

Appendix E

Transportation Study



**TRANSPORTATION STUDY
FOR THE
WESTFIELD NORTH COUNTY
THEATER PROJECT
ESCONDIDO, CALIFORNIA**

SEPTEMBER 2015

PREPARED FOR
WESTFIELD LLC

PREPARED BY



**TRANSPORTATION STUDY
FOR THE
WESTFIELD NORTH COUNTY
THEATER PROJECT**

ESCONDIDO, CALIFORNIA

September 2015

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Executive Summary

This study was undertaken to analyze the potential transportation impacts of the Westfield North County Theater Project (the Project). The following summarizes the results of this analysis:

- Project Description – Westfield North County, an existing Super Regional Shopping Center, is located in the southeast portion of the City of Escondido (City) on approximately 80 acres at the city's southern boundary along Via Rancho Parkway and Bear Valley Parkway (the Project Site). The shopping center is located west of Bear Valley Parkway, north of Via Rancho Parkway, east of Interstate 15, and south of Beethoven Drive.

The Project involves the construction of a 50,341 square foot (sf) movie theater with approximately 1,248 seats and 10 screens, resulting in a shopping center with a total of 1,329,826 sf of gross leasable area (GLA). The Project represents an increase of approximately 4% in leasable area over the existing shopping center's leasable area. The Project will be located in the northeast portion of the Project Site adjacent to Beethoven Drive, displacing roughly 202 surface parking stalls and resulting in a parking supply of approximately 5,482 parking spaces.

The Project is expected to be completed sometime in 2017. In order to be conservative, the analysis in this report is based on the Project's first full year of operation in 2018.

- Project Location and Study Area – The Project Site is located approximately 1,500 feet east of Interstate 15 (I-15) and 4.25 miles south of State Route 78. These freeways provide regional access to the Project Site. Primary sub-regional and local access to the Project Site is provided by a network of streets including Via Rancho Parkway, Bear Valley Parkway, Beethoven Drive, and San Pasqual Road. The Project Site is located north of Via Rancho Parkway, east of I-15, south of Beethoven Drive, and west of Bear Valley Parkway.

The Project Study Area includes a geographic area approximately 2.0 miles (north-south) by 1.75 miles (east-west). This approximately 3.5 square-mile Study Area was established in consultation with City staff by reviewing the travel patterns and the potential impacts of Project traffic. The Study Area is bounded by Sunset Drive and Ranchito Road on the north, Bear Valley Parkway and San Pasqual Road on the east, Via Rancho Parkway on the south, and the Felicita Road and Quiet Hills Drive on the west. This analysis area includes facilities in the jurisdictions of the City and the California Department of Transportation.

- Existing Conditions – The analysis of Existing Conditions in this study includes an assessment of the existing street system, an analysis of intersection and street segment traffic volumes and current operating conditions, and the existing public transit services.

Turning movement counts for typical weekday afternoon (4:00 p.m. to 6:00 p.m.) peak periods at the 17 study intersections, and average daily traffic counts at the 14 street segments were conducted in April 2015 when area schools were in session. All of the study intersections and street segments currently operate at level of service (LOS) D or better with the exception of one.

Bus and rail transit service in the Study Area is provided by the North County Transit District and San Diego Metropolitan Transit Service.

- Project Trip Generation – The Project, at full buildout, is expected to generate 1,684 net new daily trips on a typical weekday, including approximately six morning peak hour trips and 135 afternoon peak hour trips. These estimates are conservative in that they do not account for trip reductions from pass-by trips. Given the low trip generation of the Project during the morning peak hour, it was decided to focus the impact analysis on the weekday afternoon peak hour time period.
- Significant Impact Criteria – Consistent with City policy, the significant impact criteria identified in the San Diego Traffic Engineers' Council and the Institute of Transportation Engineers guidelines was used for intersection and street segment impact analysis in the study.
- Future Base Roadway Improvements – The City's General Plan Circulation Element identifies future roadway improvements that are expected to be implemented by the year 2035, within the Study Area that would affect the traffic projections and traffic operations. In order to provide a more conservative analysis, no future roadway improvements were assumed to be in place for any study scenario.
- Near Term Cumulative Conditions (Year 2018) – In accordance with City requirements, the Project's impacts were evaluated at the analyzed intersections, ramp meters, and street segments under the Near Term Conditions. The Project is not expected to result in a significant impact at any of the analyzed intersections or ramp meters during the afternoon peak hour or at any of the analyzed street segments during the afternoon peak hour or daily conditions.
- Horizon Year Conditions (Year 2035) – In accordance with City requirements, the Project's impacts were evaluated at the analyzed intersections, ramp meters, and street segments under the Horizon Year Conditions. The Project is not expected to result in a significant impact at any of the analyzed intersections or ramp meters during the afternoon peak hour or at any of the analyzed street segments during the afternoon peak hour or daily conditions.
- Parking – The Project parking requirements were analyzed based on City requirements for the Project Site (at least four spaces per 1,000 sf of shopping center GLA). The Project Site, under future conditions, would provide sufficient parking to meet these requirements.
- Mitigation – The Project does not add enough traffic to any of the analyzed intersections, ramp meters, and street segments to result in a significant daily or peak hour project impact. Therefore, no mitigation measures are required.

-
- Voluntary Fair-Share Payment – The Project does add trips to two study roadway segments that are predicted to operate at an unacceptable LOS under existing and future conditions. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive currently operate at LOS F and are predicted to continue operating at LOS F in the future. Project traffic does not cause a significant impact at either of these locations; therefore, no direct mitigation measures are required, but a voluntary fair-share payment toward future improvements will be provided by the Project to help the City achieve acceptable LOS on these study segments. The fair-share payment will be based on the percentage of growth attributable to Project traffic on the segments in question. The Project is responsible for 15.2% of the growth in daily traffic along Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue, and 29.8% of the growth in traffic along Bear Valley Parkway between San Pasqual Road and Beethoven Drive. Westfield has agreed to make a fair-share payment toward future corridor improvements along Bear Valley Parkway.

Chapter 1

Introduction

The transportation analysis presented in this study has been prepared to evaluate the potential transportation impacts of the Westfield North County Theater Project (the Project) on the surrounding roadway system. The scope of work, methodology, and base assumptions used in this study were established in conjunction with the City of Escondido (the City) and follow the procedures set forth by *SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region* (San Diego Traffic Engineers' Council [SANTEC] and the Institute of Transportation Engineers [ITE], March 2000) ("the SANTEC/ITE Guidelines") and the *City of Escondido Traffic Impact Analysis Guideline* (City of Escondido, October 10, 2013) ("the City Guideline").

PROJECT LOCATION

Westfield North County, an existing Super Regional Shopping Center, is located in the southeast portion of the City on approximately 80 acres at the City's southern boundary along Via Rancho Parkway and Bear Valley Parkway (the Project Site).

The Project Site is located approximately 1,500 feet east of Interstate 15 (I-15) and 4.25 miles south of State Route 78 (SR 78). These freeways provide regional access to the Project Site. Primary sub-regional and local access to the Project Site is provided by a network of streets including Via Rancho Parkway, Bear Valley Parkway, Beethoven Drive, and San Pasqual Road. The Project Site is located north of Via Rancho Parkway, east of I-15, south of Beethoven Drive, and west of Bear Valley Parkway.

PROJECT DESCRIPTION

Originally developed in the 1980s, the indoor regional shopping center currently has 1,279,485 square feet (sf) of gross leasable area (GLA), including major retail anchors and a 35,000 sf

gym. The shopping center buildings are ringed with surface parking lots on the north, east, south, and west, with 5,684 parking stalls. Three existing outparcel buildings are part of the shopping center and one additional outparcel building is currently under construction.

The Project involves the construction of a 50,341 sf movie theater with approximately 1,248 seats and 10 screens, resulting in a shopping center with a total of 1,329,826 sf GLA. The Project represents an increase of approximately 4% in leasable area over the existing shopping center's leasable area. The Project will be located in the northeast portion of the Project Site adjacent to Beethoven Drive, displacing roughly 202 surface parking stalls and resulting in a parking supply of approximately 5,482 parking spaces.

The Project is expected to be completed sometime in 2017. In order to be conservative, the analysis in this report is based on the Project's first full year of operation in 2018. Figure 1 illustrates the conceptual site plan of the Project.

ORGANIZATION OF REPORT

This report is divided into 13 chapters, including this introduction. Chapter 2 describes the methodology used to analyze intersection and roadway segment operating characteristics and assess significant traffic impacts. Chapter 3 describes the existing circulation system, traffic volumes, and traffic conditions in the Study Area. The methodologies used to forecast Near Term Cumulative background traffic volumes are described and applied in Chapter 4. The methodologies used to forecast Horizon Year background traffic volumes are described and applied in Chapter 5. Chapter 6 discusses the procedure used to forecast Project traffic and the Project-related traffic volumes, and Chapter 7 assesses intersection and roadway segment operating conditions of the existing street system after completion of the Project. Chapter 8 assesses intersection and roadway segment operating conditions under Near Term Cumulative conditions after completion of the Project. Chapter 9 assesses intersection and roadway segment operating conditions under Horizon Year conditions after completion of the Project. Chapter 10 identifies the potential significant traffic impacts of the Project under Existing with Project, Near Term Cumulative with Project, and Horizon Year with Project conditions, and discusses fair-share payment calculations. Site access and internal circulation are evaluated in Chapter 11. Chapter 12 presents a summary of parking requirements and supply for the Project



and Chapter 13 presents the construction impact analysis. The appendices contain supporting documentation, model results, traffic counts and analysis worksheets.

FIGURE
1

Chapter 2

Traffic Impact Analysis Methodology

This chapter describes the various traffic scenarios analyzed, the methodologies used for assessing intersection and street segment operating conditions, and significant traffic impact criteria for the City.

ANALYSIS SCENARIOS

The study analyzed the potential Project-generated traffic impacts on the street system surrounding the Project Site. Intersection traffic impacts were evaluated for typical weekday afternoon (4:00 p.m. to 6:00 p.m.) peak periods. Street segments were analyzed for afternoon peak hour (4:00 p.m. to 6:00 p.m.) and daily impacts. The analysis of existing and future traffic forecasts was conducted both with and without the addition of the Project traffic. Morning peak hour impacts were not studied because of the small morning trip generation of a movie theater. No significant Project impacts are expected during the morning peak hours.

Existing Conditions (Year 2015)

The Existing Conditions analysis includes a description of key streets and highways within the Study Area, traffic volumes, and current intersection and street segment operating conditions. Turning movement counts for typical weekday afternoon (4:00 p.m. to 6:00 p.m.) peak periods for the analyzed intersections and average daily traffic (ADT) counts for the analyzed street segments were collected in April 2015 when local schools were still in session. Fieldwork (lane configurations and signal phasing) for the analyzed intersections and roadway segments was collected in May 2015.

Existing with Project Conditions (Year 2015)

In accordance with the California Environmental Quality Act (CEQA), the Existing with Project Conditions were evaluated at the analyzed intersections and street segments to identify the potential incremental impacts of the Project, prior to mitigation, on projected traffic operating conditions by adding the Project-generated traffic to the Existing traffic volumes (year 2015).

Near Term Cumulative without Project Conditions (Year 2018)

The Near Term Cumulative without Project traffic volumes are a combination of the Existing Conditions traffic volumes plus traffic generated by pending related projects in the Study Area. This analysis provides the baseline conditions by which Project impacts are evaluated under the Near Term Conditions.

Near Term Cumulative with Project Conditions (Year 2018)

This analysis identifies the potential incremental impacts of the Project in the Near Term Cumulative Conditions, prior to mitigation, on projected future traffic operating conditions by adding the Project-generated traffic to the Near Term Cumulative without Project (year 2018) traffic forecasts.

Horizon Year: Future without Project Conditions (Year 2035)

This analysis projects the future intersection and street segment operating conditions based on the future traffic volumes that are projected by the San Diego Association of Governments (SANDAG) model for the year 2035. This analysis provides the baseline conditions by which Project impacts are evaluated under the Horizon Year Conditions. To be conservative this scenario does not assume that the proposed roadway improvements in *City of Escondido General Plan Circulation Element*, City of Escondido, January 2013 (the Circulation Element) are implemented by the year 2035.

Horizon Year: Future with Project Conditions (Year 2035)

This analysis identifies the potential incremental impacts of the Project in the Horizon Year Conditions, prior to mitigation, on projected future traffic operating conditions by adding the Project-generated traffic to the Horizon Year without Project (year 2035) traffic forecasts.

LEVEL OF SERVICE METHODOLOGY

Level of service (LOS) categories range from excellent, nearly free-flow traffic at LOS A to stop-and-go conditions at LOS F. The City considers LOS D an acceptable LOS.

Intersections

Intersection capacity has been analyzed using a method that assesses the cumulative operating conditions at each study intersection. In accordance with the City Guideline, the *2010 Highway Capacity Manual* (Transportation Research Board, 2010) (2010 HCM) methodology was used for all conditions.

The 2010 HCM methodology determines the average stopped delay experienced per vehicle (measured in seconds) and corresponding LOS for the turning movements and intersection characteristics at signalized intersections based on the definitions described in Table 1. All of the analyzed intersections are currently controlled by traffic signals. Vistro software was used to apply the 2010 HCM methodologies to the analyzed intersections.

Street Segments

The City requires a daily street segment analysis to evaluate street segment operations. The daily street segment analysis is based upon capacity thresholds identified in the City Guideline and shown in Table 2. Roadway classifications for the analyzed street segments were determined using the Circulation Element.



The 2010 HCM methodology determines the LOS for street segments using average travel speeds based on the definitions described in Table 3. Peak hour arterial analysis at the street segments was conducted using HCS software.

SIGNIFICANT IMPACT CRITERIA

Consistent with City policy, the significant impact criteria identified in the SANTEC/ITE Guidelines was used for intersection and street segment impact analysis in the study. The criteria state that a significant impact would occur if the thresholds in Table 4 are exceeded.

TABLE 1
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS
2010 HIGHWAY CAPACITY MANUAL OPERATIONS METHODOLOGY

Level of Service	Average Control Delay per Vehicle (seconds)
A	≤ 10.0
B	> 10.0 and ≤ 20.0
C	> 20.0 and ≤ 35.0
D	> 35.0 and ≤ 55.0
E	> 55.0 and ≤ 80.0
F	> 80.0

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

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR STREET SEGMENTS - AVERAGE DAILY TRAFFIC
CITY OF ESCONDIDO GUIDELINES

Street Classification	Lanes	LOS with ADT ¹				
		A	B	C	D	E
Prime Arterial	8 Lanes	23,800	37,800	51,800	62,300	70,000
	6 Lanes	20,400	32,400	44,400	53,400	60,000
Major Road	6 Lanes	17,000	27,000	37,000	44,500	50,000
	4 Lanes	12,600	20,000	27,400	32,900	37,000
Collector	4 Lanes	11,600	185,000	25,300	30,400	34,200
	4 Lanes	6,800	108,000	14,800	17,800	20,000
Local Collector	2 Lanes	5,100	8,100	11,100	13,400	15,000
	2 Lanes	3,400	5,400	7,400	8,900	10,000

Notes:

¹ Approximate recommended ADT based upon the *City of Escondido Traffic Impact Analysis Guidelines*, City of Escondido, October 10, 2013.

TABLE 3
LEVEL OF SERVICE DEFINITIONS
FOR STREET SEGMENTS (PEAK HOUR)
2010 HIGHWAY CAPACITY MANUAL OPERATIONS METHODOLOGY

Travel Speed as a Percentage of Base Free-Flow Speed (%)	LOS by Critical Volume-to-Capacity Ratio
	≤ 1.0
> 85	≤ 10.0
> 67-85	> 10.0 and ≤ 20.0
> 50-67	> 20.0 and ≤ 35.0
> 40-50	> 35.0 and ≤ 55.0
>30-40	> 55.0 and ≤ 80.0
≥ 30	> 80.0

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

TABLE 4
CITY OF ESCONDIDO PROPOSED THRESHOLDS
TO IDENTIFY PROJECT SIGNIFICANT IMPACT

Level of Service With Project	Allowable Change due to Project Impact		
	Roadway Segments		Intersections
	V/C	Speed Reduction (mph)	Delay (sec.)
D, E, or F	0.02	1	2

Source: City of Escondido Traffic Impact Analysis Guidelines , City of Escondido, October 10, 2013.

Chapter 3

Existing Conditions

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the Project Study Area. The existing conditions analysis relevant to this study includes an assessment of the existing street system and intersections, an analysis of the existing public transit service, and an analysis of traffic volumes and current operating conditions.

STUDY AREA

The Project Study Area includes a geographic area approximately 2.0 miles (north-south) by 1.75 miles (east-west). This approximately 3.5 square-mile Study Area was established in consultation with City staff and by reviewing the travel patterns and the potential impacts of Project traffic. The Study Area is bounded by Sunset Drive and Ranchito Road on the north, Bear Valley Parkway and San Pasqual Road on the east, Via Rancho Parkway on the south, and the Felicita Road and Quiet Hills Drive on the west. This analysis area includes facilities in the jurisdictions of the City of Escondido and the California Department of Transportation (Caltrans).

The Study Area was designed to ensure all potentially significantly impacted intersections and/or street segments, prior to any mitigation, were analyzed, and it was adjusted, as necessary, to confirm that there were no significant impacts at or outside the boundary of the Study Area by reviewing the Project traffic's travel patterns. Figure 2 illustrates the location of the Project Site in relation to the surrounding street system and the analyzed intersections and street segments.

Study Intersections

A total of 17 study intersections were selected based on Project traffic patterns and in consultation with City staff. Three of the 17 study intersections are freeway ramp locations and, thus, also fall under Caltrans jurisdiction. A list of these intersections by jurisdiction is presented in Table 5 and illustrated in Figure 2. The existing lane configurations at the analyzed intersections are provided in Appendix A.

Study Street Segments

A total of 14 study street segments were selected based on Project traffic patterns and in consultation with the City staff. A list of these street segments is presented in Table 6 and illustrated in Figure 2.

EXISTING STREET SYSTEM

The existing street system in the Study Area consists of a regional roadway system including freeways, prime and major arterials, secondary arterials and collectors, and sub-collector streets. The prime, major, and secondary arterials, collectors, and selected local streets in the Study Area offer sub-regional and local access and circulation opportunities. These transportation facilities generally provide two to six travel lanes.

Freeway System

Primary regional access to the Project Site is provided by I-15, which runs north-south approximately 1,500 feet west of the Project Site. I-15 connects with SR 78, which generally runs east-west approximately 4.5 miles north of the Project Site, and SR 56, which runs generally east-west, approximately 7.5 miles south of the Project Site.

The bi-directional annual ADT on I-15 in 2013 was 202,000 vehicles south of the Via Rancho Parkway interchange and 194,000 vehicles north of the Via Rancho Parkway interchange.

Arterial and Collector Streets

Primary sub-regional and local access to the Project Site is provided by a network of streets including Via Rancho Parkway, Bear Valley Parkway, San Pasqual Road, and Beethoven Drive.

The following provides a brief description of the streets in the vicinity of the Project Site:

- Via Rancho Parkway – In the Study Area, the classification of Via Rancho Parkway ranges from a Collector Road to a Super Prime Arterial road with a two to six lane cross-section. It runs east-west within the Study Area with a full-access interchange to I-15 south of the Project Site. Via Rancho Parkway has a bike lane on both sides of the street east of I-15. Parking is generally not allowed on either side of the street in the Study Area. The posted speed limit ranges from 35 to 45 miles per hour (mph).
- Bear Valley Parkway – Bear Valley Parkway is a designated Major Road or Super Major Road with a four-lane cross-section. It runs in the north-south direction within the Study Area. Parking is generally not allowed on either side of the street in the Study Area. Bear Valley Parkway has bike lanes on both sides of the street in the Study Area. The posted speed limit is 45 mph.
- San Pasqual Road – San Pasqual Road is a four-lane east-west roadway within the Study Area. It is classified a Major Road. San Pasqual Road has bike lanes on both sides of the street in the Study Area and generally prohibits parking on both sides of the street.
- Beethoven Drive – Beethoven Drive is a three to four lane roadway bordering the east and north sides of the shopping center that provides direct access to the Project Site. It is classified a Collector in the Study Area. Parking is not allowed on the street in the Study Area.

BICYCLE AND PEDESTRIAN NETWORK

Existing Bicycle System

The existing bicycle system in the Study Area consists of Class II bike lanes on Via Rancho Parkway, Bear Valley Parkway, and San Pasqual Road. Bicycle lanes are a component of street design with dedicated striping, separating vehicular traffic from bicycle traffic. These facilities offer a safer environment for both cyclists and motorists.

Existing Pedestrian Facilities

The walkability of existing facilities is based on the availability of pedestrian routes necessary to accomplish daily tasks without the use of an automobile; these attributes are quantified by WalkScore.com and assigned a score out of 100 points. With the various commercial businesses adjacent to residential neighborhoods, the walkability of the Study Area is approximately 42 points¹; comparable to the citywide score of 41 points.

PUBLIC TRANSIT SYSTEM

Transit service is available in the immediate vicinity of the Project Site, provided by North County Transit District (NCTD) and Metropolitan Transit System (MTS). Figure 3 illustrates the existing transit service within the Study Area. Table 7 summarizes the various transit lines, the type of service, and frequency of service. The following provides a brief description of the bus lines providing service in the vicinity of the Project Site:

- **NCTD 350** – Route 350 is a local line that travels from Escondido to Del Lago Transit Station, with average headways of 15 minutes during the weekday morning and afternoon peak hours. This line provides service to the Escondido Transit Center, Del Lago Transit Station, and Westfield North County. It travels along Beethoven Drive and Bear Valley Parkway in the vicinity of the Project Site.
- **MTS 235** – Route 235 is a rapid line that travels from Downtown San Diego to the Escondido Transit Center, with average headways of 15 minutes during the weekday morning peak and afternoon peak hours. This line provides service to the various transit stations, centers and plazas along the I-15 corridor. It travels along I-15 and Del Lago Boulevard in the vicinity of the Project Site.
- **MTS 280** – Route 280 is a rapid express line that travels from Downtown San Diego to the Escondido Transit Center, with average headways of 15 minutes during the weekday morning and afternoon peak hours. It travels along I-15 and Del Lago Boulevard in the vicinity of the Project Site.

¹ WalkScore.com (www.walkscore.com) rates the Project Site (272 E. Via Rancho Parkway) with a score of 42 out of 100 possible points (scores accessed on June 18, 2015). Walk Score calculates the walkability of specific addresses by taking into account the ease of living in the neighborhood with a reduced reliance on automobile travel.

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

This section presents the existing peak hour turning movement traffic volumes for the intersections and ADT volumes for the street segments analyzed in the study. It also presents the analysis of the resulting operating conditions at each intersection and roadway segment indicating delays, volume-to-capacity (V/C) ratios, and LOS.

Existing Traffic Volumes

Turning movement counts for typical weekday afternoon (4:00 p.m. to 6:00 p.m.) peak periods at the 17 study intersections and ADT counts at the 14 study street segments were collected in April 2015 when area schools were in session.

Intersection fieldwork (signal phasing and lane configurations) was collected at all of the analyzed intersections and street segments in May 2015.

These traffic volumes are illustrated in Figure 4 and represent for the purposes of this analysis the Existing Conditions. The existing traffic counts are provided in Appendix B.

Intersection Operations

Existing intersection operations analysis during the weekday afternoon peak hour was conducted using the 2010 HCM methodologies described in Chapter 2. Table 8 summarizes the delay and corresponding LOS at each of the analyzed intersections. As shown in Table 8, all of the 17 analyzed intersections currently operate at an acceptable LOS, i.e., LOS D or better, during the afternoon peak hour with the exception of Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6, which operates at LOS E. Detailed LOS worksheets are provided in Appendix C.

Street Segment Operations – Daily Analysis

Existing street segment operations were analyzed using the LOS thresholds described in Chapter 2. Table 9 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 9, all but two of the 14 analyzed street segments currently operate at LOS D or better. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive both operate at LOS F under existing conditions.

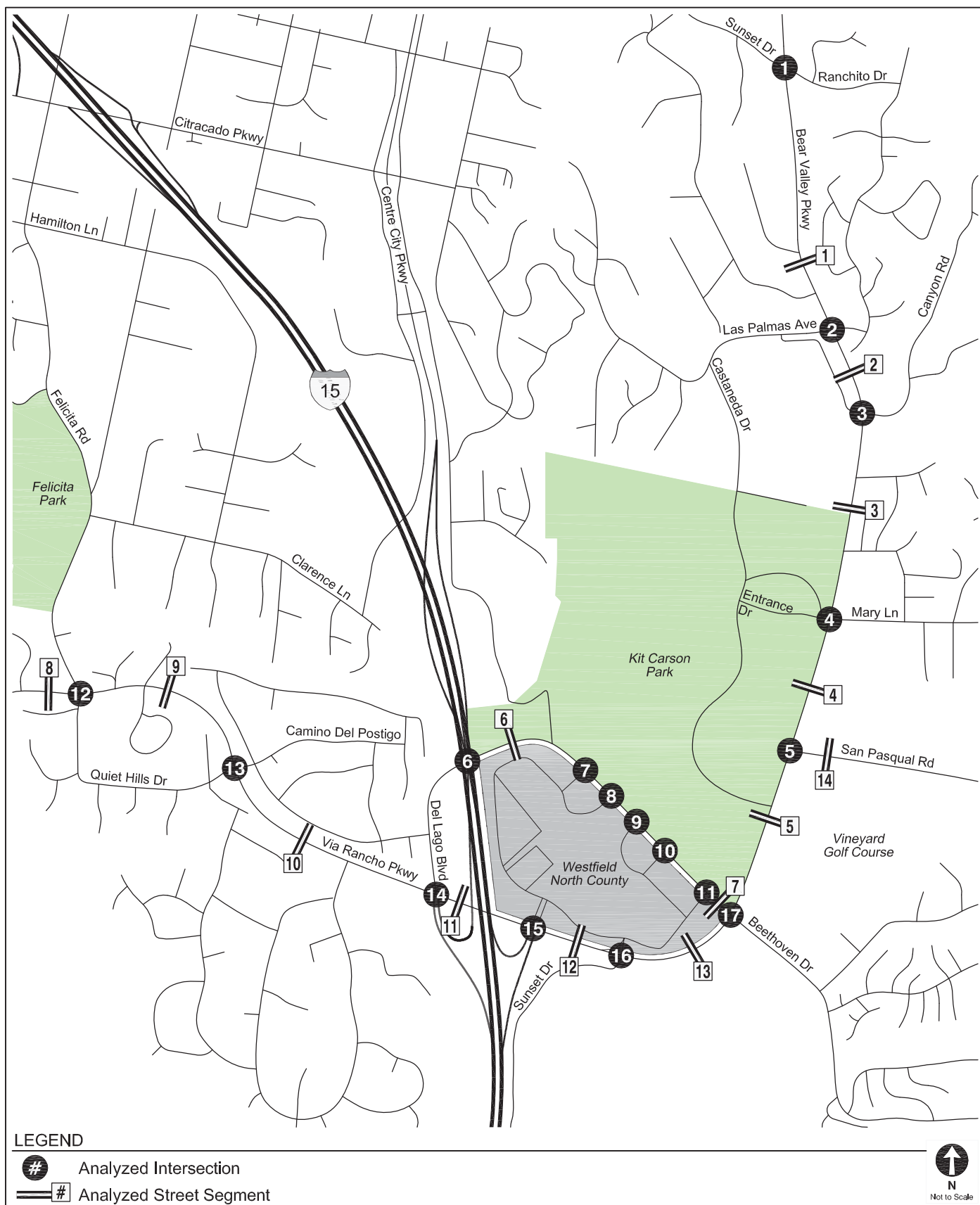
Street Segment Operations – Peak Hour Analysis

Existing street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project in the peak hour. As shown in Table 10, all 10 of the street segments analyzed for peak hour impacts currently operate at LOS D or better during the afternoon peak hour. Detailed worksheets for the peak hour street segment analysis are provided in Appendix D.

