						
	Through						
	Right Turn	43	45	104.9%	8.5	3.2	A
	Subtotal	43	45	104.9%	8.5	3.2	A
EB	Left Turn						
	Through	1,308	1,288	98.5%	13.3	6.8	B
	Right Turn						
	Subtotal	1,308	1,288	98.5%	13.3	6.8	B
WB	Left Turn						
	Through	819	810	98.9%	3.5	0.2	A
	Right Turn	39	41	103.8%	3.4	0.9	A
	Subtotal	858	851	99.2%	3.4	0.2	A
Total		2,209	2,184	98.9%	9.5	4.3	A

Intersection 14

Cannery Ave/Cannery Loop

Roundabout

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	53	47	88.9%	2.8	0.4	A
	Through	100	100	99.7%	3.0	0.3	A
	Right Turn						
	Subtotal	153	147	95.9%	2.9	0.3	A
SB	Left Turn						
	Through	80	78	96.9%	2.4	0.3	A
	Right Turn	15	17	110.0%	2.0	0.6	A
	Subtotal	95	94	98.9%	2.3	0.3	A
EB	Left Turn	5	5	92.0%	1.3	0.7	A
	Through						
	Right Turn	24	22	91.7%	1.8	0.4	A
	Subtotal	29	27	91.7%	1.8	0.3	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		277	267	96.5%	2.6	0.2	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 15 Cannery Ave-J St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	89	85	95.8%	32.1	7.4	C
	Through	18	20	111.7%	35.9	16.9	D
	Right Turn	67	67	100.3%	15.9	3.1	B
	Subtotal	174	173	99.2%	25.9	4.8	C
SB	Left Turn	69	64	92.3%	37.3	9.6	D
	Through	16	16	101.3%	41.6	23.8	D
	Right Turn	19	20	104.2%	11.5	5.8	B
	Subtotal	104	100	95.9%	33.5	6.2	C
EB	Left Turn	91	83	91.6%	87.9	23.0	F
	Through	1,127	1,122	99.5%	61.2	17.5	E
	Right Turn	90	88	97.3%	53.3	18.1	D
	Subtotal	1,308	1,293	98.8%	62.1	17.7	E
WB	Left Turn	50	47	93.4%	46.7	6.4	D
	Through	731	727	99.5%	31.9	4.6	C
	Right Turn	63	62	97.9%	28.7	6.5	C
	Subtotal	844	836	99.0%	32.6	4.4	C
Total		2,430	2,401	98.8%	48.2	10.5	D

Intersection 16 L St/E Covell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	128	126	98.6%	22.9	1.8	C
	Through	5	5	96.0%	13.0	15.7	B
	Right Turn	110	108	98.0%	18.2	3.7	B
	Subtotal	243	239	98.3%	20.9	2.1	C
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	1,148	1,132	98.6%	23.4	7.9	C
	Right Turn	115	119	103.6%	13.5	5.1	B
	Subtotal	1,263	1,251	99.0%	22.4	7.6	C
WB	Left Turn	75	74	98.1%	42.1	11.3	D
	Through	716	711	99.3%	13.7	5.1	B
	Right Turn						
	Subtotal	791	785	99.2%	16.3	5.2	B
Total		2,297	2,274	99.0%	20.2	5.5	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 18

Pole Line Rd/Moore Blvd

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	474	470	99.2%	35.9	20.4	E
	Right Turn	153	165	108.1%	32.2	20.3	D
	Subtotal	627	636	101.4%	34.9	20.2	D
SB	Left Turn	88	91	103.9%	10.7	1.8	B
	Through	498	505	101.3%	16.1	1.9	C
	Right Turn						
	Subtotal	586	596	101.7%	15.3	1.8	C
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	118	113	95.7%	7.0	0.3	A
	Through						
	Right Turn	55	60	109.1%	4.9	0.8	A
	Subtotal	173	173	99.9%	6.3	0.5	A
Total		1,386	1,405	101.3%	23.3	9.9	C

Intersection 19

Pole Line Rd/Donner Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	618	623	100.8%	5.9	0.8	A
	Right Turn	59	59	99.3%	6.0	0.7	A
	Subtotal	677	682	100.7%	5.9	0.8	A
SB	Left Turn	22	24	110.5%	10.8	1.5	B
	Through	594	594	100.0%	3.9	0.3	A
	Right Turn						
	Subtotal	616	618	100.4%	4.2	0.3	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	48	44	92.3%	18.9	4.5	C
	Through						
	Right Turn	9	11	124.4%	7.6	4.1	A
	Subtotal	57	56	97.4%	17.1	3.8	C
Total		1,350	1,355	100.4%	5.6	0.5	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 20

Pole Line Rd/Picasso Ave

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through	649	651	100.3%	4.7	0.8	A
	Right Turn	104	108	103.6%	5.7	2.4	A
	Subtotal	753	759	100.7%	4.8	0.8	A
SB	Left Turn	20	23	112.5%	17.3	6.7	C
	Through	622	616	99.1%	5.3	0.6	A
	Right Turn						
	Subtotal	642	639	99.5%	5.7	0.7	A
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	69	70	102.0%	32.3	12.5	D
	Through						
	Right Turn	28	29	103.9%	11.9	4.5	B
	Subtotal	97	100	102.6%	27.0	10.5	D
Total		1,492	1,497	100.3%	6.7	1.0	A

Intersection 21

Pole Line Rd/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	139	140	100.9%	68.9	20.4	E
	Through	335	342	102.0%	58.6	25.3	E
	Right Turn	60	64	105.8%	47.1	26.8	D
	Subtotal	534	545	102.1%	60.3	24.0	E
SB	Left Turn	170	164	96.2%	56.5	5.9	E
	Through	295	299	101.4%	41.6	4.1	D
	Right Turn	226	224	99.0%	17.9	3.3	B
	Subtotal	691	686	99.3%	37.6	2.9	D
EB	Left Turn	298	295	99.0%	50.4	10.5	D
	Through	733	719	98.1%	36.2	5.7	D
	Right Turn	189	182	96.2%	10.2	1.4	B
	Subtotal	1,220	1,196	98.0%	35.6	5.4	D
WB	Left Turn	95	94	99.3%	43.8	7.4	D
	Through	386	384	99.6%	36.2	2.7	D
	Right Turn	120	123	102.6%	4.4	0.6	A
	Subtotal	601	602	100.1%	31.5	1.6	C
Total		3,046	3,030	99.5%	39.7	4.1	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 22 **Dummy Bike/Ped-Birch Ln/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	41	43	104.4%	16.0	6.3	B
	Through						
	Right Turn	20	18	88.5%	19.8	9.2	B
	Subtotal	61	61	99.2%	17.2	5.7	B
SB	Left Turn						
	Through	9	10	112.2%	18.0	9.7	B
	Right Turn						
	Subtotal	9	10	112.2%	18.0	9.7	B
EB	Left Turn						
	Through	934	919	98.4%	11.3	3.9	B
	Right Turn	29	28	96.6%	12.8	5.9	B
	Subtotal	963	947	98.3%	11.3	3.9	B
WB	Left Turn	24	23	95.0%	19.8	6.0	B
	Through	560	564	100.7%	10.4	2.2	B
	Right Turn						
	Subtotal	584	587	100.4%	10.9	2.2	B
Total		1,617	1,604	99.2%	11.4	3.0	B

Intersection 23 **Baywood Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	14	115.0%	16.5	11.6	C
	Through	1	1	110.0%	2.3	7.3	A
	Right Turn	18	18	98.9%	7.2	3.8	A
	Subtotal	31	33	105.5%	12.2	4.9	B
SB	Left Turn	3	2	50.0%	5.6	6.3	A
	Through	1	1	130.0%	5.9	10.1	A
	Right Turn	12	13	110.0%	0.9	0.0	A
	Subtotal	16	16	100.0%	4.5	3.8	A
EB	Left Turn	26	27	103.8%	6.7	2.3	A
	Through	913	889	97.4%	3.7	0.7	A
	Right Turn	27	28	104.1%	3.1	0.6	A
	Subtotal	966	944	97.8%	3.7	0.7	A
WB	Left Turn	14	14	98.6%	10.7	7.7	B
	Through	585	585	99.9%	3.3	0.4	A
	Right Turn	2	2	110.0%	3.1	1.1	A
	Subtotal	601	601	99.9%	3.5	0.4	A
Total		1,614	1,594	98.7%	3.8	0.4	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 24 **Manzanita Ln/E Covell Blvd** **Side-street Stop**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	28	23	82.5%	16.5	6.2	C
	Through						
	Right Turn	17	16	96.5%	8.7	3.6	A
	Subtotal	45	40	87.8%	14.2	4.7	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	898	872	97.1%	5.7	0.7	A
	Right Turn	36	36	101.1%	5.6	0.9	A
	Subtotal	934	909	97.3%	5.7	0.7	A
WB	Left Turn	29	27	94.5%	11.3	4.8	B
	Through	573	578	100.9%	2.3	0.2	A
	Right Turn						
	Subtotal	602	605	100.6%	2.7	0.3	A
Total		1,581	1,553	98.3%	4.7	0.5	A

Intersection 25 **Wright Blvd/E Covell Blvd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	111	109	98.6%	16.8	3.5	B
	Through						
	Right Turn	64	60	93.4%	1.5	0.2	A
	Subtotal	175	169	96.7%	11.2	3.1	B
EB	Left Turn	86	81	94.4%	27.7	4.5	C
	Through	830	808	97.3%	12.3	1.5	B
	Right Turn						
	Subtotal	916	889	97.0%	13.7	1.7	B
WB	Left Turn						
	Through	538	547	101.6%	11.3	1.6	B
	Right Turn	110	109	99.0%	6.2	0.8	A
	Subtotal	648	655	101.1%	10.5	1.5	B
Total		1,739	1,713	98.5%	12.2	1.2	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 26

Monarch Ln/E Covell Blvd

Side-street Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	24	107.3%	20.9	8.0	C
	Through	5	4	86.0%	13.0	15.0	B
	Right Turn	24	24	98.8%	6.2	4.8	A
	Subtotal	51	52	101.2%	13.7	7.1	B
SB	Left Turn	44	41	92.7%	19.6	10.0	C
	Through	5	5	98.0%	27.2	17.2	D
	Right Turn	53	57	107.4%	8.7	5.4	A
	Subtotal	102	103	100.6%	14.0	6.1	B
EB	Left Turn	74	71	96.5%	5.8	1.6	A
	Through	832	815	98.0%	3.2	0.5	A
	Right Turn	35	32	90.3%	2.4	0.8	A
	Subtotal	941	918	97.6%	3.4	0.5	A
WB	Left Turn	22	22	101.8%	9.3	4.2	A
	Through	573	575	100.3%	3.1	0.4	A
	Right Turn	45	43	96.4%	2.7	0.4	A
	Subtotal	640	640	100.0%	3.3	0.4	A
Total		1,734	1,713	98.8%	4.5	0.8	A

Intersection 27

Alhambra Dr/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	105	106	101.0%	12.8	3.2	B
	Through						
	Right Turn	4	5	117.5%	1.5	1.3	A
	Subtotal	109	111	101.7%	12.4	3.3	B
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	742	725	97.7%	6.8	1.3	A
	Right Turn	158	157	99.2%	3.7	0.2	A
	Subtotal	900	882	98.0%	6.3	1.1	A
WB	Left Turn	18	18	100.6%	19.2	6.3	B
	Through	535	533	99.6%	7.0	1.3	A
	Right Turn						
	Subtotal	553	551	99.7%	7.5	1.2	A
Total		1,562	1,544	98.8%	7.1	1.0	A

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 29

Harper Hr HS Access/E Covell Blvd

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	1	1	60.0%	0.6	1.8	A
	Through						
	Right Turn	1	2	150.0%	2.3	2.0	A
	Subtotal	2	2	105.0%	2.4	2.1	A
SB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
EB	Left Turn						
	Through	740	723	97.7%	5.3	0.5	A
	Right Turn	6	7	115.0%	1.4	1.3	A
	Subtotal	746	730	97.8%	5.2	0.5	A
WB	Left Turn	3	2	76.7%	14.7	3.3	B
	Through	552	550	99.5%	13.1	1.4	B
	Right Turn						
	Subtotal	555	552	99.4%	13.1	1.4	B
Total		1,303	1,284	98.5%	8.6	0.8	A

Intersection 30

Mace Blvd/Alhambra Dr

Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	195	193	99.0%	23.1	4.0	C
	Through	525	524	99.8%	7.2	1.0	A
	Right Turn						
	Subtotal	720	717	99.6%	11.7	1.3	B
SB	Left Turn						
	Through	751	733	97.6%	20.9	20.5	C
	Right Turn	16	18	110.6%	9.8	3.0	A
	Subtotal	767	751	97.9%	20.7	20.3	C
EB	Left Turn	10	10	102.0%	19.7	13.2	B
	Through						
	Right Turn	188	187	99.7%	1.9	0.2	A
	Subtotal	198	198	99.8%	2.8	1.0	A
WB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
Total		1,685	1,666	98.9%	14.4	8.0	B

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 31 **2nd St/Target Main Dwy-Fermi Place** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	156	155	99.2%	24.4	4.6	C
	Through	658	656	99.6%	12.0	2.2	B
	Right Turn	13	14	103.8%	9.2	5.5	A
	Subtotal	827	824	99.6%	14.3	2.5	B
SB	Left Turn	50	49	98.2%	32.6	5.7	C
	Through	248	236	95.0%	14.6	3.1	B
	Right Turn	121	112	92.2%	4.3	0.9	A
	Subtotal	419	396	94.6%	14.1	2.1	B
EB	Left Turn	196	199	101.7%	23.3	2.6	C
	Through	2	2	85.0%	13.6	20.2	B
	Right Turn	86	90	105.0%	6.3	1.4	A
	Subtotal	284	291	102.6%	17.9	1.8	B
WB	Left Turn	10	9	92.0%	29.7	17.9	C
	Through	8	9	107.5%	33.2	15.0	C
	Right Turn	37	39	106.5%	10.6	3.4	B
	Subtotal	55	57	104.0%	18.2	6.5	B
Total		1,585	1,569	99.0%	15.0	1.8	B

Intersection 32 **Mace Blvd/2nd St-County Rd 32A** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	330	307	93.0%	35.9	4.2	D
	Through	565	552	97.7%	27.9	8.0	C
	Right Turn	23	20	87.0%	5.4	3.2	A
	Subtotal	918	879	95.7%	30.2	6.1	C
SB	Left Turn	124	117	94.6%	67.3	47.1	E
	Through	660	633	96.0%	81.7	76.9	F
	Right Turn	145	141	97.3%	30.2	49.1	C
	Subtotal	929	892	96.0%	71.5	69.9	E
EB	Left Turn	148	155	104.7%	33.1	3.8	C
	Through	147	148	101.0%	30.9	3.3	C
	Right Turn	602	600	99.7%	13.5	6.0	B
	Subtotal	897	904	100.7%	19.8	4.3	B
WB	Left Turn	72	71	98.5%	61.1	21.8	E
	Through	27	26	96.3%	37.0	15.6	D
	Right Turn	20	23	114.0%	12.6	8.2	B
	Subtotal	119	120	100.6%	46.9	15.7	D
Total		2,863	2,794	97.6%	39.4	20.8	D

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 33 **Mace Blvd/I-80 WB Ramps** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	203	176	86.8%	35.6	5.7	D
	Through	398	348	87.4%	9.1	1.7	A
	Right Turn						
	Subtotal	601	524	87.2%	18.4	3.3	B
SB	Left Turn						
	Through	1,189	1,133	95.3%	147.7	55.4	F
	Right Turn	145	142	98.1%	86.7	45.1	F
	Subtotal	1,334	1,275	95.6%	141.2	54.3	F
EB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
WB	Left Turn	362	356	98.4%	27.2	4.9	C
	Through	1	1	130.0%	6.0	12.7	A
	Right Turn	520	527	101.4%	2.9	0.3	A
	Subtotal	883	885	100.2%	13.0	2.1	B
Total		2,818	2,683	95.2%	73.3	24.9	E

Intersection 34 **Mace Blvd/Chiles Rd** **Signal**

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	22	24	107.3%	77.3	18.7	E
	Through	506	499	98.6%	70.4	22.5	E
	Right Turn	133	140	105.3%	46.8	22.6	D
	Subtotal	661	662	100.2%	65.7	22.4	E
SB	Left Turn	257	234	91.0%	185.2	72.6	F
	Through	405	389	96.1%	71.3	27.1	E
	Right Turn	230	228	99.0%	36.0	22.5	D
	Subtotal	892	851	95.4%	93.0	36.5	F
EB	Left Turn	395	212	53.7%	250.5	79.4	F
	Through	317	179	56.3%	70.6	16.0	E
	Right Turn	55	31	55.6%	2.5	0.5	A
	Subtotal	767	421	54.9%	150.3	32.0	F
WB	Left Turn	29	26	91.0%	31.8	13.1	C
	Through	33	32	95.8%	32.9	12.7	C
	Right Turn	200	205	102.3%	25.3	9.0	C
	Subtotal	262	263	100.2%	26.9	7.5	C
Total		2,582	2,197	85.1%	85.9	15.0	F

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 35 I-80 EB Off Ramp/Chiles Rd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn						
	Through						
	Right Turn						
	Subtotal						
SB	Left Turn	78	72	92.3%	46.7	33.8	D
	Through						
	Right Turn	38	38	99.7%	2.9	1.1	A
	Subtotal	116	110	94.7%	32.8	23.9	C
EB	Left Turn						
	Through	688	351	50.9%	553.5	119.3	F
	Right Turn						
	Subtotal	688	351	50.9%	553.5	119.3	F
WB	Left Turn	1	0	20.0%	#DIV/0!	#DIV/0!	#DIV/0!
	Through	284	283	99.5%	7.5	2.6	A
	Right Turn						
	Subtotal	285	283	99.2%	7.5	2.6	A
Total		1,089	743	68.2%	236.2	35.3	F

Intersection 36 Mace Blvd/Cowell Blvd Signal

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	14	15	104.3%	37.0	20.2	D
	Through	380	384	101.1%	36.0	29.8	D
	Right Turn	20	22	110.0%	34.5	49.3	C
	Subtotal	414	421	101.6%	36.2	30.1	D
SB	Left Turn	110	92	83.2%	36.6	6.7	D
	Through	213	205	96.1%	20.3	2.5	C
	Right Turn	72	65	90.7%	8.6	2.3	A
	Subtotal	395	362	91.5%	22.2	3.3	C
EB	Left Turn	120	123	102.8%	26.3	7.8	C
	Through	65	59	91.4%	21.0	6.2	C
	Right Turn	26	25	97.7%	10.1	6.3	B
	Subtotal	211	208	98.6%	23.0	6.1	C
WB	Left Turn	13	13	103.1%	38.5	19.5	D
	Through	40	40	98.8%	26.8	6.3	C
	Right Turn	64	67	105.0%	15.0	8.7	B
	Subtotal	117	120	102.6%	21.7	7.3	C
Total		1,137	1,110	97.7%	28.3	14.4	C

SimTraffic Post-Processor
Average Results from 10 Runs
Volume and Delay by Movement

Palomino Place
Existing Plus Project Conditions
PM Peak Hour

Intersection 37

Mace Blvd/N El Macero Dr

All-way Stop

Direction	Movement	Demand Volume (vph)	Served Volume (vph)		Total Delay (sec/veh)		
			Average	Percent	Average	Std. Dev.	LOS
NB	Left Turn	12	11	95.0%	5.0	2.3	A
	Through	333	337	101.2%	7.4	0.3	A
	Right Turn	6	6	106.7%	2.5	2.4	A
	Subtotal	351	355	101.1%	7.3	0.3	A
SB	Left Turn	88	84	95.8%	12.3	2.3	B
	Through	153	150	98.1%	12.5	2.3	B
	Right Turn	11	11	96.4%	3.2	1.3	A
	Subtotal	252	245	97.2%	11.9	2.2	B
EB	Left Turn	7	6	85.7%	3.1	2.2	A
	Through	10	13	130.0%	5.4	0.8	A
	Right Turn	4	4	97.5%	1.5	1.4	A
	Subtotal	21	23	109.0%	4.9	0.7	A
WB	Left Turn	8	7	91.3%	4.8	2.3	A
	Through	24	24	99.6%	6.2	1.0	A
	Right Turn	74	75	101.9%	4.1	0.5	A
	Subtotal	106	107	100.6%	4.6	0.5	A
Total		730	729	99.9%	8.4	1.1	A

Intersection												
Int Delay, s/veh	5.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗	↘	↑						↕	
Traffic Vol, veh/h	0	258	36	20	147	0	0	0	0	156	1	46
Future Vol, veh/h	0	258	36	20	147	0	0	0	0	156	1	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	195	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	297	41	23	169	0	0	0	0	179	1	53

Major/Minor	Major1			Major2			Minor2			
Conflicting Flow All	-	0	0	338	0	0		533	533	169
Stage 1	-	-	-	-	-	-		215	215	-
Stage 2	-	-	-	-	-	-		318	338	-
Critical Hdwy	-	-	-	4.12	-	-		6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-		5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-		5.42	5.52	-
Follow-up Hdwy	-	-	-	2.218	-	-		3.518	4.018	3.318
Pot Cap-1 Maneuver	0	-	-	1221	-	0		507	441	875
Stage 1	0	-	-	-	-	0		821	725	-
Stage 2	0	-	-	-	-	0		738	641	-
Platoon blocked, %	-	-	-	-	-	-		-	-	-
Mov Cap-1 Maneuver	-	-	-	1221	-	-		497	0	875
Mov Cap-2 Maneuver	-	-	-	-	-	-		497	0	-
Stage 1	-	-	-	-	-	-		821	0	-
Stage 2	-	-	-	-	-	-		724	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	1	16.2
HCM LOS			C

Minor Lane/Major Mvmt	EBT	EBR	WBL	WBT	SBLn1
Capacity (veh/h)	-	-	1221	-	551
HCM Lane V/C Ratio	-	-	0.019	-	0.423
HCM Control Delay (s)	-	-	8	-	16.2
HCM Lane LOS	-	-	A	-	C
HCM 95th %tile Q(veh)	-	-	0.1	-	2.1

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	116	298	136	173	30	31
Future Vol, veh/h	116	298	136	173	30	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	115	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	133	343	156	199	34	36

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	355	0	-	0	865 256
Stage 1	-	-	-	-	256 -
Stage 2	-	-	-	-	609 -
Critical Hdwy	4.12	-	-	-	6.42 6.22
Critical Hdwy Stg 1	-	-	-	-	5.42 -
Critical Hdwy Stg 2	-	-	-	-	5.42 -
Follow-up Hdwy	2.218	-	-	-	3.518 3.318
Pot Cap-1 Maneuver	1204	-	-	-	324 783
Stage 1	-	-	-	-	787 -
Stage 2	-	-	-	-	543 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1204	-	-	-	288 783
Mov Cap-2 Maneuver	-	-	-	-	288 -
Stage 1	-	-	-	-	700 -
Stage 2	-	-	-	-	543 -

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1204	-	-	-	424
HCM Lane V/C Ratio	0.111	-	-	-	0.165
HCM Control Delay (s)	8.4	-	-	-	15.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.4	-	-	-	0.6

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	4	296	28	14	269	3	36	2	18	0	1	4
Future Vol, veh/h	4	296	28	14	269	3	36	2	18	0	1	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	115	-	-	90	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	340	32	16	309	3	41	2	21	0	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	312	0	0	372	0	0	712	710	356	721	725	311
Stage 1	-	-	-	-	-	-	366	366	-	343	343	-
Stage 2	-	-	-	-	-	-	346	344	-	378	382	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1248	-	-	1186	-	-	347	359	688	343	352	729
Stage 1	-	-	-	-	-	-	653	623	-	672	637	-
Stage 2	-	-	-	-	-	-	670	637	-	644	613	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1248	-	-	1186	-	-	339	353	688	327	346	729
Mov Cap-2 Maneuver	-	-	-	-	-	-	339	353	-	327	346	-
Stage 1	-	-	-	-	-	-	650	621	-	669	629	-
Stage 2	-	-	-	-	-	-	656	629	-	620	611	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			0.4			15.5			11.1		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	406	1248	-	-	1186	-	-	597
HCM Lane V/C Ratio	0.159	0.004	-	-	0.014	-	-	0.01
HCM Control Delay (s)	15.5	7.9	-	-	8.1	-	-	11.1
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0

Intersection							
Int Delay, s/veh	3.9						
Movement	EBT	EBR	WBU	WBL	WBT	NBL	NBR
Lane Configurations	↔				↔	↔	
Traffic Vol, veh/h	178	134	1	40	152	132	31
Future Vol, veh/h	178	134	1	40	152	132	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	None
Storage Length	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	-	0	0	-
Grade, %	0	-	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	212	160	1	48	181	157	37

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	372
Stage 1	-	-	292
Stage 2	-	-	277
Critical Hdwy	-	-	4.12
Critical Hdwy Stg 1	-	-	5.42
Critical Hdwy Stg 2	-	-	5.42
Follow-up Hdwy	-	-	2.218
Pot Cap-1 Maneuver	-	-	1186
Stage 1	-	-	758
Stage 2	-	-	770
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	~ -42	~ -42
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	758
Stage 2	-	-	770

Approach	EB	WB	NB
HCM Control Delay, s	0		16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	519	-	-	+	-
HCM Lane V/C Ratio	0.374	-	-	-	-
HCM Control Delay (s)	16	-	-	-	-
HCM Lane LOS	C	-	-	-	-
HCM 95th %tile Q(veh)	1.7	-	-	-	-

Notes
 ~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	5.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↗	
Traffic Vol, veh/h	110	102	108	396	352	79
Future Vol, veh/h	110	102	108	396	352	79
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	65	215	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	115	106	113	413	367	82

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1047	408	449	0	-	0
Stage 1	408	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	253	643	1111	-	-	-
Stage 1	671	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	227	643	1111	-	-	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	603	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.3	1.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1111	-	227	643	-	-
HCM Lane V/C Ratio	0.101	-	0.505	0.165	-	-
HCM Control Delay (s)	8.6	-	36	11.7	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	2.6	0.6	-	-

Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	Y	↑
Traffic Vol, veh/h	28	87	462	44	48	403
Future Vol, veh/h	28	87	462	44	48	403
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Yield	-	None
Storage Length	0	-	-	280	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	91	481	46	50	420

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1001	-	0	0	481
Stage 1	481	-	-	-	-
Stage 2	520	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218
Pot Cap-1 Maneuver	269	0	-	-	1082
Stage 1	622	0	-	-	-
Stage 2	597	0	-	-	-
Platoon blocked, %		-	-	-	-
Mov Cap-1 Maneuver	257	-	-	-	1082
Mov Cap-2 Maneuver	257	-	-	-	-
Stage 1	622	-	-	-	-
Stage 2	570	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.8	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	257	1082
HCM Lane V/C Ratio	-	-	0.113	0.046
HCM Control Delay (s)	-	-	20.8	8.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1

Intersection	
Intersection Delay, s/veh	17.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	35	9	82	3	13	4	55	476	1	3	372	18
Future Vol, veh/h	35	9	82	3	13	4	55	476	1	3	372	18
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	36	9	85	3	13	4	57	491	1	3	384	19
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.6	9.8	21.9	14.7
HCM LOS	B	A	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	10%	28%	15%	1%
Vol Thru, %	89%	7%	65%	95%
Vol Right, %	0%	65%	20%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	532	126	20	393
LT Vol	55	35	3	3
Through Vol	476	9	13	372
RT Vol	1	82	4	18
Lane Flow Rate	548	130	21	405
Geometry Grp	1	1	1	1
Degree of Util (X)	0.759	0.214	0.037	0.572
Departure Headway (Hd)	4.984	5.921	6.48	5.082
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	729	605	551	709
Service Time	2.984	3.969	4.543	3.115
HCM Lane V/C Ratio	0.752	0.215	0.038	0.571
HCM Control Delay	21.9	10.6	9.8	14.7
HCM Lane LOS	C	B	A	B
HCM 95th-tile Q	7.1	0.8	0.1	3.7

Intersection							
Int Delay, s/veh	1.1						
Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations	↙	↗	↙	↑	↘	↑	↗
Traffic Vol, veh/h	10	38	55	460	0	350	28
Future Vol, veh/h	10	38	55	460	0	350	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	-	None
Storage Length	250	0	390	-	370	-	370
Veh in Median Storage, #	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2
Mvmt Flow	11	40	59	489	0	372	30

Major/Minor	Minor2	Major1	Major2				
Conflicting Flow All	979	372	402	0	-	-	0
Stage 1	372	-	-	-	-	-	-
Stage 2	607	-	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-	-
Pot Cap-1 Maneuver	277	674	1157	-	-	-	-
Stage 1	697	-	-	-	-	-	-
Stage 2	544	-	-	-	-	-	-
Platoon blocked, %				-	-	-	-
Mov Cap-1 Maneuver	263	674	1157	-	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-	-
Stage 1	661	-	-	-	-	-	-
Stage 2	544	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	0.9	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBU	SBT	SBR
Capacity (veh/h)	1157	-	263	674	-	-	-
HCM Lane V/C Ratio	0.051	-	0.04	0.06	-	-	-
HCM Control Delay (s)	8.3	-	19.3	10.7	0	-	-
HCM Lane LOS	A	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.2	-	0.1	0.2	-	-	-

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↶	↷		↶	↷
Traffic Vol, veh/h	0	94	107	22	11	4
Future Vol, veh/h	0	94	107	22	11	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	12	12	12	12	12	12
Mvmt Flow	0	111	126	26	13	5

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	152	0	-	0	250 139
Stage 1	-	-	-	-	139 -
Stage 2	-	-	-	-	111 -
Critical Hdwy	4.22	-	-	-	6.52 6.32
Critical Hdwy Stg 1	-	-	-	-	5.52 -
Critical Hdwy Stg 2	-	-	-	-	5.52 -
Follow-up Hdwy	2.308	-	-	-	3.608 3.408
Pot Cap-1 Maneuver	1370	-	-	-	717 883
Stage 1	-	-	-	-	864 -
Stage 2	-	-	-	-	889 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1370	-	-	-	717 883
Mov Cap-2 Maneuver	-	-	-	-	717 -
Stage 1	-	-	-	-	864 -
Stage 2	-	-	-	-	889 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1370	-	-	-	755
HCM Lane V/C Ratio	-	-	-	-	0.023
HCM Control Delay (s)	0	-	-	-	9.9
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	1	105	65	0	16	48
Future Vol, veh/h	1	105	65	0	16	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	265	-	-	305	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	1	127	78	0	19	58

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	78	0	-	0	207 78
Stage 1	-	-	-	-	78 -
Stage 2	-	-	-	-	129 -
Critical Hdwy	4.19	-	-	-	6.49 6.29
Critical Hdwy Stg 1	-	-	-	-	5.49 -
Critical Hdwy Stg 2	-	-	-	-	5.49 -
Follow-up Hdwy	2.281	-	-	-	3.581 3.381
Pot Cap-1 Maneuver	1477	-	-	-	766 964
Stage 1	-	-	-	-	928 -
Stage 2	-	-	-	-	880 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1477	-	-	-	765 964
Mov Cap-2 Maneuver	-	-	-	-	765 -
Stage 1	-	-	-	-	927 -
Stage 2	-	-	-	-	880 -

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1477	-	-	-	905
HCM Lane V/C Ratio	0.001	-	-	-	0.085
HCM Control Delay (s)	7.4	-	-	-	9.3
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3

Intersection						
Int Delay, s/veh	3.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↔			↔	↔	
Traffic Vol, veh/h	0	121	1	0	66	0
Future Vol, veh/h	0	121	1	0	66	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	0	142	1	0	78	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	142	0	73
Stage 1	-	-	-	-	71
Stage 2	-	-	-	-	2
Critical Hdwy	-	-	4.17	-	6.47
Critical Hdwy Stg 1	-	-	-	-	5.47
Critical Hdwy Stg 2	-	-	-	-	5.47
Follow-up Hdwy	-	-	2.263	-	3.563
Pot Cap-1 Maneuver	-	-	1411	-	919
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	1008
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1411	-	918
Mov Cap-2 Maneuver	-	-	-	-	918
Stage 1	-	-	-	-	939
Stage 2	-	-	-	-	1007

Approach	EB	WB	NB
HCM Control Delay, s	0	7.6	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	918	-	-	1411	-
HCM Lane V/C Ratio	0.085	-	-	0.001	-
HCM Control Delay (s)	9.3	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0	-

Intersection												
Int Delay, s/veh	9.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷			↷			↷	
Traffic Vol, veh/h	0	5	200	122	9	0	41	0	59	0	0	0
Future Vol, veh/h	0	5	200	122	9	0	41	0	59	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	81	81	81	81	87	81	87	81	87	87	87
Heavy Vehicles, %	2	3	3	3	3	2	3	2	3	2	2	2
Mvmt Flow	0	6	247	151	11	0	51	0	73	0	0	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	-	176	1	267	140	-	1	0	0	73	0	0
Stage 1	-	1	-	139	139	-	-	-	-	-	-	-
Stage 2	-	175	-	128	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.53	6.23	7.13	6.53	-	4.13	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.027	3.327	3.527	4.027	-	2.227	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	716	1081	684	749	0	1615	-	-	1527	-	-
Stage 1	0	893	-	862	780	0	-	-	-	-	-	-
Stage 2	0	752	-	873	893	0	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	-	692	1081	511	724	-	1615	-	-	1527	-	-
Mov Cap-2 Maneuver	-	692	-	511	724	-	-	-	-	-	-	-
Stage 1	-	893	-	834	754	-	-	-	-	-	-	-
Stage 2	-	727	-	669	893	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	15	3	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1615	-	-	1066	522	1527	-	-
HCM Lane V/C Ratio	0.031	-	-	0.237	0.31	-	-	-
HCM Control Delay (s)	7.3	0	-	9.4	15	0	-	-
HCM Lane LOS	A	A	-	A	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.9	1.3	0	-	-

2: I-80 EB Ramps Performance by movement

Movement	EBR	NBL	NBT	All
Denied Del/Veh (s)	0.1	0.0	0.0	0.0
Total Del/Veh (s)	2.7	25.2	24.5	24.6

50: I-80 WB Ramps & County Rd 32A Performance by movement

Movement	EBT	EBR	WBL	WBT	NBL	NBR	All
Denied Del/Veh (s)	0.3	0.1	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	3.3	3.3	6.8	5.5	6.3	4.4	4.0

51: Chiles Road & I-80 EB Ramps Performance by movement

Movement	EBL	EBT	WBT	WBR	SBL	SBR	All
Denied Del/Veh (s)	0.3	0.2	0.0	0.0	0.0	0.0	0.1
Total Del/Veh (s)	360.7	342.6	209.0	213.9	5.0	2.6	283.0

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	267.8

Intersection: 2: I-80 EB Ramps

Movement	EB	NB	NB
Directions Served	R	L	T
Maximum Queue (ft)	28	86	86
Average Queue (ft)	5	83	82
95th Queue (ft)	21	86	90
Link Distance (ft)	143	68	68
Upstream Blk Time (%)		68	65
Queuing Penalty (veh)		231	222
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 50: I-80 WB Ramps & County Rd 32A

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	24	82
Average Queue (ft)	2	41
95th Queue (ft)	13	68
Link Distance (ft)	2911	446
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 51: Chiles Road & I-80 EB Ramps

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	1678	1173	27
Average Queue (ft)	1030	658	5
95th Queue (ft)	1855	1379	23
Link Distance (ft)	5890	2911	68
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 453

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	3.0	0.2	0.2	3.1	0.1	0.2	4.0	0.2	0.2	4.0	0.4	0.2
Total Del/Veh (s)	27.6	11.4	4.9	24.9	11.1	4.2	17.6	12.1	4.2	23.2	15.9	4.3

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.4
Total Del/Veh (s)	11.5

Total Network Performance

Denied Del/Veh (s)	0.4
Total Del/Veh (s)	13.0

Intersection: 26: Monarch Ln & E Covell Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	86	216	173	50	169	137	64	63	78	65
Average Queue (ft)	26	107	63	13	90	46	18	23	29	28
95th Queue (ft)	67	180	130	41	147	100	50	55	60	59
Link Distance (ft)		657	657		871	871		468		273
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			85			100		100	
Storage Blk Time (%)	0	8		0	7		0	0	0	
Queuing Penalty (veh)	0	2		0	1		0	0	0	

Network Summary

Network wide Queuing Penalty: 4

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.7	0.2	0.3	2.9	0.2	0.2	4.0	0.2	0.2	4.0	0.2	0.2
Total Del/Veh (s)	27.3	11.6	5.2	27.9	14.2	6.3	19.5	12.9	5.4	25.6	15.9	5.0

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.5
Total Del/Veh (s)	13.2

Total Network Performance

Denied Del/Veh (s)	0.5
Total Del/Veh (s)	15.4

Intersection: 26: Monarch Ln & E Covell Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	119	241	202	66	195	173	56	53	89	80
Average Queue (ft)	50	125	84	19	108	68	18	16	32	28
95th Queue (ft)	98	205	160	52	172	137	47	44	66	58
Link Distance (ft)		657	657		871	871		468		273
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			85			100		100	
Storage Blk Time (%)	1	10		0	13				0	0
Queuing Penalty (veh)	3	8		0	3				0	0

Network Summary

Network wide Queuing Penalty: 14

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.7	0.2	0.2	3.4	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2
Total Del/Veh (s)	28.3	11.4	4.1	24.6	11.1	3.9	14.9	14.0	5.7	15.4	11.3	6.1

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.2
Total Del/Veh (s)	11.3

Total Network Performance

Denied Del/Veh (s)	0.2
Total Del/Veh (s)	12.8

Intersection: 26: Monarch Ln & E Covell Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	91	219	172	45	183	142	81	100
Average Queue (ft)	23	107	62	12	87	47	37	44
95th Queue (ft)	63	176	129	37	149	101	71	78
Link Distance (ft)		663	663		877	877	468	273
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			85				
Storage Blk Time (%)	0	8			6			
Queuing Penalty (veh)	0	2			1			

Network Summary

Network wide Queuing Penalty: 4

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Denied Del/Veh (s)	2.7	0.2	0.3	3.0	0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.2
Total Del/Veh (s)	29.2	10.7	5.5	31.2	12.1	4.7	18.2	19.0	6.8	19.3	21.5	7.7

26: Monarch Ln & E Covell Blvd Performance by movement

Movement	All
Denied Del/Veh (s)	0.3
Total Del/Veh (s)	12.2

Total Network Performance

Denied Del/Veh (s)	0.3
Total Del/Veh (s)	14.3

Intersection: 26: Monarch Ln & E Covell Blvd

Movement	EB	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	T	TR	L	T	TR	LTR	LTR
Maximum Queue (ft)	118	219	180	69	176	144	72	126
Average Queue (ft)	51	119	82	21	101	61	30	47
95th Queue (ft)	94	189	153	54	159	122	62	89
Link Distance (ft)		663	663		877	877	468	273
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	100			85				
Storage Blk Time (%)	0	9		0	10			
Queuing Penalty (veh)	2	6		0	2			

Network Summary

Network wide Queuing Penalty: 11

Intersection 5

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	350	175	12	325	26	350	16	0%	0%
EB	Through/Right	1	350	250	19	400	22	375	17	0%	0%
WB	U/Left Turn	1	175	200	7	275	8	225	0	37%	5%
WB	Through	1	525	250	37	550	37	525	6	0%	0%
WB	Through	2	525	125	21	300	46	475	63	0%	0%
SB	Left/Through	1	1,375	250	54	400	118	475	129	0%	0%
SB	Right Turn	1	875	125	7	175	17	225	47	0%	0%

Intersection 6

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	1	150	75	4	125	11	150	26	0%	0%
EB	Through	1	525	75	8	150	25	225	68	1%	1%
EB	Through	2	525	100	5	175	15	225	29	0%	0%
WB	Through	1	475	175	17	300	35	350	43	0%	0%
WB	Through	2	475	125	14	225	26	275	42	2%	1%
WB	Right Turn	1	175	50	9	125	33	200	77	0%	0%
NB	Left/Through	1	1,275	150	20	250	30	300	45	0%	0%
NB	Right Turn	1	575	75	7	125	19	175	38	0%	0%

Intersection 26

Monarch Ln & E Covell Blvd, All Intervals

Side-street Stop

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	775	25	1	25	6	25	15	0%	0%
EB	Through/Right	1	775	25	3	25	16	50	36	0%	0%
WB	Left Turn	1	100	25	2	25	5	50	12	0%	0%
WB	Through	1	650	25	1	25	6	25	16	0%	0%
WB	Through/Right	1	650	25	2	25	15	50	42	0%	0%
NB	Shared	1	475	50	4	75	10	100	21	0%	0%
SB	Shared	1	275	25	1	25	6	25	16	0%	0%

Intersection 33

Mace Blvd & I-80 WB Ramps, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Left Turn	1	700	75	5	125	13	150	19	0%	0%
WB	Left/Through	1	1,225	100	9	175	21	200	29	0%	0%
NB	Left Turn	1	300	100	8	150	14	175	30	0%	0%
NB	Left Turn	2	300	125	6	175	16	200	47	0%	0%
NB	Through	1	500	75	9	150	21	200	54	0%	0%
NB	Through	2	500	25	7	75	23	125	48	0%	0%
SB	Through	1	1,100	175	43	400	101	500	103	0%	0%
SB	Through	2	1,100	275	38	475	90	550	139	8%	0%
SB	Right Turn	1	350	75	34	225	137	300	174	0%	0%

Intersection 35

Chiles Rd & I-80 EB Off-Ramp, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	3,300	100	9	200	29	275	68	0%	0%
WB	Through	1	400	50	4	100	11	125	17	0%	0%
WB	Through	2	400	75	5	100	10	125	12	0%	0%
SB	Left Turn	1	1,100	25	4	75	7	75	14	0%	0%
SB	Left Turn	2	1,100	50	7	100	15	125	26	0%	0%
SB	Right Turn	1	825	25	3	75	5	75	12	0%	0%

--	--	--	--	--	--	--	--	--	--	--	--

Intersection 5

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	350	125	9	225	20	275	31	0%	0%
EB	Through/Right	1	350	125	10	250	24	300	31	0%	0%
WB	U/Left Turn	1	175	175	8	250	11	225	1	14%	3%
WB	Through	1	525	100	15	275	48	400	60	0%	0%
WB	Through	2	525	50	14	150	60	250	133	0%	0%
SB	Left/Through	1	1,375	125	19	200	31	250	54	0%	0%
SB	Right Turn	1	875	75	6	125	11	150	27	0%	0%

Intersection 6

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turn	1	150	100	8	175	17	175	24	4%	3%
EB	Through	1	525	75	7	150	16	200	36	0%	0%
EB	Through	2	525	75	6	125	16	150	30	0%	0%
WB	Through	1	475	200	17	300	30	325	41	0%	0%
WB	Through	2	475	150	14	225	24	275	30	4%	1%
WB	Right Turn	1	175	75	10	125	39	200	77	0%	0%
NB	Left/Through	1	1,275	175	10	250	20	325	48	0%	0%
NB	Right Turn	1	575	200	25	325	55	375	59	0%	0%

Intersection 33

Mace Blvd & I-80 WB Ramps, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Left Turn	1	700	100	6	150	13	175	25	0%	0%
WB	Left/Through	1	1,225	100	6	150	11	175	27	0%	0%
WB	Right Turn	1	1,225	25	0	25	3	25	8	0%	0%
NB	Left Turn	1	300	50	6	100	8	125	19	0%	0%
NB	Left Turn	2	300	75	5	125	8	125	20	0%	0%
NB	Through	1	500	75	9	125	22	175	37	0%	0%
NB	Through	2	500	25	5	50	18	100	42	0%	0%
SB	Through	1	1,100	550	192	1,000	314	1,000	239	0%	0%
SB	Through	2	1,100	650	206	1,125	339	1,100	225	49%	0%
SB	Right Turn	1	350	250	109	525	92	425	0	0%	0%

Intersection 35

Chiles Rd & I-80 EB Off-Ramp, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	3,300	2,550	378	4,300	158	3,350	15	0%	0%
WB	U/Through	1	400	25	6	75	10	100	16	0%	0%
WB	Through	1	400	50	7	100	9	100	12	0%	0%
SB	Left Turn	1	1,100	25	2	50	5	50	13	0%	0%
SB	Left Turn	2	1,100	50	10	125	25	175	30	0%	0%
SB	Right Turn	1	825	25	4	50	5	75	13	0%	0%

Intersection 5

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	350	175	11	300	21	325	19	0%	0%
EB	Through/Right	1	350	250	16	375	19	375	15	0%	0%
WB	U/Left Turn	1	175	200	6	250	7	225	0	38%	4%
WB	Through	1	525	250	40	550	55	525	9	0%	0%
WB	Through	2	525	125	25	300	73	450	80	0%	0%
SB	Left/Through	1	1,375	225	14	350	40	375	77	0%	0%
SB	Right Turn	1	875	125	6	200	15	250	45	0%	0%

Intersection 6

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	1	150	75	6	100	10	150	28	0%	0%
EB	Through	1	525	75	9	150	20	175	44	1%	1%
EB	Through	2	525	100	8	175	23	225	46	0%	0%
WB	Through	1	475	175	17	300	32	375	66	0%	0%
WB	Through	2	475	125	10	225	26	300	57	2%	1%
WB	Right Turn	1	175	50	6	125	32	175	81	0%	0%
NB	Left/Through	1	1,275	150	5	250	15	275	30	0%	0%
NB	Right Turn	1	575	75	8	150	18	175	31	0%	0%

Intersection 26

Monarch Ln & E Covell Blvd, All Intervals

Side-street Stop

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	1	125	25	3	50	6	50	14	0%	0%
EB	Through	1	775	25	1	25	10	25	28	0%	0%
EB	Through/Right	1	775	25	2	25	11	50	27	0%	0%
WB	Left Turn	1	100	25	3	50	6	50	8	0%	0%
WB	Through	1	650	25	1	25	5	50	13	0%	0%
WB	Through	2	650	25	2	25	12	25	23	0%	0%
NB	Shared	1	475	50	4	75	9	100	21	0%	0%
SB	Shared	1	275	50	4	75	12	100	31	0%	0%

Intersection 33

Mace Blvd & I-80 WB Ramps, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Left Turn	1	700	75	6	125	10	125	18	0%	0%
WB	Left/Through	1	1,225	100	7	150	16	200	39	0%	0%
NB	Left Turn	1	300	100	9	150	18	175	27	0%	0%
NB	Left Turn	2	300	125	8	175	17	175	23	0%	0%
NB	Through	1	500	100	8	175	15	200	34	0%	0%
NB	Through	2	500	25	4	75	10	100	19	0%	0%
SB	Through	1	450	150	20	350	37	400	53	0%	0%
SB	Through	2	1,100	250	28	450	48	500	67	4%	0%
SB	Right Turn	1	350	50	20	200	85	350	134	0%	0%

Intersection 35

Chiles Rd & I-80 EB Off-Ramp, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	3,300	100	9	175	14	225	27	0%	0%
WB	Through	1	400	50	5	100	9	125	26	0%	0%
WB	Through	2	400	75	5	100	11	125	30	0%	0%
SB	Left Turn	1	1,100	25	3	50	7	75	11	0%	0%
SB	Left Turn	2	1,100	50	6	100	13	125	26	0%	0%
SB	Right Turn	1	825	25	3	75	7	75	27	0%	0%

Intersection 5

SR 113 SB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	350	125	14	225	30	275	56	0%	0%
EB	Through/Right	1	350	125	20	250	44	325	54	0%	0%
WB	U/Left Turn	1	175	175	9	250	8	225	1	13%	2%
WB	Through	1	525	75	18	225	35	350	50	0%	1%
WB	Through	2	525	25	7	100	27	200	77	0%	0%
SB	Left/Through	1	1,375	150	11	225	27	275	55	0%	0%
SB	Right Turn	1	875	75	6	125	15	125	21	0%	0%

Intersection 6

SR 113 NB Ramps/W Covell Blvd

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	U/Left Turn	1	150	100	10	175	14	200	17	7%	3%
EB	Through	1	525	100	14	175	41	225	95	1%	1%
EB	Through	2	525	75	9	150	30	200	96	0%	0%
WB	Through	1	475	175	14	275	19	325	38	0%	0%
WB	Through	2	475	150	11	225	30	275	53	3%	2%
WB	Right Turn	1	175	75	8	125	29	200	69	0%	0%
NB	Left/Through	1	1,275	175	13	275	49	325	152	0%	0%
NB	Right Turn	1	575	200	45	350	117	400	156	1%	2%

Intersection 26

Monarch Ln & E Covell Blvd, All Intervals

Side-street Stop

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Left Turn	1	125	25	3	75	5	75	9	0%	0%
EB	Through	1	775	25	3	25	13	50	22	0%	0%
EB	Through/Right	1	775	25	3	50	12	75	15	0%	0%
WB	Left Turn	1	100	25	3	50	5	50	11	0%	0%
WB	Through	1	650	25	2	25	6	50	13	0%	0%
WB	Through	2	650	25	2	25	11	50	25	0%	0%
WB	Right Turn	1	100	25	1	25	5	25	13	0%	0%
NB	Shared	1	475	50	5	75	11	100	16	0%	0%
SB	Shared	1	275	50	4	100	14	125	30	0%	0%

Intersection 33

Mace Blvd & I-80 WB Ramps, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
WB	Left Turn	1	700	100	8	150	15	200	24	0%	0%
WB	Left/Through	1	1,225	100	11	175	24	200	38	0%	0%
NB	Left Turn	1	300	50	5	100	16	125	29	0%	0%
NB	Left Turn	2	300	75	7	125	14	150	29	0%	0%
NB	Through	1	500	75	7	150	14	175	21	0%	0%
NB	Through	2	500	25	5	50	14	100	22	0%	0%
SB	Through	1	1,100	700	165	1,200	280	1,125	185	0%	0%
SB	Through	2	1,100	800	171	1,300	284	1,225	178	63%	0%
SB	Right Turn	1	350	300	71	575	38	425	0	0%	0%

Intersection 35

Chiles Rd & I-80 EB Off-Ramp, All Intervals

Signal

Direction	Movement	Lane	Storage (ft)	Average Queue (ft)		95th Queue (ft)		Maximum Queue (ft)		Block Time	
				Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	Pocket	Upstream
EB	Through	1	3,300	2,600	368	4,275	110	3,350	17	0%	0%
WB	U/Through	1	400	25	6	75	11	100	23	0%	0%
WB	Through	1	400	50	5	100	10	125	24	0%	0%
SB	Left Turn	1	1,100	25	2	50	6	50	16	0%	0%
SB	Left Turn	2	1,100	75	19	125	50	200	72	0%	0%
SB	Right Turn	1	825	25	4	50	6	50	13	0%	0%