Freeway Ramps Operations

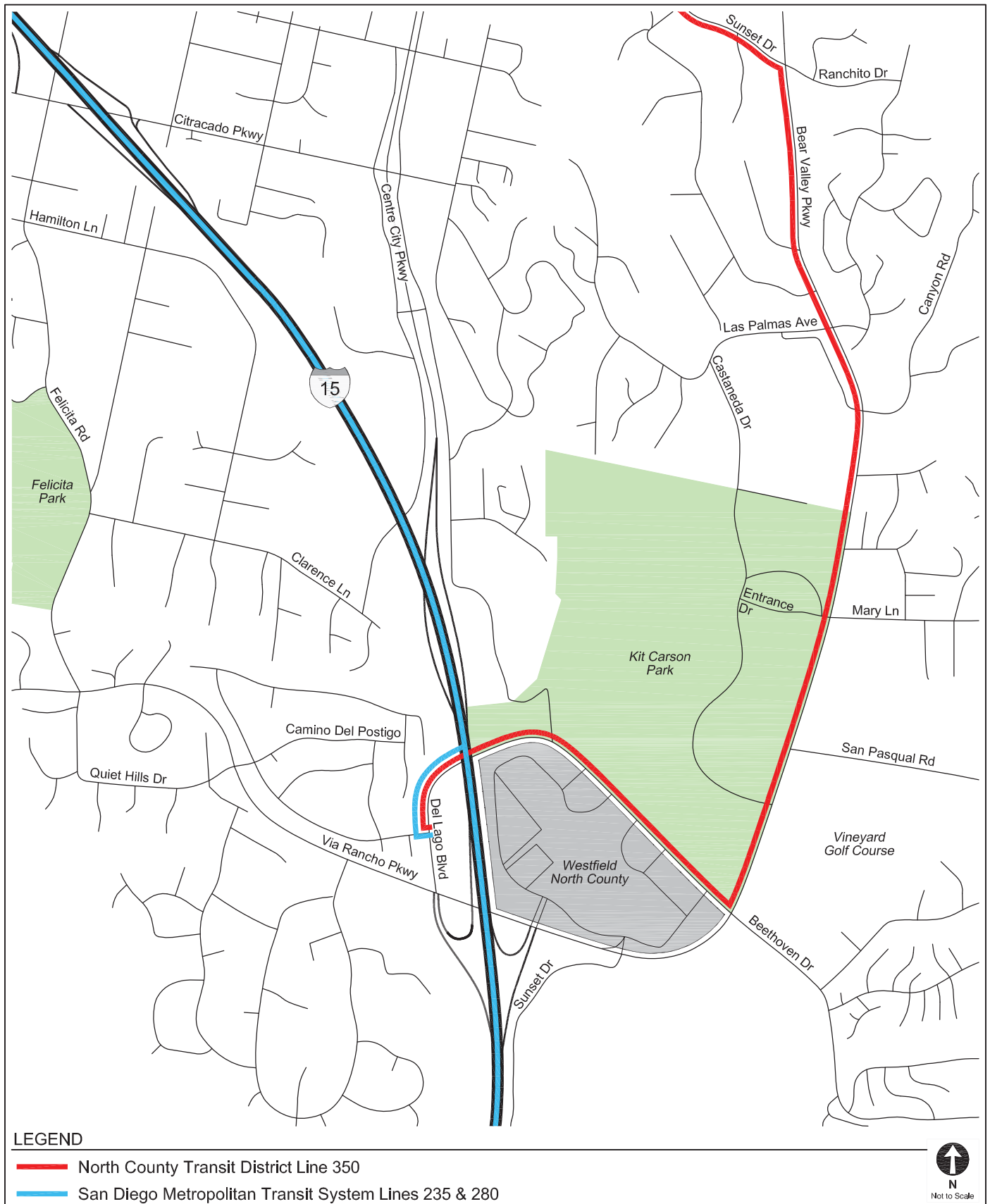
The only Study Area freeway on-ramp that is metered during the afternoon peak hour is the I-15 Northbound On-Ramp at Via Rancho Parkway. According to information provided by Caltrans staff, the ramp meter at this location allows between 358 to 493 vehicles per hour to enter the freeway. For the purposes of this study, the average number of vehicles per hour (425 vehicles per hour) allowed to enter the freeway was used as the basis for analysis.

Table 11 provides a summary of ramp meter operations for this on-ramp. As shown in Table 11, under existing conditions this ramp has an excess demand of 152 vehicles per hour resulting in a delay of 21.46 minutes and a queue of 4,408 feet. Field observations of operating conditions at this ramp during the afternoon peak hours indicate that the existing ramp is not operating this poorly and, therefore, these calculations represent a very conservative portrayal of actual conditions.



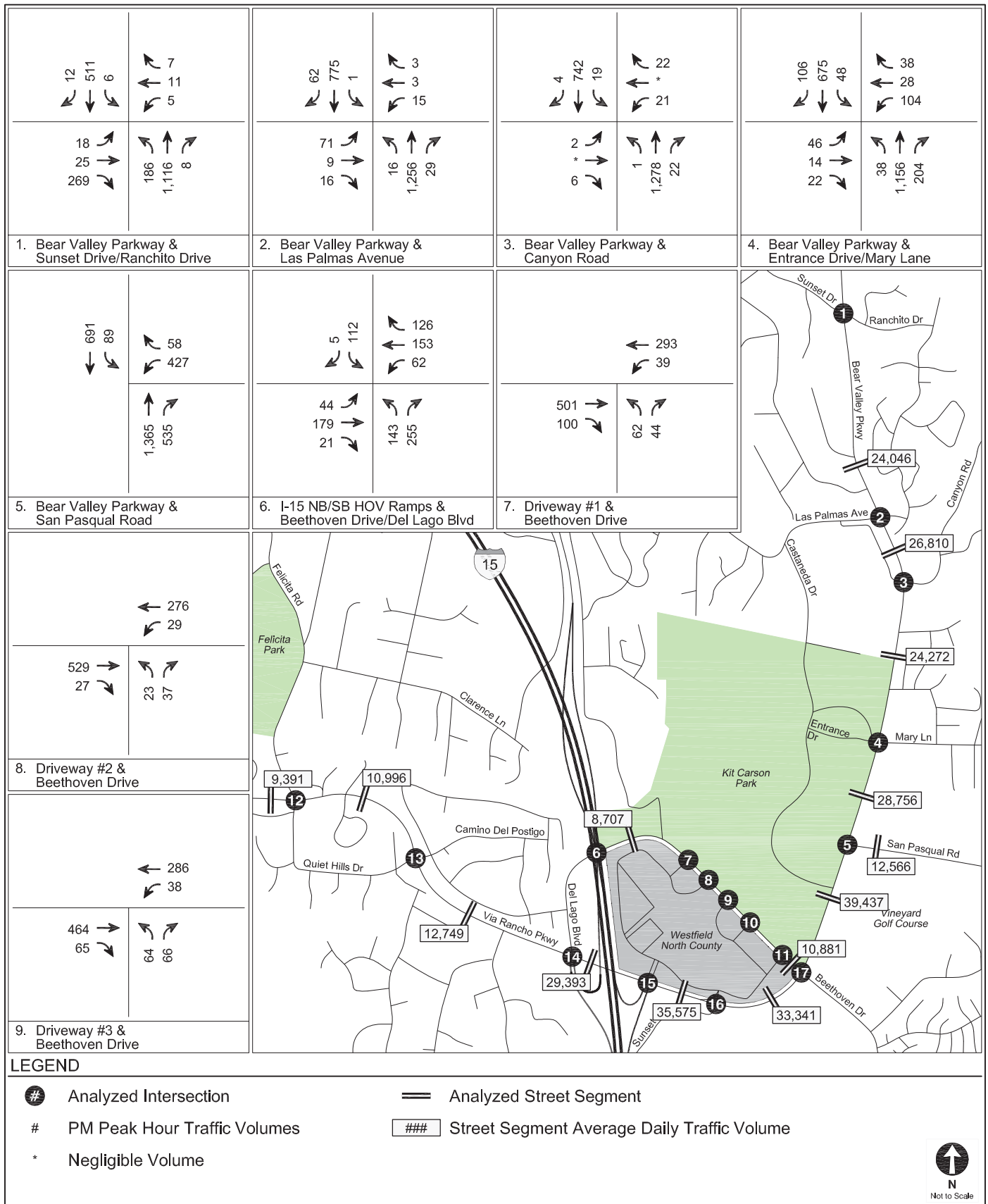
STUDY AREA AND ANALYZED LOCATIONS

FIGURE
2



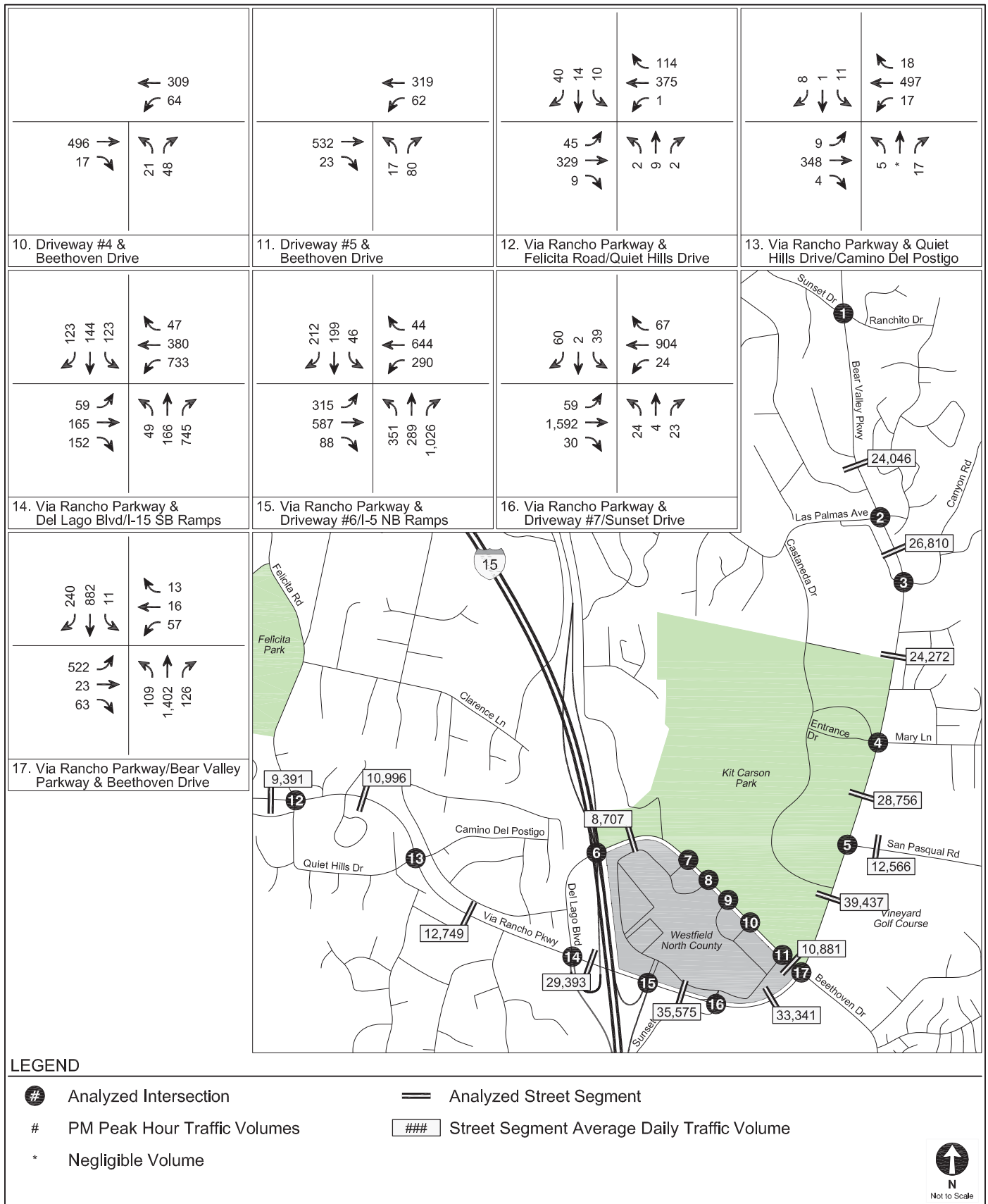
EXISTING TRANSIT SERVICE

FIGURE
3



EXISTING CONDITIONS (YEAR 2015)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
4



EXISTING CONDITIONS (YEAR 2015)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
4 (CONT.)

TABLE 5
ANALYZED INTERSECTIONS

No.	Intersection	Jurisdiction
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	City of Escondido
2.	Bear Valley Parkway & Las Palmas Avenue	City of Escondido
3.	Bear Valley Parkway & Canyon Road	City of Escondido
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	City of Escondido
5.	Bear Valley Parkway & San Pasqual Road	City of Escondido
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	City of Escondido/CALTRANS
7.	Driveway #1 & Beethoven Drive	City of Escondido
8.	Driveway #2 & Beethoven Drive	City of Escondido
9.	Driveway #3 & Beethoven Drive	City of Escondido
10.	Driveway #4 & Beethoven Drive	City of Escondido
11.	Driveway #5 & Beethoven Drive	City of Escondido
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	City of Escondido
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	City of Escondido
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	City of Escondido/CALTRANS
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	City of Escondido/CALTRANS
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	City of Escondido
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	City of Escondido

TABLE 6
ANALYZED STREET SEGMENTS

No.	Street Segment
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive
6.	Beethoven Drive East of Interstate-15
7.	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/Interstate-15 Southbound Ramps
11.	Via Rancho Parkway between Del Lago Boulevard/Interstate-15 Southbound Ramps & Driveway #6/Interstate-15 Northbound Ramps
12.	Via Rancho Parkway between Driveway #6/Interstate-15 Northbound Ramps & Driveway #7/Sunset Drive
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive
14.	San Pasqual Road East of Bear Valley Parkway

**TABLE 7
EXISTING TRANSIT SERVICE**

Provider, Route, and Service Area		Service Type	Hours of Operation	Average Headway (minutes)		
				A.M.	Midday	P.M.
North County Transit District						
350	Escondido to Del Lago Transit Station via Westfield North County Mall	Local	4:23 a.m. to 12:08 a.m.	15	15	15
San Diego Metropolitan Transit System						
235	Downtown San Diego - Escondido Transit Center	Rapid	4:30 a.m. to 11:45 p.m.	15	15	15
280	Downtown San Diego - Escondido Transit Center	Rapid Express	5:00 a.m. to 7:00 p.m.	15	30	15

TABLE 8
EXISTING CONDITIONS (YEAR 2015)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Delay	LOS [a]
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	27.17	C
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	7.20	A
3.	Bear Valley Parkway & Canyon Road	P.M.	5.69	A
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	13.76	B
5.	Bear Valley Parkway & San Pasqual Road	P.M.	16.95	B
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	9.96	A
7. [b]	Driveway #1 & Beethoven Drive	P.M.	17.35	B
8. [b]	Driveway #2 & Beethoven Drive	P.M.	14.22	B
9. [b]	Driveway #3 & Beethoven Drive	P.M.	15.65	B
10. [b]	Driveway #4 & Beethoven Drive	P.M.	14.15	B
11. [b]	Driveway #5 & Beethoven Drive	P.M.	11.98	B
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	10.68	B
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	6.62	A
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	47.86	D
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	78.48	E
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	36.64	D
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	23.04	C

Notes:

[a] LOS Analysis is based on 2010 HCM methodology

[b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

**TABLE 9
EXISTING CONDITIONS (YEAR 2015)
STREET SEGMENT DAILY LEVELS OF SERVICE**

No.	Street Segment	General Plan Classification	Lanes	Capacity at LOS E	ADT	V/C	LOS
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	24,046	1.603	F
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	26,810	0.725	C
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	24,272	0.656	C
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,756	0.777	D
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	39,437	1.066	F
6.	Beethoven Drive East of I-15	Collector	3	22,500	8,707	0.387	B
7.	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	10,881	0.318	A
[a]		Collector	3	22,500	10,881	0.484	B
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,391	0.626	C
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	10,996	0.733	C
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	12,749	0.212	A
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	29,393	0.794	D
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	35,575	0.593	C
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	33,341	0.556	C
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	12,566	0.340	A

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 10
EXISTING CONDITIONS (YEAR 2015)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	Existing Conditions	
		PM Peak Hour	
		Speed	LOS
Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	NB	29.88	C
	SB	40.44	A
Bear Valley Parkway between Las Palmas Avenue & Canyon Road	NB	31.15	B
	SB	33.65	B
Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	NB	38.93	B
	SB	36.98	B
Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	NB	36.70	B
	SB	36.30	B
Bear Valley Parkway between San Pasqual Road & Beethoven Drive	NB	32.87	B
	SB	28.82	C
Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	EB	40.63	A
	WB	38.87	B
Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	EB	25.64	C
	WB	43.36	A
Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	EB	18.89	D
	WB	19.75	D
Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	EB	32.11	B
	WB	18.77	D
Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	EB	18.94	D
	WB	37.56	B

**TABLE 11
EXISTING CONDITIONS (YEAR 2015)
FREEWAY RAMP METER ANALYSIS**

Location	Peak Hour	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	577	425	152	21.46	4,408

Chapter 4

Near Term Cumulative without Project Conditions

Estimates of Near Term Cumulative without Project traffic conditions were developed to evaluate the background traffic present on the local street system prior to the development of the Project. This discussion details the assumptions used to develop the Near Term Cumulative without Project (estimated as first full year of operation in year 2018).

CEQA GUIDELINES

The forecast of Near Term Cumulative without Project conditions was prepared in accordance with procedures outlined in Section 15130 of *Guidelines for Implementation of the California Environmental Quality Act, Chapter 3, Title 14, California Code of Regulations* (California Natural Resources Agency, amended July 27, 2007) (*Guidelines*). Specifically, *Guidelines* provides two options for developing the cumulative traffic volume forecast:

“(A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the [lead] agency, or

“(B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact. Any such planning document shall be referenced and made available to the public at a location specified by the lead agency.”

As described in detail below, this analysis includes traffic growth from future projects (option “A” above, the Related Projects) but, as directed by City staff, not from regional growth projections (option “B” above, or ambient growth).

RELATED PROJECTS

In accordance with the CEQA requirements in *Guidelines*, this study considered the effects of the Project in relation to other developments either proposed, approved, or under construction in the Study Area (collectively, the Related Projects). Based on information provided by the City, the Related Projects in the Study Area (e.g., generally located within a two-mile radius of the Project Site) are detailed in Figure 5 and Table 12. Though the buildout years of these Related Projects are uncertain and may be well beyond the buildout year of the Project, or may ultimately never be developed, they were conservatively assumed to be completed and operational by the Project's first full year of operation in 2018.

Using these assumptions, the potential impact of the Project may be evaluated within the context of the worst-case cumulative impact of all prospective development. The development of estimated traffic volumes added to the Study Area as a result of Related Projects involves the use of a three-step process: trip generation, trip distribution, and trip assignment.

Trip Generation

Trip generation estimates for the Related Projects were provided by the City. As shown in Table 12, the Related Projects are expected to generate approximately 1,606 daily trips on a typical weekday, including 217 AM peak hour trips and 239 PM peak hour trips. These projections are very conservative in that they do not in every case account for either the existing uses to be removed or the likely use of other travel modes (transit, walk, etc.) Further, they do not account for the internal capture trips within a multi-use development, nor the interaction of trips between multiple Related Projects within the area, in which one Related Project serves as the origin for a trip destined for another Related Project.

Trip Distribution

The geographic distribution of the traffic generated by the Related Projects is dependent on several factors. These include the type and density of the proposed land uses, the geographic distribution of the population from which the employees/residents and potential patrons of the

proposed developments are drawn, and the location of these projects in relation to the surrounding street system. These factors are considered along with logical travel routes through the street system to develop a reasonable pattern of trip distribution.

Trip Assignment

The trip generation estimates for the Related Projects were assigned to the local street system using the trip distribution pattern described above. Figure 6 shows the study intersection peak hour traffic volumes and street segment daily volumes associated with these Related Projects. These volumes were then added to the existing traffic volumes. These volumes represent the Near Term Cumulative without Project conditions (i.e., existing traffic volumes added to Related Project traffic growth) and are shown in Figure 7.

ROADWAY IMPROVEMENTS

The Circulation Element identifies future roadway improvements within the Study Area that would affect the traffic projections and traffic patterns in the Study Area. In order to provide worst-case analysis no future roadway improvements were assumed for Future Conditions.

TRAFFIC OPERATIONS

Intersections

As mentioned, per City policy, the study intersections were analyzed using 2010 HCM methodology. The projected Near Term Cumulative without Project Conditions intersection operations for the weekday afternoon peak hour are shown in Table 13. As shown, under the Near Term Cumulative without Project Conditions, all but one of the analyzed intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during both the morning and afternoon peak hours. Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6 is projected to operate at LOS E during the afternoon peak hour under Near Term Cumulative without Project conditions. Detailed LOS worksheets are provided in Appendix C.

Street Segments – Daily Analysis

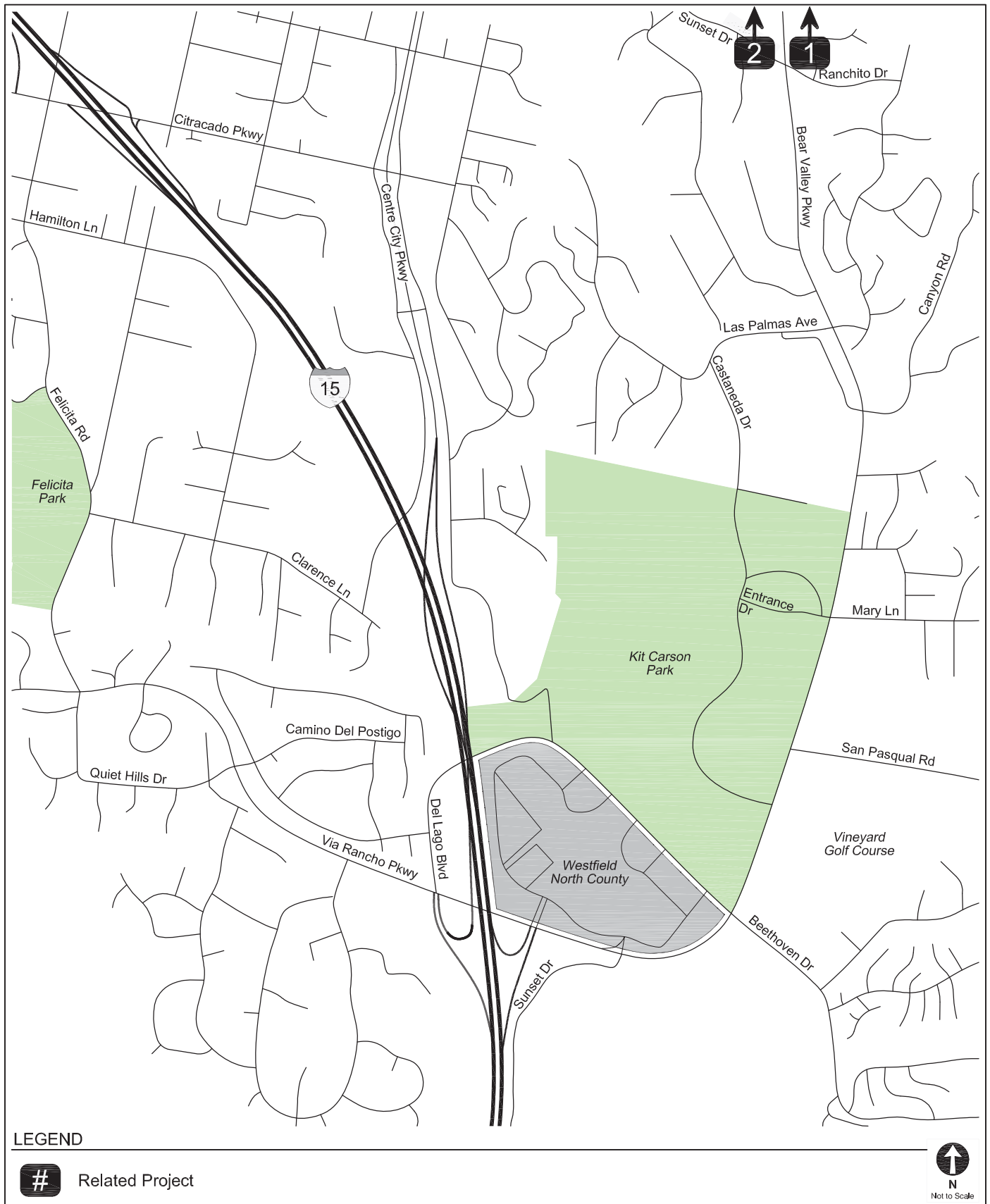
Near Term Cumulative without Project Conditions daily street segment operations were analyzed using the LOS thresholds described in Chapter 2. Table 14 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 14, 16 of the 18 analyzed street segments are projected to operate at LOS D or better. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive are both projected to operate at LOS F under Near Term Cumulative without Project Conditions.