Major Street **E Covell Blvd**
 Minor Street **Monarch Ln**

Project **Palomino Place**
 Scenario **Existing Conditions**
 Peak Hour **AM**

Turn Movement Volumes

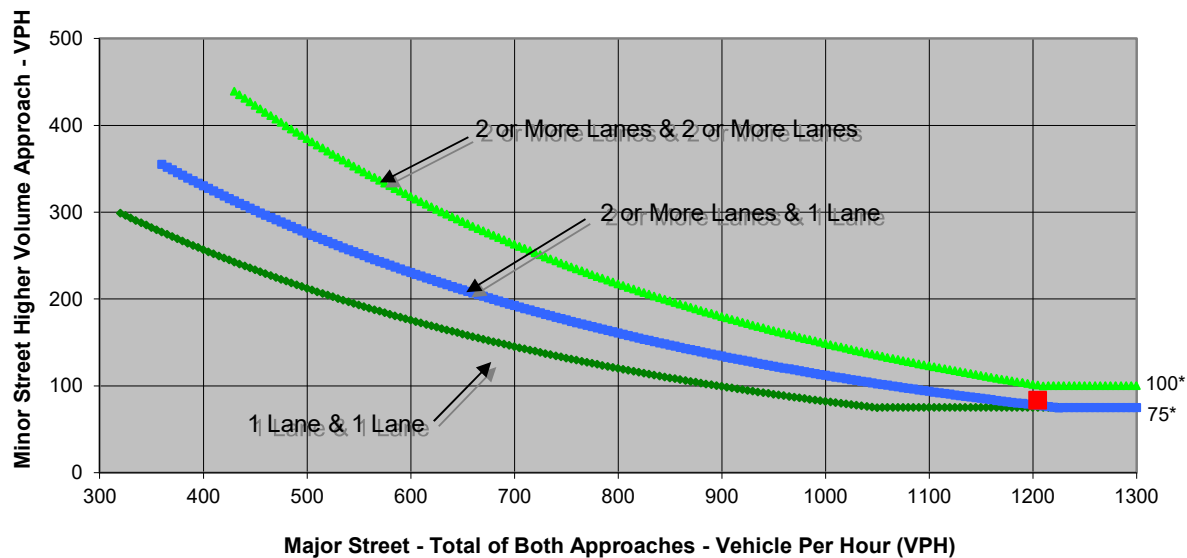
	NB	SB	EB	WB
Left	27	0	0	0
Through	0	0	668	492
Right	56	1	30	15
Total	83	1	698	507

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	E Covell Blvd	Monarch Ln	
Number of Approach Lanes	2	1	<u>YES</u>
Traffic Volume (VPH) *	1,205	83	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street E Covell Blvd
 Minor Street Monarch Ln

Project Palomino Place
 Scenario Existing Conditions
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	27	0	0	0
Through	0	0	668	492
Right	56	1	30	15
Total	83	1	698	507

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	24
Approach with Worst Case Delay	NB
Total Vehicles on Approach	83

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	0.6	83	1,289
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **E Covell Blvd**
 Minor Street **Monarch Ln**

Project **Palomino Place**
 Scenario **Existing Conditions**
 Peak Hour **PM**

Turn Movement Volumes

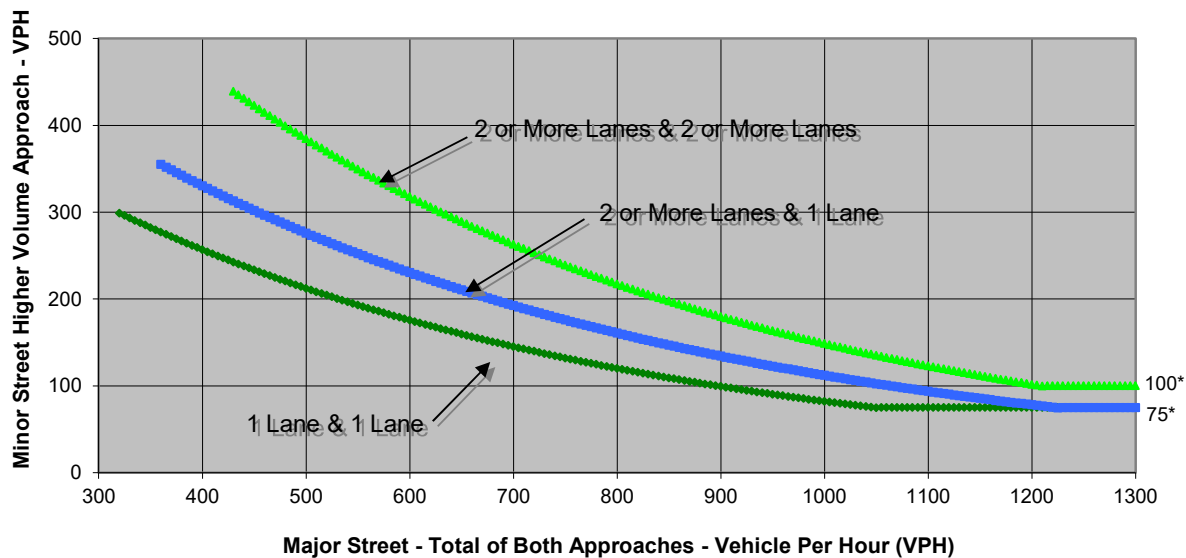
	NB	SB	EB	WB
Left	22	0	0	0
Through	0	0	832	573
Right	46	1	35	0
Total	68	1	867	573

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	E Covell Blvd	Monarch Ln	
Number of Approach Lanes	2	1	<u>NO</u>
Traffic Volume (VPH) *	1,440	68	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street E Covell Blvd
 Minor Street Monarch Ln

Project Palomino Place
 Scenario Existing Conditions
 Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	22	0	0	0
Through	0	0	832	573
Right	46	1	35	0
Total	68	1	867	573

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	28.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	68

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	0.5	68	1,509
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **E Covell Blvd**
 Minor Street **Monarch Ln**

Project **Palomino Place**
 Scenario **Existing Plus Project**
 Peak Hour **AM**

Turn Movement Volumes

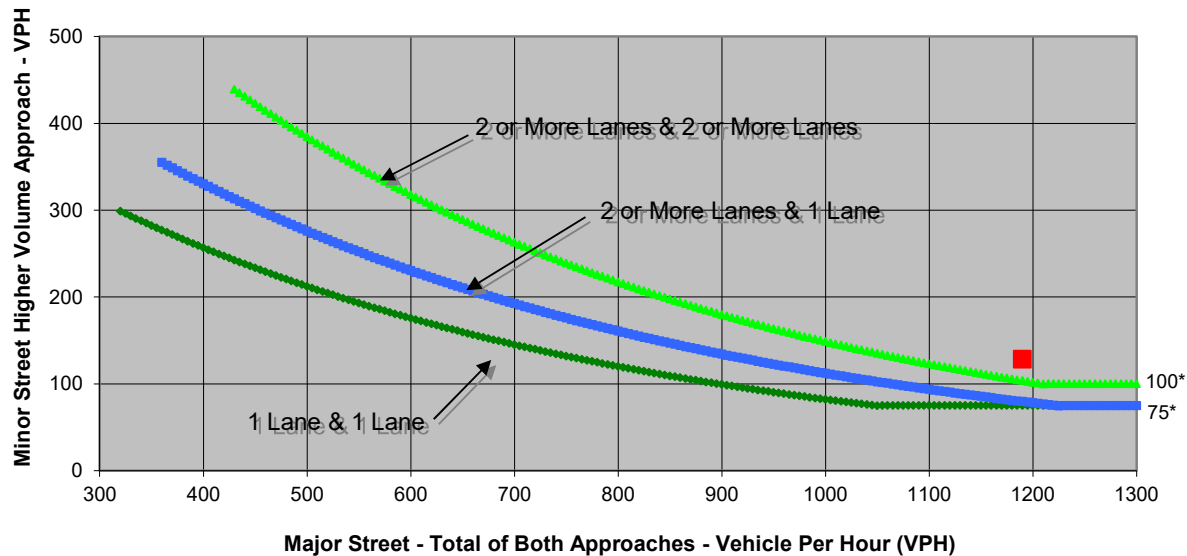
	NB	SB	EB	WB
Left	27	43	0	0
Through	5	5	668	492
Right	56	80	30	0
Total	88	128	698	492

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	E Covell Blvd	Monarch Ln	
Number of Approach Lanes	2	1	<u>YES</u>
Traffic Volume (VPH) *	1,190	128	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street E Covell Blvd
 Minor Street Monarch Ln

Project Palomino Place
 Scenario Existing Plus Project
 Peak Hour AM

Turn Movement Volumes

	NB	SB	EB	WB
Left	27	43	0	0
Through	5	5	668	492
Right	56	80	30	0
Total	88	128	698	492

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	37.4
Approach with Worst Case Delay	SB
Total Vehicles on Approach	128

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Plus Project	1.3	128	1,406
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		

Major Street **E Covell Blvd**
 Minor Street **Monarch Ln**

Project **Palomino Place**
 Scenario **Existing Plus Project**
 Peak Hour **PM**

Turn Movement Volumes

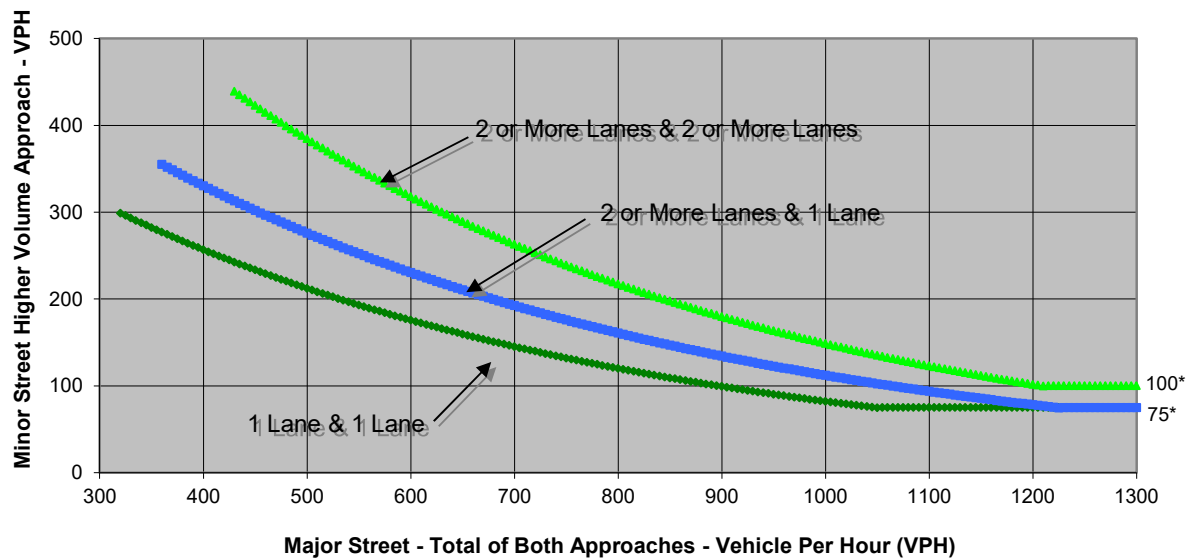
	NB	SB	EB	WB
Left	22	44	0	0
Through	5	5	832	573
Right	98	75	35	0
Total	125	124	867	573

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	E Covell Blvd	Monarch Ln	
Number of Approach Lanes	2	1	<u>YES</u>
Traffic Volume (VPH) *	1,440	125	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street E Covell Blvd
 Minor Street Monarch Ln

Project Palomino Place
 Scenario Existing Plus Project
 Peak Hour PM

Turn Movement Volumes

	NB	SB	EB	WB
Left	22	44	0	0
Through	5	5	832	573
Right	98	75	35	0
Total	125	124	867	573

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	60.3
Approach with Worst Case Delay	SB
Total Vehicles on Approach	124

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Plus Project	2.1	125	1,689
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 SB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

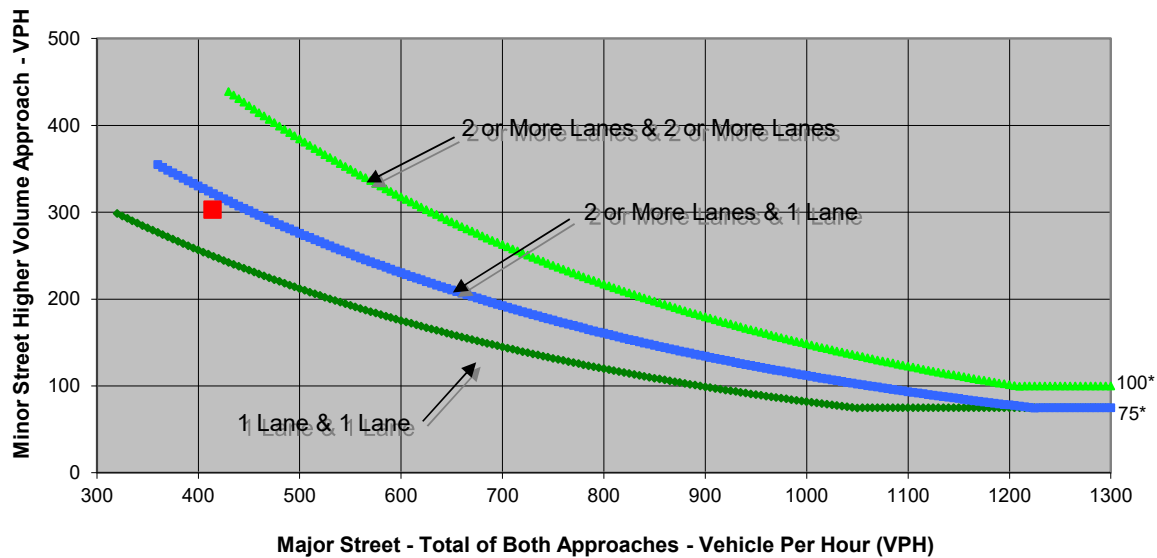
	NB	SB	EB	WB
Left	0	220	0	43
Through	0	0	209	130
Right	0	83	32	0
Total	0	303	241	173

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 SB Ramps	
Number of Approach Lanes	1	1	<u>YES</u>
Traffic Volume (VPH) *	414	303	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 SB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	220	0	43
Through	0	0	209	130
Right	0	83	32	0
Total	0	303	241	173

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	20.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	303

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	1.7	303	717
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 NB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

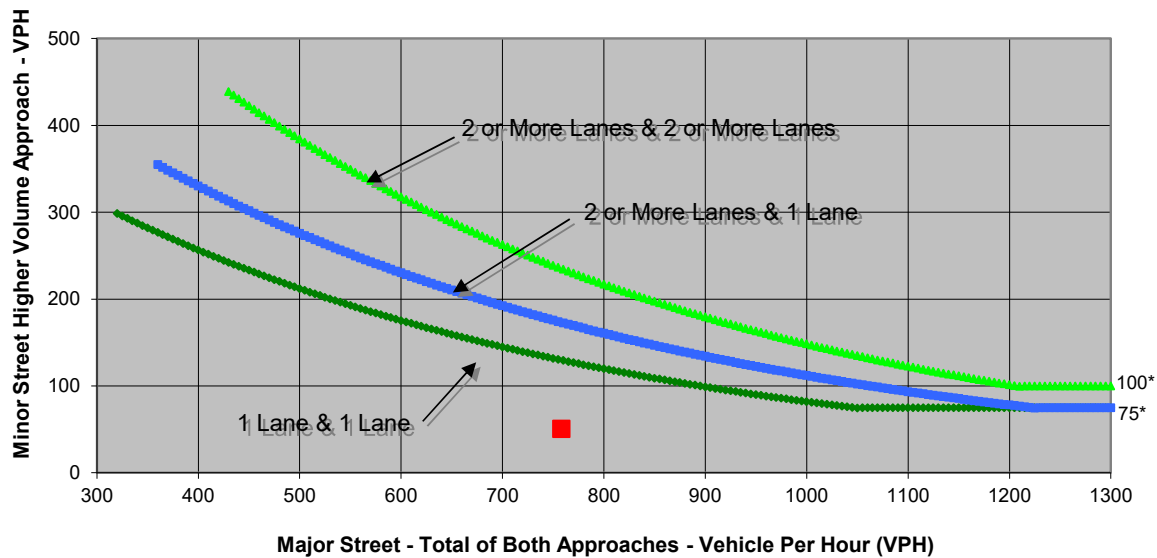
	NB	SB	EB	WB
Left	0	1	42	0
Through	0	21	387	144
Right	0	29	0	185
Total	0	51	429	329

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 NB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	758	51	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 NB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	42	0
Through	0	21	387	144
Right	0	29	0	185
Total	0	51	429	329

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	13.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	51

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	51	809
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 100A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

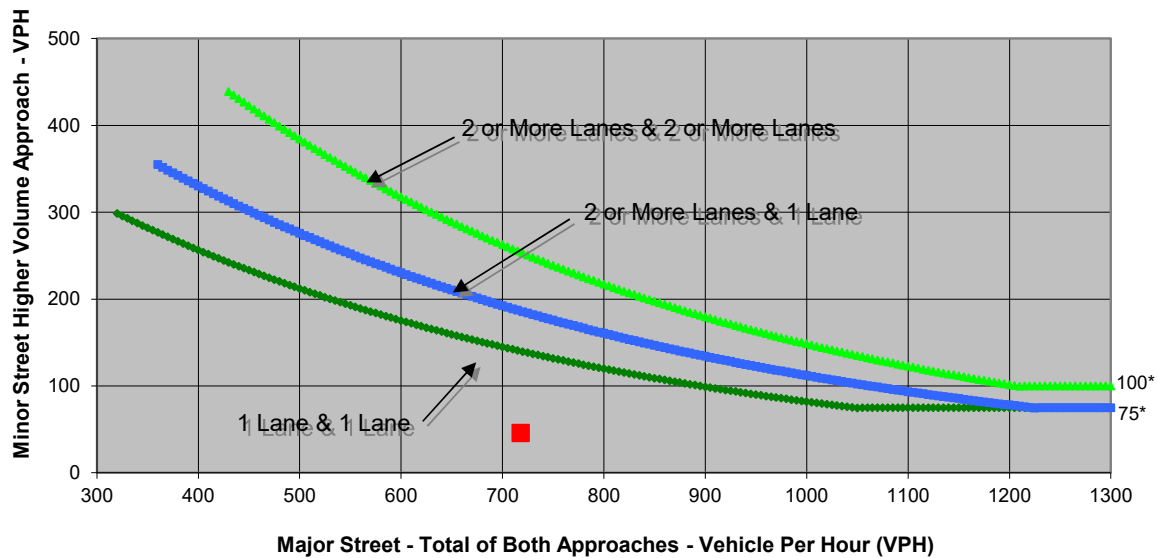
	NB	SB	EB	WB
Left	34	2	3	20
Through	0	0	327	290
Right	12	4	77	1
Total	46	6	407	311

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 100A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	718	46	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 100A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	34	2	3	20
Through	0	0	327	290
Right	12	4	77	1
Total	46	6	407	311

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	17.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	46

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	46	770
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 101A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

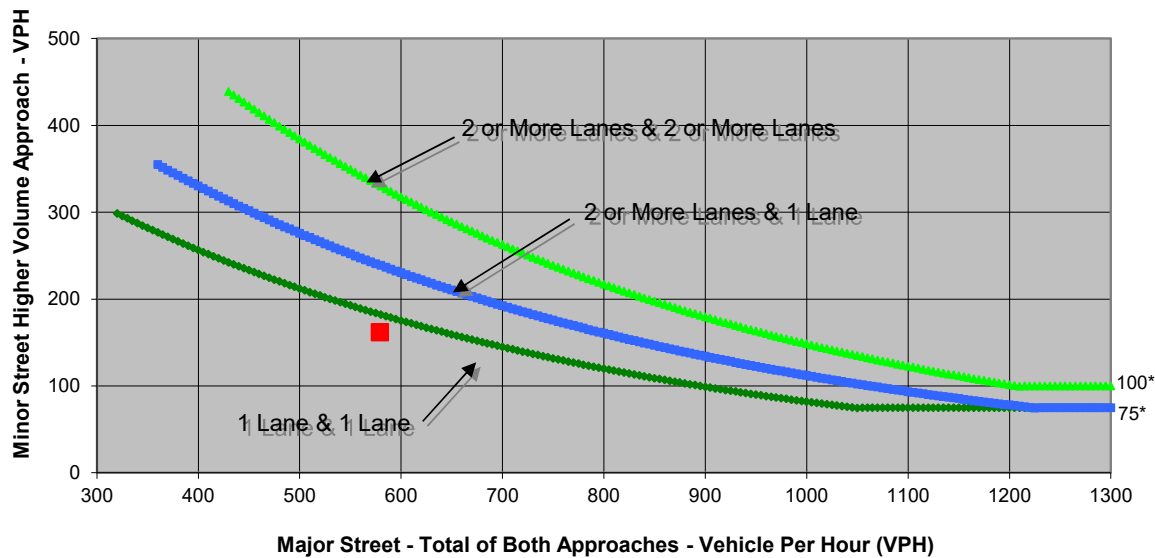
	NB	SB	EB	WB
Left	141	0	0	69
Through	0	0	142	168
Right	21	0	200	0
Total	162	0	342	237

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 101A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	579	162	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 101A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	141	0	0	69
Through	0	0	142	168
Right	21	0	200	0
Total	162	0	342	237

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	19.2
Approach with Worst Case Delay	NB
Total Vehicles on Approach	162

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.9	162	741
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 29**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

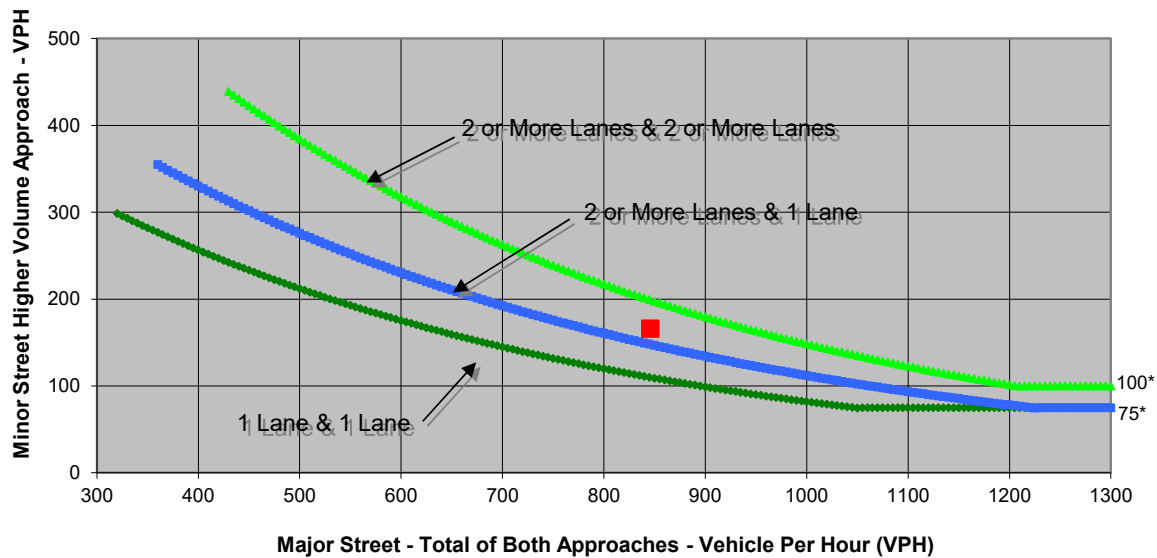
	NB	SB	EB	WB
Left	140	0	52	0
Through	229	377	0	0
Right	0	100	114	0
Total	369	477	166	0

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 29	
Number of Approach Lanes	1	2	<u>YES</u>
Traffic Volume (VPH) *	846	166	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 29

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	140	0	52	0
Through	229	377	0	0
Right	0	100	114	0
Total	369	477	166	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 18.4
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 166

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	0.8	166	1,012
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		



Major Street **CR 102**
 Minor Street **CR 28H**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

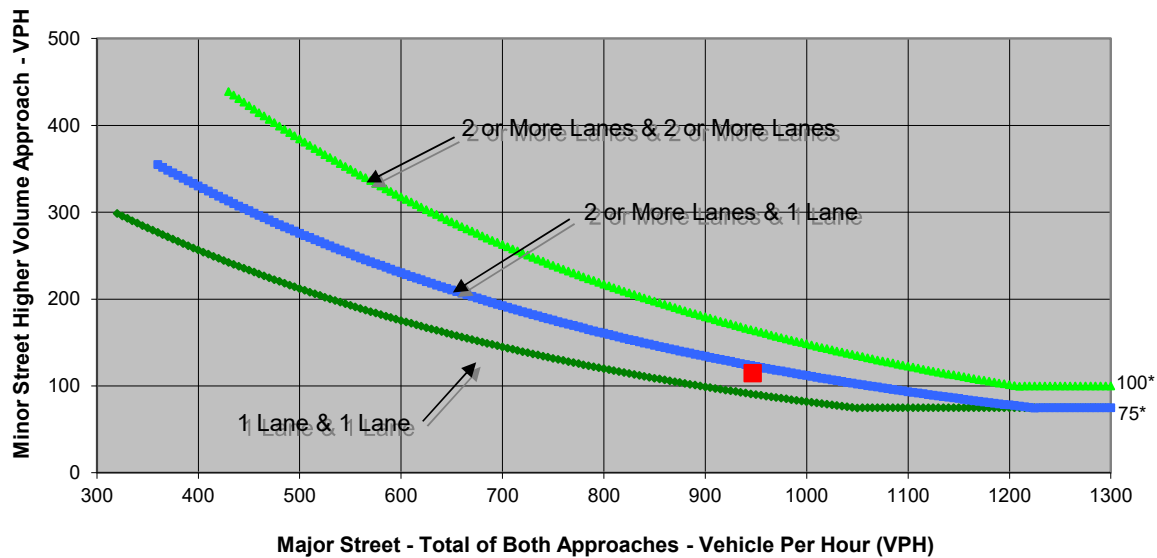
	NB	SB	EB	WB
Left	0	48	0	28
Through	457	398	0	0
Right	44	0	0	87
Total	501	446	0	115

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 28H	
Number of Approach Lanes	1	2	<u>NO</u>
Traffic Volume (VPH) *	947	115	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 28H

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	48	0	28
Through	457	398	0	0
Right	44	0	0	87
Total	501	446	0	115

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 20.6
 Approach with Worst Case Delay WB
 Total Vehicles on Approach 115

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	0.7	115	1,062
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		



Major Street **CR 102**
 Minor Street **CR 27**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