Street Segments – Peak Hour Analysis

Near Term Cumulative without Project Conditions street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project. As shown in Table 15, all 10 analyzed street segments are projected to operate at LOS D or better during the afternoon peak hour. Detailed worksheets are provided in Appendix D.

Freeway Ramps

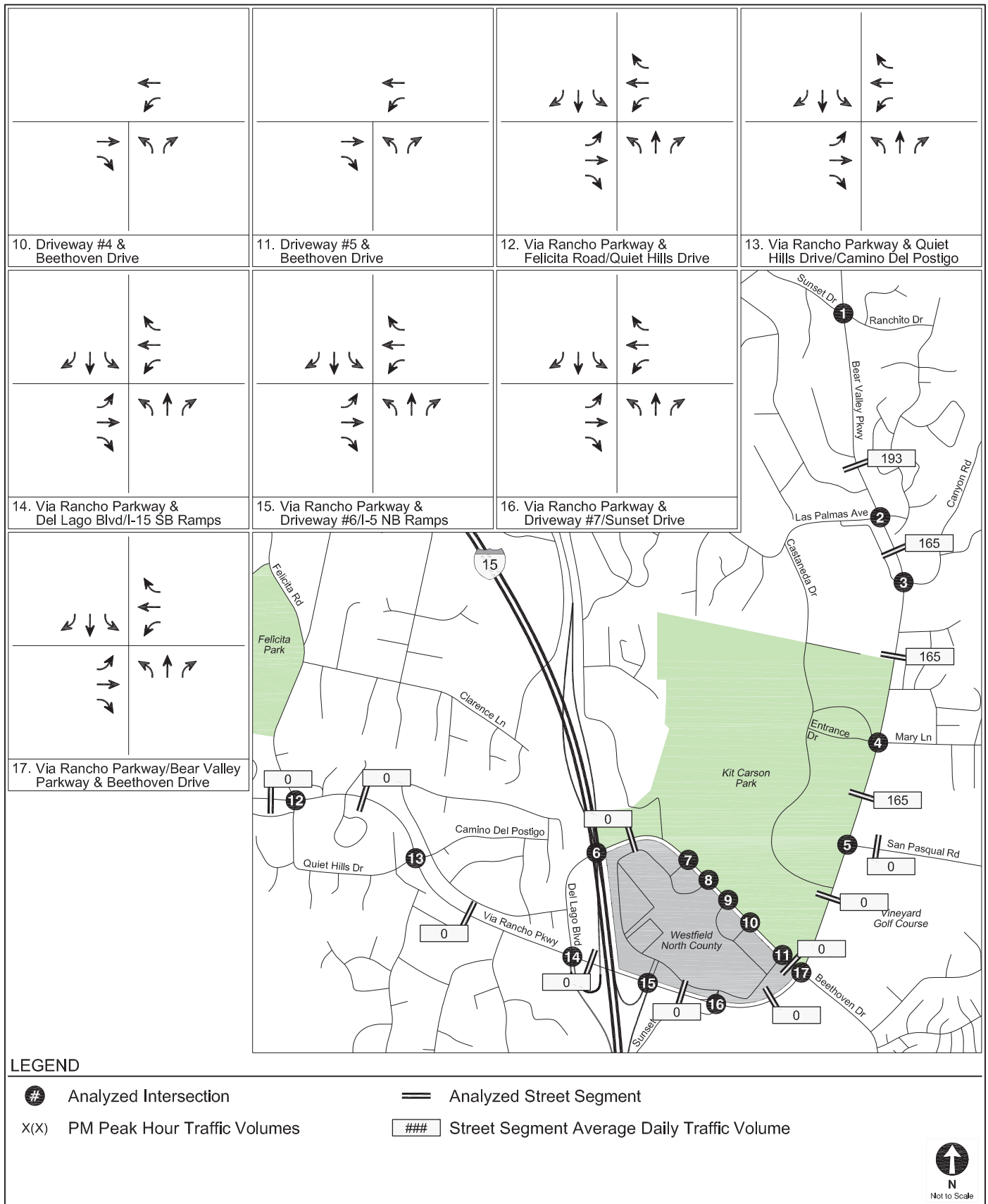
Table 16 provides a summary of ramp meter operations for the I-15 Northbound On-Ramp at Via Rancho Parkway. As shown in Table 16, under Near Term Cumulative without Project Conditions, this ramp has an excess demand of 152 vehicles per hour, resulting in a delay of 21.46 minutes and a queue of 4,408 feet.





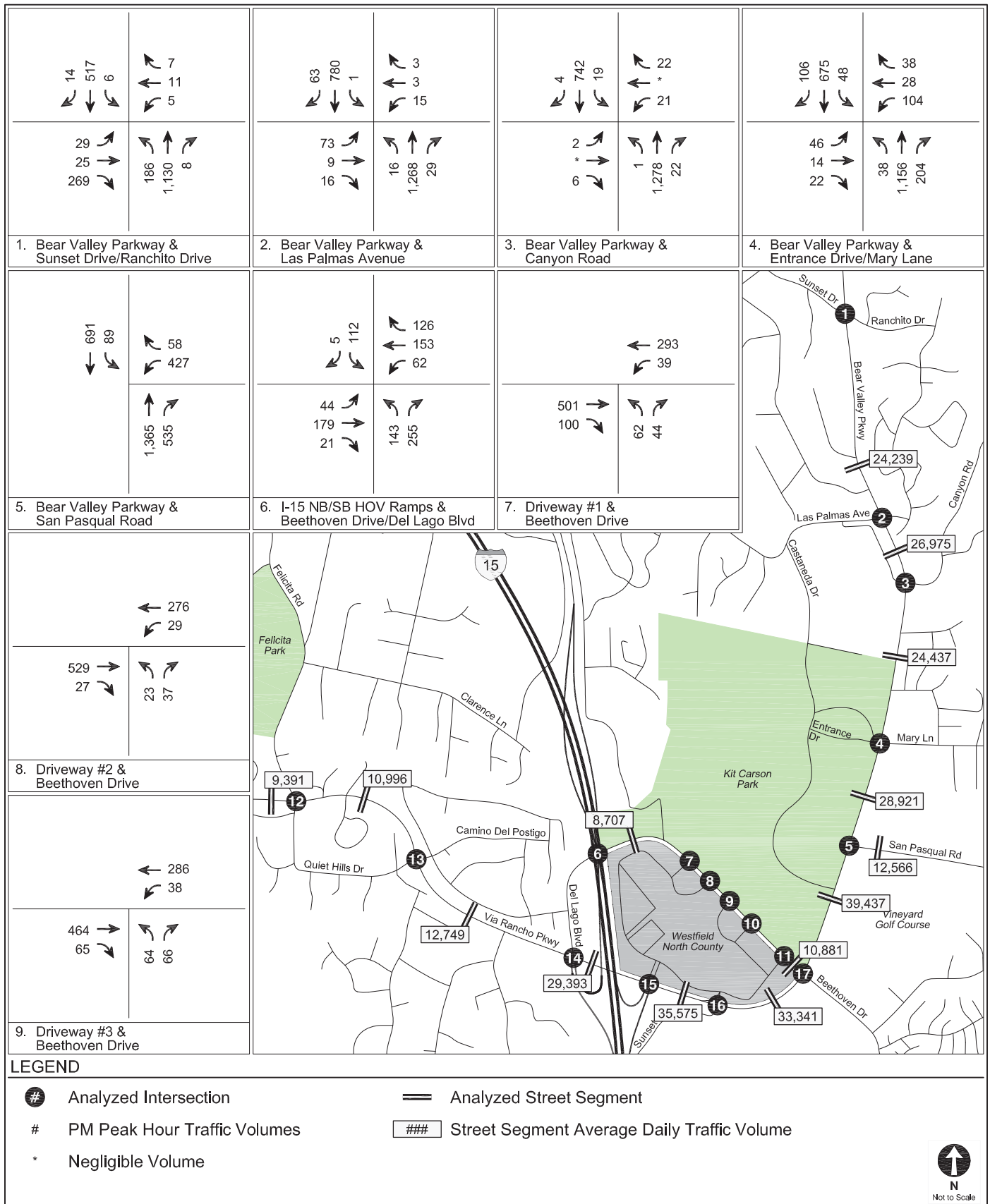
**RELATED PROJECT-ONLY
PM PEAK HOUR TRAFFIC VOLUMES**

**FIGURE
6**



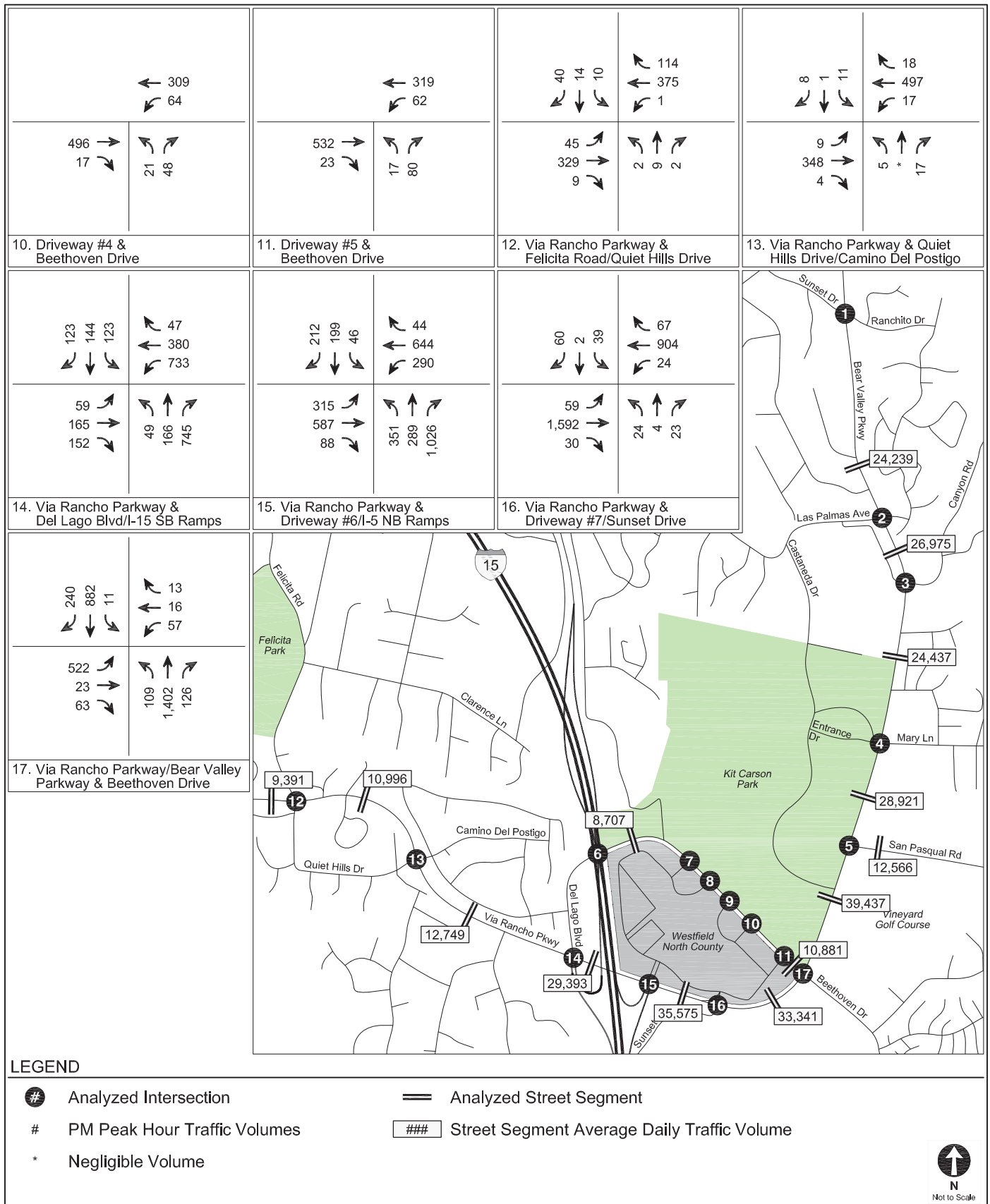
RELATED PROJECT-ONLY
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
6 (CONT.)



NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
7



NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
7 (CONT.)

**TABLE 12
RELATED PROJECTS**

No	Project [a]	Address	Description	Size	Weekday Trip Generation						
					Daily	AM Peak Hour			PM Peak Hour		
						In	Out	Total	In	Out	Total
1.	661 Bear Valley	SE Corner of Bear Valley Pkwy & Encino Dr	Residential	55 du	550	13	31	44	39	16	55
2.	Emmanuel Faith Community Church	639 E. 17th Avenue	Church	400 seats	56	2	1	3	2	2	4
			Preschool	200 students	1,000	85	85	170	90	90	180
Total					1,606	100	117	217	131	108	239

Notes

du: dwelling units

[a] Related projects list provided by City of Escondido, May 2015.

TABLE 13
NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Delay	LOS [a]
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	27.63	C
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	7.65	A
3.	Bear Valley Parkway & Canyon Road	P.M.	5.69	A
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	13.76	B
5.	Bear Valley Parkway & San Pasqual Road	P.M.	16.95	B
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	9.96	A
7. [b]	Driveway #1 & Beethoven Drive	P.M.	17.35	B
8. [b]	Driveway #2 & Beethoven Drive	P.M.	14.22	B
9. [b]	Driveway #3 & Beethoven Drive	P.M.	15.65	B
10. [b]	Driveway #4 & Beethoven Drive	P.M.	14.15	B
11. [b]	Driveway #5 & Beethoven Drive	P.M.	11.98	B
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	10.68	B
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	6.62	A
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	47.86	D
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	78.48	E
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	36.64	D
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	23.04	C

Notes:

[a] LOS Analysis is based on 2010 HCM methodology

[b] Intersection is stop-controlled, delayed reported is for minor street left turn lane

TABLE 14
NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	General Plan Classification	Lanes	Capacity at LOS E	ADT	V/C	LOS
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	24,239	1.616	F
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	26,975	0.729	C
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	24,437	0.660	C
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,921	0.782	D
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	39,437	1.066	F
6.	Beethoven Drive East of I-15	Collector	3	22,500	8,707	0.387	B
7.	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	10,881	0.318	A
[a]		Collector	3	22,500	10,881	0.484	B
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,391	0.626	C
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	10,996	0.733	C
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	12,749	0.212	A
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	29,393	0.794	D
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	35,575	0.593	C
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	33,341	0.556	C
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	12,566	0.340	A

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 15
NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	PM Peak Hour	
		Speed	LOS
Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	NB	30.04	C
	SB	40.19	A
Bear Valley Parkway between Las Palmas Avenue & Canyon Road	NB	29.75	C
	SB	34.48	B
Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	NB	39.49	A
	SB	36.77	B
Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	NB	36.70	B
	SB	36.30	B
Bear Valley Parkway between San Pasqual Road & Beethoven Drive	NB	32.87	B
	SB	28.78	C
Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	EB	40.63	A
	WB	38.87	B
Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	EB	25.91	C
	WB	43.40	A
Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	EB	18.96	D
	WB	21.05	D
Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	EB	31.98	B
	WB	18.92	D
Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	EB	19.36	D
	WB	37.32	B

TABLE 16
NEAR TERM CUMULATIVE WITHOUT PROJECT CONDITIONS (YEAR 2018)
FREEWAY RAMP METER ANALYSIS

Location	Peak Hour	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	577	425	152	21.46	4,408

Chapter 5

Horizon Year without Project Conditions

Estimates of Horizon Year without Project Conditions were developed to evaluate the background traffic present on the local street system prior to the development of the Project. This chapter details the assumptions used to develop the Horizon Year without Project Conditions (year 2035).

SANDAG MODEL RUNS

The Horizon Year traffic volumes for the study intersections and street segments were developed using traffic projections from SANDAG's Series 12 North County Sub-Area Model. These model runs include traffic projections from the fully-occupied existing land uses on the Project Site as well as development of the Project. Additional engineering judgment was used to refine the peak hour intersection traffic volumes to provide a more accurate reflection of future conditions.

The model runs provided both intersection peak period (three hour periods) and street segment daily traffic volumes. Due to the fact that the model outputs peak period volumes as opposed to peak hour volumes, the peak period volumes must be factored to determine peak hour volumes. Peak hour factors are provided by SANDAG and, in this case, a peak hour factor of 0.34 in the afternoon peak hour was used to convert the intersection afternoon peak period volumes to intersection afternoon peak hour volumes. Figure 8 shows the resulting intersection peak hour and street segment daily traffic volumes in the Study Area under Horizon Year without Project Conditions.

ROADWAY IMPROVEMENTS

The Circulation Element identifies future roadway improvements within the Study Area that would affect the traffic projections and traffic patterns in the Study Area. In order to provide worst-case analysis, no future roadway improvements were assumed for Future Conditions.

TRAFFIC OPERATIONS

Intersections

As mentioned, per City policy, the study intersections were analyzed using 2010 HCM methodology. The projected Horizon Year without Project Conditions intersection operations for the weekday morning and afternoon peak hours are shown in Table 17. As shown, under the Horizon Year without Project Conditions, all but one of the analyzed intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during the afternoon peak hour. Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6 is projected to operate at LOS E during the afternoon peak hour under Horizon Year without Project Conditions. Detailed LOS worksheets are provided in Appendix C.

Street Segments – Daily Analysis

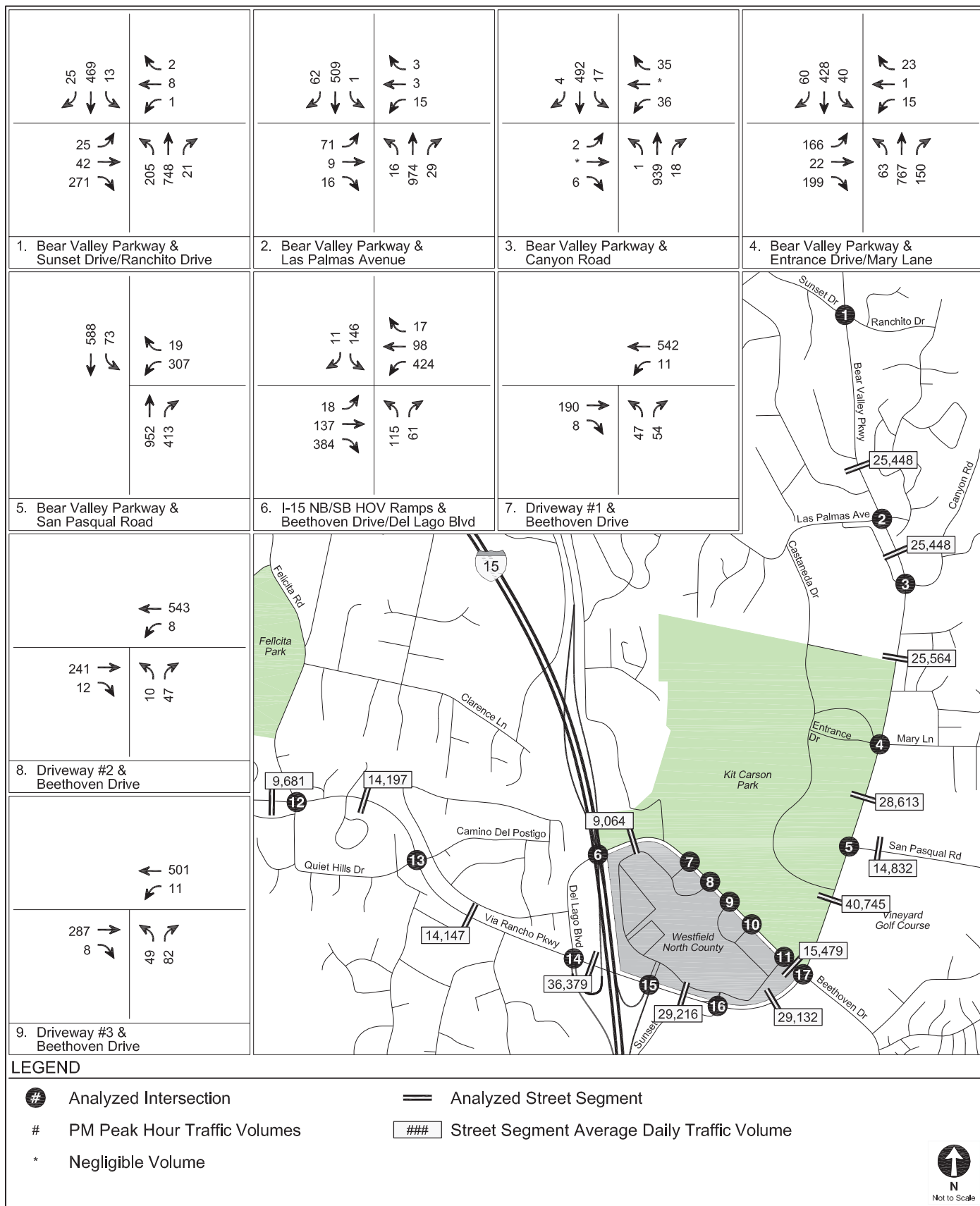
Horizon Year without Project Conditions daily street segment operations were analyzed using the LOS thresholds described in Chapter 1. Table 18 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 18, 14 of the 18 analyzed street segments are projected to operate at LOS D or better. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive and the segments of Via Rancho Parkway between Del Lago Boulevard/I-15 Southbound Ramps and I-15 Northbound Ramps/Driveway #6 and between Felicita Road/Quiet Hills Drive and Quiet Hills Drive/Camino del Postigo are all projected to operate at LOS E or F under Horizon Year without Project Conditions.

Street Segments – Peak Hour Analysis

Horizon Year without Project Conditions street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project. As shown in Table 19, all 10 analyzed street segments are projected to operate at LOS D or better during the afternoon peak hour. Detailed worksheets are provided in Appendix D.

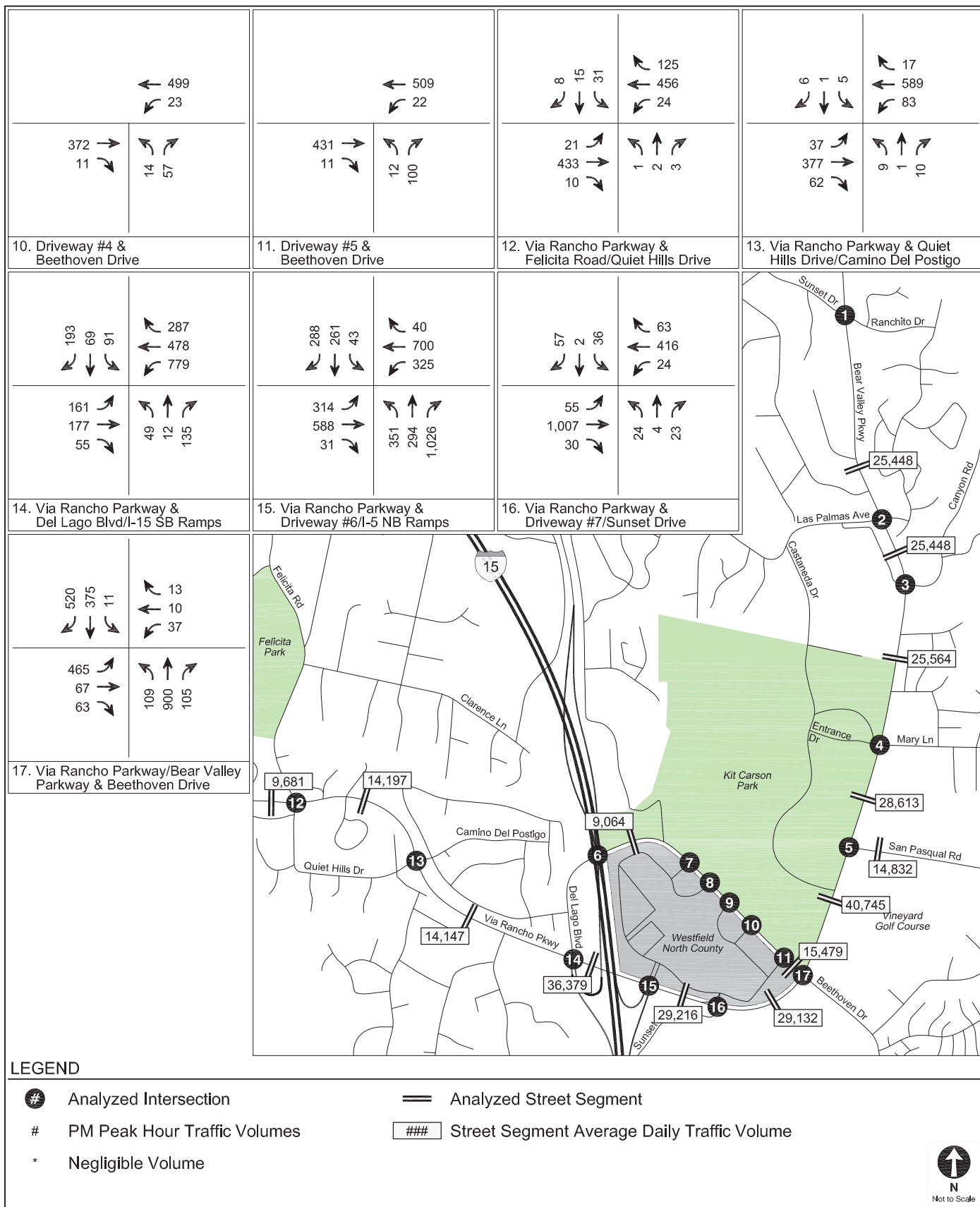
Freeway Ramps

Table 20 provides a summary of ramp meter operations for operations for the I-15 Northbound On-Ramp at Via Rancho Parkway. As shown in Table 20, under Horizon Year without Project Conditions, this ramp has an excess demand of 190 vehicles per hour, resulting in a delay of 26.82 minutes and a queue of 5,510 feet.



HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
8



HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
8 (CONT.)