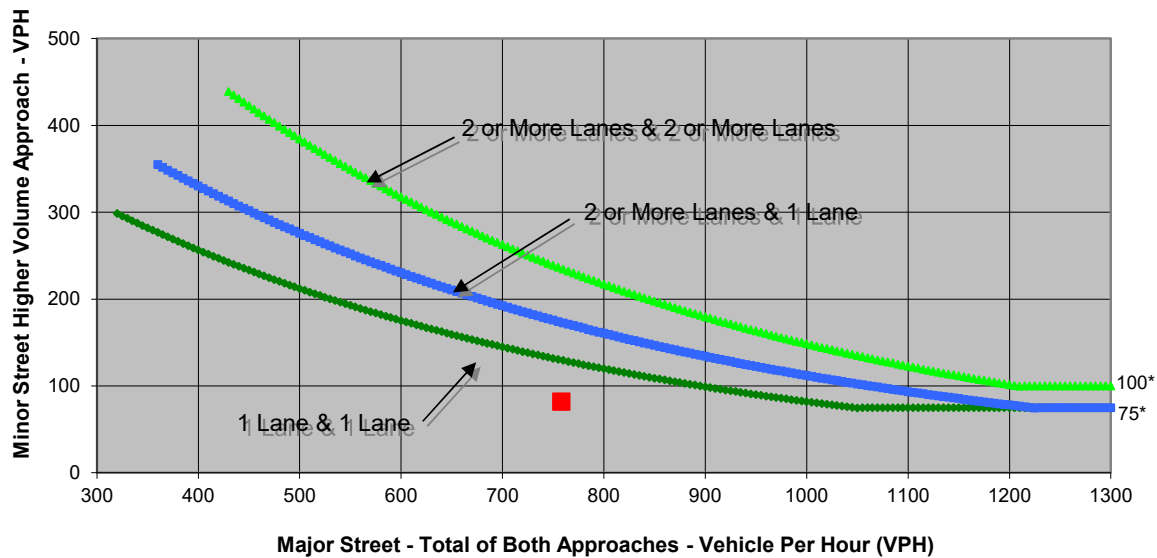
	NB	SB	EB	WB
Left	46	4	15	2
Through	211	452	6	3
Right	2	43	61	0
Total	259	499	82	5

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 27	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	758	82	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 27

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	46	4	15	2
Through	211	452	6	3
Right	2	43	61	0
Total	259	499	82	5

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 16.1
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 82

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.4	82	845
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 25A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

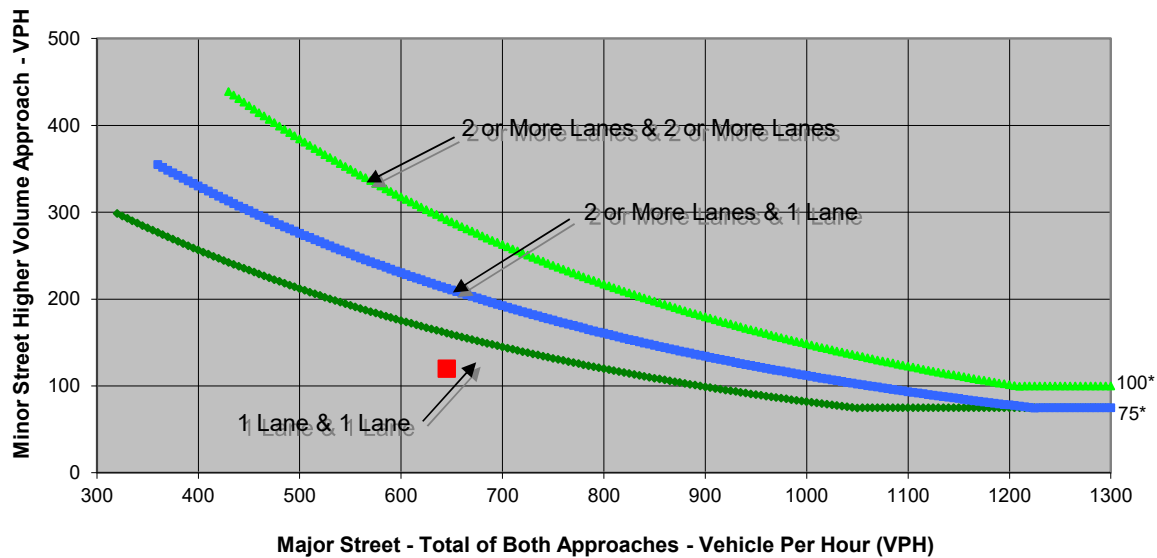
	NB	SB	EB	WB
Left	26	0	15	0
Through	199	405	0	0
Right	0	15	105	0
Total	225	420	120	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 25A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	645	120	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 25A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	26	0	15	0
Through	199	405	0	0
Right	0	15	105	0
Total	225	420	120	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 12.7
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 120

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.4	120	765
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 103**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

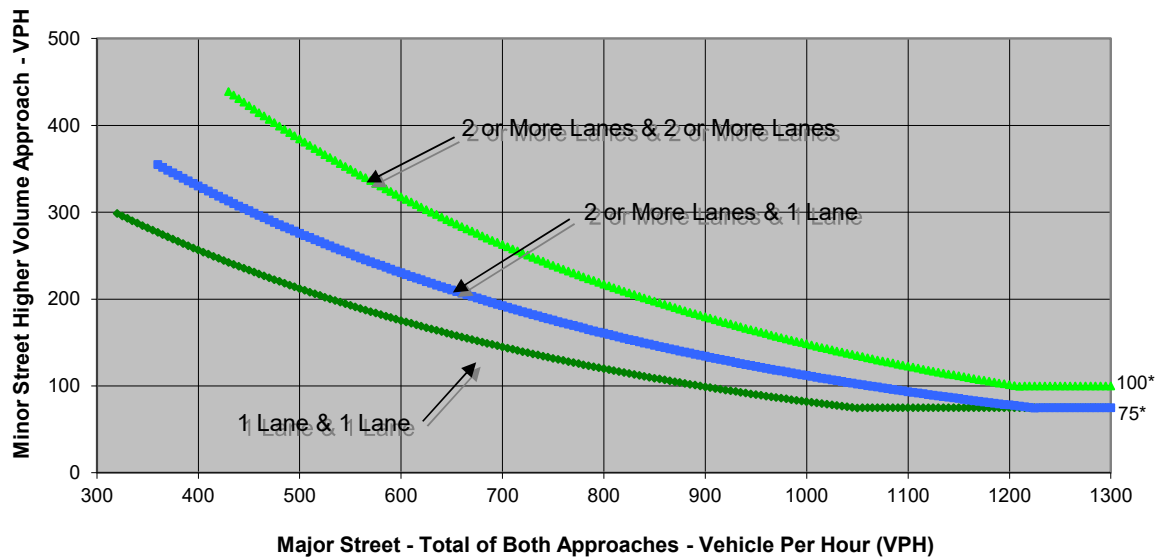
	NB	SB	EB	WB
Left	0	10	1	0
Through	0	0	90	46
Right	0	2	0	7
Total	0	12	91	53

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 103	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	144	12	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 103

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	10	1	0
Through	0	0	90	46
Right	0	2	0	7
Total	0	12	91	53

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.4
Approach with Worst Case Delay	SB
Total Vehicles on Approach	12

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0	12	156
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **Yolo County Landfill Dwy**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

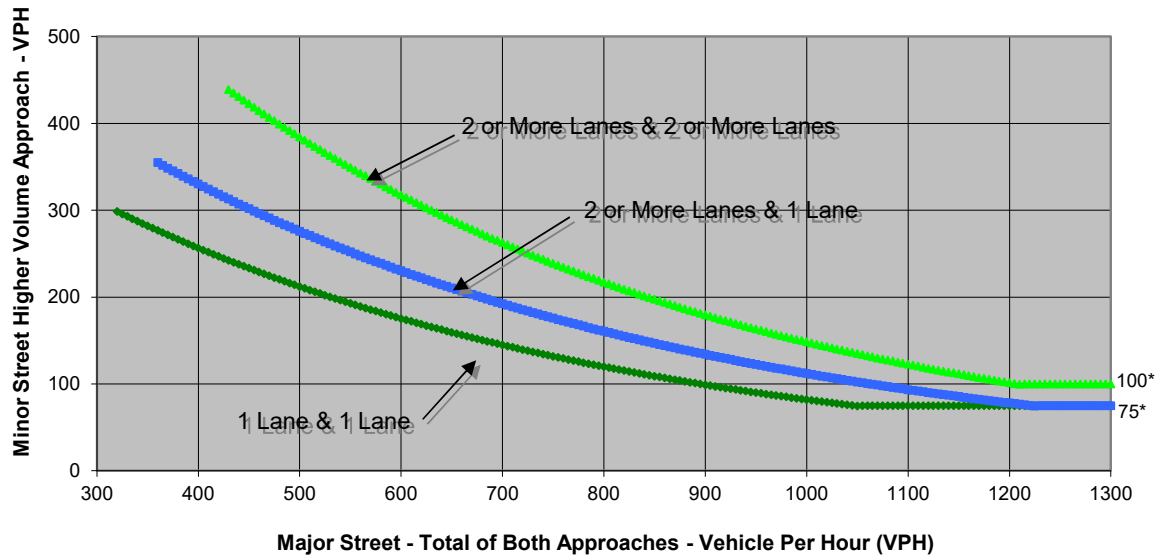
	NB	SB	EB	WB
Left	0	13	21	0
Through	0	0	69	35
Right	0	22	0	14
Total	0	35	90	49

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	Yolo County Landfill Dwy	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	139	35	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street Yolo County Landfill Dwy

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	13	21	0
Through	0	0	69	35
Right	0	22	0	14
Total	0	35	90	49

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	35

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.1	35	174
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

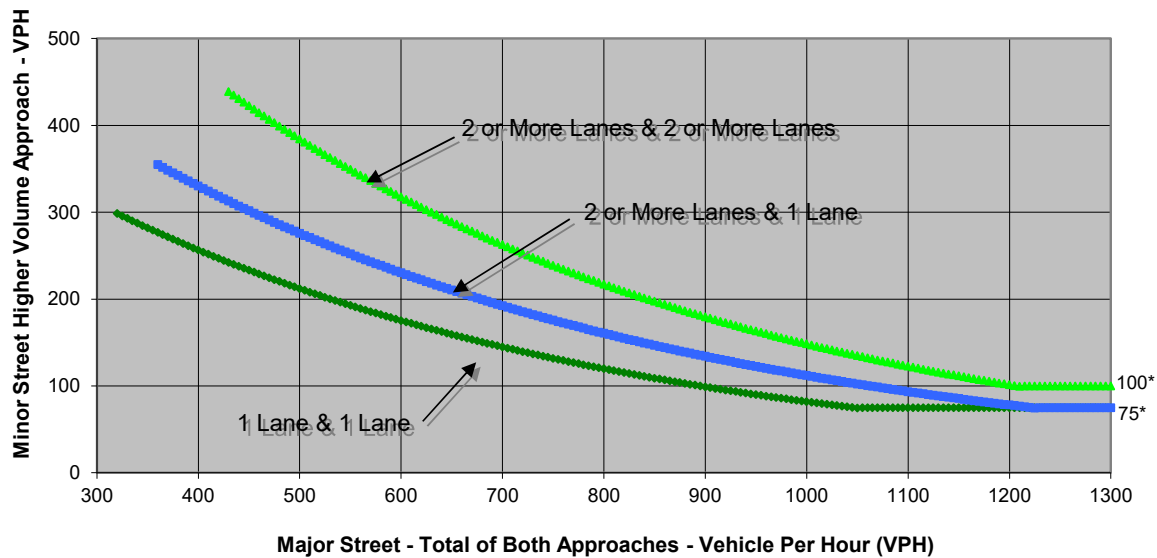
	NB	SB	EB	WB
Left	49	0	0	1
Through	0	0	2	1
Right	2	0	82	0
Total	51	0	84	2

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	86	51	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	49	0	0	1
Through	0	0	2	1
Right	2	0	82	0
Total	51	0	84	2

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.2
Approach with Worst Case Delay	NB
Total Vehicles on Approach	51

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.1	51	137
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

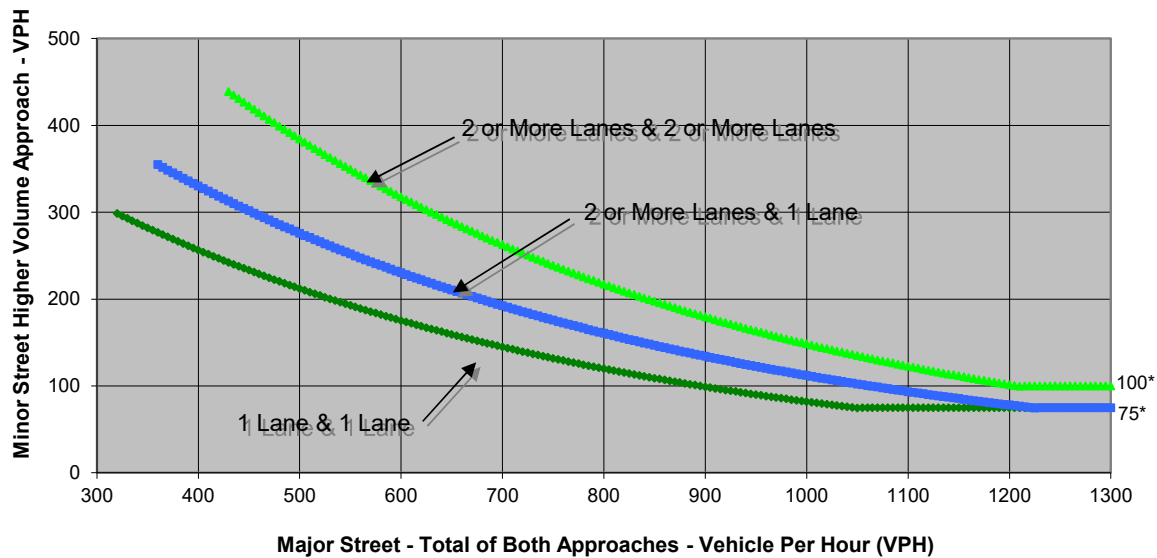
	NB	SB	EB	WB
Left	41	0	0	72
Through	0	0	7	8
Right	52	0	30	0
Total	93	0	37	80

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	93	80	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	41	0	0	72
Through	0	0	7	8
Right	52	0	30	0
Total	93	0	37	80

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 10.6
 Approach with Worst Case Delay WB
 Total Vehicles on Approach 80

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	80	210
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **I-80 WB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

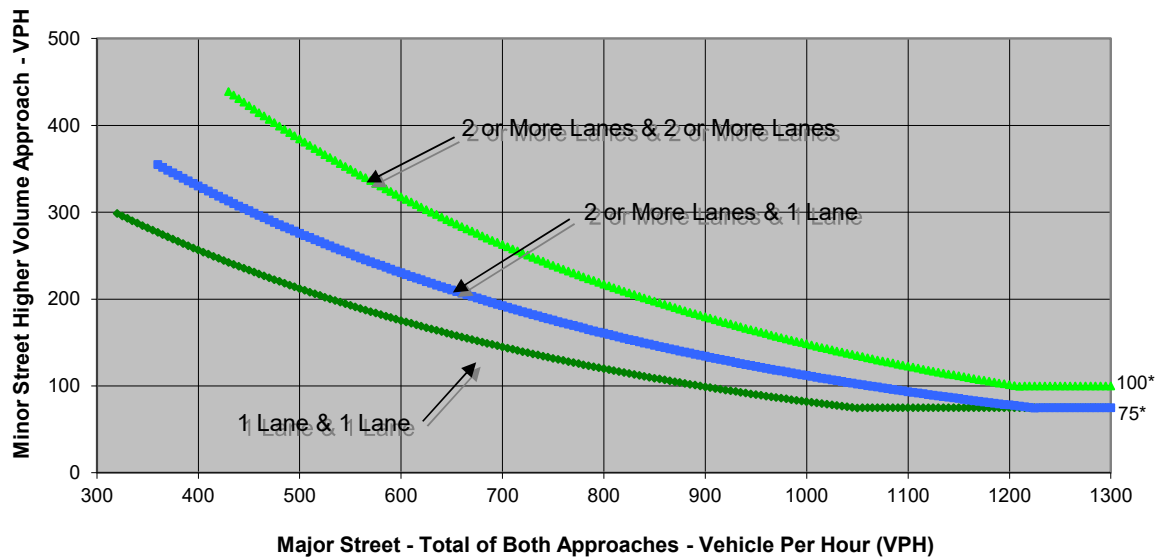
	NB	SB	EB	WB
Left	89	0	0	3
Through	0	0	100	5
Right	68	0	2	0
Total	157	0	102	8

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	I-80 WB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	110	157	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street I-80 WB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	89	0	0	3
Through	0	0	100	5
Right	68	0	2	0
Total	157	0	102	8

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	8.9
Approach with Worst Case Delay	NB
Total Vehicles on Approach	157

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	0.4	157	267
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Chiles Road**
 Minor Street **I-80 EB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

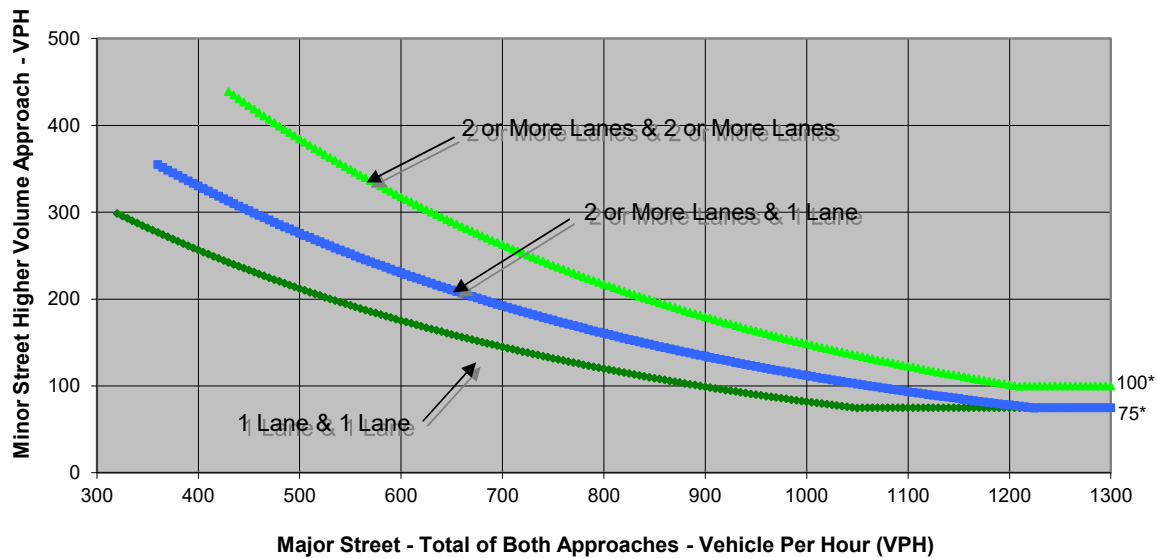
	NB	SB	EB	WB
Left	0	1	72	0
Through	0	0	7	55
Right	0	4	0	113
Total	0	5	79	168

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Chiles Road	I-80 EB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	247	5	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Chiles Road
 Minor Street I-80 EB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	72	0
Through	0	0	7	55
Right	0	4	0	113
Total	0	5	79	168

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	7.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	168

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.4	5	252
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 SB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

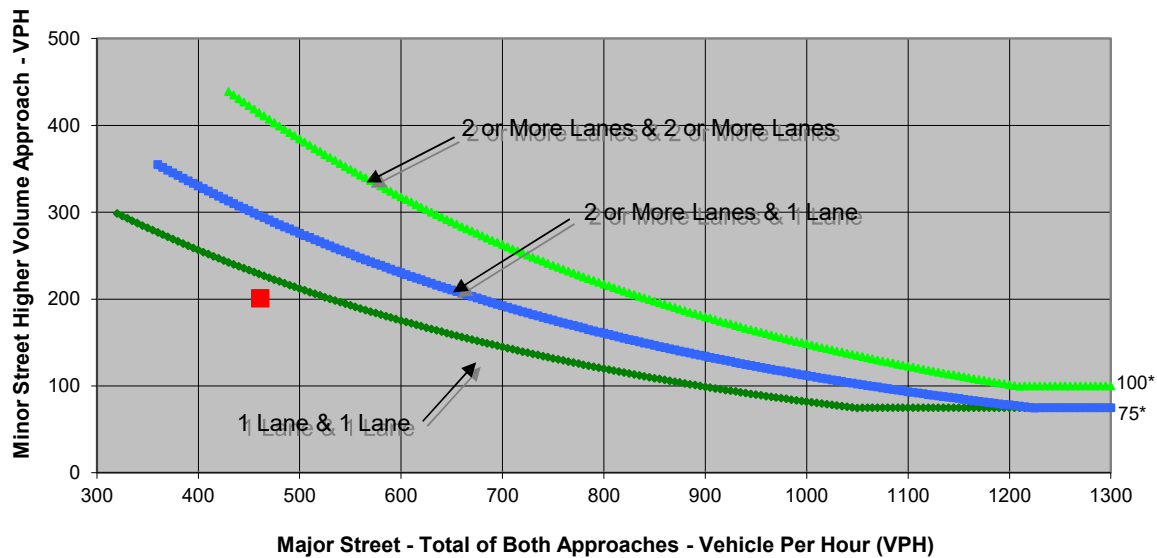
	NB	SB	EB	WB
Left	0	154	0	20
Through	0	1	258	147
Right	0	46	36	0
Total	0	201	294	167

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 SB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	461	201	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 SB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	154	0	20
Through	0	1	258	147
Right	0	46	36	0
Total	0	201	294	167

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16.1
Approach with Worst Case Delay	SB
Total Vehicles on Approach	201

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.9	201	662
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 NB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

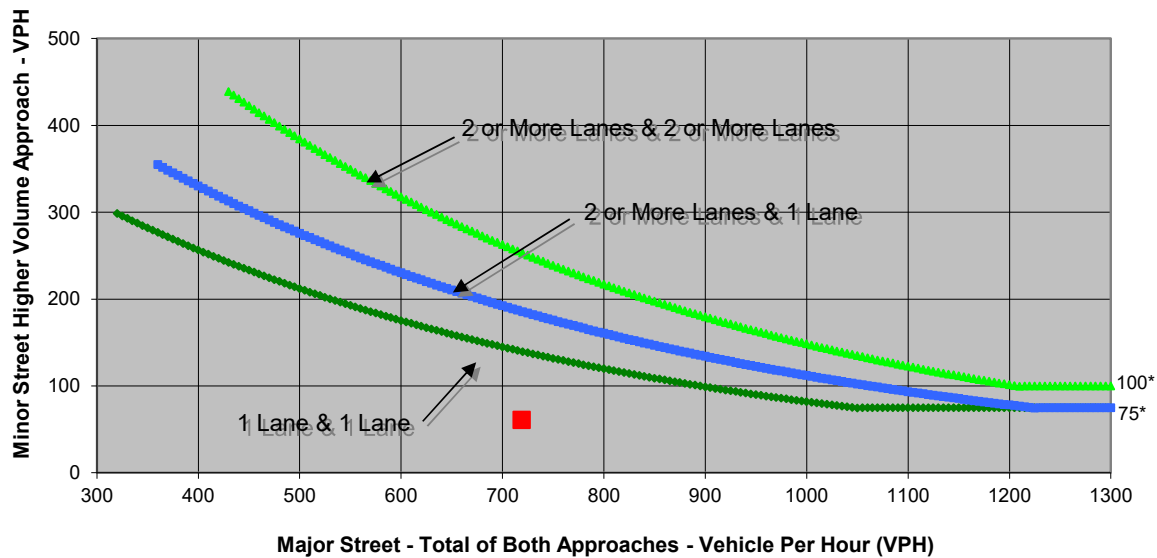
	NB	SB	EB	WB
Left	0	30	116	0
Through	0	0	296	136
Right	0	31	0	171
Total	0	61	412	307

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 NB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	719	61	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 NB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	30	116	0
Through	0	0	296	136
Right	0	31	0	171
Total	0	61	412	307

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.1
Approach with Worst Case Delay	SB
Total Vehicles on Approach	61

	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.3	61	780
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 100A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

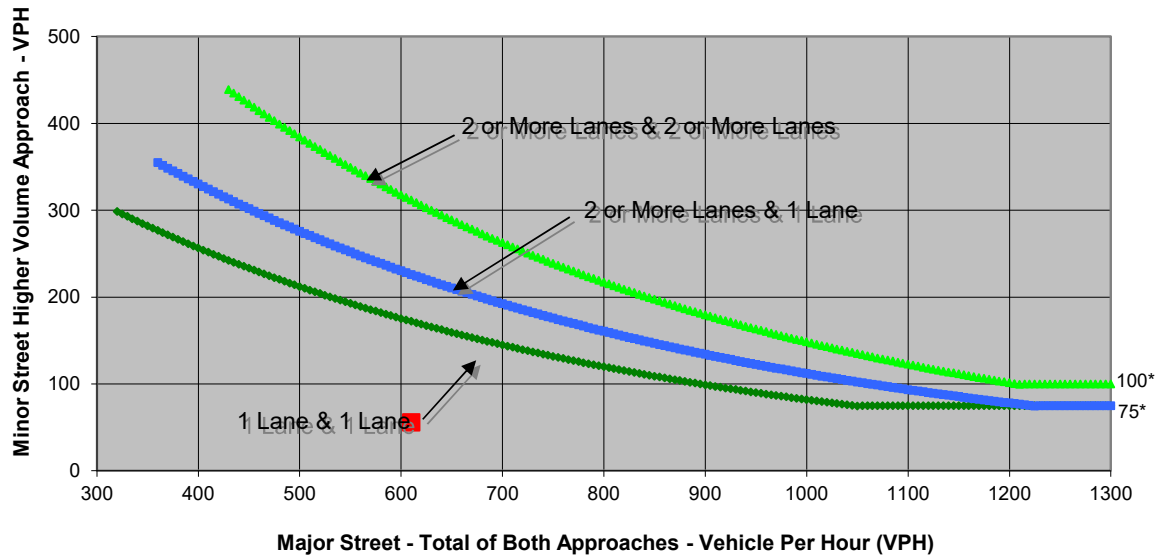
	NB	SB	EB	WB
Left	36	0	4	14
Through	2	1	294	267
Right	18	4	28	3
Total	56	5	326	284

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 100A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	610	56	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 100A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	36	0	4	14
Through	2	1	294	267
Right	18	4	28	3
Total	56	5	326	284

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.4
Approach with Worst Case Delay	NB
Total Vehicles on Approach	56

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	56	671
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 101A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

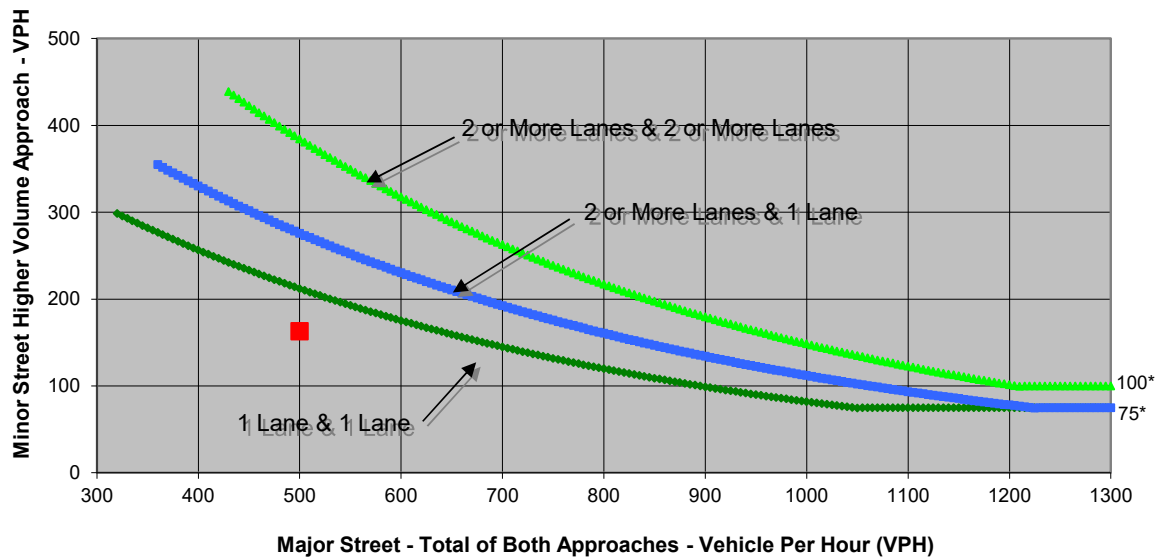
	NB	SB	EB	WB
Left	132	0	0	40
Through	0	0	176	150
Right	31	0	134	0
Total	163	0	310	190

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 101A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	500	163	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 101A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	132	0	0	40
Through	0	0	176	150
Right	31	0	134	0
Total	163	0	310	190

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16
Approach with Worst Case Delay	NB
Total Vehicles on Approach	163

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.7	163	663
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 29**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

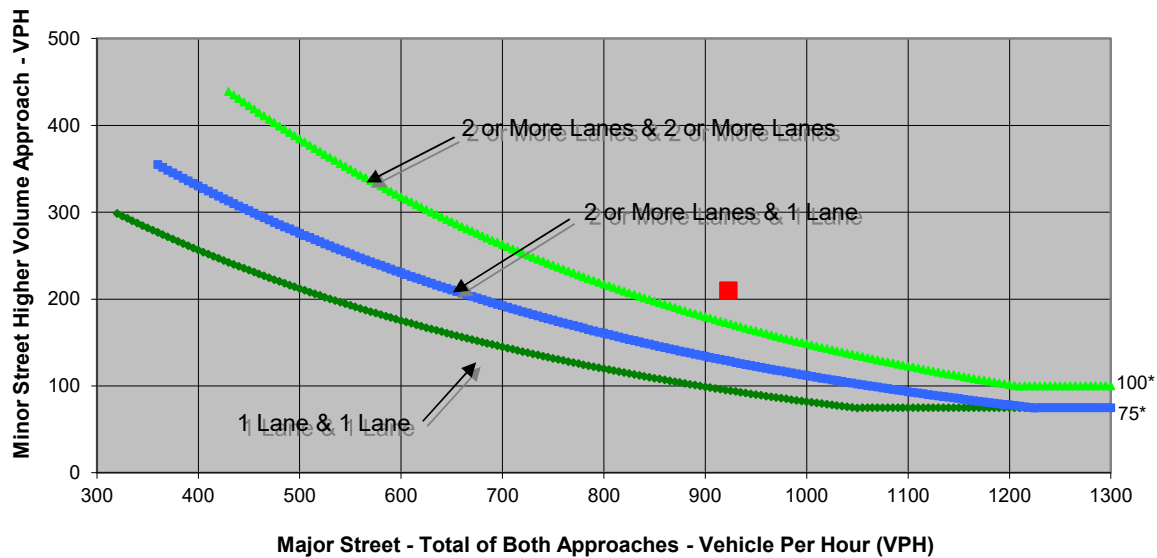
	NB	SB	EB	WB
Left	106	0	110	0
Through	391	347	0	0
Right	0	79	100	0
Total	497	426	210	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 29	
Number of Approach Lanes	1	2	<u>YES</u>
Traffic Volume (VPH) *	923	210	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 29

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	106	0	110	0
Through	391	347	0	0
Right	0	79	100	0
Total	497	426	210	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 23.5
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 210

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Serviced (vph)
Existing Conditions	1.4	210	1,133
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		



Major Street **CR 102**
 Minor Street **CR 28H**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

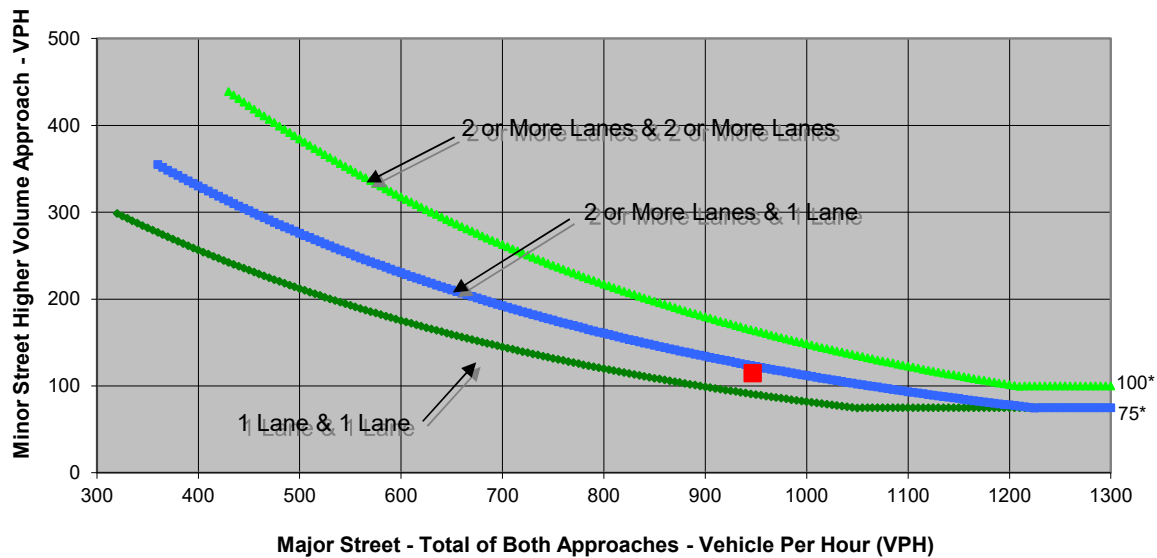
	NB	SB	EB	WB
Left	0	48	0	28
Through	457	398	0	0
Right	44	0	0	87
Total	501	446	0	115

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 28H	
Number of Approach Lanes	1	2	<u>NO</u>
Traffic Volume (VPH) *	947	115	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 28H

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	48	0	28
Through	457	398	0	0
Right	44	0	0	87
Total	501	446	0	115

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 20.6
 Approach with Worst Case Delay WB
 Total Vehicles on Approach 115

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.7	115	1,062
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 27**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

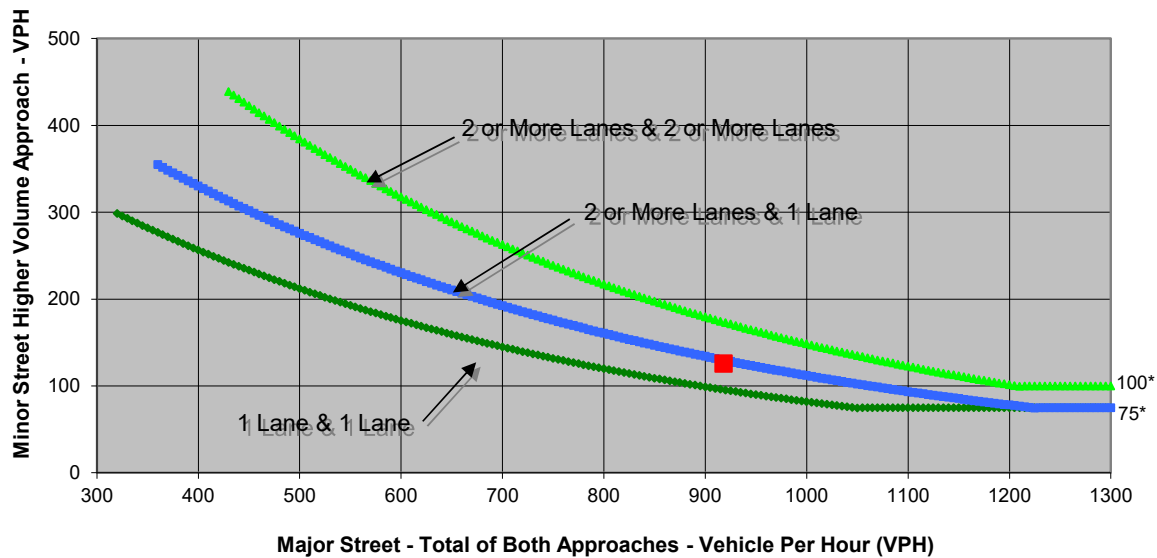
	NB	SB	EB	WB
Left	55	3	35	3
Through	474	367	9	13
Right	1	18	82	4
Total	530	388	126	20

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 27	
Number of Approach Lanes	1	1	<u>YES</u>
Traffic Volume (VPH) *	918	126	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 27

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	55	3	35	3
Through	474	367	9	13
Right	1	18	82	4
Total	530	388	126	20

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 21.6
 Approach with Worst Case Delay NB
 Total Vehicles on Approach 530

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	3.2	126	1,064
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		



Major Street **CR 102**
 Minor Street **CR 25A**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

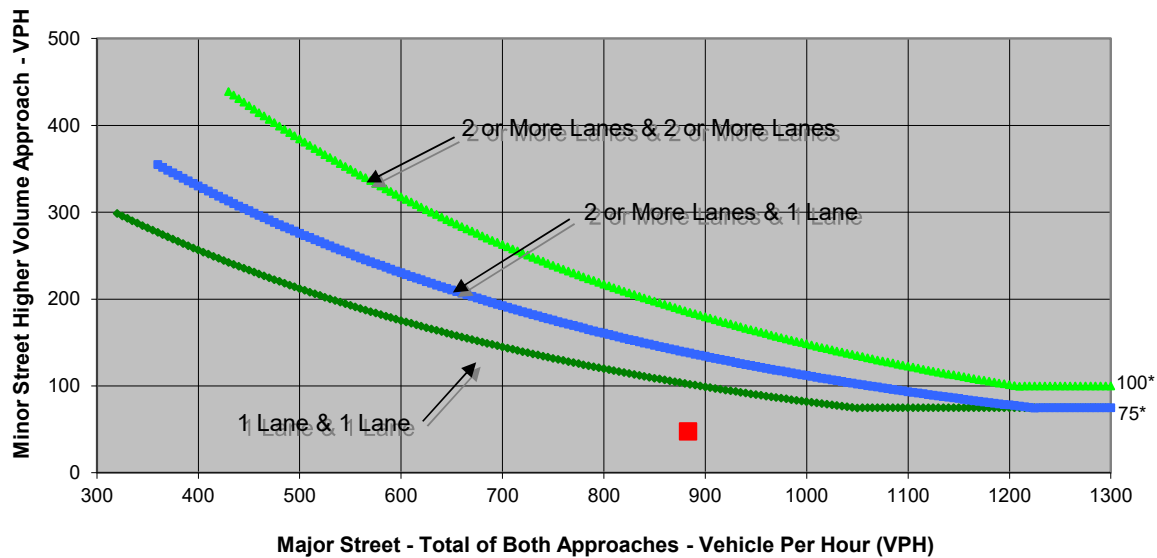
	NB	SB	EB	WB
Left	55	0	10	0
Through	455	345	0	0
Right	0	28	38	0
Total	510	373	48	0

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 25A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	883	48	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 25A

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	55	0	10	0
Through	455	345	0	0
Right	0	28	38	0
Total	510	373	48	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 12.4
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 48

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	48	931
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 103**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

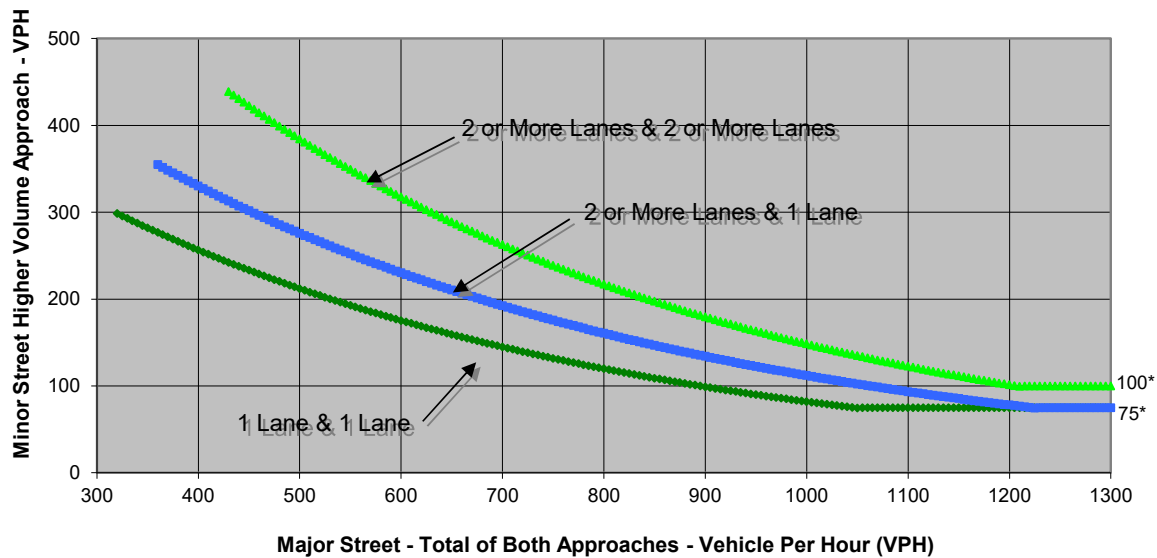
	NB	SB	EB	WB
Left	0	11	0	0
Through	0	0	94	107
Right	0	4	0	22
Total	0	15	94	129

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 103	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	223	15	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 103

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	11	0	0
Through	0	0	94	107
Right	0	4	0	22
Total	0	15	94	129

Major Street Direction

North/South
 x East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 9.9
 Approach with Worst Case Delay SB
 Total Vehicles on Approach 15

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0	15	238
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **Yolo County Landfill Dwy**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

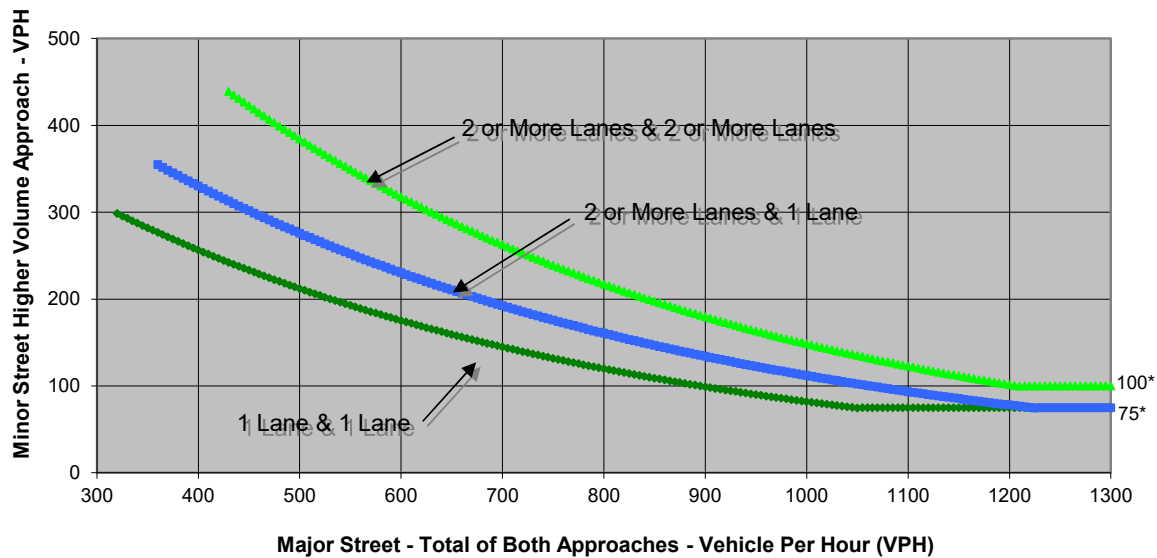
	NB	SB	EB	WB
Left	0	16	1	0
Through	0	0	105	65
Right	0	48	0	0
Total	0	64	106	65

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	Yolo County Landfill Dwy	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	171	64	

* Note: Traffic Volume for Major Street is Total Volume of Both Approches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street Yolo County Landfill Dwy

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	16	1	0
Through	0	0	105	65
Right	0	48	0	0
Total	0	64	106	65

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	SB
Total Vehicles on Approach	64

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	64	235
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

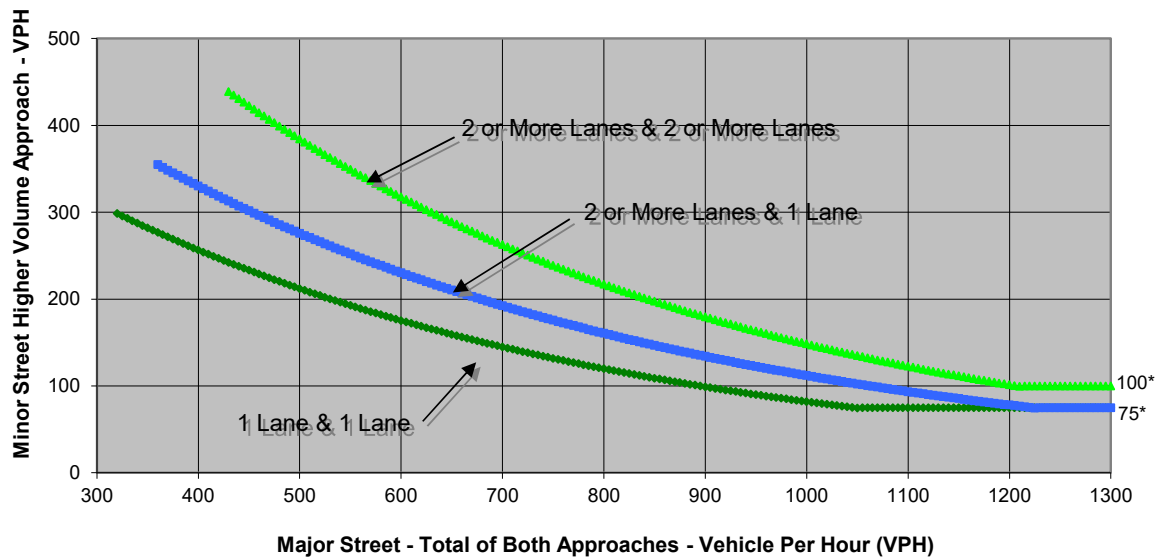
	NB	SB	EB	WB
Left	66	0	0	1
Through	0	0	0	0
Right	0	0	121	0
Total	66	0	121	1

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	122	66	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	66	0	0	1
Through	0	0	0	0
Right	0	0	121	0
Total	66	0	121	1

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	NB
Total Vehicles on Approach	66

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.2	66	188
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **CR 32A**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

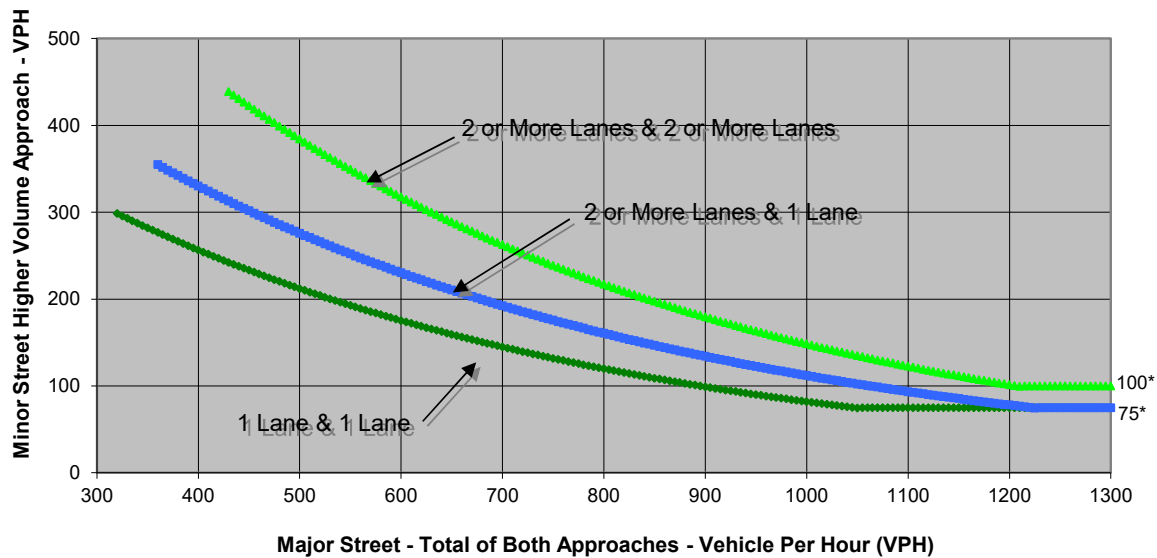
	NB	SB	EB	WB
Left	41	0	0	122
Through	0	0	5	9
Right	59	0	194	0
Total	100	0	199	131

Major Street Direction

x North/South
 East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	100	199	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	41	0	0	122
Through	0	0	5	9
Right	59	0	194	0
Total	100	0	199	131

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 14.8
 Approach with Worst Case Delay WB
 Total Vehicles on Approach 131

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.5	199	430
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **I-80 WB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

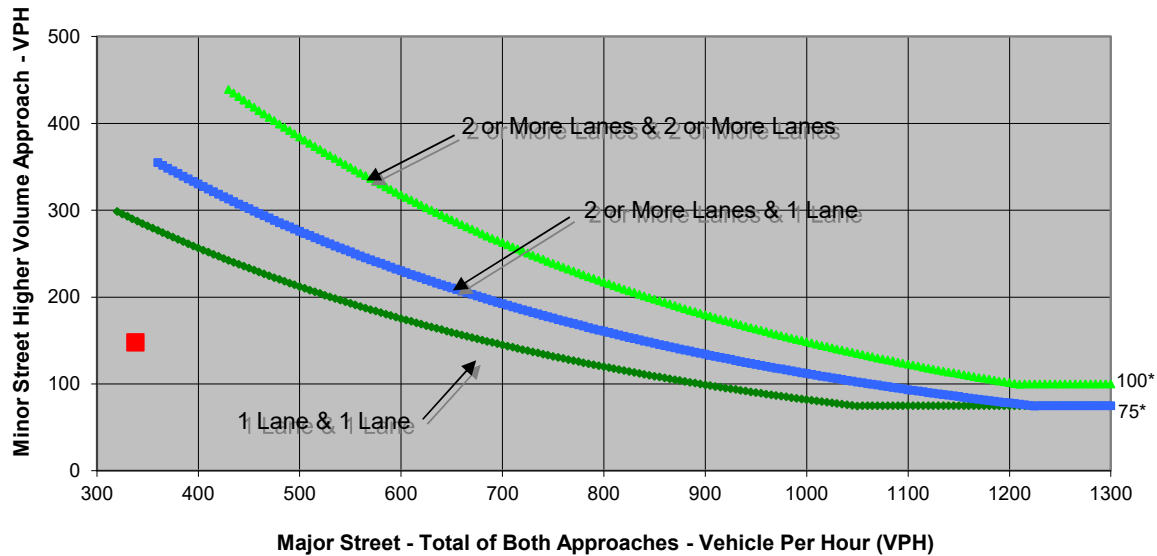
	NB	SB	EB	WB
Left	97	0	0	8
Through	0	0	321	7
Right	51	0	2	0
Total	148	0	323	15

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	I-80 WB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	338	148	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street I-80 WB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	97	0	0	8
Through	0	0	321	7
Right	51	0	2	0
Total	148	0	323	15

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	6.1
Approach with Worst Case Delay	NB
Total Vehicles on Approach	148

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	0.3	148	486
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Chiles Road**
 Minor Street **I-80 EB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