TABLE 17
HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Delay	LOS [a]
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	25.57	C
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	8.50	A
3.	Bear Valley Parkway & Canyon Road	P.M.	7.40	A
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	21.14	C
5.	Bear Valley Parkway & San Pasqual Road	P.M.	14.05	B
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	18.03	B
7. [b]	Driveway #1 & Beethoven Drive	P.M.	12.58	B
8. [b]	Driveway #2 & Beethoven Drive	P.M.	10.85	B
9. [b]	Driveway #3 & Beethoven Drive	P.M.	12.94	B
10. [b]	Driveway #4 & Beethoven Drive	P.M.	12.26	B
11. [b]	Driveway #5 & Beethoven Drive	P.M.	10.87	B
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	8.39	A
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	10.25	B
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	44.77	D
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	79.91	E
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	43.75	D
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	24.34	C

Notes:

[a] LOS Analysis is based on 2010 HCM methodology

[b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

TABLE 18
HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	General Plan Classification	Lanes	Capacity at LOS E	ADT	V/C	LOS
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	25,448	1.697	F
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	25,448	0.688	C
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	25,564	0.691	C
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,613	0.773	D
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	40,745	1.101	F
6.	Beethoven Drive East of I-15	Collector	3	22,500	9,064	0.403	B
7.	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	15,479	0.453	B
[a]		Collector	3	22,500	15,479	0.688	C
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,681	0.645	C
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	14,197	0.946	E
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	14,147	0.236	A
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	36,379	0.983	E
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	29,216	0.487	B
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	29,132	0.486	B
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	14,832	0.401	B

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 19
HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	PM Peak Hour	
		Speed	LOS
Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	NB	35.60	B
	SB	43.14	A
Bear Valley Parkway between Las Palmas Avenue & Canyon Road	NB	34.43	B
	SB	29.83	C
Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	NB	37.46	B
	SB	36.90	B
Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	NB	36.06	B
	SB	36.67	B
Bear Valley Parkway between San Pasqual Road & Beethoven Drive	NB	33.86	B
	SB	30.77	C
Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	EB	39.86	A
	WB	40.18	A
Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	EB	30.99	C
	WB	42.91	A
Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	EB	24.46	C
	WB	20.83	D
Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	EB	32.97	B
	WB	20.77	D
Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	EB	24.73	C
	WB	35.00	B

TABLE 20
HORIZON YEAR WITHOUT PROJECT CONDITIONS (YEAR 2035)
FREEWAY RAMP METER ANALYSIS

Location	Peak Hour	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	617	425	192	27.11	5,568

Chapter 6

Project Traffic

A trip generation estimate, trip distribution pattern and trip assignment were prepared for the Project. These components form the basis of the Project's traffic impact analysis.

PROJECT TRAFFIC VOLUMES

The first step of the forecasting process is trip generation, which estimates the total arriving and departing traffic volumes on a peak hour and daily basis by applying the appropriate vehicle trip generation equations or rates to the amount of Project development.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound Project traffic volumes. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the Study Area. Localized routes of travel through the Study Area are developed based on existing traffic patterns and relative travel times on various corridors.

The third step of the forecasting process is trip assignment. This involves applying the traffic generated by the Project (the trip generation) to the intersections and street segments in the Study Area according to the projected trip distribution patterns. These traffic volumes can then be added to existing or future background conditions to represent traffic volumes in those conditions once the Project is complete.

With the forecasting process complete and Project traffic assignments developed, the impact of the Project is isolated by comparing operational (i.e., LOS) conditions at the selected key intersections using expected future traffic volumes without and with forecast Project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated and the significance of the Project's impacts identified.

Project Trip Generation

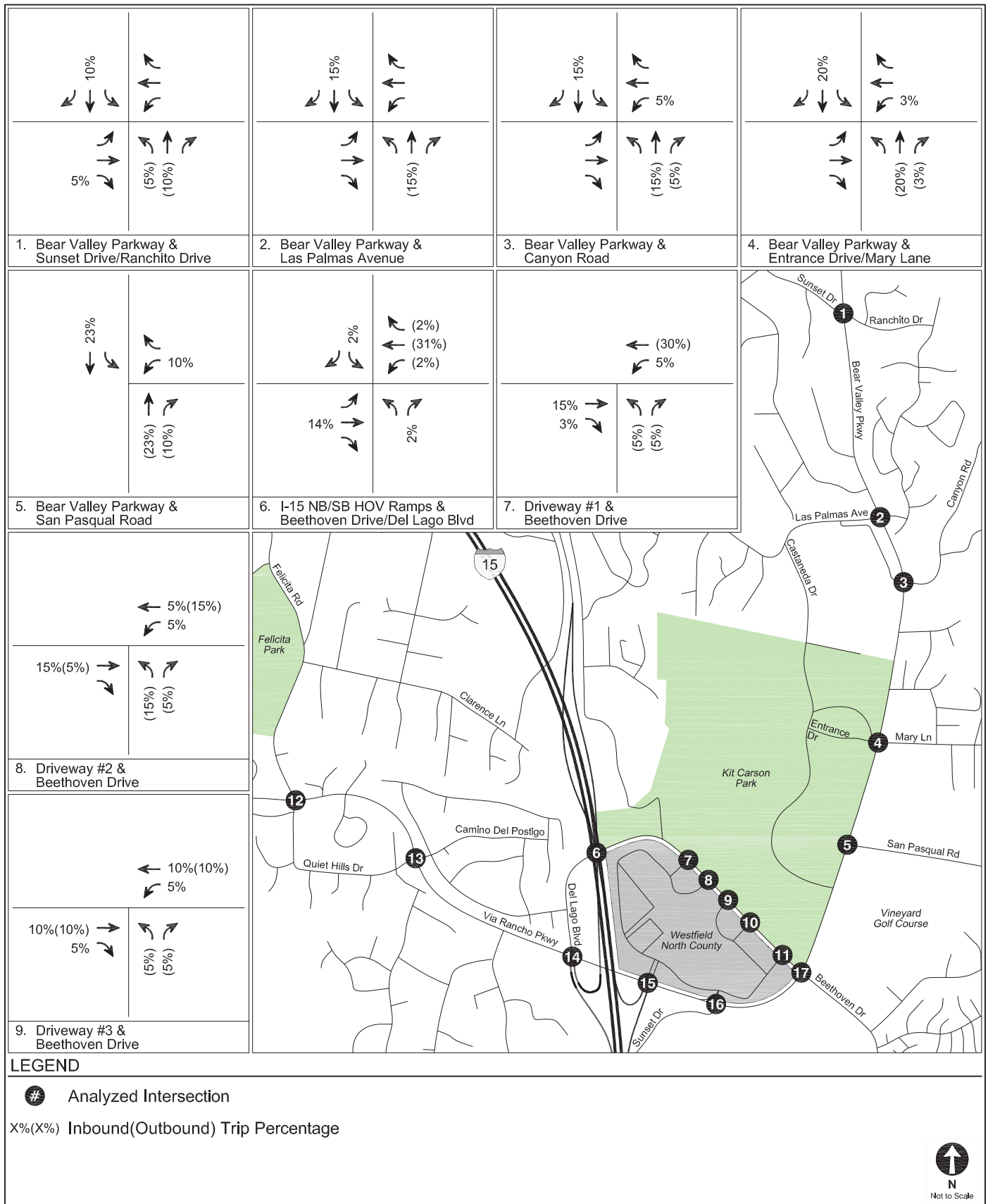
Trip generation estimates for the Project were developed using trip generation rates identified for 'Super Regional Shopping Center,' 'Health Club,' and 'Theater' land uses in the *(not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region* (SANDAG, 2002). Table 21 provides a summary of the trip generation rates and estimates for the development proposed under the Project. As shown in Table 21, it is estimated that the Project would generate a total of 1,684 net new daily trips on a typical weekday, including approximately six morning peak hour trips (five inbound, one outbound) and 135 afternoon peak hour trips (81 inbound, 54 outbound). These estimates are conservative in that they do not account for trip reductions from pass-by trips. It should be noted that, due to the low net new trip generation, the morning peak hour was not studied for Project impacts.

Project Trip Distribution

Project trip distribution is based on a SANDAG select-zone model run that predicts the distribution of Project trips for a given development area. In this case, the development area is the entire mall site; as such, the distribution percentages in the SANDAG model consider trips attracted to a regional mall from a very large area. Since the Project is a movie theater, its customer base will be drawn from a more localized area than the entire shopping center, so engineering judgment was applied to the model results to adjust the trip distribution pattern to account for the more localized customer base.

Project Trip Assignment

The Project trip generation estimates summarized in Table 21 and the distribution patterns illustrated in Figure 9 were used to assign the Project-generated traffic through the analyzed intersections and street segments. Figure 10 illustrates the Project-generated traffic volumes at the analyzed intersections and street segments.



PROJECT TRIP DISTRIBUTION

FIGURE
9



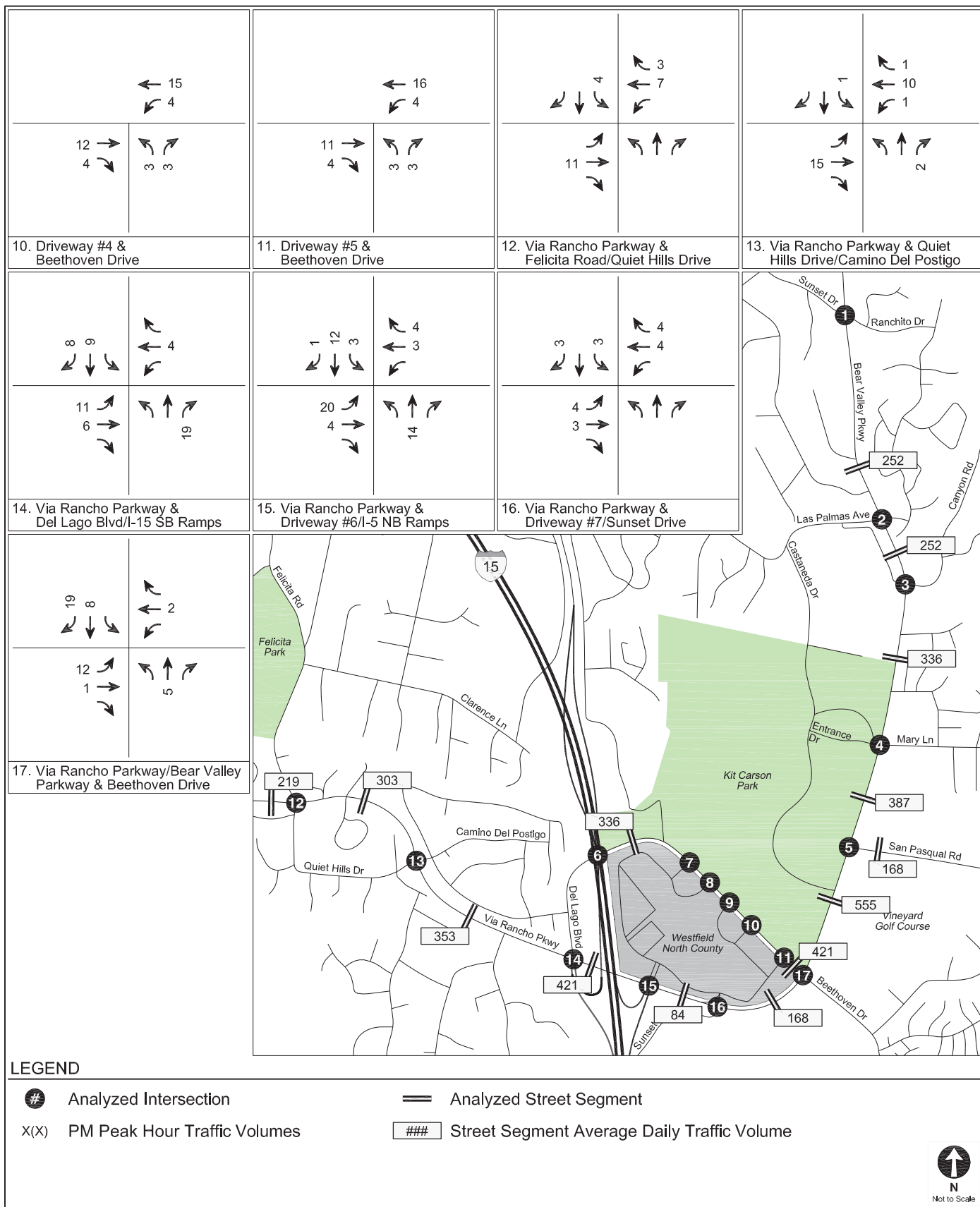
PROJECT TRIP DISTRIBUTION

FIGURE
9 (CONT.)



**PROJECT-ONLY
PM PEAK HOUR TRAFFIC VOLUMES**

**FIGURE
10**



PROJECT-ONLY
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
10 (CONT.)

**TABLE 21
TRIP GENERATION ESTIMATES**

TRIP GENERATION RATES [a]								
Land Use	Rate	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
Super Regional Shopping Center	per 1,000 sf	35.00	70%	30%	4%	50%	50%	10%
Health Club	per 1,000 sf	30.00	60%	40%	4%	60%	40%	9%
Theater	per seat	1.80	80%	20%	0.33%	60%	40%	8%

TRIP GENERATION ESTIMATES								
Land Use	Size	Weekday						
		Daily	A.M. Peak Hour			P.M. Peak Hour		
			In	Out	Total	In	Out	Total
<u>Existing Conditions</u>								
Super Regional Shopping Center	1,244,485 sf	43,557	1,220	523	1,743	2,178	2,178	4,356
Health Club	35,000 sf	1,050	25	17	42	57	38	95
TOTAL EXISTING	1,279,485 sf	44,607	1,245	540	1,785	2,235	2,216	4,451
<u>Future Conditions with Cinema</u>								
Super Regional Shopping Center	1,244,485 sf	43,557	1,220	523	1,743	2,178	2,178	4,356
Health Club	35,000 sf	1,050	25	17	42	57	38	95
Theater (50,341 sf)	1,248 seats	2,246	6	1	7	108	72	180
Less 25% internal capture for Theater		(562)	(1)	(0)	(1)	(27)	(18)	(45)
TOTAL FUTURE	1,329,835 sf	46,291	1,250	541	1,791	2,316	2,270	4,586
NET NEW TRIPS		1,684	5	1	6	81	54	135

Notes:

[a] Source: (Not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region , SANDAG, April 2002.

Chapter 7

Existing with Project Conditions

This chapter describes the evaluation of Project traffic on the existing environment. The analysis corresponds with Existing Conditions data and analysis presented in Chapter 2. The Existing with Project Conditions (year 2015) are defined by the traffic volumes, roadways, and intersections configurations under Existing Conditions.

TRAFFIC VOLUMES

The Project-only afternoon peak hour traffic volumes and daily street segment volumes described in Chapter 6 and shown in Figure 10 were added to the Existing Conditions afternoon peak hour traffic volumes and daily street segment volumes shown in Figure 4. The resulting traffic volumes, illustrated in Figure 11, represent the Existing with Project Conditions (year 2015) after development of the Project.

TRAFFIC OPERATIONS

Intersections

As mentioned, per City policy, the study intersections were analyzed using 2010 HCM methodology. The projected Existing with Project Conditions intersection operations for the afternoon peak hour are shown in Table 22. As shown, under Existing with Project Conditions, all but one of the analyzed intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during the afternoon peak hour. Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6 is projected to operate at LOS E during the afternoon peak hour under Existing with Project conditions. Detailed LOS worksheets are provided in Appendix C.

Street Segments – Daily Analysis

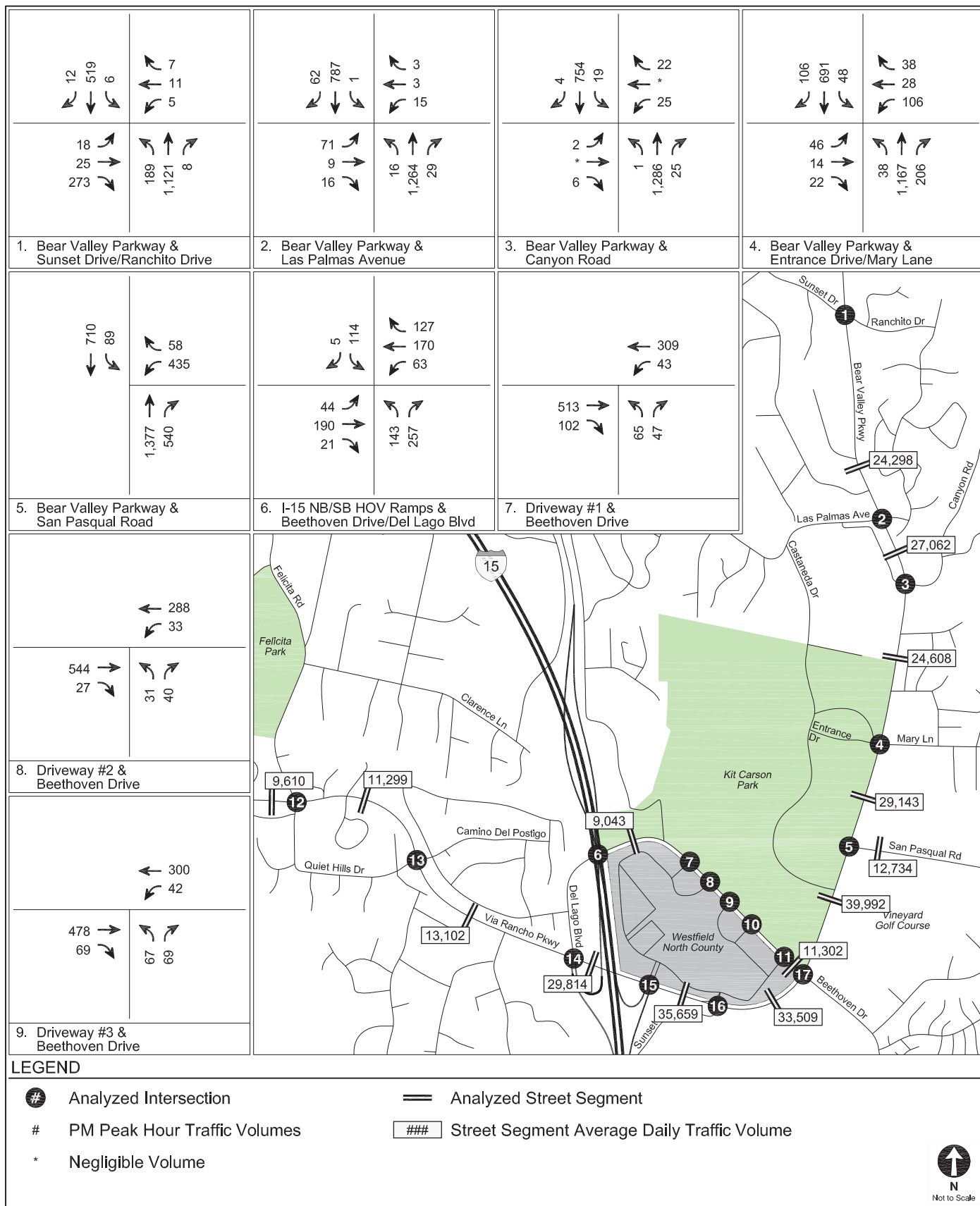
Existing with Project Conditions daily street segment operations were analyzed using the LOS thresholds described in Chapter 2. Table 23 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 23, 16 of the 18 analyzed street segments are projected to operate at LOS D or better under Existing with Project conditions. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive are both projected to operate at LOS F under Existing with Project Conditions.

Street Segments – Peak Hour Analysis

Existing with Project Conditions street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project. As shown in Table 24, eight of the 10 analyzed street segments are projected to operate at LOS D or better during the afternoon peak hour in both directions. One direction of the segments of Via Rancho Parkway between I-15 Northbound Ramps/Driveway #6 and Driveway #7/Sunset Drive and between Driveway #7/Sunset Drive and Beethoven Drive operates at LOS E during the afternoon peak hour under Existing with Project conditions. Detailed worksheets are provided in Appendix D.

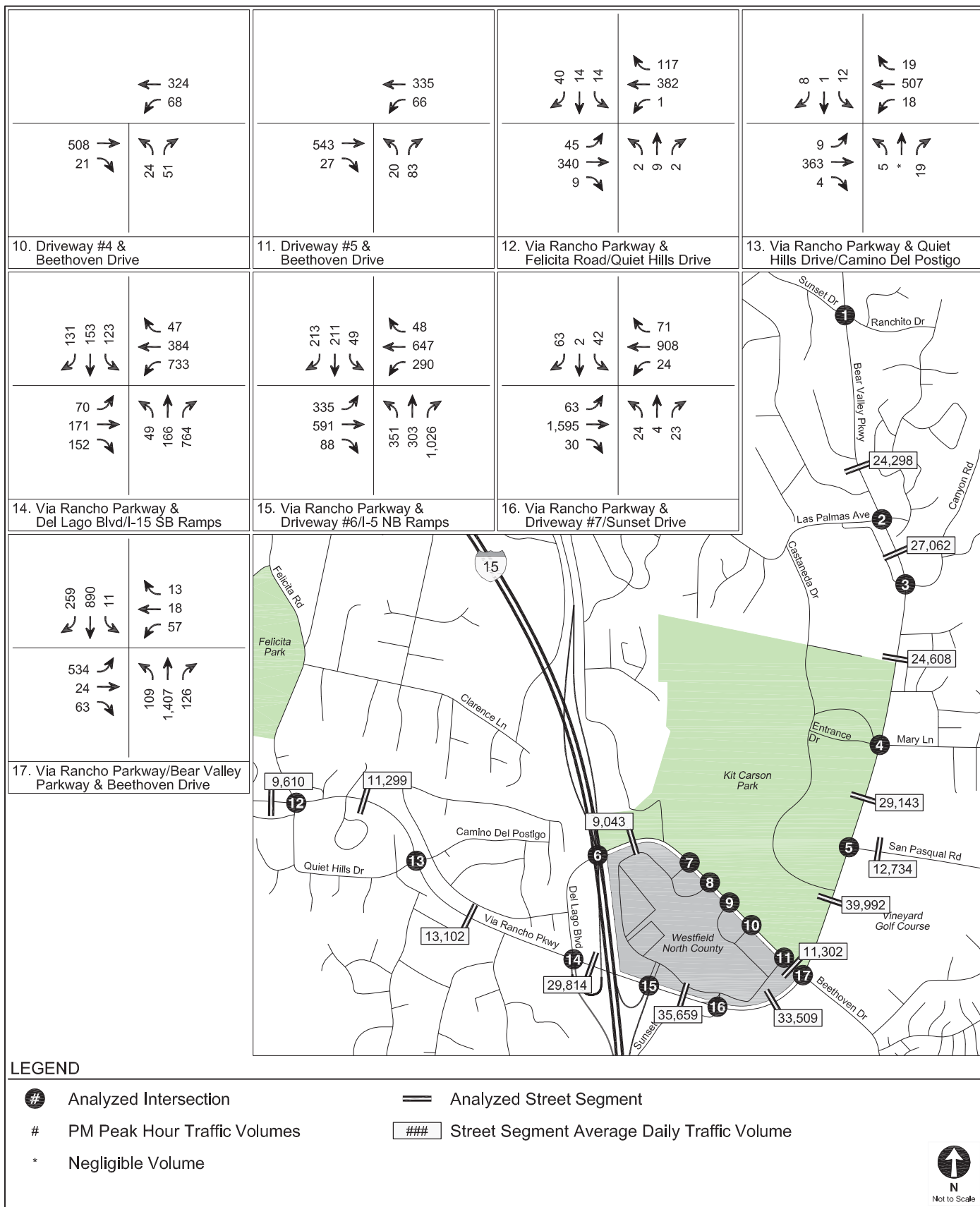
Freeway Ramps

Table 25 provides a summary of ramp meter operations for operations for the I-15 Northbound On-Ramp at Via Rancho Parkway. As shown in Table 25, under Existing with Project Conditions, this ramp has an excess demand of 164 vehicles per hour, resulting in a delay of 23.15 minutes and a queue of 4,756 feet.



EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
11



EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
11 (CONT.)

TABLE 22
EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Existing Conditions		Existing plus Project Conditions			
			Delay	LOS [a]	Delay	LOS [a]	Change in Delay	Significant Impact?
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	27.17	C	27.61	C	0.44	NO
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	7.20	A	7.17	A	(0.03)	NO
3.	Bear Valley Parkway & Canyon Road	P.M.	5.69	A	5.91	A	0.22	NO
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	13.76	B	13.81	B	0.05	NO
5.	Bear Valley Parkway & San Pasqual Road	P.M.	16.95	B	17.06	B	0.11	NO
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	9.96	A	10.06	B	0.10	NO
7. [b]	Driveway #1 & Beethoven Drive	P.M.	17.35	B	18.21	B	0.86	NO
8. [b]	Driveway #2 & Beethoven Drive	P.M.	14.22	B	15.11	B	0.89	NO
9. [b]	Driveway #3 & Beethoven Drive	P.M.	15.65	B	16.37	B	0.72	NO
10. [b]	Driveway #4 & Beethoven Drive	P.M.	14.15	B	14.73	B	0.58	NO
11. [b]	Driveway #5 & Beethoven Drive	P.M.	11.98	B	12.38	B	0.40	NO
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	10.68	B	10.70	B	0.02	NO
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	6.62	A	6.83	A	0.21	NO
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	47.86	D	49.28	D	1.42	NO
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	78.48	E	78.35	E	(0.13)	NO
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	36.64	D	36.61	D	(0.03)	NO
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	23.04	C	23.30	C	0.26	NO

Notes:

[a] LOS Analysis is based on 2010 HCM methodology.