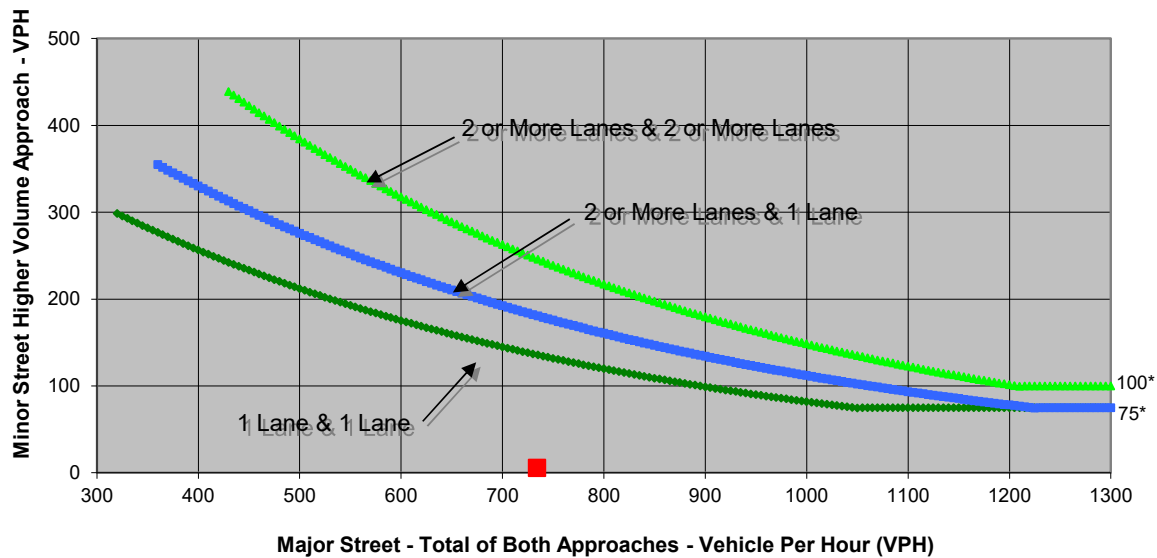
	NB	SB	EB	WB
Left	0	2	349	0
Through	0	0	13	52
Right	0	4	0	320
Total	0	6	362	372

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Chiles Road	I-80 EB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	734	6	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Chiles Road
 Minor Street I-80 EB Ramps

Project Palomino Place LTA
 Scenario Existing Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	2	349	0
Through	0	0	13	52
Right	0	4	0	320
Total	0	6	362	372

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	392.2
Approach with Worst Case Delay	EB
Total Vehicles on Approach	362

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Conditions	39.4	6	740
Limiting Value	4	100	800
Condition Satisfied?	Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 SB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

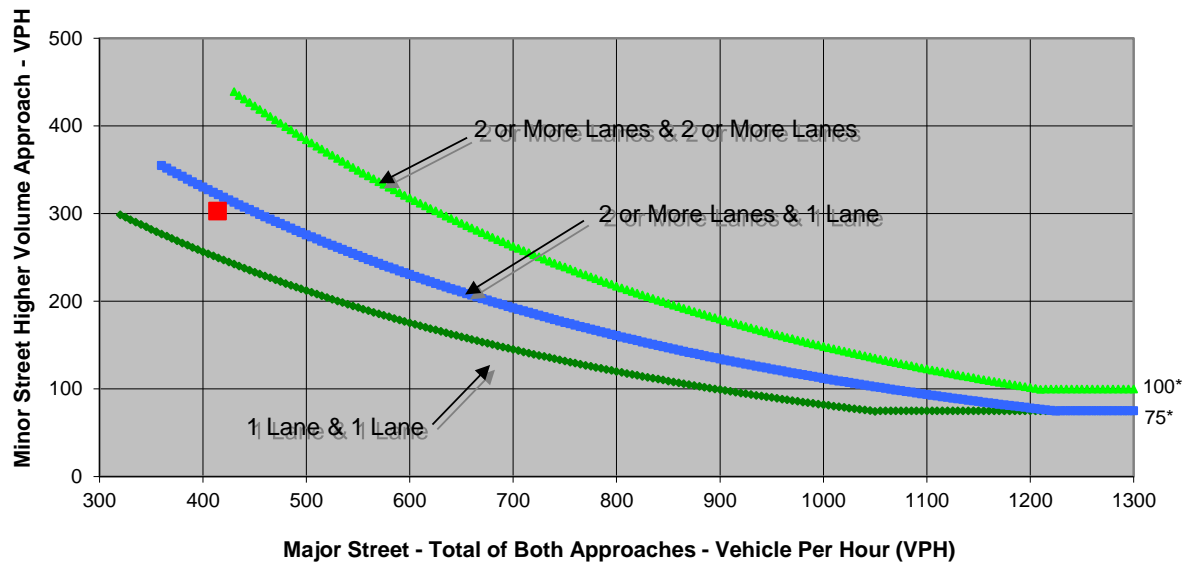
	NB	SB	EB	WB
Left	0	220	0	43
Through	0	0	209	130
Right	0	83	32	0
Total	0	303	241	173

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 SB Ramps	
Number of Approach Lanes	1	1	<u>YES</u>
Traffic Volume (VPH) *	414	303	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 SB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	220	0	43
Through	0	0	209	130
Right	0	83	32	0
Total	0	303	241	173

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	20.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	303

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	1.7	303	717
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 NB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

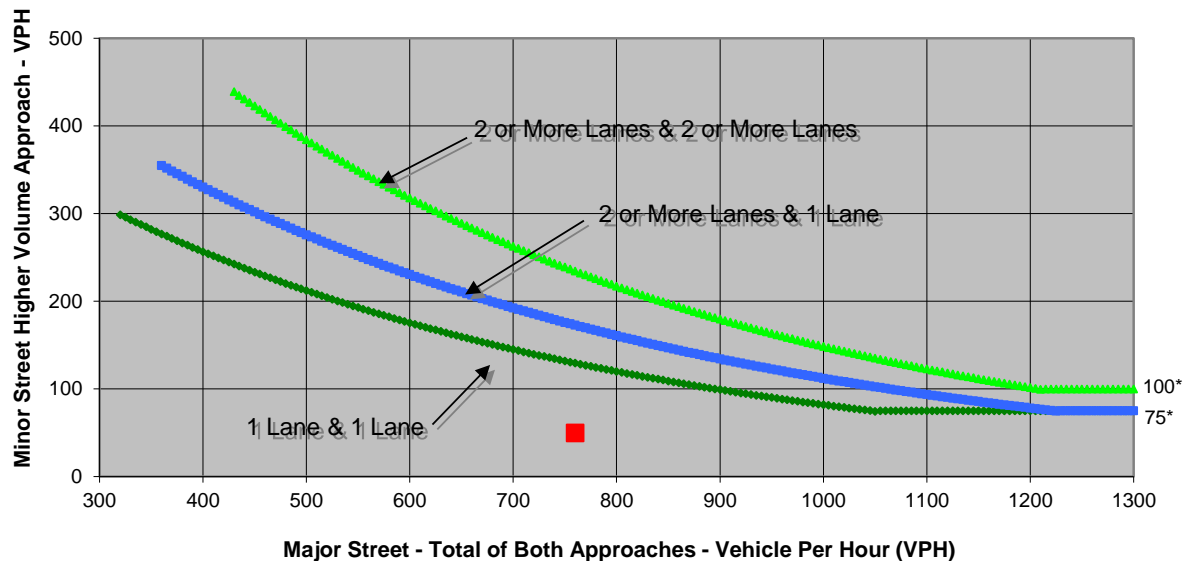
	NB	SB	EB	WB
Left	0	21	42	0
Through	0	0	387	144
Right	0	29	0	187
Total	0	50	429	331

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 NB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	760	50	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 NB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	21	42	0
Through	0	0	387	144
Right	0	29	0	187
Total	0	50	429	331

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	13.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	50

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	50	810
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 100A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

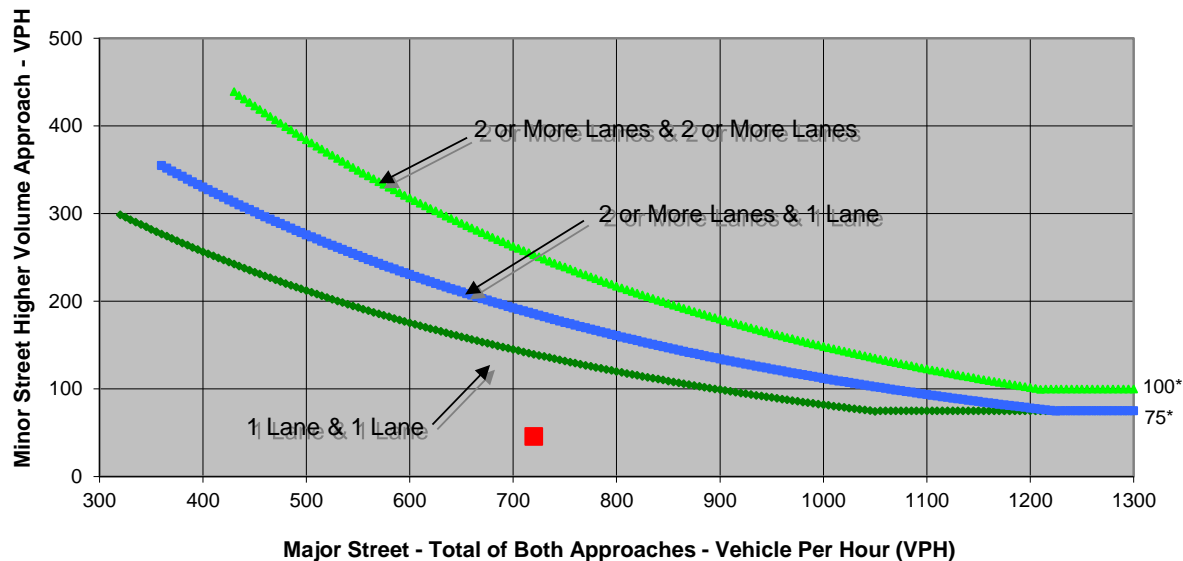
	NB	SB	EB	WB
Left	34	2	3	20
Through	0	0	327	292
Right	12	4	77	1
Total	46	6	407	313

Major Street Direction

North/South
x East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 100A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	720	46	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 100A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	34	2	3	20
Through	0	0	327	292
Right	12	4	77	1
Total	46	6	407	313

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.5
Approach with Worst Case Delay	NB
Total Vehicles on Approach	46

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	46	772
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 101A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

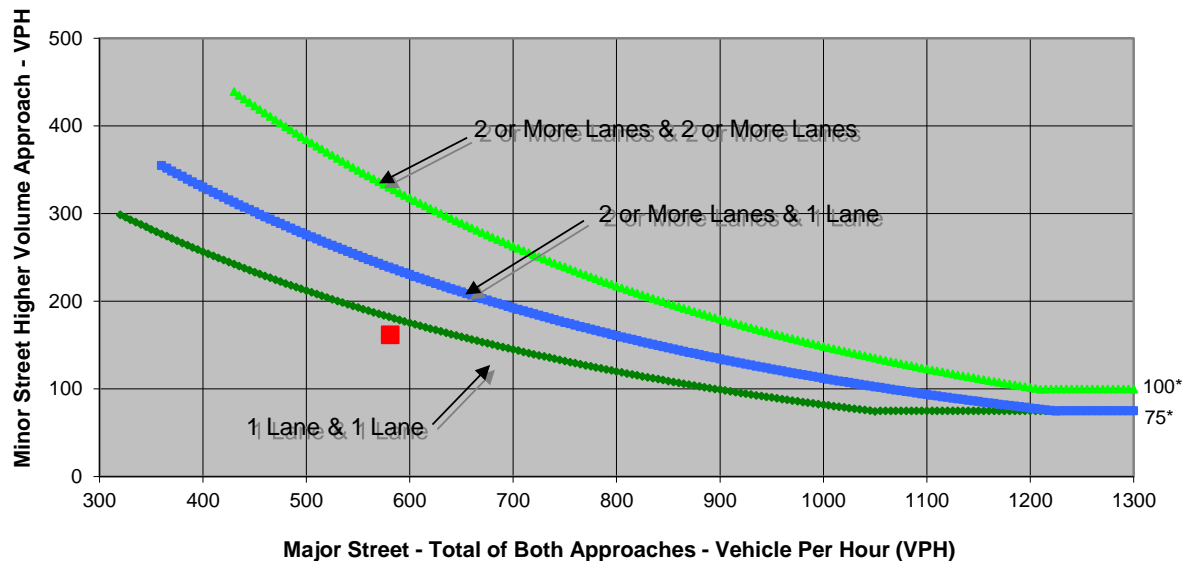
	NB	SB	EB	WB
Left	141	0	0	69
Through	0	0	142	170
Right	21	0	200	0
Total	162	0	342	239

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 101A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	581	162	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 101A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	141	0	0	69
Through	0	0	142	170
Right	21	0	200	0
Total	162	0	342	239

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16
Approach with Worst Case Delay	NB
Total Vehicles on Approach	162

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.7	162	743
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 29**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

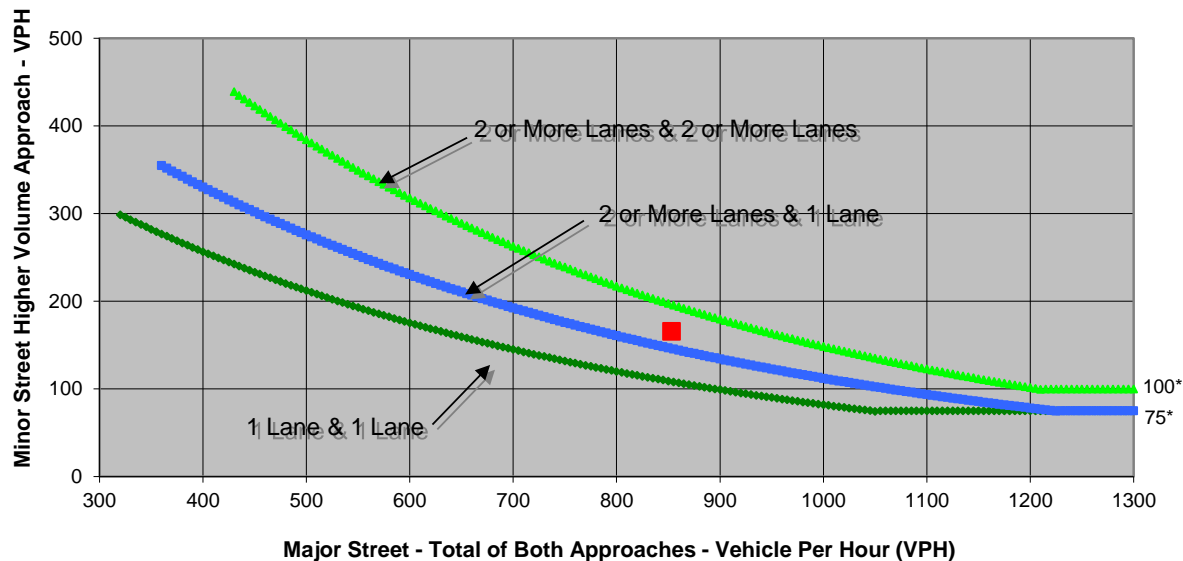
	NB	SB	EB	WB
Left	142	0	52	0
Through	233	378	0	0
Right	0	100	114	0
Total	375	478	166	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 29	
Number of Approach Lanes	1	2	<u>YES</u>
Traffic Volume (VPH) *	853	166	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 29

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	142	0	52	0
Through	233	378	0	0
Right	0	100	114	0
Total	375	478	166	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 24.3
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 166

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	1.1	166	1,019
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 28H**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

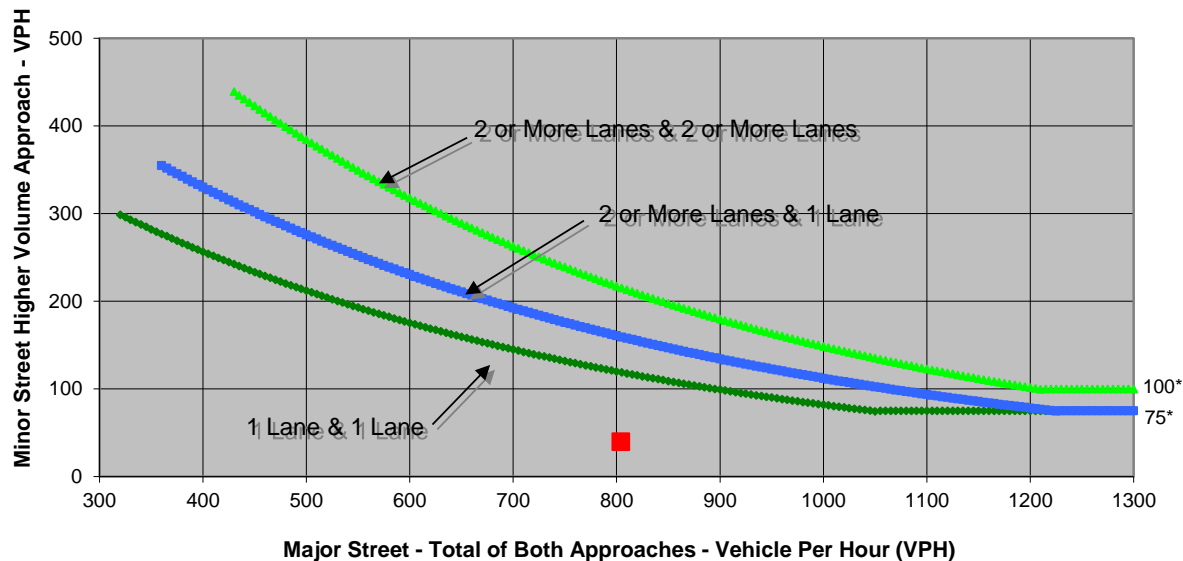
	NB	SB	EB	WB
Left	0	57	0	16
Through	258	462	0	0
Right	27	0	0	24
Total	285	519	0	40

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 28H	
Number of Approach Lanes	1	2	<u>NO</u>
Traffic Volume (VPH) *	804	40	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 28H

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	57	0	16
Through	258	462	0	0
Right	27	0	0	24
Total	285	519	0	40

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	2
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	20.8
Approach with Worst Case Delay	WB
Total Vehicles on Approach	40

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	40	844
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 27**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

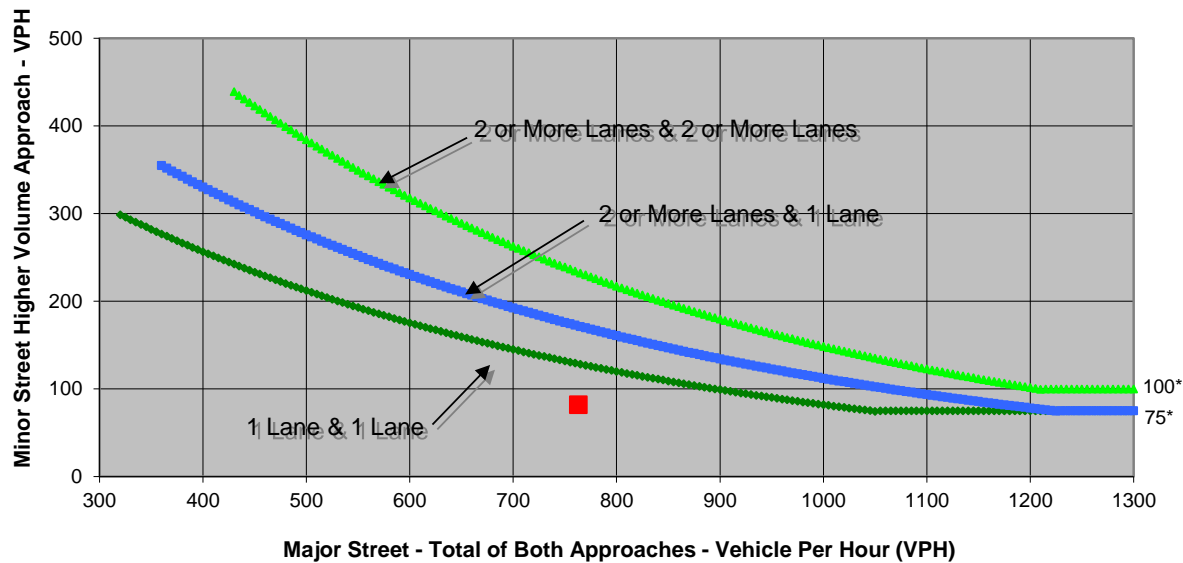
	NB	SB	EB	WB
Left	46	4	15	2
Through	215	453	6	3
Right	2	43	61	0
Total	263	500	82	5

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 27	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	763	82	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 27

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	46	4	15	2
Through	215	453	6	3
Right	2	43	61	0
Total	263	500	82	5

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	21.9
Approach with Worst Case Delay	NB
Total Vehicles on Approach	263

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	1.6	82	850
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 25A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

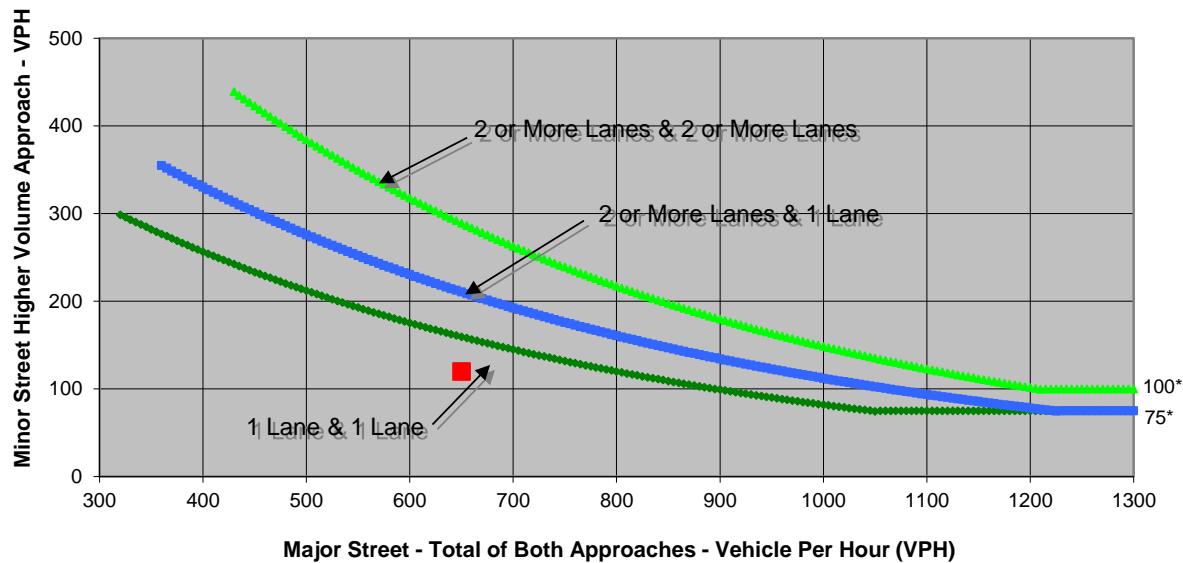
	NB	SB	EB	WB
Left	26	0	15	0
Through	203	406	0	0
Right	0	15	105	0
Total	229	421	120	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 25A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	650	120	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 25A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	26	0	15	0
Through	203	406	0	0
Right	0	15	105	0
Total	229	421	120	0

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	12.5
Approach with Worst Case Delay	EB
Total Vehicles on Approach	120

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.4	120	770
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 103**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

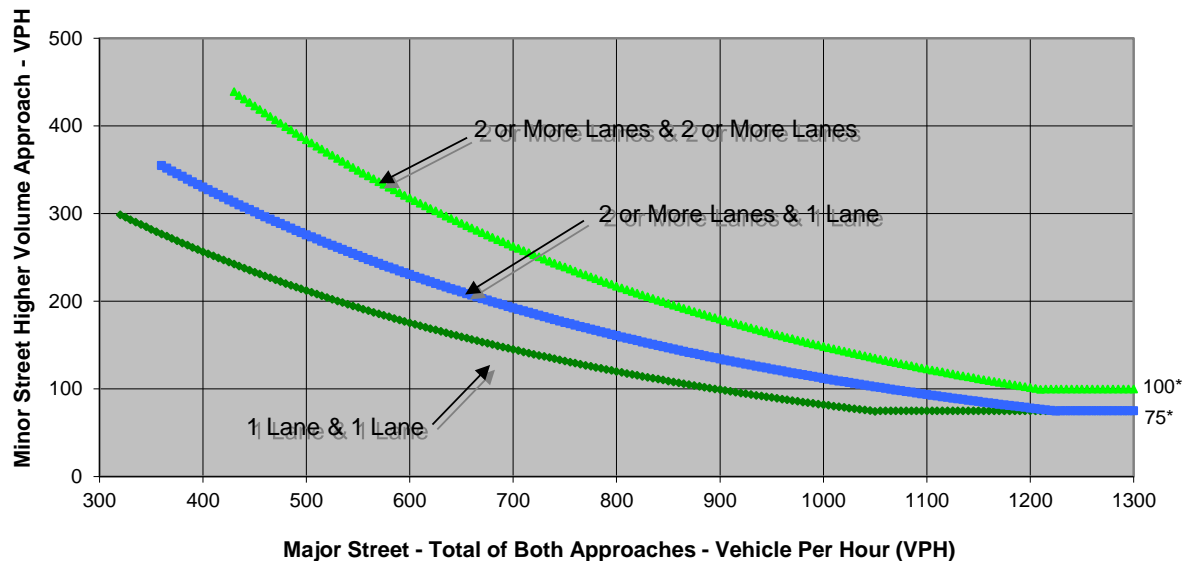
	NB	SB	EB	WB
Left	0	10	1	0
Through	0	0	90	46
Right	0	2	0	7
Total	0	12	91	53

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 103	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	144	12	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 103

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	10	1	0
Through	0	0	90	46
Right	0	2	0	7
Total	0	12	91	53

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.9
Approach with Worst Case Delay	SB
Total Vehicles on Approach	12

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0	12	156
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **CR 28H**
 Minor Street **Yolo County Landfill Dwy**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

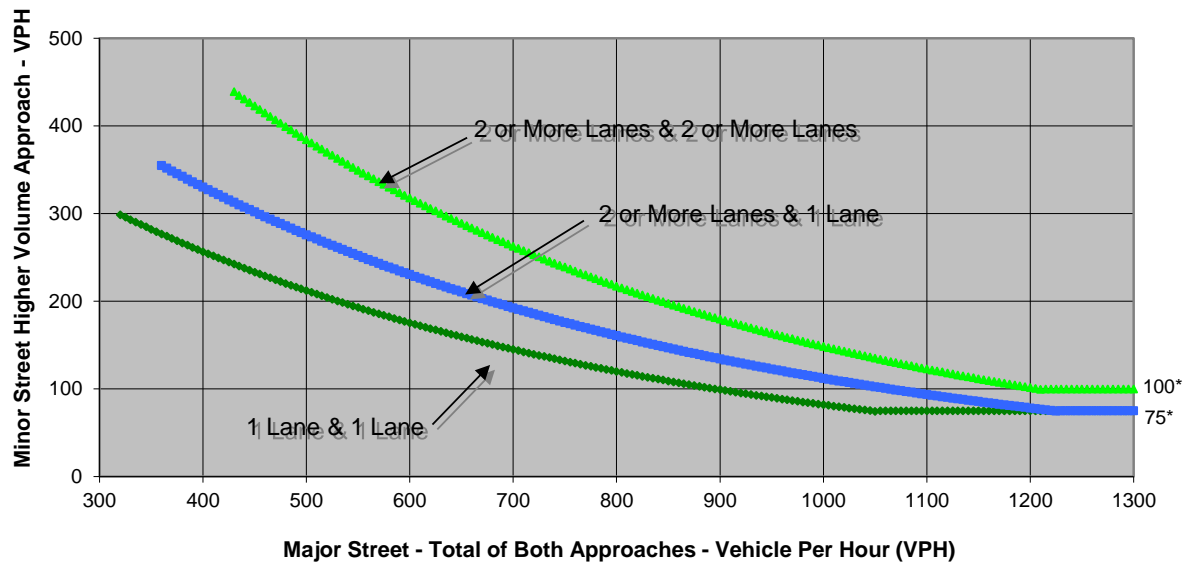
	NB	SB	EB	WB
Left	0	13	21	0
Through	0	0	69	35
Right	0	22	0	14
Total	0	35	90	49

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



	Major Street	Minor Street	Warrant Met
	CR 28H	Yolo County Landfill Dwy	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	139	35	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street Yolo County Landfill Dwy

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	13	21	0
Through	0	0	69	35
Right	0	22	0	14
Total	0	35	90	49

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	SB
Total Vehicles on Approach	35

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.1	35	174
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

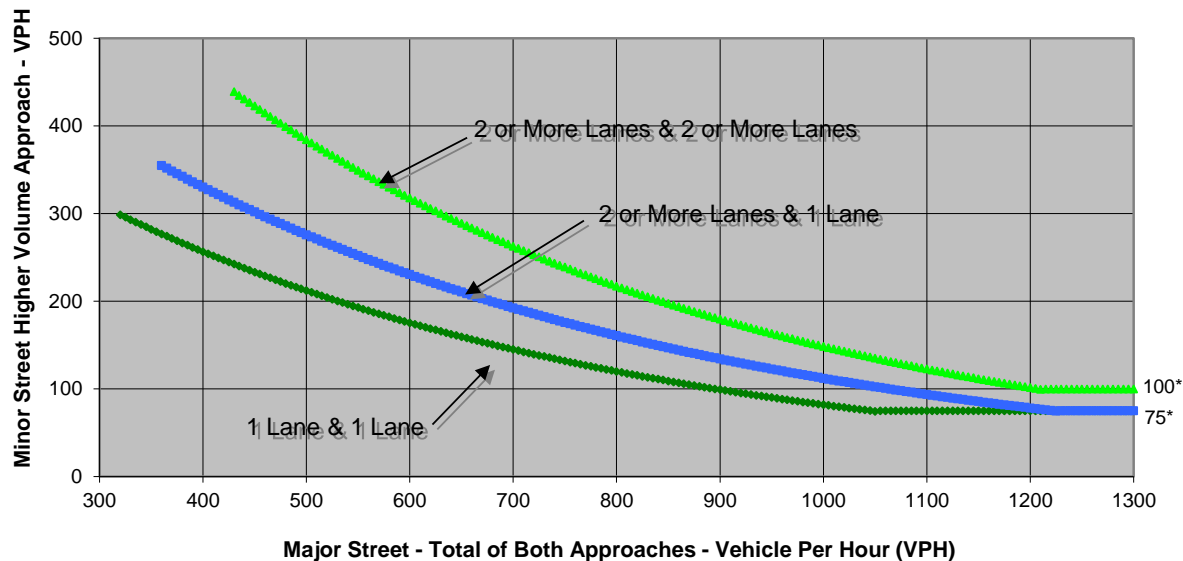
	NB	SB	EB	WB
Left	49	0	0	1
Through	0	0	2	1
Right	2	0	82	0
Total	51	0	84	2

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	86	51	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	49	0	0	1
Through	0	0	2	1
Right	2	0	82	0
Total	51	0	84	2

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	NB
Total Vehicles on Approach	51

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.1	51	137
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

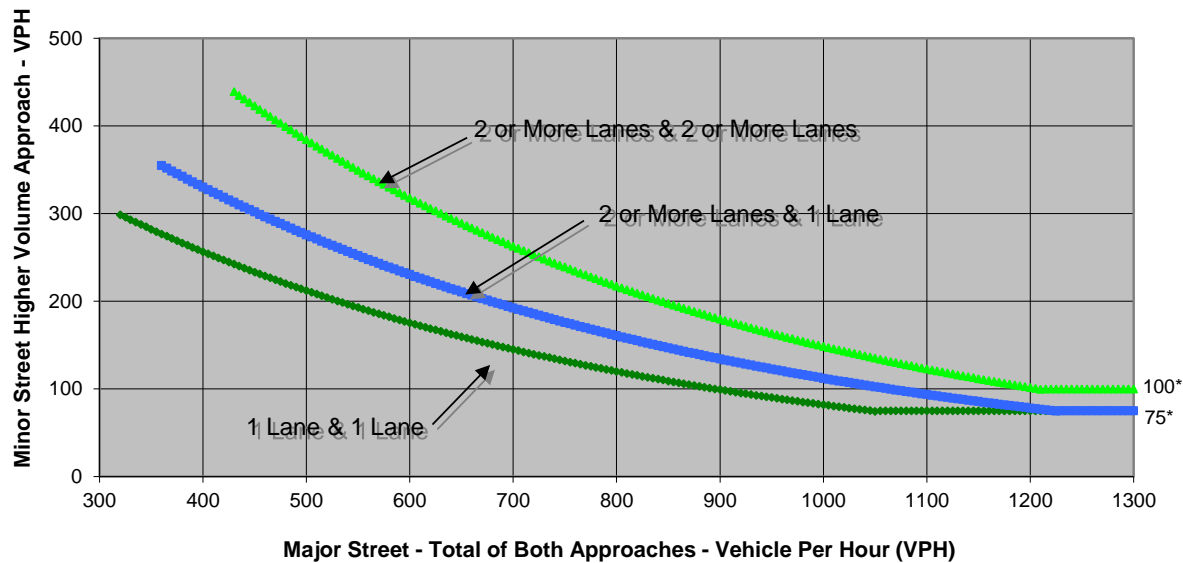
	NB	SB	EB	WB
Left	41	0	0	72
Through	0	0	7	8
Right	52	0	31	0
Total	93	0	38	80

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	93	80	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	41	0	0	72
Through	0	0	7	8
Right	52	0	31	0
Total	93	0	38	80

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.1
Approach with Worst Case Delay	WB
Total Vehicles on Approach	80

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.3	80	211
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **I-80 WB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

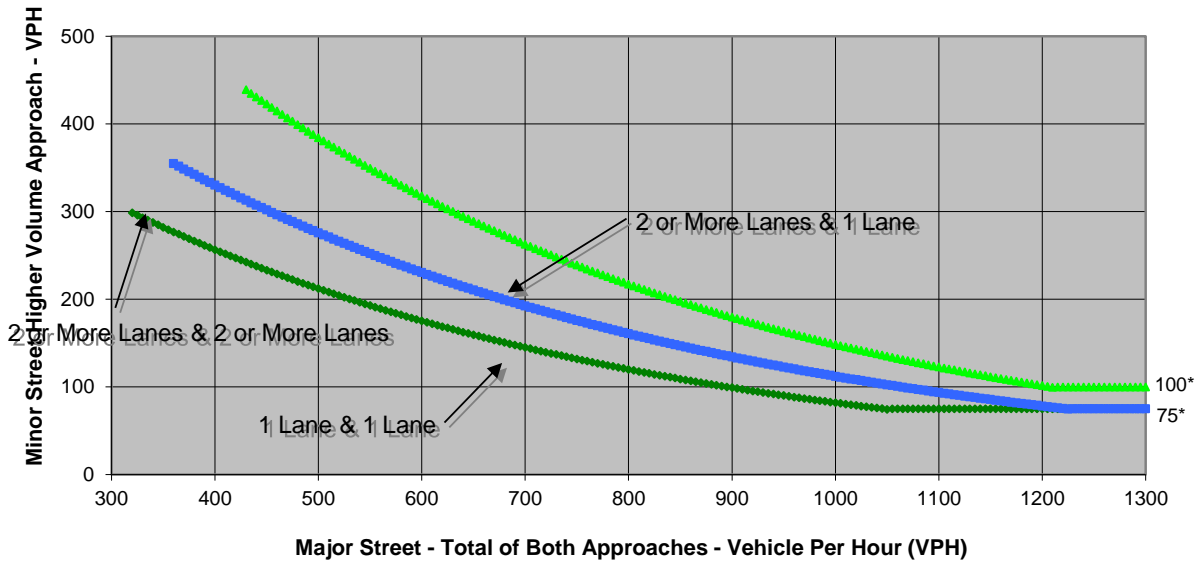
	NB	SB	EB	WB
Left	89	0	0	3
Through	0	0	101	5
Right	68	0	2	0
Total	157	0	103	8

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

	Major Street CR 32A	Minor Street I-80 WB Ramps	Warrant Met
Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014			
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	111	157	
* Note: Traffic Volume for Major Street is Total Volume of Both Approaches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			



Major Street CR 32A
 Minor Street I-80 WB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	89	0	0	3
Through	0	0	101	5
Right	68	0	2	0
Total	157	0	103	8

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	8.8
Approach with Worst Case Delay	NB
Total Vehicles on Approach	157

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.4	157	268
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Chiles Road**
 Minor Street **I-80 EB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **AM Peak Hour**

Turn Movement Volumes

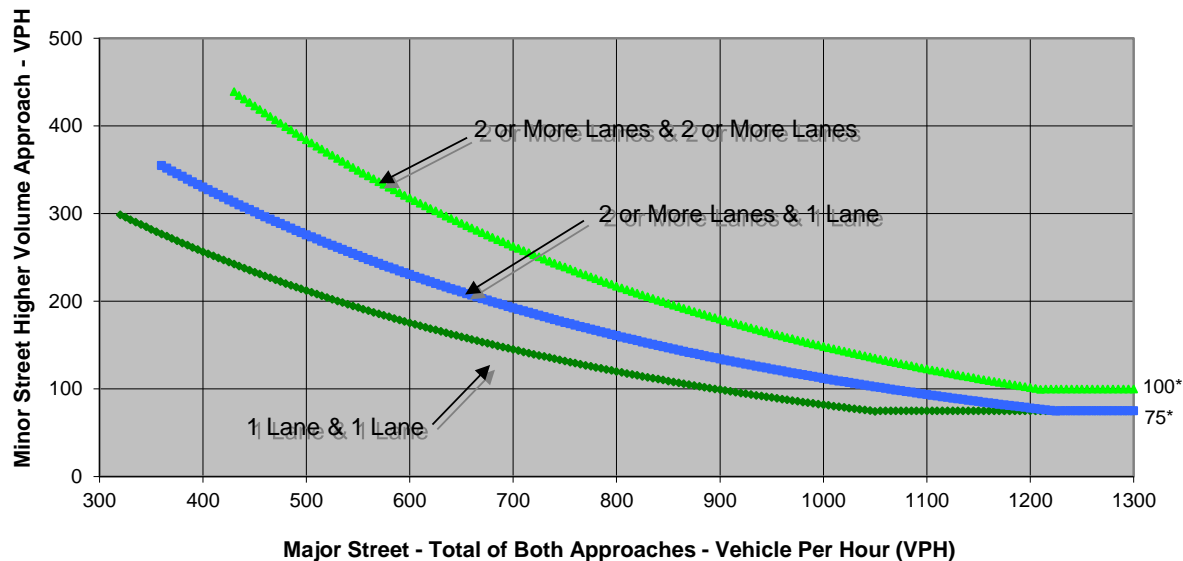
	NB	SB	EB	WB
Left	0	1	73	0
Through	0	0	7	55
Right	0	4	0	114
Total	0	5	80	169

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Chiles Road	I-80 EB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	249	5	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Chiles Road
 Minor Street I-80 EB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour AM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	1	73	0
Through	0	0	7	55
Right	0	4	0	114
Total	0	5	80	169

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	7.5
Approach with Worst Case Delay	WB
Total Vehicles on Approach	169

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.4	5	254
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 SB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

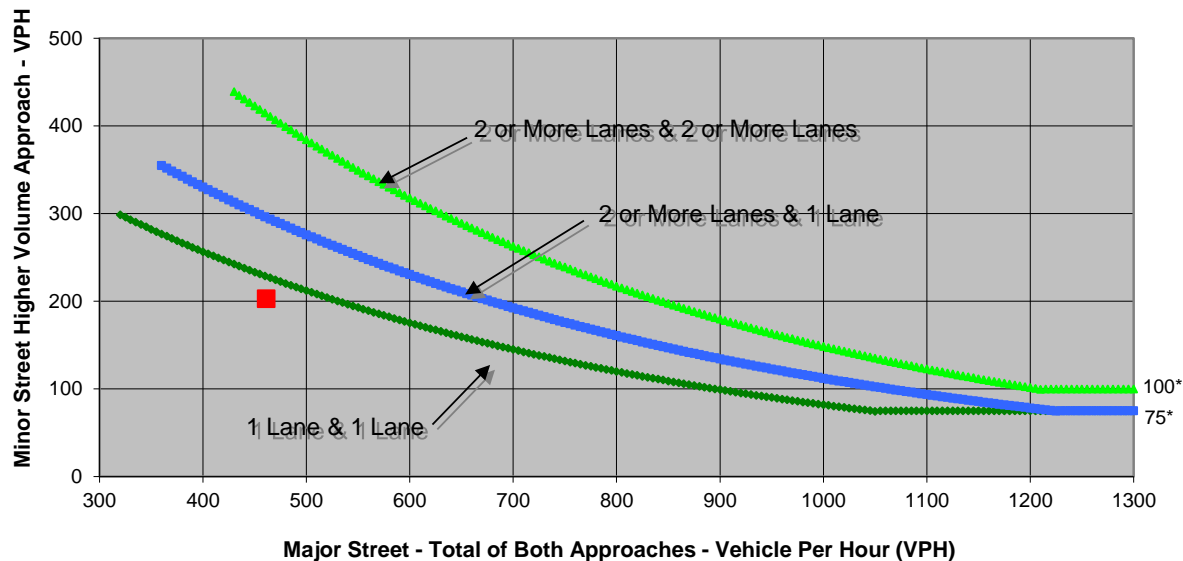
	NB	SB	EB	WB
Left	0	156	0	20
Through	0	1	258	147
Right	0	46	36	0
Total	0	203	294	167

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 SB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	461	203	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 SB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	156	0	20
Through	0	1	258	147
Right	0	46	36	0
Total	0	203	294	167

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	203

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.9	203	664
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **SR 113 NB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

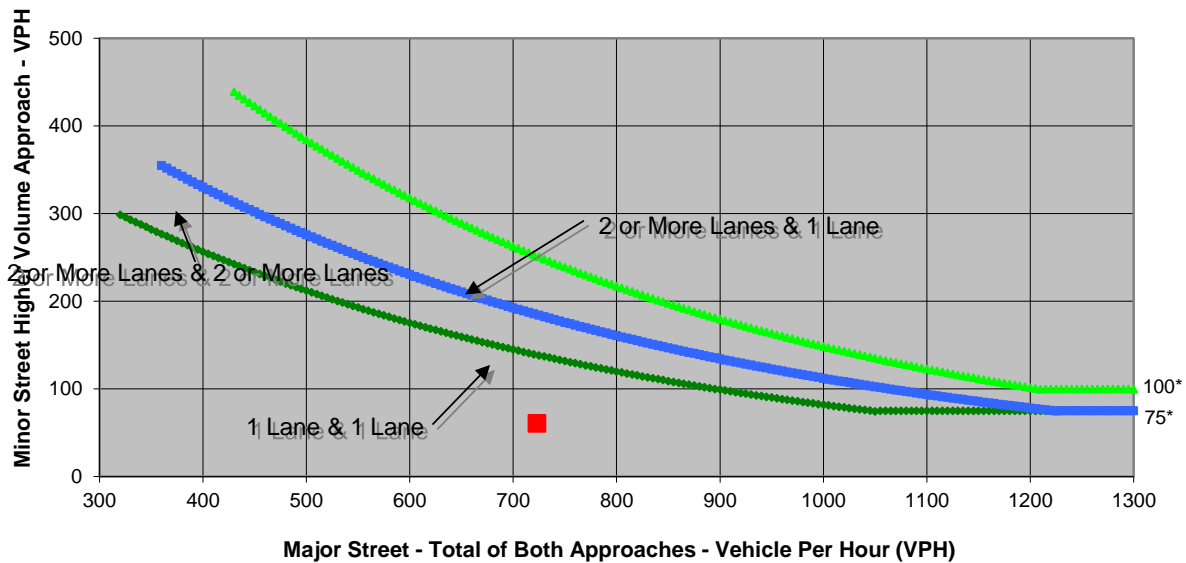
	NB	SB	EB	WB
Left	0	30	116	0
Through	0	0	298	136
Right	0	31	0	173
Total	0	61	414	309

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	SR 113 NB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	723	61	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street SR 113 NB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	30	116	0
Through	0	0	298	136
Right	0	31	0	173
Total	0	61	414	309

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	15.2
Approach with Worst Case Delay	SB
Total Vehicles on Approach	61

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.3	61	784
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 29**
 Minor Street **CR 100A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

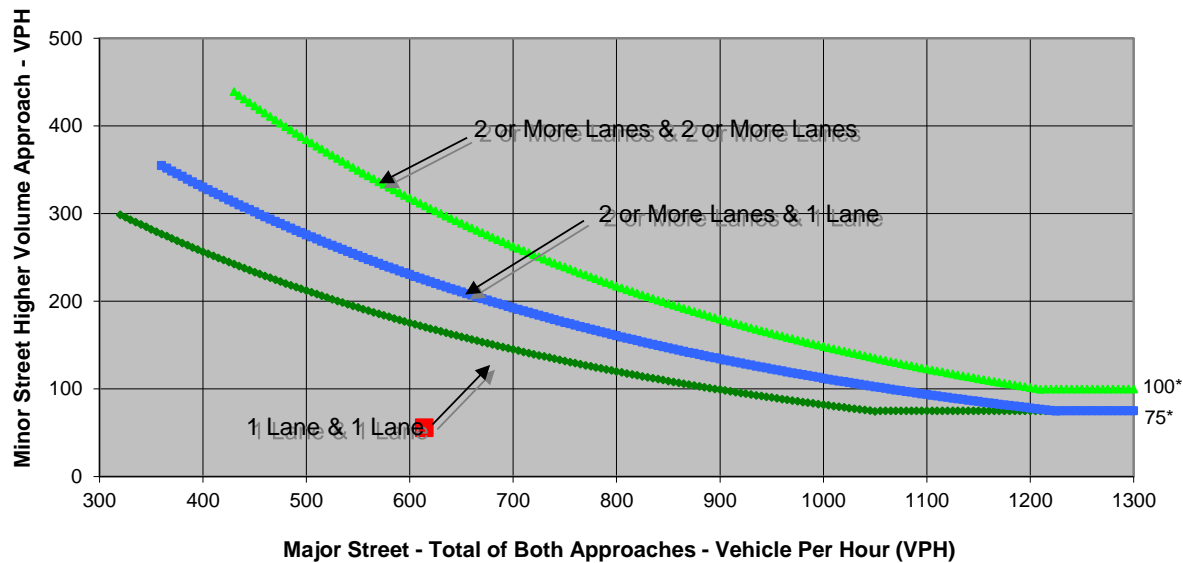
	NB	SB	EB	WB
Left	36	0	4	14
Through	2	1	296	269
Right	18	4	28	3
Total	56	5	328	286

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 100A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	614	56	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 100A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	36	0	4	14
Through	2	1	296	269
Right	18	4	28	3
Total	56	5	328	286

Major Street Direction

 North/South
 x East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 15.5
 Approach with Worst Case Delay NB
 Total Vehicles on Approach 56

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	56	675
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		



Major Street **CR 29**
 Minor Street **CR 101A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

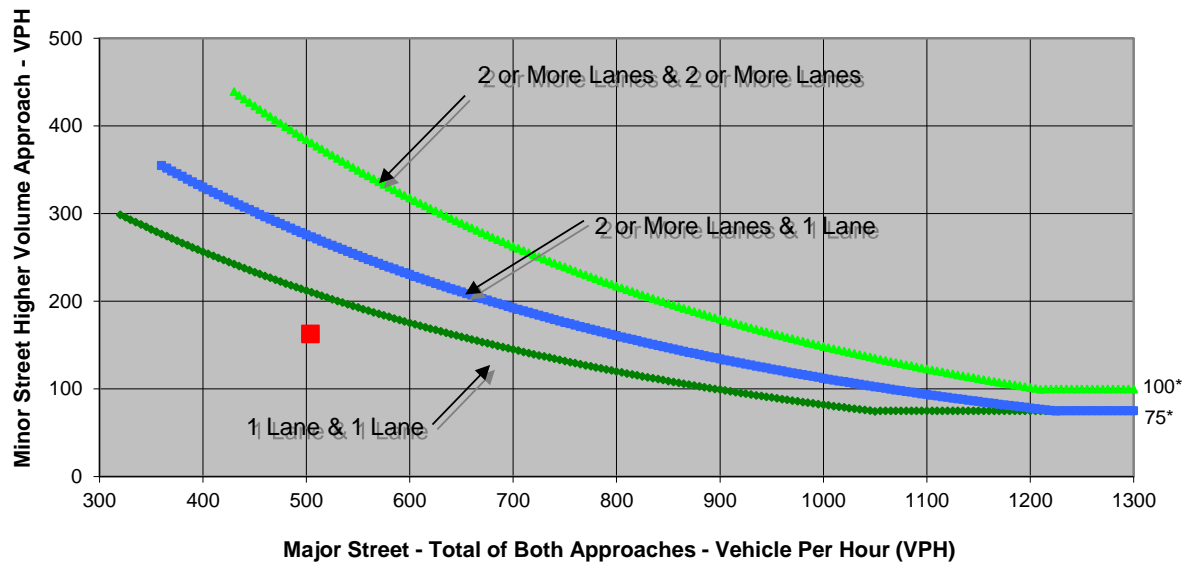
	NB	SB	EB	WB
Left	132	0	0	40
Through	0	0	178	152
Right	31	0	134	0
Total	163	0	312	192

Major Street Direction

North/South
x East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 29	CR 101A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	504	163	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 29
 Minor Street CR 101A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	132	0	0	40
Through	0	0	178	152
Right	31	0	134	0
Total	163	0	312	192

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	16
Approach with Worst Case Delay	NB
Total Vehicles on Approach	163

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.7	163	667
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 29**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

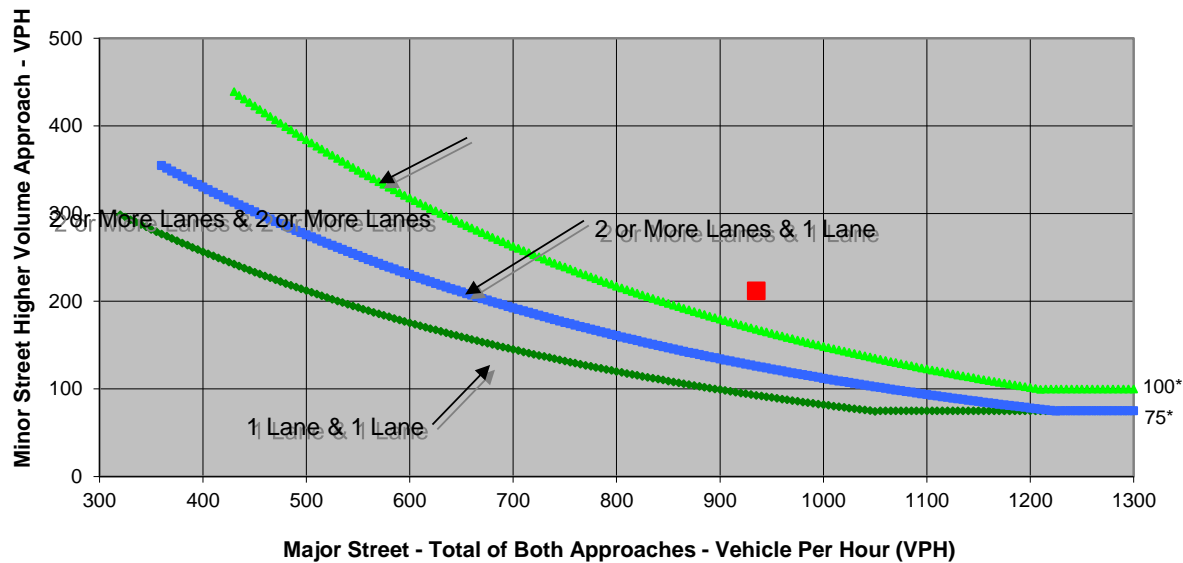
	NB	SB	EB	WB
Left	108	0	110	0
Through	396	352	0	0
Right	0	79	102	0
Total	504	431	212	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 29	
Number of Approach Lanes	1	2	YES
Traffic Volume (VPH) *	935	212	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 29

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	108	0	110	0
Through	396	352	0	0
Right	0	79	102	0
Total	504	431	212	0

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 2
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 24.3
 Approach with Worst Case Delay EB
 Total Vehicles on Approach 212