[b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

**TABLE 23
EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
STREET SEGMENT DAILY LEVELS OF SERVICE**

No.	Street Segment	Classification	Lanes	Capacity at LOS E	Existing Conditions			Existing plus Project Conditions				
					ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Significant Impact?
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	24,046	1.603	F	24,298	1.620	F	0.017	NO
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	26,810	0.725	C	27,062	0.731	C	0.007	NO
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	24,272	0.656	C	24,608	0.665	C	0.009	NO
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,756	0.777	D	29,143	0.788	D	0.010	NO
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	39,437	1.066	F	39,992	1.081	F	0.015	NO
6.	Beethoven Drive East of I-15	Collector	3	22,500	8,707	0.387	B	9,043	0.402	B	0.015	NO
7. [a]	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	10,881	0.318	A	11,302	0.330	A	0.012	NO
		Collector	3	22,500	10,881	0.484	B	11,302	0.502	B	0.019	NO
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,391	0.626	C	9,610	0.641	C	0.015	NO
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	10,996	0.733	C	11,299	0.753	D	0.020	NO
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	12,749	0.212	A	13,102	0.218	A	0.006	NO
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	29,393	0.794	D	29,814	0.806	D	0.011	NO
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	35,575	0.593	C	35,659	0.594	C	0.001	NO
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	33,341	0.556	C	33,509	0.558	C	0.003	NO
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	12,566	0.340	A	12,734	0.344	B	0.005	NO

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 24
EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	Exsiting Conditions		Exsiting plus Project Conditions			
		PM Peak Hour		PM Peak Hour			
		Speed	LOS	Speed	LOS	Change in Speed	Significant Impact?
Bear Valley Parkway	NB	29.88	C	29.26	C	(0.62)	NO
between Sunset Drive/Ranchito Drive & Las Palmas Avenue	SB	40.44	A	40.35	A	(0.09)	NO
Bear Valley Parkway	NB	31.15	B	31.12	B	(0.03)	NO
between Las Palmas Avenue & Canyon Road	SB	33.65	B	33.59	B	(0.06)	NO
Bear Valley Parkway	NB	38.93	B	38.86	B	(0.07)	NO
between Canyon Road & Entrance Drive/Mary Lane	SB	36.98	B	36.99	B	0.01	NO
Bear Valley Parkway	NB	36.70	B	36.70	B	0.00	NO
between Entrance Drive/Mary Lane & San Pasqual Road	SB	36.30	B	35.99	B	(0.31)	NO
Bear Valley Parkway	NB	32.87	B	32.63	B	(0.24)	NO
between San Pasqual Road & Beethoven Drive	SB	28.82	C	28.04	C	(0.78)	NO
Via Rancho Parkway	EB	40.63	A	40.47	A	(0.16)	NO
between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	WB	38.87	B	39.41	B	0.54	NO
Via Rancho Parkway	EB	25.64	C	26.26	C	0.62	NO
between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	WB	43.36	A	43.32	A	(0.04)	NO
Via Rancho Parkway	EB	18.89	D	18.74	D	(0.15)	NO
between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	WB	19.75	D	19.55	D	(0.20)	NO
Via Rancho Parkway	EB	32.11	B	31.72	B	(0.39)	NO
between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	WB	18.77	D	18.34	E	(0.43)	NO
Via Rancho Parkway	EB	18.94	D	18.33	E	(0.61)	NO
between Driveway #7/Sunset Drive & Beethoven Drive	WB	37.56	B	37.54	B	(0.02)	NO

TABLE 25
EXISTING WITH PROJECT CONDITIONS (YEAR 2015)
FREEWAY RAMP METER ANALYSIS

Location	Peak Hour	Existing Conditions					Existing with Project Conditions						
		Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Change in Delay (min)	Significant Impact?
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	577	425	152	21.46	4,408	589	425	164	23.15	4,756	1.69	NO

Chapter 8

Near Term Cumulative with Project Conditions

This chapter describes the evaluation of the Project traffic on near term cumulative background traffic. The analysis year of 2018 corresponds with the anticipated first full year of operation of the Project. All future background traffic growth presented in Chapter 4 is also assumed in this analysis.

TRAFFIC VOLUMES

The Project-only afternoon peak hour traffic volumes and daily street segment volumes described in Chapter 6 and shown in Figure 9 were added to the Near Term Cumulative without Project afternoon peak hour traffic volumes and daily street segment volumes shown in Figure 7. The resulting traffic volumes are illustrated in Figure 12 and represent the Near Term Cumulative with Project conditions (year 2018) after the first full year of operation of the Project in year 2018.

TRAFFIC OPERATIONS

Intersections

As mentioned, per City policy, the study intersections were analyzed using 2010 HCM methodology. The projected Near Term Cumulative with Project Conditions intersection operations for the weekday afternoon peak hour are shown in Table 26. As shown, under the Near Term Cumulative with Project Conditions, all but one of the analyzed intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during the afternoon peak hour. Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6 is projected to operate at LOS E during the afternoon peak hour under Near Term Cumulative with Project Conditions. Detailed LOS worksheets are provided in Appendix C.

Street Segments – Daily Analysis

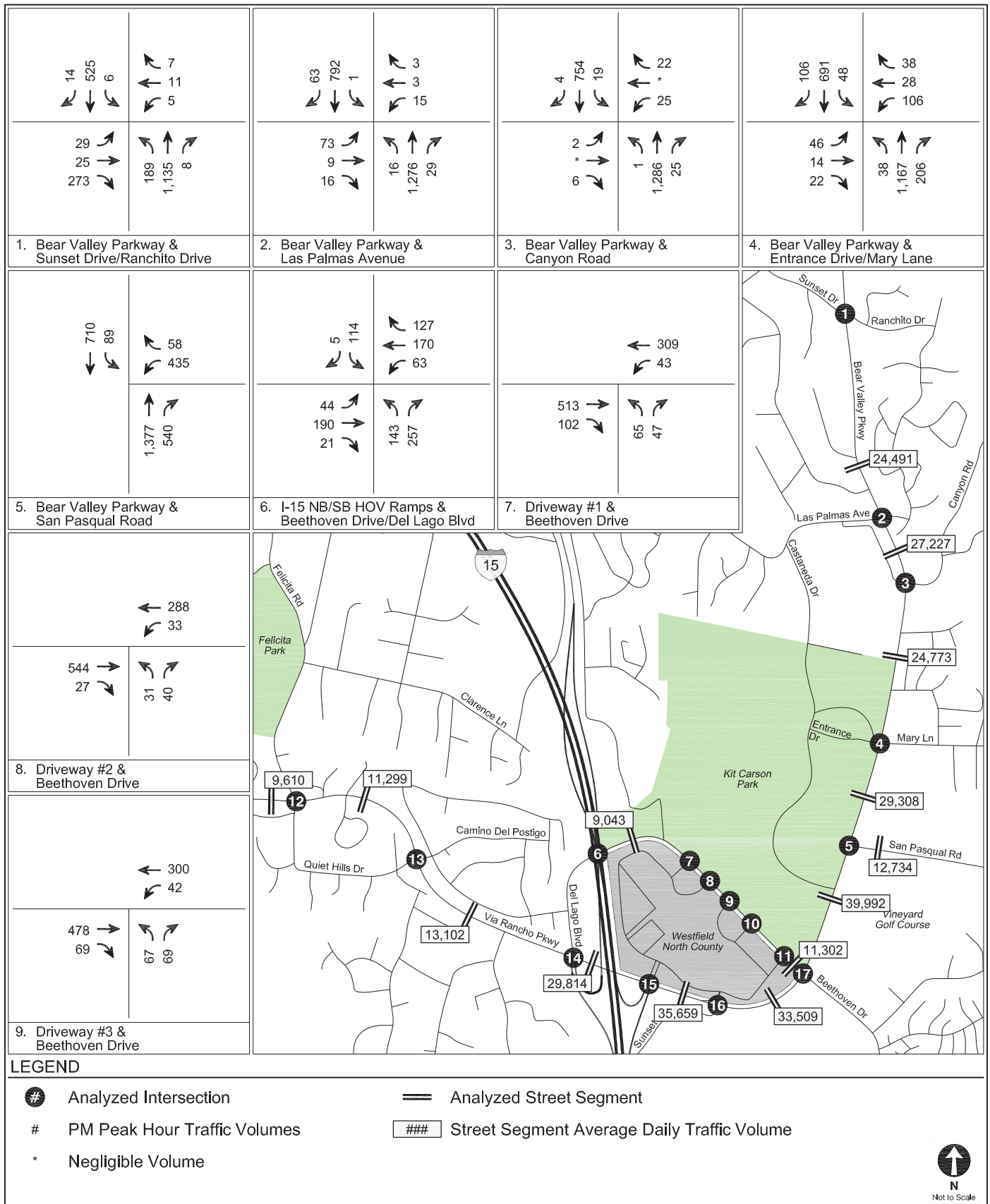
Near Term Cumulative with Project Conditions daily street segment operations were analyzed using the LOS thresholds described in Chapter 2. Table 27 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 27, 16 of the 18 analyzed street segments are projected to operate at LOS D or better. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive are both projected to operate at LOS F under Near Term Cumulative with Project Conditions.

Street Segments – Peak Hour Analysis

Near Term Cumulative with Project Conditions street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project. As shown in Table 28, all but one of the 10 analyzed street segments are projected to operate at LOS D or better during the afternoon peak hour. The segment of Via Rancho Parkway between I-15 Northbound Ramps/Driveway #6 and Driveway #7/Sunset Drive is projected to operate at LOS E during the afternoon peak hour under Near Term Cumulative with Project Conditions. Detailed worksheets are provided in Appendix D.

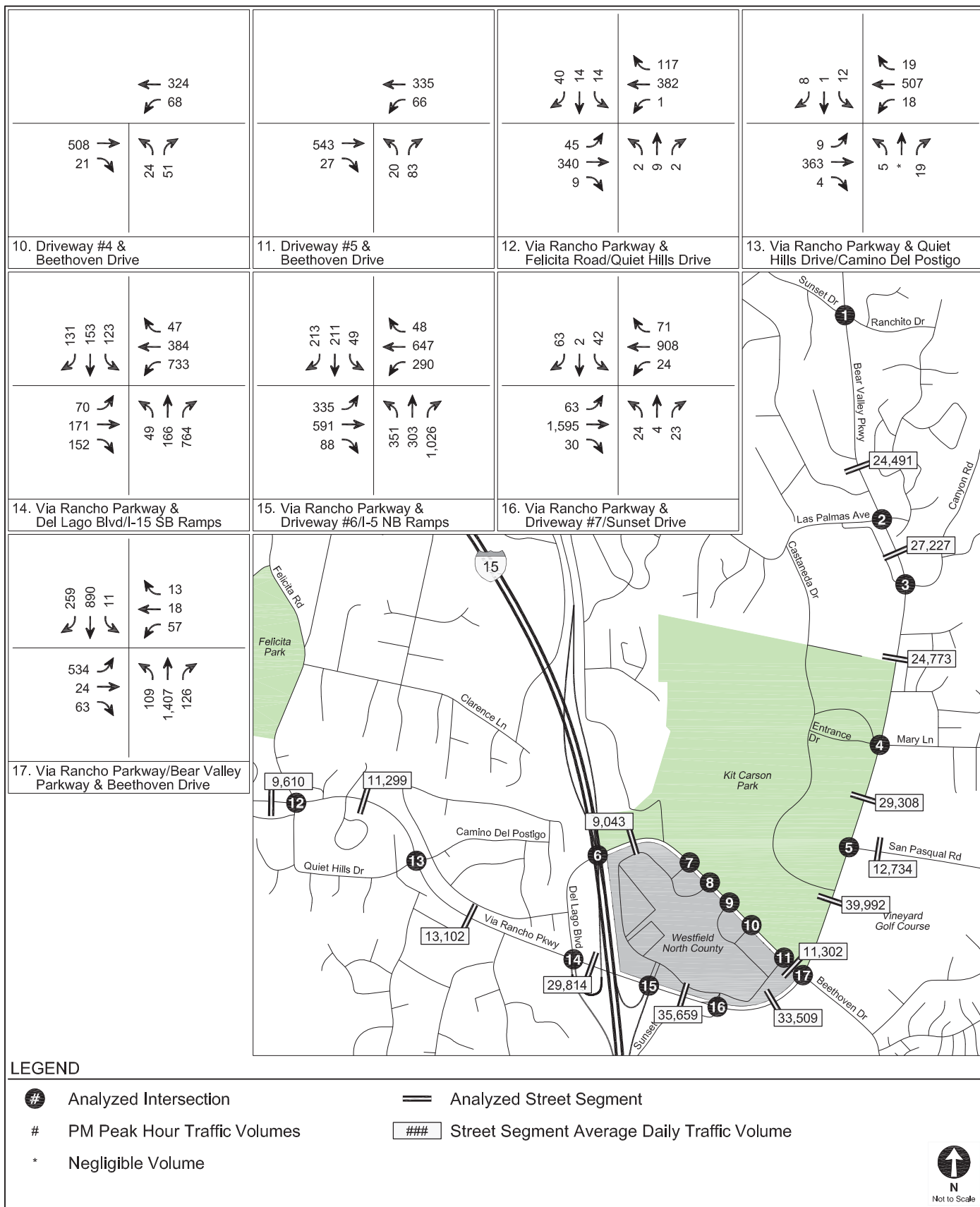
Freeway Ramps

Table 29 provides a summary of ramp meter operations for operations for the I-15 Northbound On-Ramp at Via Rancho Parkway. As shown in Table 29, under Near Term Cumulative with Project Conditions, this ramp has an excess demand of 164 vehicles per hour, resulting in a delay of 23.15 minutes and a queue of 4,756 feet.



NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
12



NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
12 (CONT.)

TABLE 26
NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Near Term Cumulative without Project Conditions		Near Term Cumulative plus Project Conditions			
			Delay	LOS [a]	Delay	LOS [a]	Change in Delay	Significant Impact?
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	27.63	C	28.09	C	0.46	NO
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	7.65	A	7.61	A	(0.04)	NO
3.	Bear Valley Parkway & Canyon Road	P.M.	5.69	A	5.86	A	0.17	NO
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	13.76	B	13.81	B	0.05	NO
5.	Bear Valley Parkway & San Pasqual Road	P.M.	16.95	B	17.06	B	0.11	NO
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	9.96	A	10.06	B	0.10	NO
7.	Driveway #1 & Beethoven Drive	P.M.	17.35	B	18.21	B	0.86	NO
8.	Driveway #2 & Beethoven Drive	P.M.	14.22	B	15.11	B	0.89	NO
9.	Driveway #3 & Beethoven Drive	P.M.	15.65	B	16.37	B	0.72	NO
10.	Driveway #4 & Beethoven Drive	P.M.	14.15	B	14.73	B	0.58	NO
11.	Driveway #5 & Beethoven Drive	P.M.	11.98	B	12.38	B	0.40	NO
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	10.68	B	10.70	B	0.02	NO
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	6.62	A	6.83	A	0.21	NO
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	47.86	D	49.28	D	1.42	NO
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	78.48	E	78.35	E	(0.13)	NO
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	36.64	D	36.61	D	(0.03)	NO
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	23.04	C	23.30	C	0.26	NO

Notes:

- [a] LOS Analysis is based on 2010 HCM methodology.
- [b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

TABLE 27
NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	Classification	Lanes	Capacity at LOS E	Near Term Cumulative without Project Conditions			Near Term Cumulative plus Project Conditions				
					ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Significant Impact?
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	24,239	1.616	F	24,491	1.633	F	0.017	NO
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	26,975	0.729	C	27,227	0.736	C	0.007	NO
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	24,437	0.660	C	24,773	0.670	C	0.009	NO
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,921	0.782	D	29,308	0.792	D	0.010	NO
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	39,437	1.066	F	39,992	1.081	F	0.015	NO
6.	Beethoven Drive East of I-15	Collector	3	22,500	8,707	0.387	B	9,043	0.402	B	0.015	NO
7.	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	10,881	0.318	A	11,302	0.330	A	0.012	NO
[a]		Collector	3	22,500	10,881	0.484	B	11,302	0.502	B	0.019	NO
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,391	0.626	C	9,610	0.641	C	0.015	NO
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	10,996	0.733	C	11,299	0.753	D	0.020	NO
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	12,749	0.212	A	13,102	0.218	A	0.006	NO
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	29,393	0.794	D	29,814	0.806	D	0.011	NO
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	35,575	0.593	C	35,659	0.594	C	0.001	NO
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	33,341	0.556	C	33,509	0.558	C	0.003	NO
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	12,566	0.340	A	12,734	0.344	B	0.005	NO

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 28
NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	Near Term Cumulative without Project Conditions		Near Term Cumulative plus Project Conditions			
		PM Peak Hour		PM Peak Hour			
		Speed	LOS	Speed	LOS	Change in Speed	Significant Impact?
Bear Valley Parkway	NB	30.04	C	29.45	C	(0.59)	NO
between Sunset Drive/Ranchito Drive & Las Palmas Avenue	SB	40.19	A	40.07	A	(0.12)	NO
Bear Valley Parkway	NB	29.75	C	29.78	C	0.03	NO
between Las Palmas Avenue & Canyon Road	SB	34.48	B	34.46	B	(0.02)	NO
Bear Valley Parkway	NB	39.49	A	39.44	B	(0.05)	NO
between Canyon Road & Entrance Drive/Mary Lane	SB	36.77	B	36.78	B	0.01	NO
Bear Valley Parkway	NB	36.70	B	36.70	B	0.00	NO
between Entrance Drive/Mary Lane & San Pasqual Road	SB	36.30	B	36.17	B	(0.13)	NO
Bear Valley Parkway	NB	32.87	B	32.62	B	(0.25)	NO
between San Pasqual Road & Beethoven Drive	SB	28.78	C	28.19	C	(0.59)	NO
Via Rancho Parkway	EB	40.63	A	40.47	A	(0.16)	NO
between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	WB	38.87	B	37.47	A	(1.40)	NO
Via Rancho Parkway	EB	25.91	C	26.55	C	0.64	NO
between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	WB	43.40	A	43.36	A	(0.04)	NO
Via Rancho Parkway	EB	18.96	D	18.93	D	(0.03)	NO
between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	WB	21.05	D	20.81	D	(0.24)	NO
Via Rancho Parkway	EB	31.98	B	31.60	B	(0.38)	NO
between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	WB	18.92	D	18.56	E	(0.36)	NO
Via Rancho Parkway	EB	19.36	D	18.98	D	(0.38)	NO
between Driveway #7/Sunset Drive & Beethoven Drive	WB	37.32	B	37.27	B	(0.05)	NO

TABLE 29
NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS (YEAR 2018)
FREEWAY RAMP METER ANALYSIS

Location	Peak Hour	Near Term Cumulative without Project Conditions					Near Term Cumulative with Project Conditions						
		Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Change in Delay (min)	Significant Impact?
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	577	425	152	21.46	4,408	589	425	164	23.15	4,756	1.69	NO

Chapter 9

Horizon Year with Project Conditions

This chapter describes the evaluation of the Project traffic on Horizon Year background traffic. The analysis year of 2035 corresponds with the Horizon Year of the *City of Escondido General Plan* (May 2012). All future background traffic growth presented in Chapter 5 is also assumed in this analysis.

TRAFFIC VOLUMES

The Project-only afternoon peak hour traffic volumes and daily street segment volumes described in Chapter 6 and shown in Figure 9 were added to the Horizon Year without Project afternoon peak hour traffic volumes and daily street segment volumes shown in Figure 7. The resulting traffic volumes are illustrated in Figure 13 and represent the Horizon Year with Project conditions (year 2035).

TRAFFIC OPERATIONS

Intersections

As mentioned, per City policy, the study intersections were analyzed using 2010 HCM methodology. The projected Horizon Year with Project Conditions intersection operations for the weekday afternoon peak hour are shown in Table 30. As shown, under the Horizon Year with Project Conditions, all but one of the analyzed intersections are projected to operate at an acceptable LOS, i.e., LOS D or better, during the afternoon peak hour. Via Rancho Parkway & I-15 Northbound Ramps/Driveway #6 is projected to operate at LOS E during the afternoon peak hour under Horizon Year with Project Conditions. Detailed LOS worksheets are provided in Appendix C.

Street Segments – Daily Analysis

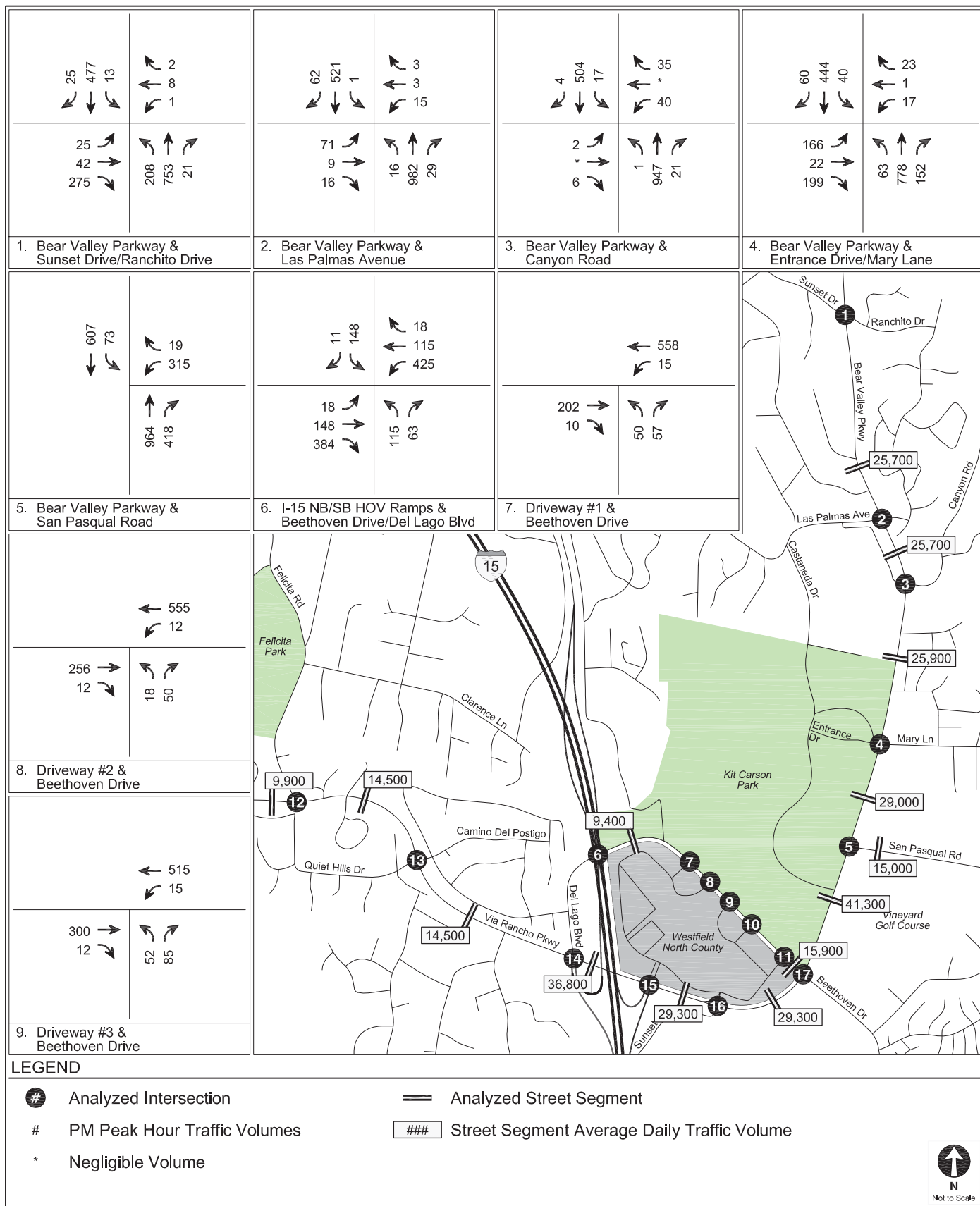
Horizon Year without Project Conditions daily street segment operations were analyzed using the LOS thresholds described in Chapter 1. Table 31 summarizes the traffic volumes, capacities, and LOS at the analyzed street segments. As shown in Table 31, 14 of the 18 analyzed street segments are projected to operate at LOS D or better. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive and the segments of Via Rancho Parkway between Del Lago Boulevard/I-15 Southbound Ramps and I-15 Northbound Ramps/Driveway #6 and between Felicita Road/Quiet Hills Drive and Quiet Hills Drive/Camino del Postigo are all projected to operate at LOS E or F under Horizon Year with Project Conditions.

Street Segments – Peak Hour Analysis

Horizon Year without Project Conditions street segment peak hour analysis was conducted for all of the street segments that may be significantly impacted by the Project. As shown in Table 32, all 10 analyzed street segments are projected to operate at LOS D or better during the afternoon peak hour in both directions. Detailed worksheets are provided in Appendix D.

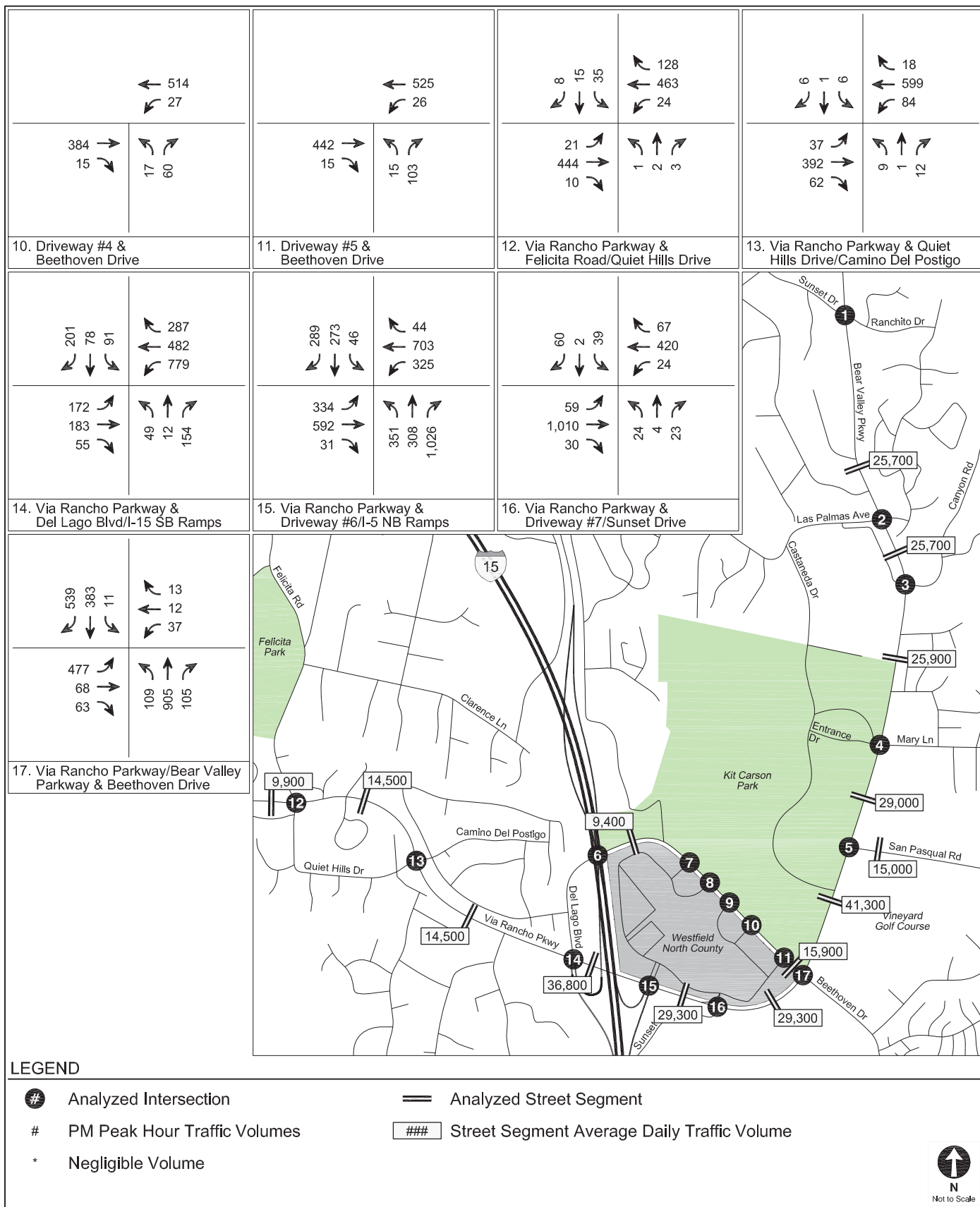
Freeway Ramps

Table 33 provides a summary of ramp meter operations for the I-15 Northbound On-Ramp at Via Rancho Parkway. As shown in Table 33, under Horizon Year with Project Conditions, this ramp is projected to have an excess demand of 204 vehicles per hour, resulting in a delay of 28.80 minutes and a queue of 5,916 feet.



HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
13



HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
PM PEAK HOUR TRAFFIC VOLUMES

FIGURE
13 (CONT.)

TABLE 30
HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Horizon Year without Project Conditions		Horizon Year plus Project Conditions			
			Delay	LOS [a]	Delay	LOS [a]	Change in Delay	Significant Impact?
1.	Bear Valley Parkway & Sunset Drive/Ranchito Drive	P.M.	25.57	C	25.74	C	0.17	NO
2.	Bear Valley Parkway & Las Palmas Avenue	P.M.	8.50	A	8.43	A	(0.07)	NO
3.	Bear Valley Parkway & Canyon Road	P.M.	7.40	A	7.56	A	0.16	NO
4.	Bear Valley Parkway & Entrance Drive/Mary Lane	P.M.	21.14	C	21.02	C	(0.12)	NO
5.	Bear Valley Parkway & San Pasqual Road	P.M.	14.05	B	14.13	B	0.08	NO
6.	I-15 NB/SB HOV Ramps & Beethoven Drive/Del Lago Boulevard	P.M.	18.03	B	17.96	B	(0.07)	NO
7. [b]	Driveway #1 & Beethoven Drive	P.M.	12.58	B	13.03	B	0.45	NO
8. [b]	Driveway #2 & Beethoven Drive	P.M.	10.85	B	11.68	B	0.83	NO
9. [b]	Driveway #3 & Beethoven Drive	P.M.	12.94	B	13.42	B	0.48	NO
10. [b]	Driveway #4 & Beethoven Drive	P.M.	12.26	B	12.79	B	0.53	NO
11. [b]	Driveway #5 & Beethoven Drive	P.M.	10.87	B	11.14	B	0.27	NO
12.	Via Rancho Parkway & Felicita Road/Quiet Hills Drive	P.M.	8.39	A	8.63	A	0.24	NO
13.	Via Rancho Parkway & Quiet Hills Drive/Camino Del Postigo	P.M.	10.25	B	10.33	B	0.08	NO
14.	Via Rancho Parkway & Del Lago Boulevard/I-15 SB Ramps	P.M.	44.77	D	44.89	D	0.12	NO
15.	Via Rancho Parkway & Driveway #6/I-5 NB Ramps	P.M.	79.91	E	79.81	E	(0.10)	NO
16.	Via Rancho Parkway & Driveway #7/Sunset Drive	P.M.	43.75	D	43.66	D	(0.09)	NO
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	24.34	C	24.61	C	0.27	NO

Notes:

[a] LOS Analysis is based on 2010 HCM methodology.

[b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

TABLE 31
HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	Classification	Lanes	Capacity at LOS E	Horizon Year without Project Conditions			Horizon Year plus Project Conditions				
					ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Significant Impact?
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	Major Road	2	15,000	25,448	1.697	F	25,700	1.713	F	0.017	NO
2.	Bear Valley Parkway between Las Palmas Avenue & Canyon Road	Super Major Road	4	37,000	25,448	0.688	C	25,700	0.695	C	0.007	NO
3.	Bear Valley Parkway between Canyon Road & Entrance Drive/Mary Lane	Super Major Road	4	37,000	25,564	0.691	C	25,900	0.700	C	0.009	NO
4.	Bear Valley Parkway between Entrance Drive/Mary Lane & San Pasqual Road	Super Major Road	4	37,000	28,613	0.773	D	29,000	0.784	D	0.010	NO
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	Super Major Road	4	37,000	40,745	1.101	F	41,300	1.116	F	0.015	NO
6.	Beethoven Drive East of I-15	Collector	3	22,500	9,064	0.403	B	9,400	0.418	B	0.015	NO
7. [a]	Beethoven Drive West of Via Rancho Parkway/Bear Valley Parkway	Collector	4	34,200	15,479	0.453	B	15,900	0.465	B	0.012	NO
		Collector	3	22,500	15,479	0.688	C	15,900	0.707	C	0.019	NO
8.	Via Rancho Parkway West of Felicita Road/Quiet Hills Drive	Collector	2	15,000	9,681	0.645	C	9,900	0.660	C	0.015	NO
9.	Via Rancho Parkway between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	Collector	2	15,000	14,197	0.946	E	14,500	0.967	E	0.020	NO
10.	Via Rancho Parkway between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	Super Prime Arterial	6	60,000	14,147	0.236	A	14,500	0.242	A	0.006	NO
11.	Via Rancho Parkway between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	Major Road	4	37,000	36,379	0.983	E	36,800	0.995	E	0.011	NO
12.	Via Rancho Parkway between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	Super Prime Arterial	7	60,000	29,216	0.487	B	29,300	0.488	B	0.001	NO
13.	Via Rancho Parkway between Driveway #7/Sunset Drive & Beethoven Drive	Super Prime Arterial	7	60,000	29,132	0.486	B	29,300	0.488	B	0.003	NO
14.	San Pasqual Road East of Bear Valley Parkway	Major Road	4	37,000	14,832	0.401	B	15,000	0.405	B	0.005	NO

Notes:

[a] Segment has 3- and 4- lane cross sections

TABLE 32
HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
STREET SEGMENT PEAK HOUR LEVELS OF SERVICE

Street Segment	Direction	Horizon Year without Project Conditions		Horizon Year plus Project Conditions			
		PM Peak Hour		PM Peak Hour			
		Speed	LOS	Speed	LOS	Change in Speed	Significant Impact?
Bear Valley Parkway	NB	35.60	B	35.31	B	(0.29)	NO
between Sunset Drive/Ranchito Drive & Las Palmas Avenue	SB	43.14	A	43.15	A	0.01	NO
Bear Valley Parkway	NB	34.43	B	34.41	B	(0.02)	NO
between Las Palmas Avenue & Canyon Road	SB	29.83	C	29.75	C	(0.08)	NO
Bear Valley Parkway	NB	37.46	B	37.29	B	(0.17)	NO
between Canyon Road & Entrance Drive/Mary Lane	SB	36.90	B	37.16	B	0.26	NO
Bear Valley Parkway	NB	36.06	B	36.04	B	(0.02)	NO
between Entrance Drive/Mary Lane & San Pasqual Road	SB	36.67	B	36.54	B	(0.13)	NO
Bear Valley Parkway	NB	33.86	B	33.92	B	0.06	NO
between San Pasqual Road & Beethoven Drive	SB	30.77	C	30.47	C	(0.30)	NO
Via Rancho Parkway	EB	39.86	A	39.88	A	0.02	NO
between Felicita Road/Quiet Hills Drive & Quiet Hills Drive/Camino del Postigo	WB	40.18	A	39.47	A	(0.71)	NO
Via Rancho Parkway	EB	30.99	C	30.77	C	(0.22)	NO
between Quiet Hills Drive/Camino del Postigo & Del Lago Boulevard/I-15 SB Ramps	WB	42.91	A	42.81	A	(0.10)	NO
Via Rancho Parkway	EB	24.46	C	24.78	C	0.32	NO
between Del Lago Boulevard/I-15 SB Ramps & Driveway #6/I-15 NB Ramps	WB	20.83	D	20.67	D	(0.16)	NO
Via Rancho Parkway	EB	32.97	B	32.97	B	0.00	NO
between Driveway #6/I-15 NB Ramps & Driveway #7/Sunset Drive	WB	20.77	D	20.24	D	(0.53)	NO
Via Rancho Parkway	EB	24.73	C	24.11	C	(0.62)	NO
between Driveway #7/Sunset Drive & Beethoven Drive	WB	35.00	B	34.90	B	(0.10)	NO

TABLE 33
HORIZON YEAR WITH PROJECT CONDITIONS (YEAR 2035)
FREEWAY RAMP METER ANALYSIS

Location	Peak Hour	Horizon Year without Project Conditions					Horizon Year with Project Conditions						
		Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Demand (veh/hr)	Meter Rate (veh/hr)	Excess Demand (veh/hr)	Delay (min)	Queue (feet)	Change in Delay (min)	Significant Impact?
I-15 Northbound On-Ramp @ Via Rancho Parkway	PM	617	425	192	27.11	5,568	629	425	204	28.80	5,916	1.69	NO

Chapter 10

Traffic Impact Analysis

The relative impact of the added Project traffic volumes during the peak hours was evaluated based on analysis of both existing and future operating conditions at the study intersections and street segments with and without the Project. The previously discussed significance criteria and thresholds outlined in Chapter 2 were used to determine the significance of a traffic impact on the study intersections caused by the Project.

EXISTING WITH PROJECT CONDITIONS

The Existing with Project Conditions (year 2015) summarized in Tables 22 through 25 were compared to the Existing Conditions (year 2015) in Tables 8 through 11. The analysis assesses the impacts of the Project as compared to the Existing Conditions environment without development of the Project. Based on the City significance criteria described in Chapter 2, the Project is not anticipated to result in a significant impact to any Study Area facilities under Existing with Project Conditions (year 2015). Therefore, mitigation measures are not required.

NEAR TERM CUMULATIVE WITH PROJECT CONDITIONS

The Near Term Cumulative with Project Conditions (year 2018) summarized in Tables 26 through 29 were compared to the Near Term Cumulative without Project Conditions (year 2018) in Tables 13 through 16. The analysis assesses the impacts of the Project as compared to the Near Term Cumulative Conditions environment without development of the Project. Based on the City significance criteria described in Chapter 2, the Project is not anticipated to result in a significant impact under Near Term Cumulative with Project conditions (year 2018). Therefore, mitigation measures are not required.

HORIZON YEAR WITH PROJECT CONDITIONS

The Horizon Year with Project Conditions (year 2035) summarized in Tables 30 through 33 were compared to the Horizon Year without Project conditions (year 2035) in Tables 17 through 20. The analysis assesses the impacts of the Project as compared to the Horizon Year Conditions environment without development of the Project. Based on the City significance criteria described in Chapter 2, the Project is not anticipated to result in a significant impact under Horizon Year with Project conditions (year 2035). Therefore, mitigation measures are not required.

VOLUNTARY FAIR-SHARE PAYMENTS

As shown above, the Project does add trips to two study roadway segments that are predicted to operate at unacceptable LOS under existing and future conditions. The segments of Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue and between San Pasqual Road and Beethoven Drive currently operate at LOS F and are predicted to continue operating at LOS F in the future. Project traffic does not result in a significant impact at these locations; therefore, no direct mitigation measures are required, but a voluntary fair-share payment toward future improvements will be provided by the Project to help the City achieve acceptable LOS on these study segments. The fair-share payment will be based on the percentage of growth attributable to Project traffic on the segments in question. Table 34 provides a summary of the fair-share calculations. As shown in the table, the Project will generate 15.2% of the traffic growth along Bear Valley Parkway between Sunset Drive/Ranchito Drive and Las Palmas Avenue, and 29.8% of the traffic growth along Bear Valley Parkway between San Pasqual Road and Beethoven Drive. Westfield has agreed make a fair-share payment toward future corridor improvements along Bear Valley Parkway.

**TABLE 34
FAIR-SHARE PAYMENT CALCULATION
BEAR VALLEY PARKWAY**

No.	Street Segment	Existing ADT Volumes	Year 2035 ADT Volumes	ADT Growth	Project Related ADT	% of Growth Due to Project Traffic
1.	Bear Valley Parkway between Sunset Drive/Ranchito Drive & Las Palmas Avenue	24,046	25,700	1,654	252	15.2%
5.	Bear Valley Parkway between San Pasqual Road & Beethoven Drive	39,437	41,300	1,863	555	29.8%

Notes:

ADT - Average Daily Traffic Volumes

Chapter 11

Site Access and Internal Circulation

Access to the Project Site would remain the same and be provided via seven separate driveways, five located on Beethoven Drive and two located on Via Rancho Parkway. Internal circulation would be provided via internal drive aisles and circulation roads that circulate through the surface parking lot.

Chapter 12

Parking

This chapter provides an analysis of the proposed parking supply of the Project.

PARKING SUPPLY

Currently, Westfield North County provides 5,684 parking spaces in a contiguous surface lot. The Project proposes to remove 202 of these spaces to make room for the new development, resulting in a parking supply of 5,482 parking spaces.

PARKING REQUIREMENTS

Westfield North County is conditioned to provide four parking spaces per 1,000 sf GLA. With 1,329,835 sf GLA after completion of the Project, Westfield North County is required to provide 5,320 parking spaces to satisfy the condition.

With the Project as proposed, Westfield North County will provide 5,482 parking spaces, 162 more than required by the City. Thus, the site will provide sufficient parking after completion of the Project to meet City parking requirements.

Chapter 13

Construction Impact Analysis

This chapter summarizes the construction schedule and the analysis related to the temporary impacts that may result from the construction activities of the Project, which may include safety, operational, or capacity impacts.

TYPES OF CONSTRUCTION IMPACTS

The factors used to determine the significance of a project's impacts involve the likelihood and extent to which an impact might occur, the potential inconvenience caused to a population, and consideration for public safety. Potential traffic impacts from construction activities could be expected to occur as a result of the following types of activities:

- Increases in truck traffic associated with export of fill materials and delivery of construction materials
- Increases in automobile traffic associated with construction workers traveling to and from the site
- Reductions in existing street capacity or on-street parking from temporary lane closures necessary for the construction of roadway improvements, utility relocation, and drainage facilities
- Temporary blockage of existing vehicle or pedestrian access to other parcels fronting the street

The impact of construction truck traffic (including haul trucks) would be a lessening of the capacities of access streets and haul routes due to the slower movements and larger turning radii of trucks.

PROPOSED CONSTRUCTION SCHEDULE

For purposes of analyzing the worst case scenario associated with construction, the Project was assumed to be completed in one phase that would take approximately 15 months. Construction of the Project is anticipated to be completed as early as 2017. The anticipated construction phases include site clearing, grading and excavation, and construction of new buildings, plaza, and landscape areas.

CONSTRUCTION WORKERS

Construction worker traffic impacts depend on the number of construction workers employed during various construction phases, as well as the travel mode and travel time of the workers. In general, the hours of construction typically require workers to be on site before the weekday morning commuter peak period and allow them to leave before or after the afternoon commuter peak period (i.e., arrive at the site prior to 7:00 AM and depart before 4:00 PM or after 6:00 PM). Therefore, most, if not all, of the construction worker trips would occur outside of the typical weekday commuter or weekend midday peak periods.

The estimated number of construction workers each day, depending on the phase of construction (e.g., demolition, grading, building construction, etc.), is anticipated to range between approximately 50 and 60 workers. Assuming some level of carpooling among the construction workers, an AVR of 1.135 persons per vehicle was applied, as provided in *CEQA Air Quality Handbook* (South Coast Air Quality Management District, 1993). Thus, during the construction phase with the largest number of workers (building construction), the estimated number of daily trips due to 60 construction workers is approximately 106 (53 inbound and 53 outbound trips), with all of these trips occurring outside of the peak hours.

During construction, adequate parking for construction workers would be provided within the boundaries of the Project Site. Restrictions against workers parking in the public right-of-way in the vicinity of (or adjacent to) the Project Site will be identified as part of the Construction Management Plan. Construction parking may require use of on-site parking areas for materials storage and truck staging. However, construction schedules, storage and staging, and the provisions for parking spaces for construction workers will be planned so as to minimize the

reduction in parking to Westfield North County employees and patrons, especially during the peak holiday shopping period when construction activity is expected to be minimized. Therefore, Project construction would result in a less than significant impact with regard to the availability of parking spaces.

PROPOSED TRUCK ACTIVITY

Haul Trucks

During the course of the combined excavation, demolition, and other construction activities, it is estimated that a total of approximately 2,666 cubic yards (CY) of material would be exported to various landfills likely located in the cities surrounding the Project Site. It is anticipated that 12-14 CY dirt trucks would be used to export the soil. Assuming all the demolition and excavation will take place in the first two weeks of construction, the Project will export approximately 267 CY of soil per day. Thus a total of 46 daily haul trips (23 inbound, 23 outbound), with approximately 10 trips (five inbound, five outbound) per hour, are forecast to occur during the excavation and demolition periods assuming haul truck trips would occur uniformly over a five-hour period.

A Haul Truck Route program will be required as part of the County of San Diego's permitting process. The truck haul routes would comply with the approved truck routes designated within the City and County.

Delivery Trucks

Project construction would also require delivery of construction materials. An average of between 10 and 30 daily delivery truck trips to the Project Site is envisioned, depending on the construction phase. The largest number of deliveries is anticipated during the building construction phase, with approximately 30 daily delivery trips (15 inbound, 15 outbound), or approximately six trips per hour (three inbound, three outbound), assuming delivery truck trips would occur uniformly over a five-hour period.

Passenger Car Equivalent Trips

Assuming a passenger car equivalency (PCE) factor of 2.0, the 46 off-site haul trucks and 30 delivery trucks would be equivalent to 152 passenger car trips per day. *Transportation Research Circular No. 212, Interim Materials on Highway Capacity* (Transportation Research Board, 1980) defines PCE for a vehicle as the number of through-moving passenger cars to which it is equivalent based on the vehicle's headway and delay-creating effects. Table 8 of *Transportation Research Circular No. 212* and Exhibit 11.10 of the 2010 HCM suggest a PCE of 2.0 for trucks.

CONSTRUCTION MANAGEMENT PLAN

A detailed Construction Management Plan, including street closure information, detour plans, haul routes, and staging plans, would be prepared and submitted to the City for review and approval. The Construction Management Plan would formalize how construction would be carried out and identify specific actions that would be required to reduce effects on the surrounding community. The Construction Management Plan shall be based on the nature and timing of the specific construction activities and other projects in the vicinity of the Project Site, and should include the following elements as appropriate:

- Prohibition of construction worker parking on public streets
- Prohibition of construction equipment or material deliveries within the public right-of-way
- Provisions for temporary traffic control during all construction activities adjacent to public right-of-way to improve traffic flow on public roadways (e.g., flag person)
- Scheduling of construction activities to reduce the effect on traffic flow on surrounding arterial streets
- Construction-related vehicles shall not park on surrounding public streets
- Provisions of safety precautions for pedestrians and bicyclists through such measures as alternate routing and protection barriers as appropriate
- Provisions to accommodate the equipment storage and truck staging on site
- Scheduling of construction-related deliveries, haul trips, etc., so as to occur outside the commuter peak hours to the extent feasible

- Obtaining the required permits for truck haul routes from the City prior to issuance of any permit for the Project

POTENTIAL IMPACTS OF CONSTRUCTION TRAFFIC

As described above, Project construction at its most intense phases is expected to generate approximately 106 daily worker trips and 152 PCE daily truck trips, which account for off-site hauling and deliveries, most of which are anticipated to occur during off-peak hours.

In order to provide a conservative analysis of construction traffic on the local roadway system, construction traffic was assigned to the intersections and roadway segments that will serve as direct access to the construction site. Again, for the purposes of providing conservative analysis, it was assumed that all outbound construction workers and truck trips would occur in the PM peak hour of adjacent street traffic and all the trips would utilize the intersection of Bear Valley Parkway/Via Rancho Parkway & Beethoven Drive to access the construction site. To further insure the analysis is conservative, construction impacts were evaluated on near term conditions rather than existing conditions to provide the highest reasonable traffic volumes as the basis for the analysis.

Table 35 provides a summary of the operations of the intersection of Bear Valley Parkway/Via Rancho Parkway & Beethoven Drive. As shown in the table, this intersection is projected to operate at LOS C under near term conditions during the PM peak hour with or without construction related traffic; as such, no significant impacts to study intersections due to construction traffic are anticipated.

Table 36 provides a summary of the operations of Beethoven Drive west of Via Rancho Parkway/Bear Valley Parkway. As shown in the table, this segment is projected to operate at LOS B or better under near term conditions with or without construction traffic; as such, no significant impacts to study roadway segments due to construction traffic are anticipated.

Because a majority of construction traffic would occur during off-peak hours, Project construction is not expected to cause a significant traffic impact at any of the analyzed intersections. In order to minimize the effect of construction-related traffic on the surrounding

street system, all construction workers, haul trucks and delivery trucks would be prohibited from parking, staging, or queuing along the adjacent public streets. With implementation of a Construction Management Plan, construction traffic impacts at study intersections would be less than significant.

POTENTIAL IMPACTS ON ACCESS, TRANSIT, AND PARKING

Construction activities are expected to be primarily contained within the Project Site boundaries and would generally not affect the adjacent street access, transit or parking in the area. The adjacent bus stop and route along Beethoven Drive will be maintained during construction. Thus, temporary loss of bus stops or rerouting of bus lines is not anticipated. Project construction is not expected to create hazards for roadway travelers, bus riders, or parkers if commonly practiced safety procedures for construction are followed. Such procedures and other measures (e.g., to address temporary traffic control, lane closures, sidewalk closures, relocation of bus stops, etc.) have been incorporated into the Construction Management Plan. With implementation of the Construction Management Plan, construction-related impacts are anticipated to be less than significant.

TABLE 35
NEAR TERM WITH CONSTRUCTION CONDITIONS (YEAR 2018)
INTERSECTION PEAK HOUR LEVELS OF SERVICE

No.	Intersection	Peak Hour	Near Term Conditions		Near Term plus Construction Conditions			
			Delay	LOS [a]	Delay	LOS [a]	Change in Delay	Significant Impact?
17.	Via Rancho Parkway/Bear Valley Parkway & Beethoven Drive	P.M.	23.04	C	24.34	C	1.30	NO

Notes:

[a] LOS Analysis is based on 2010 HCM methodology.

[b] Intersection is stop-controlled, delayed reported is for minor street left-turn lane

TABLE 36
NEAR TERM WITH CONSTRUCTION CONDITIONS (YEAR 2018)
STREET SEGMENT DAILY LEVELS OF SERVICE

No.	Street Segment	Classification	Lanes	Capacity at LOS E	Near Term Conditions			Near Term plus Construction Conditions				
					ADT	V/C	LOS	ADT	V/C	LOS	Change in V/C	Significant Impact?
7.	Beethoven Drive	Collector	4	34,200	10,881	0.318	A	11,139	0.326	A	0.008	NO
[a]	West of Via Rancho Parkway/Bear Valley Parkway	Collector	3	22,500	10,881	0.484	B	11,139	0.495	B	0.011	NO

Notes:

[a] Segment has 3- and 4- lane cross sections

References

2010 Highway Capacity Manual, Transportation Research Board, 2010.

Caltrans Highway Design Manual, California Department of Transportation, July 2008.

CEQA Air Quality Handbook, South Coast Air Quality Management District, 1993.

City of Escondido General Plan Circulation Element, City of Escondido, January 2013.

City of Escondido General Plan, City of Escondido, May 2012.

City of Escondido Traffic Impact Analysis Guidelines, City of Escondido, October 10, 2013.

Guide for the Preparation of Traffic Impact Studies, California Department of Transportation, December 2002.

Guidelines for Implementation of the California Environmental Quality Act, Chapter 3, Title 14, California Code of Regulations, California Natural Resources Agency, amended July 27, 2007.

(not so) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, San Diego Association of Governments, 2002.

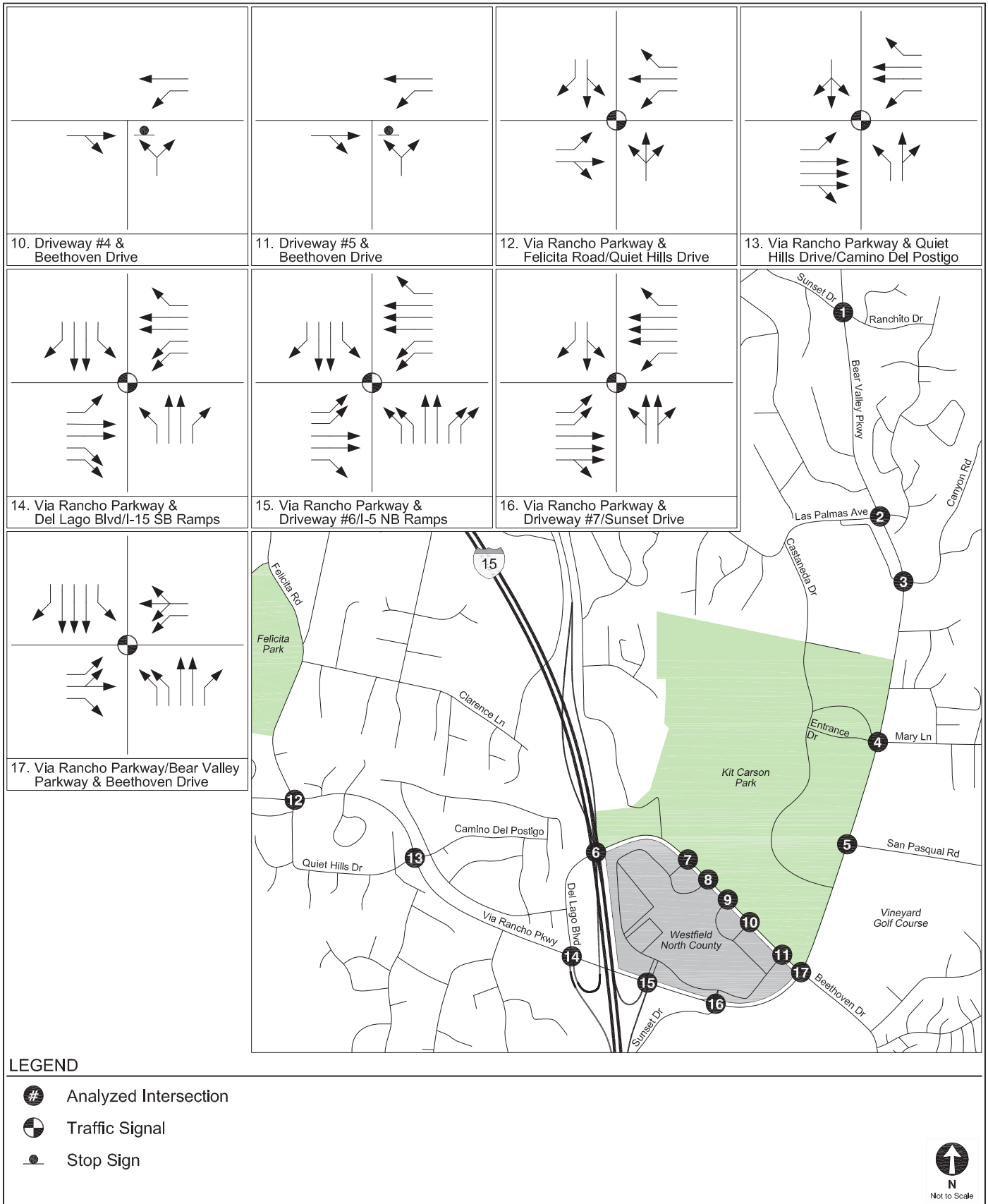
SANTEC/ITE Guidelines for Traffic Impact Studies in the San Diego Region, San Diego Traffic Engineers Council and Institute of Transportation Engineers, March 2, 2000.