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	1.4	212	1,147
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		



Major Street **CR 102**
 Minor Street **CR 28H**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

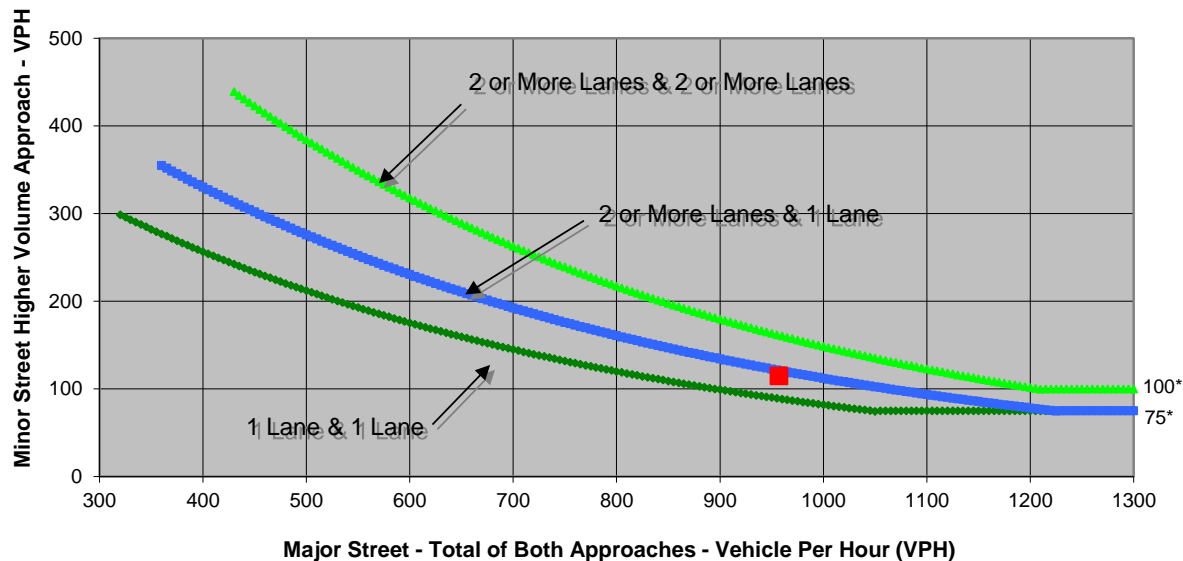
	NB	SB	EB	WB
Left	0	48	0	28
Through	462	403	0	0
Right	44	0	0	87
Total	506	451	0	115

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 28H	
Number of Approach Lanes	1	2	<u>NO</u>
Traffic Volume (VPH) *	957	115	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 28H

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	48	0	28
Through	462	403	0	0
Right	44	0	0	87
Total	506	451	0	115

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	2
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	20.8
Approach with Worst Case Delay	WB
Total Vehicles on Approach	115

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.7	115	1,072
Limiting Value	5	150	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 27**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

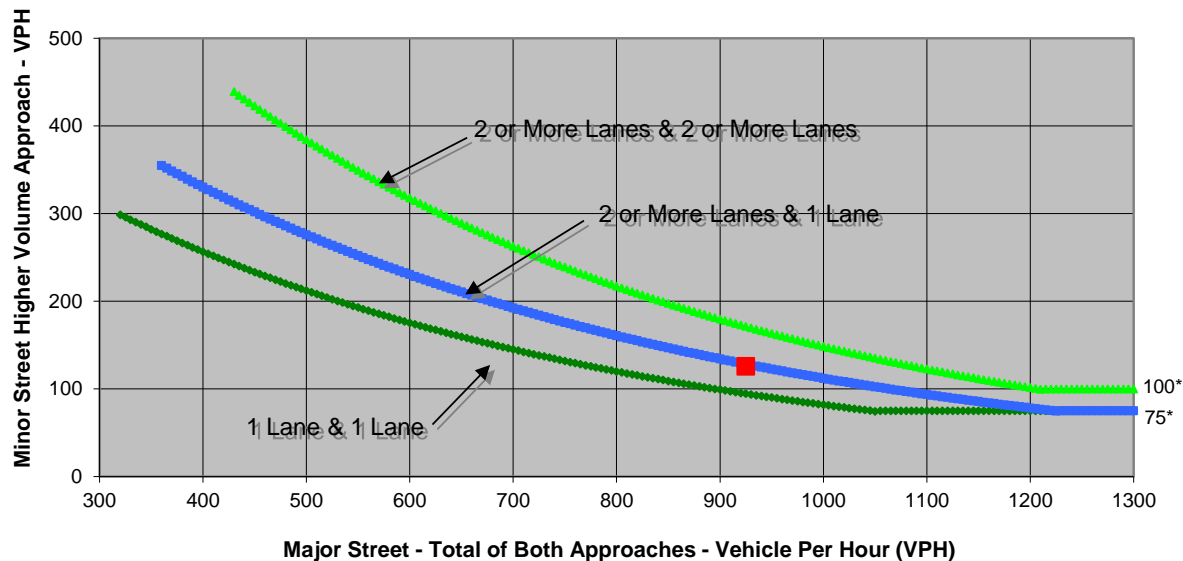
	NB	SB	EB	WB
Left	55	3	35	3
Through	476	372	9	13
Right	1	18	82	4
Total	532	393	126	20

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 27	
Number of Approach Lanes	1	1	<u>YES</u>
Traffic Volume (VPH) *	925	126	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 27

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	55	3	35	3
Through	476	372	9	13
Right	1	18	82	4
Total	532	393	126	20

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	4

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	21.9
Approach with Worst Case Delay	NB
Total Vehicles on Approach	532

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	3.2	126	1,071
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 102**
 Minor Street **CR 25A**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

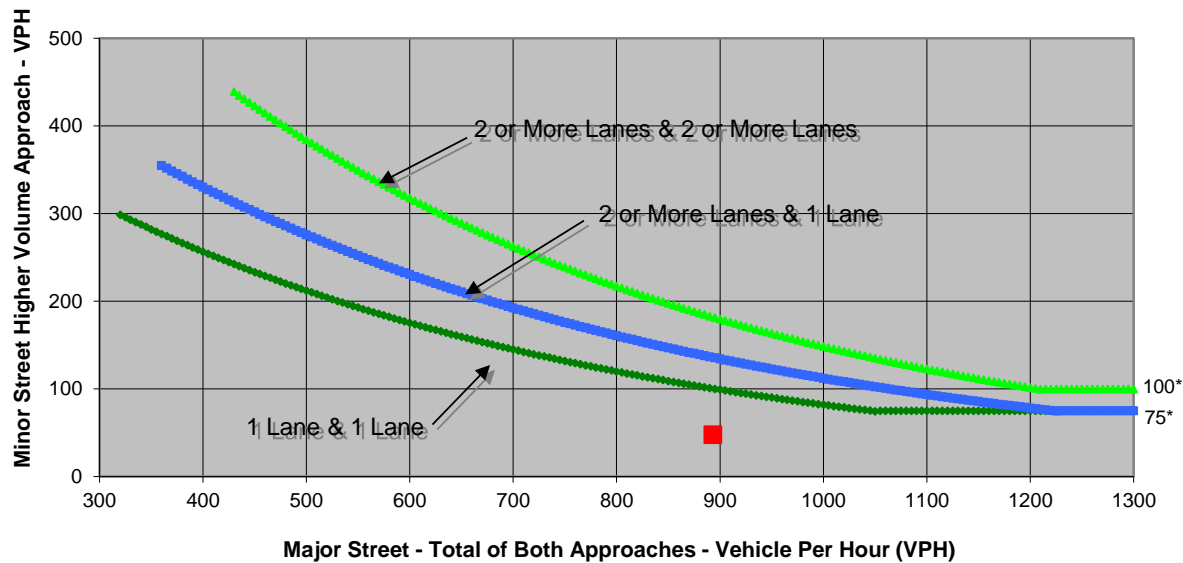
	NB	SB	EB	WB
Left	55	0	10	0
Through	460	350	0	0
Right	0	28	38	0
Total	515	378	48	0

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 102	CR 25A	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	893	48	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 102
 Minor Street CR 25A

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	55	0	10	0
Through	460	350	0	0
Right	0	28	38	0
Total	515	378	48	0

Major Street Direction

x	North/South
	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	12.5
Approach with Worst Case Delay	EB
Total Vehicles on Approach	48

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	48	941
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 103**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

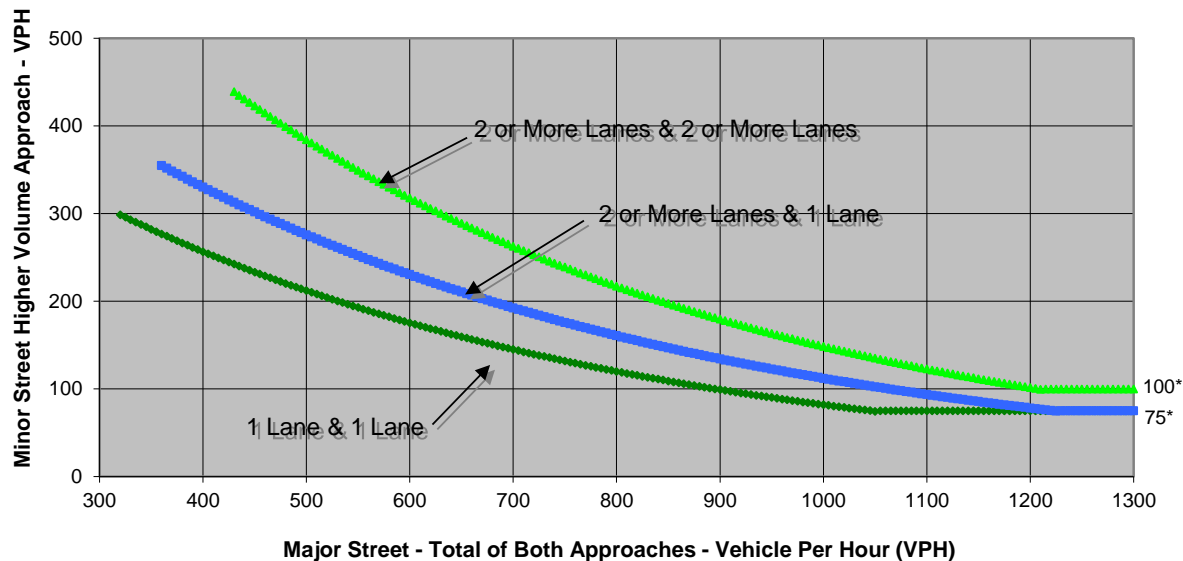
	NB	SB	EB	WB
Left	0	11	0	0
Through	0	0	94	107
Right	0	4	0	22
Total	0	15	94	129

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 103	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	223	15	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 103

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	11	0	0
Through	0	0	94	107
Right	0	4	0	22
Total	0	15	94	129

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.9
Approach with Worst Case Delay	SB
Total Vehicles on Approach	15

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0	15	238
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **Yolo County Landfill Dwy**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

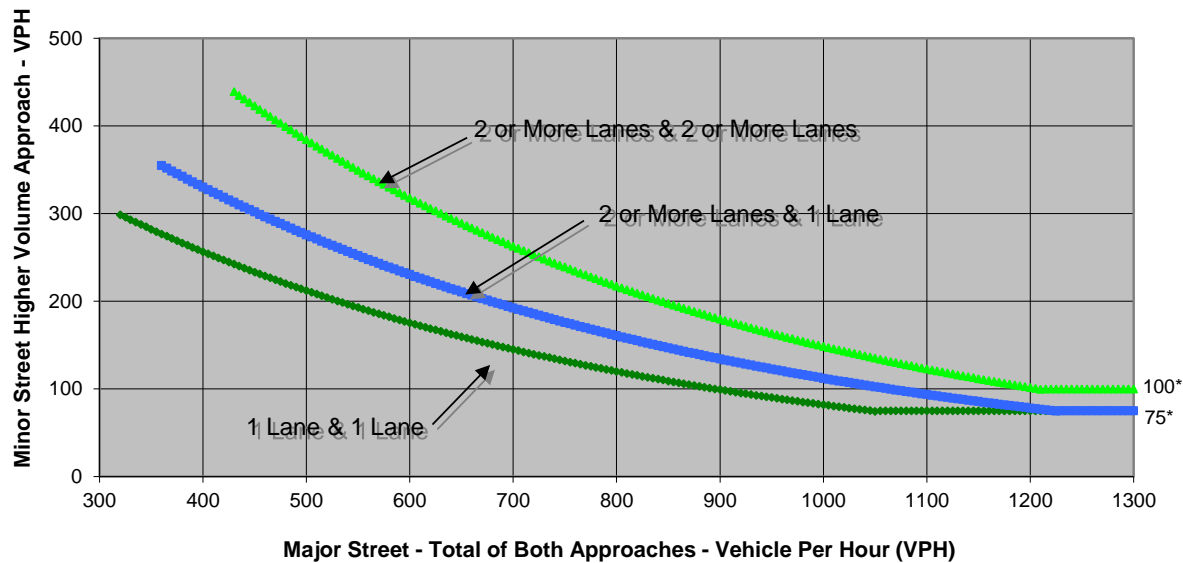
	NB	SB	EB	WB
Left	0	16	1	0
Through	0	0	105	65
Right	0	48	0	0
Total	0	64	106	65

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	Yolo County Landfill Dwy	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	171	64	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street Yolo County Landfill Dwy

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	16	1	0
Through	0	0	105	65
Right	0	48	0	0
Total	0	64	106	65

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	SB
Total Vehicles on Approach	64

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	64	235
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 28H**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

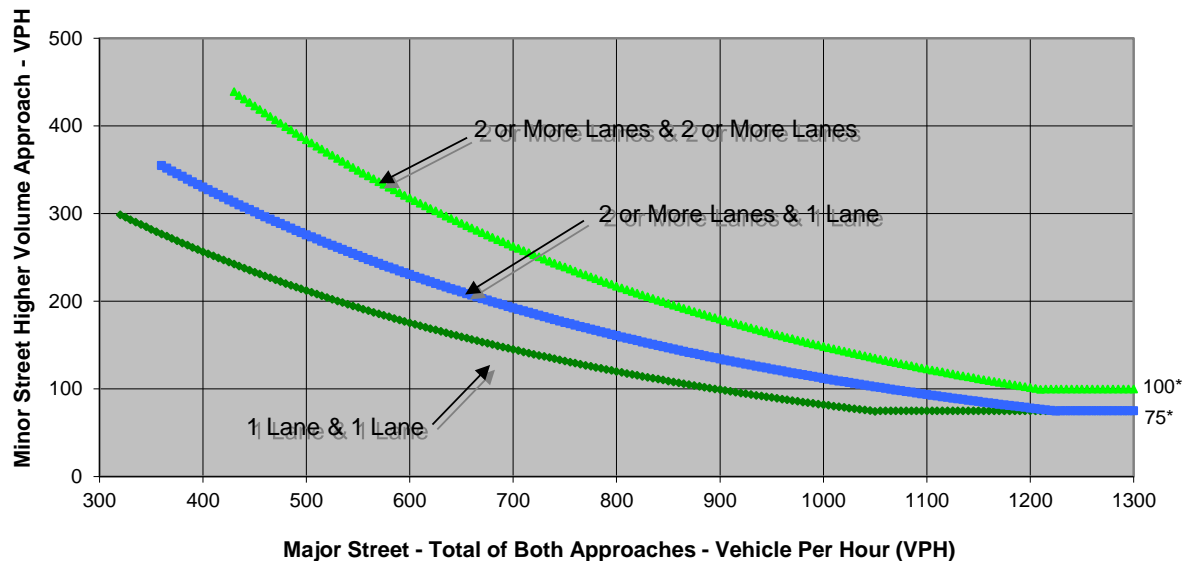
	NB	SB	EB	WB
Left	66	0	0	1
Through	0	0	0	0
Right	0	0	121	0
Total	66	0	121	1

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 28H	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	122	66	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 28H
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	66	0	0	1
Through	0	0	0	0
Right	0	0	121	0
Total	66	0	121	1

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	9.3
Approach with Worst Case Delay	NB
Total Vehicles on Approach	66

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.2	66	188
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Not Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **CR 105**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

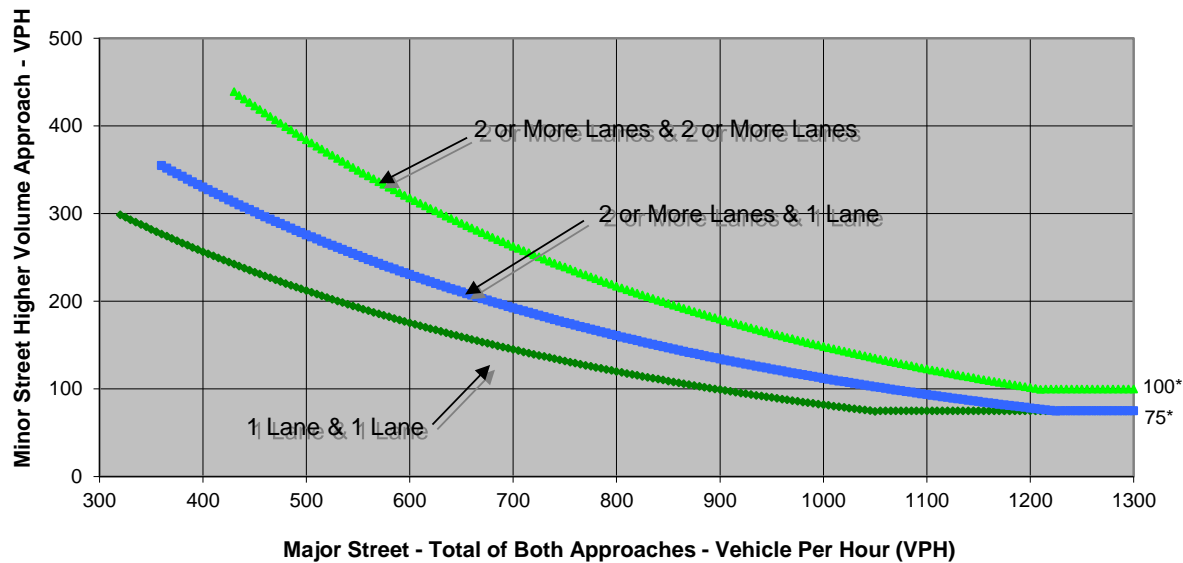
	NB	SB	EB	WB
Left	41	0	0	122
Through	0	0	5	9
Right	59	0	200	0
Total	100	0	205	131

Major Street Direction

x	North/South
	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	CR 105	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	100	205	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street CR 105

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	41	0	0	122
Through	0	0	5	9
Right	59	0	200	0
Total	100	0	205	131

Major Street Direction

x North/South
 East/West

Intersection Geometry

Number of Approach Lanes for Minor Street 1
 Total Approaches 3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle) 15
 Approach with Worst Case Delay WB
 Total Vehicles on Approach 131

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0.5	205	436
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **CR 32A**
 Minor Street **I-80 WB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

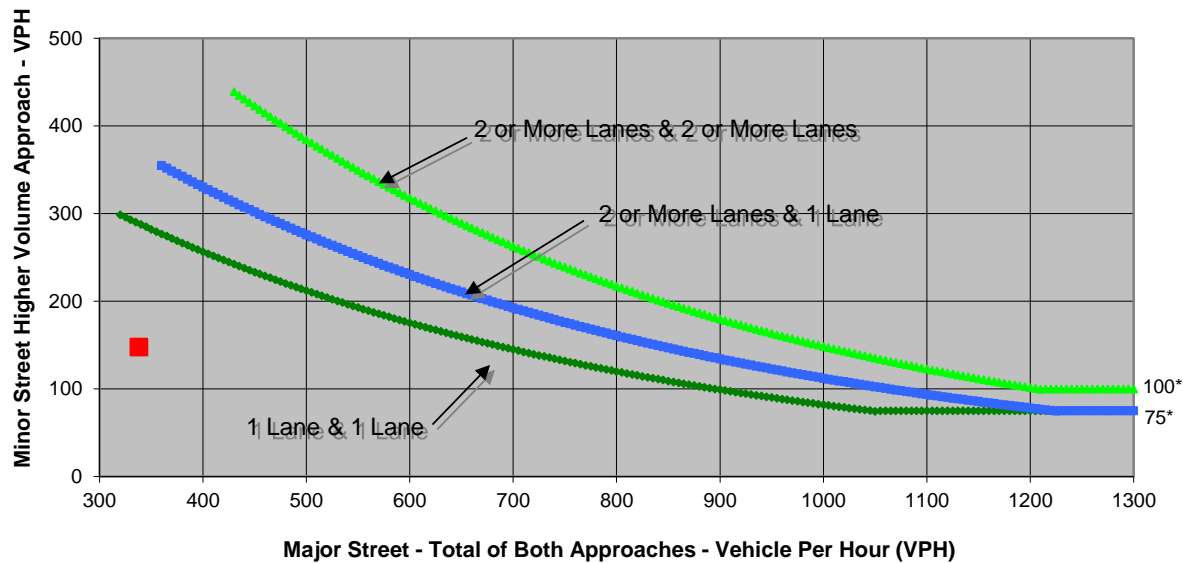
	NB	SB	EB	WB
Left	97	0	0	8
Through	0	0	321	7
Right	51	0	2	0
Total	148	0	323	15

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	CR 32A	I-80 WB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	338	148	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street CR 32A
 Minor Street I-80 WB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	97	0	0	8
Through	0	0	321	7
Right	51	0	2	0
Total	148	0	323	15

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	6.8
Approach with Worst Case Delay	WB
Total Vehicles on Approach	15

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	0	148	486
Limiting Value	4	100	800
Condition Satisfied?	Not Met	Met	Not Met
Warrant Met	<u>NO</u>		

Major Street **Chiles Road**
 Minor Street **I-80 EB Ramps**

Project **Palomino Place LTA**
 Scenario **Existing Plus Project Conditions**
 Peak Hour **PM Peak Hour**

Turn Movement Volumes

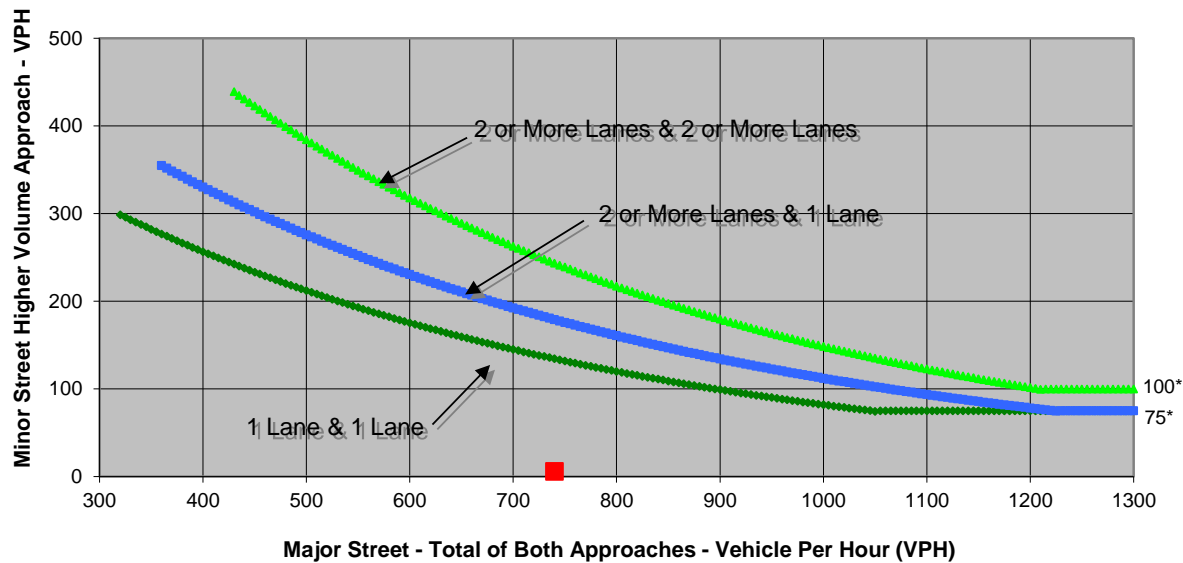
	NB	SB	EB	WB
Left	0	2	349	0
Through	0	0	13	52
Right	0	4	0	326
Total	0	6	362	378

Major Street Direction

	North/South
x	East/West

Figure 4C-4. Warrant 3B, Peak Hour (70% Factor)
 (COMMUNITY LESS THAN 10,000 POPULATION OR

ABOVE 40 MPH ON MAJOR STREET



* Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Source: California Manual on Uniform Traffic Control Devices, Caltrans, 2014

	Major Street	Minor Street	Warrant Met
	Chiles Road	I-80 EB Ramps	
Number of Approach Lanes	1	1	<u>NO</u>
Traffic Volume (VPH) *	740	6	

* Note: Traffic Volume for Major Street is Total Volume of Both Approaches.
 Traffic Volume for Minor Street is the Volume of High Volume Approach.



Major Street Chiles Road
 Minor Street I-80 EB Ramps

Project Palomino Place LTA
 Scenario Existing Plus Project Conditions
 Peak Hour PM Peak Hour

Turn Movement Volumes

	NB	SB	EB	WB
Left	0	2	349	0
Through	0	0	13	52
Right	0	4	0	326
Total	0	6	362	378

Major Street Direction

	North/South
x	East/West

Intersection Geometry

Number of Approach Lanes for Minor Street	1
Total Approaches	3

Worst Case Delay for Minor Street

Stopped Delay (seconds per vehicle)	360.7
Approach with Worst Case Delay	EB
Total Vehicles on Approach	362

Warrant 3A, Peak Hour			
	Peak Hour Delay on Minor Approach (vehicle-hours)	Peak Hour Volume on Minor Approach (vph)	Peak Hour Entering Volume Served (vph)
Existing Plus Project Conditions	36.3	6	746
Limiting Value	4	100	800
Condition Satisfied?	Met	Not Met	Not Met
Warrant Met	<u>NO</u>		