Transportation Research Circular No. 212, Interim Materials on Highway Capacity, Transportation Research Board, 1980.

Appendix A

Existing Lane Configurations





Appendix B

Existing Traffic Counts

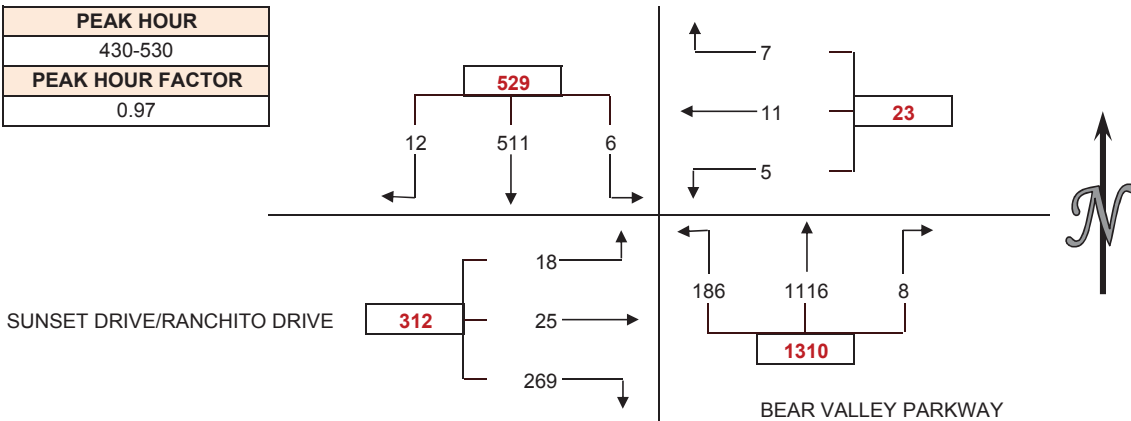
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEAR VALLEY PARKWAY
 E/W SUNSET DRIVE/RANCHITO DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	4	100	1	0	2	0	0	246	70	68	7	1	499
415-430	5	112	2	0	4	1	2	224	54	59	4	3	470
430-445	7	125	0	0	1	1	1	283	57	78	6	3	562
445-500	1	135	3	0	5	0	4	250	54	66	3	3	524
500-515	1	116	3	4	3	2	1	293	39	60	7	8	537
515-530	3	135	0	3	2	2	2	290	36	65	9	4	551
530-545	5	112	1	0	7	1	3	305	50	66	2	4	556
545-600	4	117	1	2	6	0	1	251	54	72	7	8	523
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	17	472	6	0	12	2	7	1003	235	271	20	10	2055
415-515	14	488	8	4	13	4	8	1050	204	263	20	17	2093
430-530	12	511	6	7	11	5	8	1116	186	269	25	18	2174
445-545	10	498	7	7	17	5	10	1138	179	257	21	19	2168
500-600	13	480	5	9	18	5	7	1139	179	263	25	24	2167

PEAK HOUR
430-530
PEAK HOUR FACTOR
0.97



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	1	1
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	1	1
415-515	0	0	0	1	1
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

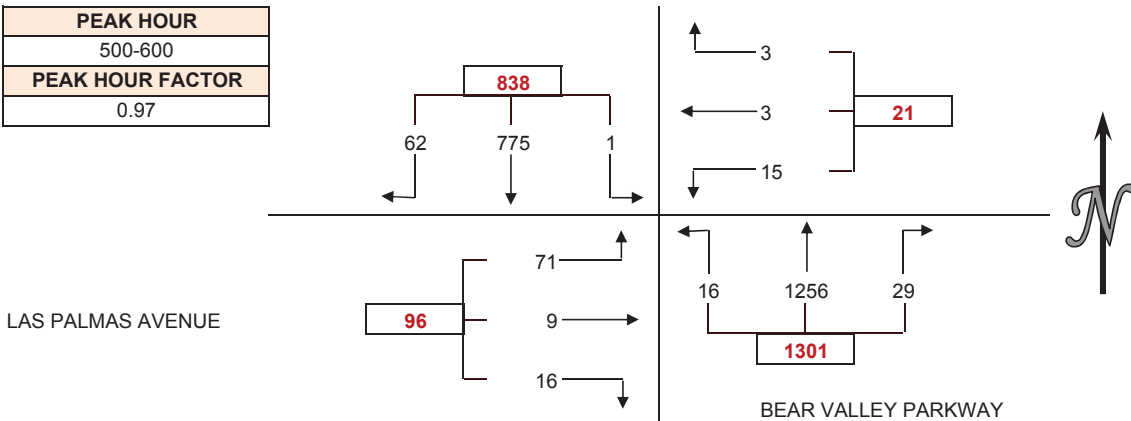
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEAR VALLEY PARKWAY
 E/W LAS PALMAS AVENUE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	12	157	1	3	2	4	5	279	4	6	0	15	488
415-430	10	183	0	5	0	2	7	343	4	7	1	7	569
430-445	16	184	0	0	1	1	7	306	1	6	1	4	527
445-500	5	195	1	1	1	3	7	277	3	9	0	5	507
500-515	15	178	0	2	1	2	9	332	5	1	0	18	563
515-530	10	201	0	0	0	6	4	305	3	7	2	15	553
530-545	13	190	1	0	2	5	9	320	6	5	0	8	559
545-600	24	206	0	1	0	2	7	299	2	3	7	30	581
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	43	719	2	9	4	10	26	1205	12	28	2	31	2091
415-515	46	740	1	8	3	8	30	1258	13	23	2	34	2166
430-530	46	758	1	3	3	12	27	1220	12	23	3	42	2150
445-545	43	764	2	3	4	16	29	1234	17	22	2	46	2182
500-600	62	775	1	3	3	15	29	1256	16	16	9	71	2256

PEAK HOUR
500-600
PEAK HOUR FACTOR
0.97



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	1	0	1
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	1	0	1
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	1	0	1
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	1	0	1
500-600	0	0	1	0	1

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	1	1	0	2
530-545	0	0	0	0	0
545-600	0	0	0	1	1
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	1	1	0	2
430-530	0	1	1	0	2
445-545	0	1	1	0	2
500-600	0	1	1	1	3

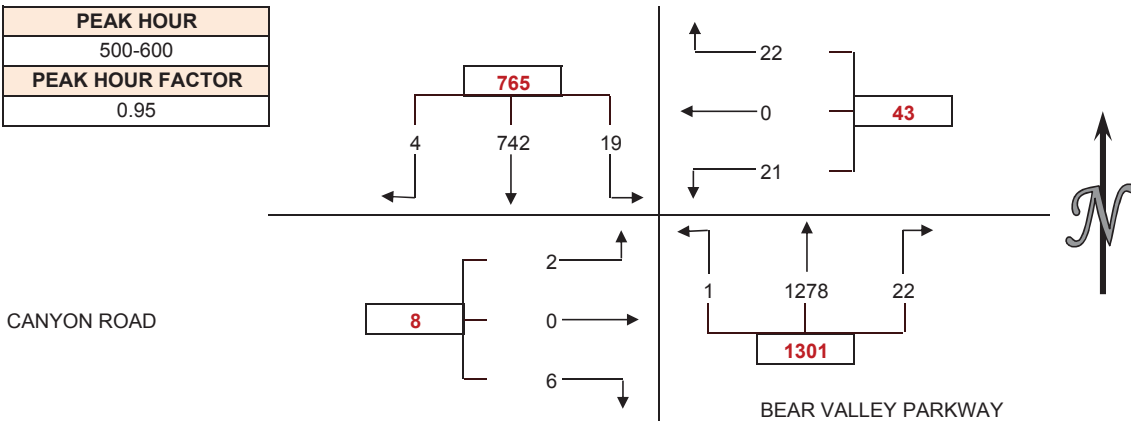
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEAR VALLEY PARKWAY
 E/W CANYON ROAD
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	7	188	2	10	0	14	4	308	5	9	0	18	565
415-430	3	203	3	4	0	7	6	278	0	3	0	4	511
430-445	0	179	5	7	0	3	8	282	0	2	0	2	488
445-500	1	188	6	5	0	7	4	288	0	1	0	2	502
500-515	1	195	4	8	0	14	6	306	1	2	0	1	538
515-530	0	198	4	4	0	3	1	349	0	1	0	0	560
530-545	1	172	6	4	0	2	7	302	0	1	0	1	496
545-600	2	177	5	6	0	2	8	321	0	2	0	0	523
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	11	758	16	26	0	31	22	1156	5	15	0	26	2066
415-515	5	765	18	24	0	31	24	1154	1	8	0	9	2039
430-530	2	760	19	24	0	27	19	1225	1	6	0	5	2088
445-545	3	753	20	21	0	26	18	1245	1	5	0	4	2096
500-600	4	742	19	22	0	21	22	1278	1	6	0	2	2117

PEAK HOUR
500-600
PEAK HOUR FACTOR
0.95



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	1	0	0	1
445-500	0	1	0	0	1
500-515	0	0	0	1	1
515-530	0	0	0	0	0
530-545	0	0	0	1	1
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	2	0	0	2
415-515	0	2	0	1	3
430-530	0	2	0	1	3
445-545	0	1	0	2	3
500-600	0	0	0	2	2

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	1	1
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	1	1
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	1	1
415-515	0	0	0	1	1
430-530	0	0	0	1	1
445-545	0	0	0	1	1
500-600	0	0	0	1	1

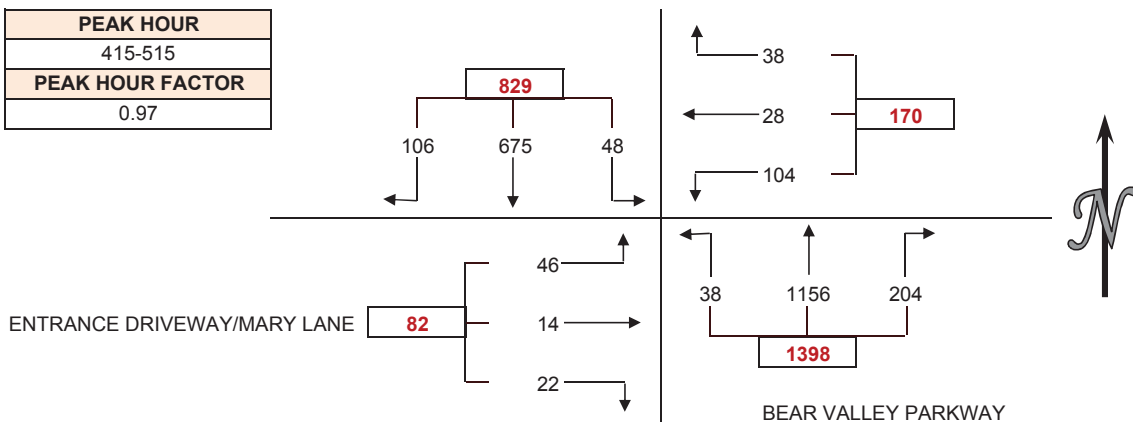
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEAR VALLEY PARKWAY
 E/W ENTRANCE DRIVEWAY/MARY LANE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	29	182	12	14	4	22	40	282	16	1	1	3	606
415-430	24	193	11	10	6	26	49	301	7	0	2	8	637
430-445	21	156	10	8	11	27	62	272	8	7	3	7	592
445-500	41	163	12	12	7	28	48	290	13	6	0	12	632
500-515	20	163	15	8	4	23	45	293	10	9	9	19	618
515-530	27	154	8	6	2	22	53	308	7	8	3	7	605
530-545	28	166	9	7	6	19	47	283	14	10	3	18	610
545-600	24	159	7	12	5	19	57	279	19	8	3	18	610
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	115	694	45	44	28	103	199	1145	44	14	6	30	2467
415-515	106	675	48	38	28	104	204	1156	38	22	14	46	2479
430-530	109	636	45	34	24	100	208	1163	38	30	15	45	2447
445-545	116	646	44	33	19	92	193	1174	44	33	15	56	2465
500-600	99	642	39	33	17	83	202	1163	50	35	18	62	2443

PEAK HOUR
415-515
PEAK HOUR FACTOR
0.97



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	2	1	0	3
415-430	0	0	1	0	1
430-445	3	0	0	0	3
445-500	0	0	2	0	2
500-515	0	0	1	4	5
515-530	0	0	0	0	0
530-545	2	0	2	1	5
545-600	1	1	0	2	4
HOUR TOTALS					
PERIOD					
400-500	3	2	4	0	9
415-515	3	0	4	4	11
430-530	3	0	3	4	10
445-545	2	0	5	5	12
500-600	3	1	3	7	14

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	1	1	0	1	3
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	2	0	0	2
545-600	0	0	0	1	1
HOUR TOTALS					
PERIOD					
400-500	1	1	0	1	3
415-515	1	1	0	1	3
430-530	1	1	0	1	3
445-545	1	3	0	1	5
500-600	0	2	0	1	3

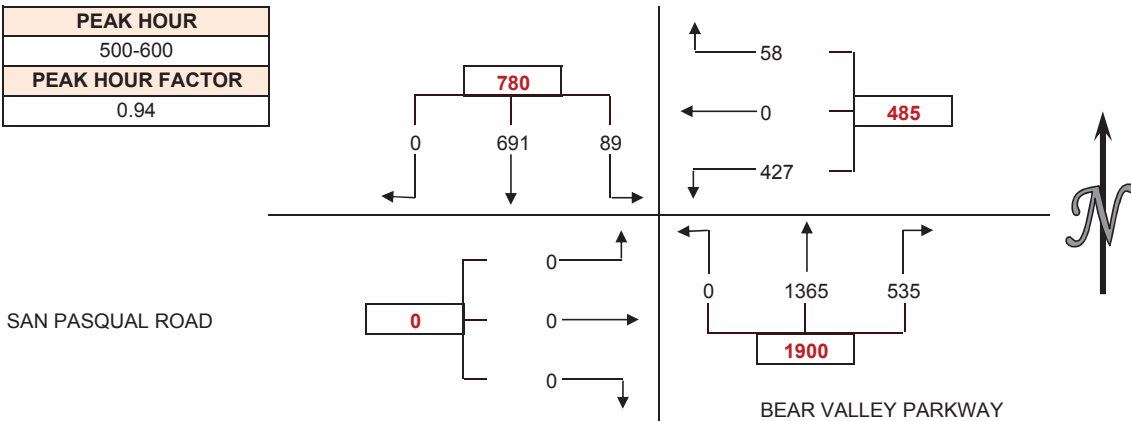
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEAR VALLEY PARKWAY
 E/W SAN PASQUAL ROAD
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	149	20	19	0	116	119	327	0	0	0	0	750
415-430	0	160	23	21	0	97	117	343	0	0	0	0	761
430-445	0	180	18	14	0	111	122	344	0	0	0	0	789
445-500	0	158	22	8	0	104	141	321	0	0	0	0	754
500-515	0	163	23	18	0	95	125	340	0	0	0	0	764
515-530	0	174	23	12	0	127	150	357	0	0	0	0	843
530-545	0	168	19	15	0	104	132	346	0	0	0	0	784
545-600	0	186	24	13	0	101	128	322	0	0	0	0	774
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	647	83	62	0	428	499	1335	0	0	0	0	3054
415-515	0	661	86	61	0	407	505	1348	0	0	0	0	3068
430-530	0	675	86	52	0	437	538	1362	0	0	0	0	3150
445-545	0	663	87	53	0	430	548	1364	0	0	0	0	3145
500-600	0	691	89	58	0	427	535	1365	0	0	0	0	3165

PEAK HOUR
500-600
PEAK HOUR FACTOR
0.94



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	4	3	0	0	7
415-430	3	0	0	0	3
430-445	3	0	0	0	3
445-500	7	0	0	0	7
500-515	2	1	0	0	3
515-530	0	2	0	0	2
530-545	0	0	0	0	0
545-600	2	0	0	0	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	17	3	0	0	20
415-515	15	1	0	0	16
430-530	12	3	0	0	15
445-545	9	3	0	0	12
500-600	4	3	0	0	7

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	2	2	0	0	4
445-500	2	1	0	0	3
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	2	0	0	0	2
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	4	3	0	0	7
415-515	4	3	0	0	7
430-530	4	3	0	0	7
445-545	4	1	0	0	5
500-600	2	0	0	0	2

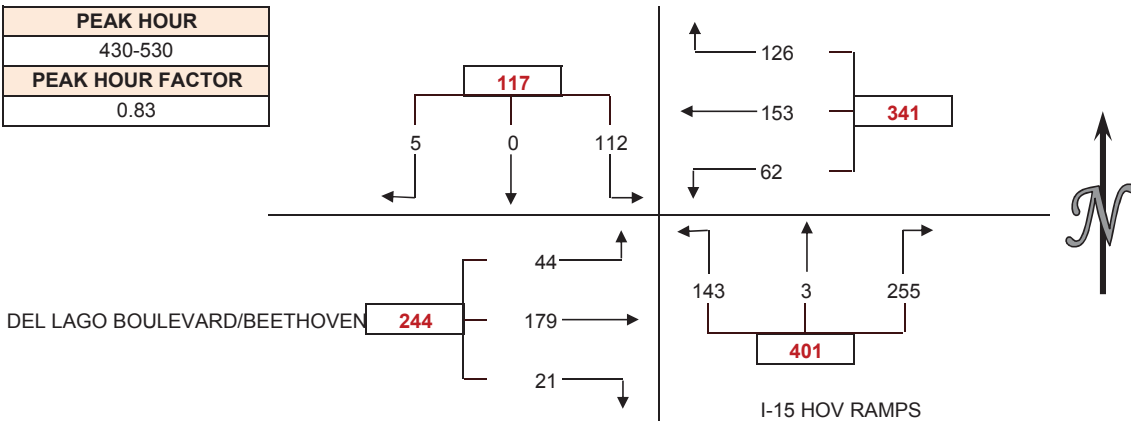
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S I-15 HOV RAMP
 E/W DEL LAGO BOULEVARD/BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	18	34	38	11	65	0	32	2	36	11	247
415-430	1	0	23	27	35	19	49	1	26	6	37	8	232
430-445	0	0	31	34	34	12	49	1	37	6	46	13	263
445-500	4	0	26	28	34	16	61	0	27	6	31	11	244
500-515	1	0	35	30	47	16	58	1	28	5	39	5	265
515-530	0	0	20	34	38	18	87	1	51	4	63	15	331
530-545	1	1	30	34	38	8	59	0	25	6	41	8	251
545-600	2	0	25	33	35	15	44	0	19	8	48	10	239
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	5	0	98	123	141	58	224	2	122	20	150	43	986
415-515	6	0	115	119	150	63	217	3	118	23	153	37	1004
430-530	5	0	112	126	153	62	255	3	143	21	179	44	1103
445-545	6	1	111	126	157	58	265	2	131	21	174	39	1091
500-600	4	1	110	131	158	57	248	2	123	23	191	38	1086

PEAK HOUR
430-530
PEAK HOUR FACTOR
0.83



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	1	0	1
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	1	0	1
500-600	0	0	1	0	1

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

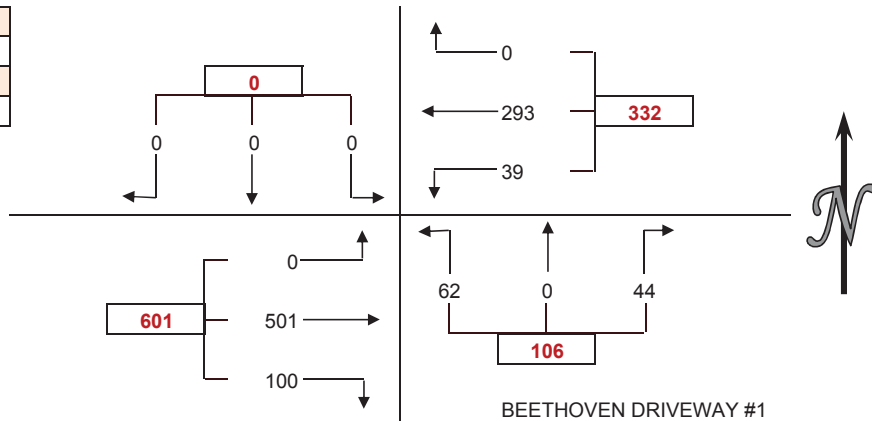
CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEETHOVEN DRIVEWAY #1
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	0	86	8	13	0	16	34	146	0	303
415-430	0	0	0	0	70	8	10	0	13	16	112	0	229
430-445	0	0	0	0	63	18	10	0	21	27	122	0	261
445-500	0	0	0	0	74	5	11	0	12	23	121	0	246
500-515	0	0	0	0	84	6	11	0	11	20	128	0	260
515-530	0	0	0	0	68	5	6	0	13	12	118	0	222
530-545	0	0	0	0	79	4	15	0	16	23	145	0	282
545-600	0	0	0	0	55	9	9	0	4	24	138	0	239
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	0	293	39	44	0	62	100	501	0	1039
415-515	0	0	0	0	291	37	42	0	57	86	483	0	996
430-530	0	0	0	0	289	34	38	0	57	82	489	0	989
445-545	0	0	0	0	305	20	43	0	52	78	512	0	1010
500-600	0	0	0	0	286	24	41	0	44	79	529	0	1003

PEAK HOUR
400-500
PEAK HOUR FACTOR
0.86

BEETHOVEN DRIVE



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

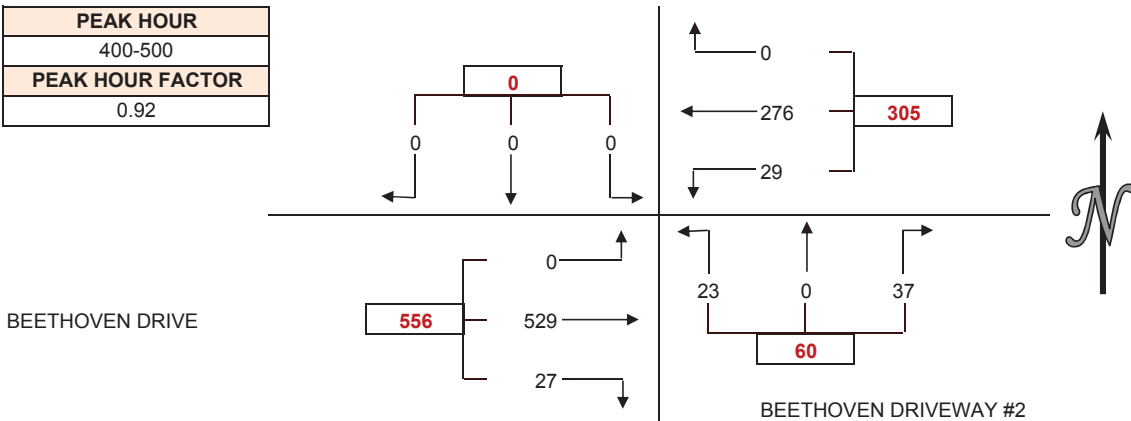
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: THURSDAY APRIL 23, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEETHOVEN DRIVEWAY #2
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	0	76	7	8	0	6	5	134	0	236
415-430	0	0	0	0	72	4	9	0	7	4	121	0	217
430-445	0	0	0	0	62	10	9	0	5	10	123	0	219
445-500	0	0	0	0	66	8	11	0	5	8	151	0	249
500-515	0	0	0	0	83	5	8	0	3	5	119	0	223
515-530	0	0	0	0	79	3	9	0	12	3	118	0	224
530-545	0	0	0	0	93	7	2	0	3	7	106	0	218
545-600	0	0	0	0	86	5	7	0	4	5	121	0	228
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	0	276	29	37	0	23	27	529	0	921
415-515	0	0	0	0	283	27	37	0	20	27	514	0	908
430-530	0	0	0	0	290	26	37	0	25	26	511	0	915
445-545	0	0	0	0	321	23	30	0	23	23	494	0	914
500-600	0	0	0	0	341	20	26	0	22	20	464	0	893

PEAK HOUR
400-500
PEAK HOUR FACTOR
0.92



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

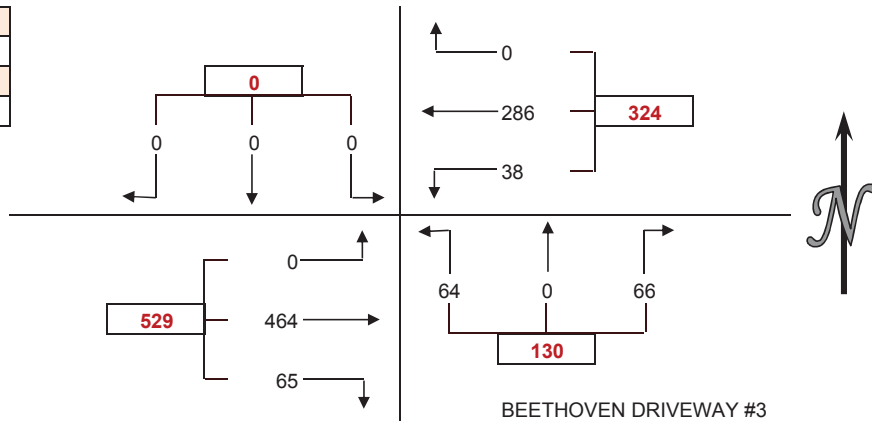
CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: THURSDAY APRIL 23, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEETHOVEN DRIVEWAY #3
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	0	67	7	15	0	14	13	134	0	250
415-430	0	0	0	0	62	11	12	0	11	18	114	0	228
430-445	0	0	0	0	63	5	13	0	13	17	112	0	223
445-500	0	0	0	0	63	8	15	0	12	16	146	0	260
500-515	0	0	0	0	67	7	13	0	22	16	111	0	236
515-530	0	0	0	0	74	15	24	0	10	19	105	0	247
530-545	0	0	0	0	82	8	14	0	20	14	102	0	240
545-600	0	0	0	0	76	7	19	0	13	12	116	0	243
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	0	255	31	55	0	50	64	506	0	961
415-515	0	0	0	0	255	31	53	0	58	67	483	0	947
430-530	0	0	0	0	267	35	65	0	57	68	474	0	966
445-545	0	0	0	0	286	38	66	0	64	65	464	0	983
500-600	0	0	0	0	299	37	70	0	65	61	434	0	966

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.95

BEETHOVEN DRIVE



BEETHOVEN DRIVEWAY #3

PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	1	0	1
430-445	0	0	0	0	0
445-500	0	0	1	1	2
500-515	0	2	3	0	5
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	2	1	3
415-515	0	2	5	1	8
430-530	0	2	4	1	7
445-545	0	2	4	1	7
500-600	0	2	3	0	5

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

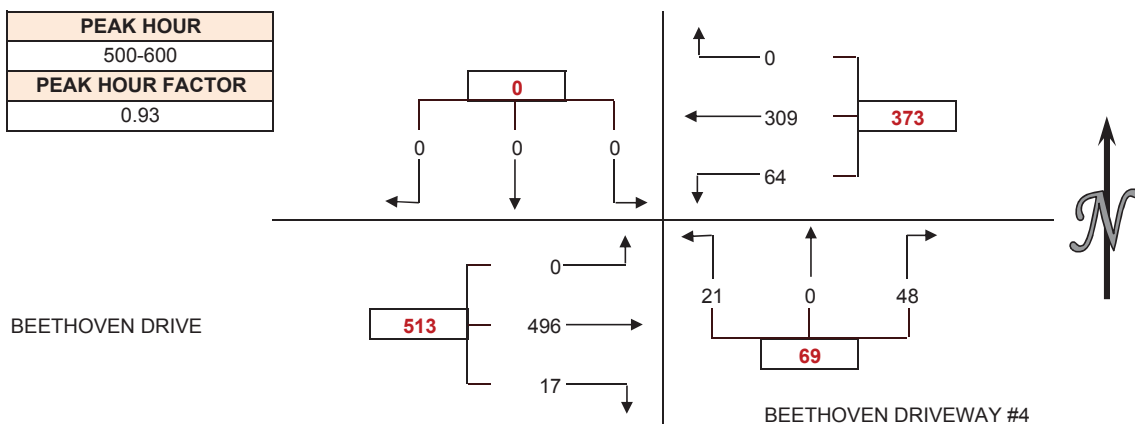
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: THURSDAY APRIL 23, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEETHOVEN DRIVEWAY #4
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	0	66	10	13	0	3	3	136	0	231
415-430	0	0	0	0	62	18	11	0	7	6	128	0	232
430-445	0	0	0	0	57	13	11	0	8	8	129	0	226
445-500	0	0	0	0	54	11	7	0	3	3	139	0	217
500-515	0	0	0	0	66	16	17	0	7	4	124	0	234
515-530	0	0	0	0	80	14	11	0	5	2	117	0	229
530-545	0	0	0	0	81	19	12	0	7	7	130	0	256
545-600	0	0	0	0	82	15	8	0	2	4	125	0	236
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	0	239	52	42	0	21	20	532	0	906
415-515	0	0	0	0	239	58	46	0	25	21	520	0	909
430-530	0	0	0	0	257	54	46	0	23	17	509	0	906
445-545	0	0	0	0	281	60	47	0	22	16	510	0	936
500-600	0	0	0	0	309	64	48	0	21	17	496	0	955

PEAK HOUR
500-600
PEAK HOUR FACTOR
0.93



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	13	13
415-430	0	0	0	4	4
430-445	0	0	0	5	5
445-500	0	0	0	0	0
500-515	0	0	0	9	9
515-530	0	0	0	4	4
530-545	0	0	0	6	6
545-600	0	0	2	4	6
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	22	22
415-515	0	0	0	18	18
430-530	0	0	0	18	18
445-545	0	0	0	19	19
500-600	0	0	2	23	25

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	1	0	1
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	1	0	1
500-600	0	0	1	0	1

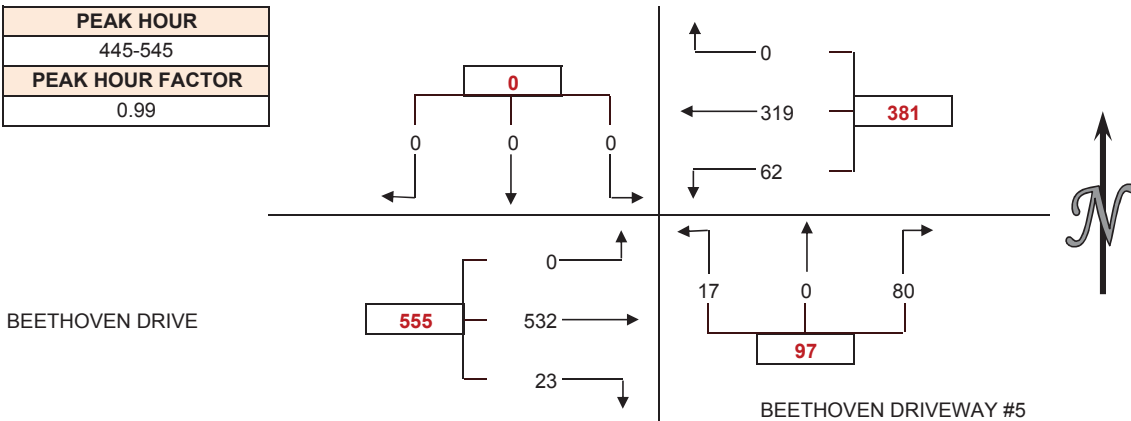
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S BEETHOVEN DRIVEWAY #5
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	0	0	0	70	11	23	0	4	5	128	0	241
415-430	0	0	0	0	69	14	16	0	4	5	130	0	238
430-445	0	0	0	0	67	16	12	0	3	5	133	0	236
445-500	0	0	0	0	78	19	23	0	4	1	137	0	262
500-515	0	0	0	0	77	20	19	0	4	7	122	0	249
515-530	0	0	0	0	87	9	18	0	4	6	136	0	260
530-545	0	0	0	0	77	14	20	0	5	9	137	0	262
545-600	0	0	0	0	80	18	17	0	1	6	118	0	240
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	0	0	0	284	60	74	0	15	16	528	0	977
415-515	0	0	0	0	291	69	70	0	15	18	522	0	985
430-530	0	0	0	0	309	64	72	0	15	19	528	0	1007
445-545	0	0	0	0	319	62	80	0	17	23	532	0	1033
500-600	0	0	0	0	321	61	74	0	14	28	513	0	1011

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.99



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

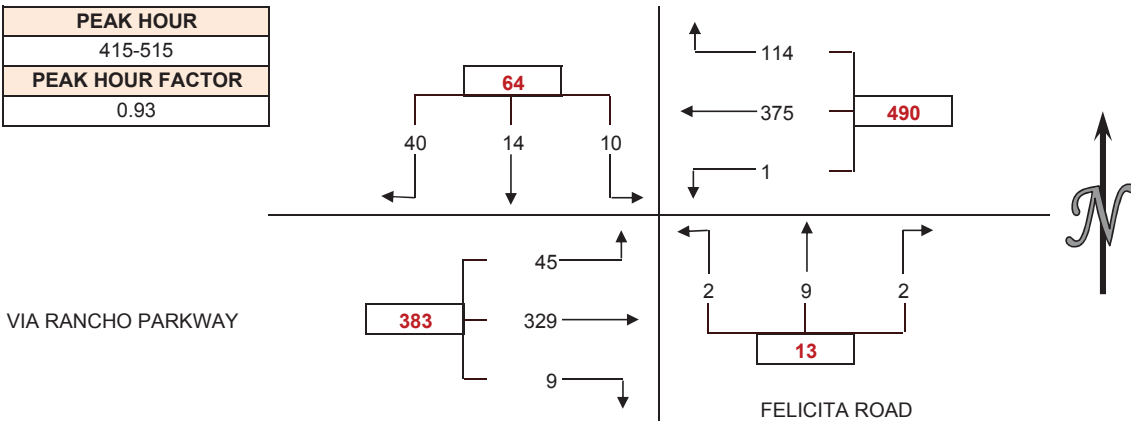
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S FELICITA ROAD
 E/W VIA RANCHO PARKWAY
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	10	2	2	29	75	2	0	6	3	1	66	24	220
415-430	9	5	1	26	108	0	0	3	1	1	88	13	255
430-445	10	3	5	30	84	1	0	2	0	3	86	8	232
445-500	12	4	2	29	85	0	2	1	0	2	80	15	232
500-515	9	2	2	29	98	0	0	3	1	3	75	9	231
515-530	9	5	6	23	99	0	0	3	0	2	80	7	234
530-545	6	3	1	38	101	0	1	1	0	2	81	16	250
545-600	13	2	2	17	90	1	0	4	1	0	69	14	213
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	41	14	10	114	352	3	2	12	4	7	320	60	939
415-515	40	14	10	114	375	1	2	9	2	9	329	45	950
430-530	40	14	15	111	366	1	2	9	1	10	321	39	929
445-545	36	14	11	119	383	0	3	8	1	9	316	47	947
500-600	37	12	11	107	388	1	1	11	2	7	305	46	928

PEAK HOUR
415-515
PEAK HOUR FACTOR
0.93



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	1	1
415-430	0	0	1	0	1
430-445	0	1	0	0	1
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	1	0	1
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	1	1	1	3
415-515	0	1	1	0	2
430-530	0	1	1	0	2
445-545	0	0	1	0	1
500-600	0	0	1	0	1

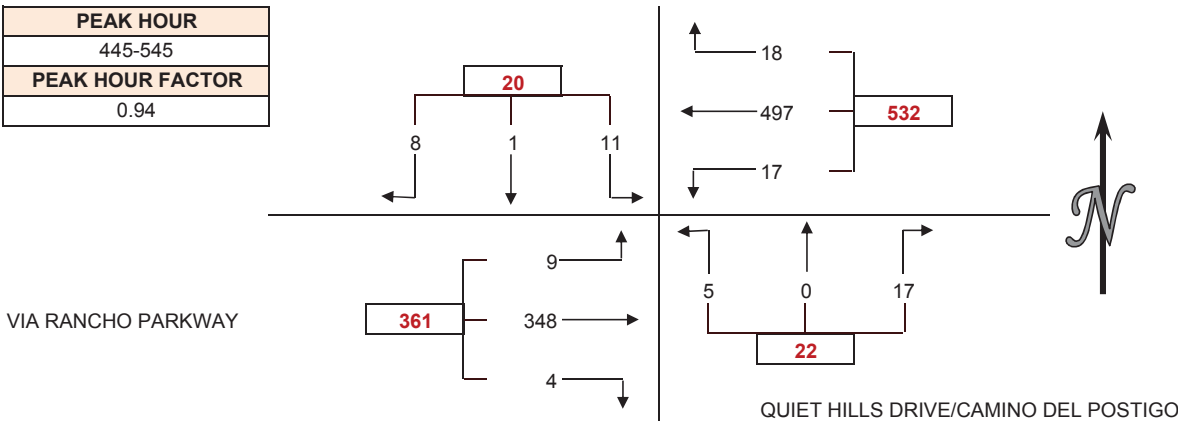
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S QUIET HILLS DRIVE/CAMINO DEL POSTIGO
 E/W VIA RANCHO PARKWAY
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	3	0	2	2	105	5	4	0	0	1	63	1	186
415-430	1	0	1	4	125	3	5	0	3	2	108	2	254
430-445	5	0	5	3	112	2	1	0	2	0	88	3	221
445-500	2	0	2	4	112	3	5	0	1	0	92	2	223
500-515	2	0	2	5	127	3	6	0	2	2	76	5	230
515-530	1	1	6	4	120	5	4	0	0	1	90	1	233
530-545	3	0	1	5	138	6	2	0	2	1	90	1	249
545-600	2	0	2	9	108	6	3	0	0	2	76	3	211
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	11	0	10	13	454	13	15	0	6	3	351	8	884
415-515	10	0	10	16	476	11	17	0	8	4	364	12	928
430-530	10	1	15	16	471	13	16	0	5	3	346	11	907
445-545	8	1	11	18	497	17	17	0	5	4	348	9	935
500-600	8	1	11	23	493	20	15	0	4	6	332	10	923

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.94



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	1	0	1
430-445	3	0	0	0	3
445-500	1	0	0	0	1
500-515	0	0	0	0	0
515-530	1	0	1	0	2
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	4	0	1	0	5
415-515	4	0	1	0	5
430-530	5	0	1	0	6
445-545	2	0	1	0	3
500-600	1	0	1	0	2

INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

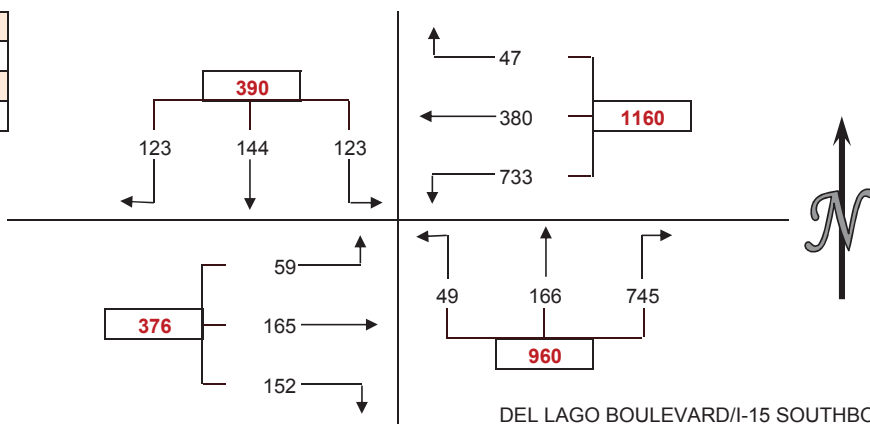
CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S DEL LAGO BOULEVARD/I-15 SOUTHBOUND RAMP
 E/W VIA RANCHO PARKWAY
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	39	35	39	8	79	163	137	38	15	24	40	11	628
415-430	26	28	26	13	99	202	149	29	14	47	56	14	703
430-445	30	40	30	17	94	193	149	45	13	56	48	13	728
445-500	25	24	25	20	90	172	162	35	11	47	44	17	672
500-515	36	42	36	15	95	185	157	44	14	37	41	10	712
515-530	27	35	27	5	100	192	183	37	10	38	42	21	717
530-545	25	33	25	17	111	185	197	43	14	45	48	18	761
545-600	35	34	35	10	74	171	208	42	11	32	34	10	696
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	120	127	120	58	362	730	597	147	53	174	188	55	2731
415-515	117	134	117	65	378	752	617	153	52	187	189	54	2815
430-530	118	141	118	57	379	742	651	161	48	178	175	61	2829
445-545	113	134	113	57	396	734	699	159	49	167	175	66	2862
500-600	123	144	123	47	380	733	745	166	49	152	165	59	2886

PEAK HOUR
500-600
PEAK HOUR FACTOR
0.95

VIA RANCHO PARKWAY



DEL LAGO BOULEVARD/I-15 SOUTHBOUND RAMP

PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	1	0	1
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-500	0	0	1	0	1
415-515	0	0	1	0	1
430-530	0	0	1	0	1
445-545	0	0	1	0	1
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	1	1
415-430	0	0	0	0	0
430-445	0	1	2	0	3
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	2	0	0	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-500	0	1	2	1	4
415-515	0	1	2	0	3
430-530	0	1	2	0	3
445-545	0	0	0	0	0
500-600	0	2	0	0	2

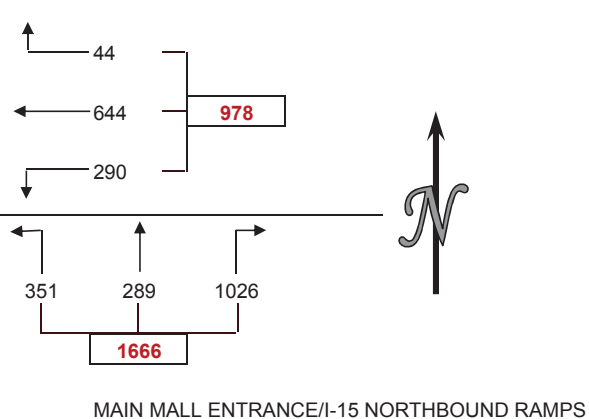
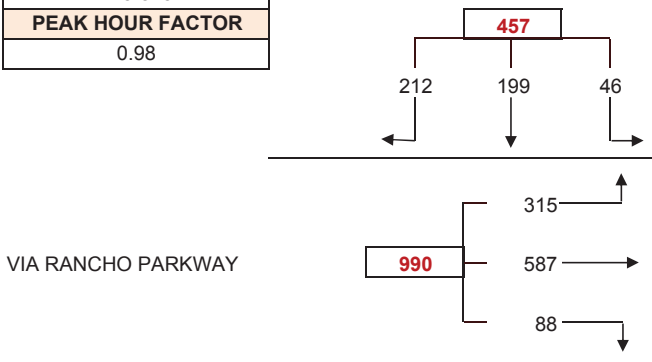
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S MAIN MALL ENTRANCE/I-15 NORTHBOUND RAMP
 E/W VIA RANCHO PARKWAY
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	61	52	8	3	131	78	241	49	69	35	129	61	917
415-430	64	34	9	8	166	73	198	55	79	49	150	59	944
430-445	51	53	11	5	148	67	274	65	89	18	130	68	979
445-500	48	52	9	11	161	71	267	64	68	23	149	71	994
500-515	59	46	15	14	174	76	265	77	83	24	144	71	1048
515-530	54	53	12	10	160	64	260	67	91	18	144	80	1013
530-545	51	48	10	9	149	79	234	81	109	23	150	93	1036
545-600	56	60	19	14	130	67	233	74	87	18	166	68	992
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	224	191	37	27	606	289	980	233	305	125	558	259	3834
415-515	222	185	44	38	649	287	1004	261	319	114	573	269	3965
430-530	212	204	47	40	643	278	1066	273	331	83	567	290	4034
445-545	212	199	46	44	644	290	1026	289	351	88	587	315	4091
500-600	220	207	56	47	613	286	992	299	370	83	604	312	4089

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.98



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	1	0	1
500-515	0	0	0	2	2
515-530	0	0	1	1	2
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-500	0	0	1	0	1
415-515	0	0	1	2	3
430-530	0	0	2	3	5
445-545	0	0	2	3	5
500-600	0	0	1	3	4

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	1	0	0	0	1
500-515	0	0	0	0	0
515-530	0	0	1	0	1
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-500	1	0	0	0	1
415-515	1	0	0	0	1
430-530	1	0	1	0	2
445-545	1	0	1	0	2
500-600	0	0	1	0	1

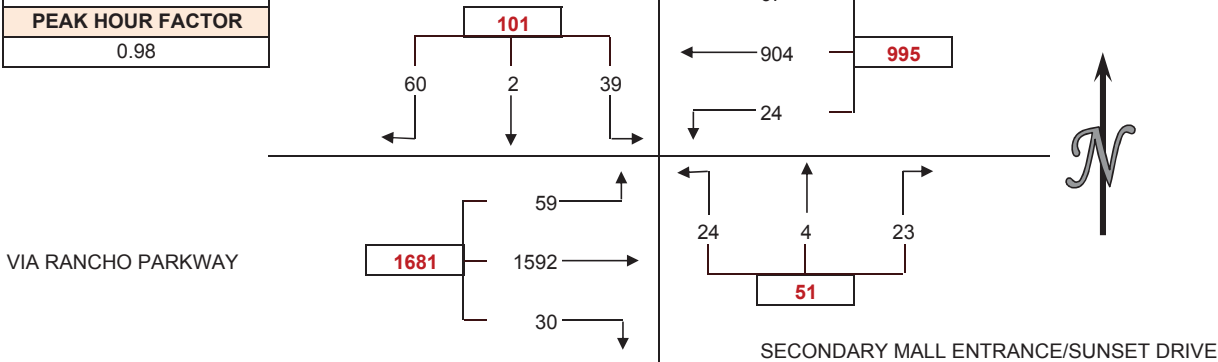
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: WEDNESDAY APRIL 22, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S SECONDARY MALL ENTRANCE/SUNSET DRIVE
 E/W VIA RANCHO PARKWAY
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	12	1	11	9	220	7	5	1	5	4	343	12	630
415-430	9	2	4	11	219	5	8	1	6	5	372	20	662
430-445	8	2	5	9	204	10	5	0	12	5	377	17	654
445-500	17	1	8	20	213	5	6	0	6	8	402	20	706
500-515	11	0	7	10	256	9	3	2	2	8	403	13	724
515-530	19	1	16	23	212	6	3	1	8	7	402	15	713
530-545	13	0	8	14	223	4	11	1	8	7	385	11	685
545-600	11	0	10	4	181	8	6	0	10	11	410	10	661
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	46	6	28	49	856	27	24	2	29	22	1494	69	2652
415-515	45	5	24	50	892	29	22	3	26	26	1554	70	2746
430-530	55	4	36	62	885	30	17	3	28	28	1584	65	2797
445-545	60	2	39	67	904	24	23	4	24	30	1592	59	2828
500-600	54	1	41	51	872	27	23	4	28	33	1600	49	2783

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.98



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	0	0	0
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS					
PERIOD					
400-500	0	0	0	0	0
415-515	0	0	0	0	0
430-530	0	0	0	0	0
445-545	0	0	0	0	0
500-600	0	0	0	0	0

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD					
400-415	0	0	0	0	0
415-430	1	0	0	1	2
430-445	0	0	0	0	0
445-500	0	0	0	0	0
500-515	0	0	0	0	0
515-530	0	0	1	0	1
530-545	0	0	0	0	0
545-600	0	0	0	0	0
HOUR TOTALS					
PERIOD					
400-500	1	0	0	1	2
415-515	1	0	0	1	2
430-530	0	0	1	0	1
445-545	0	0	1	0	1
500-600	0	0	1	0	1

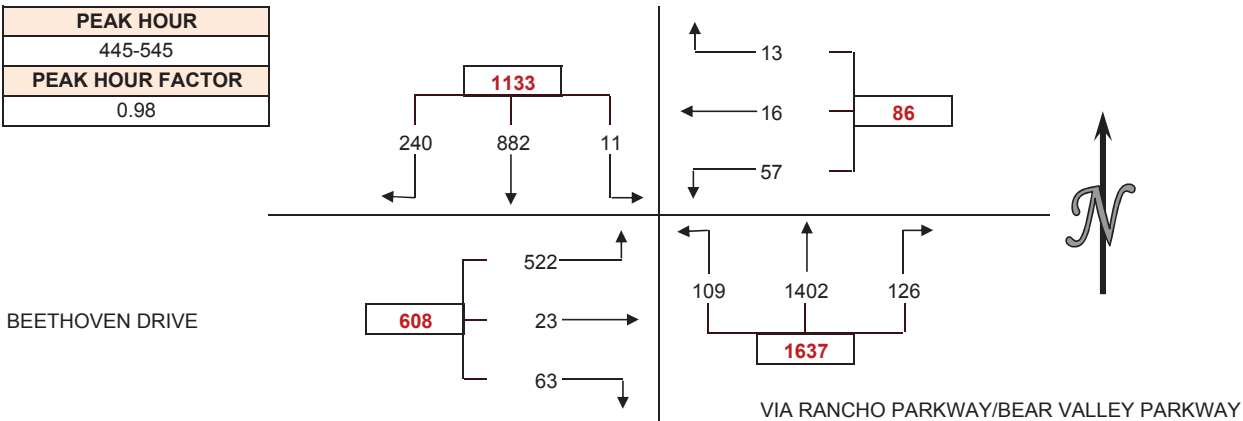
INTERSECTION CAR/PED/BIKE TRAFFIC COUNT RESULTS SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: WESTFIELD NORTH COUNTY (ESCONDIDO) TRAFFIC COUNTS
 DATE: TUESDAY APRIL 21, 2015
 PERIOD: 4:00 PM TO 6:00 PM
 INTERSECTION: N/S VIA RANCHO PARKWAY/BEAR VALLEY PARKWAY
 E/W BEETHOVEN DRIVE
 CITY: ESCONDIDO

VEHICLE COUNTS

15 MIN COUNTS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	68	240	3	4	3	15	29	349	26	13	6	125	881
415-430	57	206	7	5	6	7	27	326	23	14	9	143	830
430-445	68	220	6	2	5	12	24	299	26	13	6	115	796
445-500	65	224	1	1	3	20	35	340	35	20	8	131	883
500-515	60	216	1	3	3	14	28	368	29	14	6	134	876
515-530	53	206	5	4	6	13	34	386	21	16	3	129	876
530-545	62	236	4	5	4	10	29	308	24	13	6	128	829
545-600	61	211	6	3	4	8	22	295	22	17	6	115	770
HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	
PERIOD	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	258	890	17	12	17	54	115	1314	110	60	29	514	3390
415-515	250	866	15	11	17	53	114	1333	113	61	29	523	3385
430-530	246	866	13	10	17	59	121	1393	111	63	23	509	3431
445-545	240	882	11	13	16	57	126	1402	109	63	23	522	3464
500-600	236	869	16	15	17	45	113	1357	96	60	21	506	3351

PEAK HOUR
445-545
PEAK HOUR FACTOR
0.98



PEDESTRIAN COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	1	3	0	0	4
415-430	0	0	0	0	0
430-445	2	2	0	0	4
445-500	3	1	0	0	4
500-515	0	1	0	2	3
515-530	0	0	0	0	0
530-545	0	1	0	8	9
545-600	0	2	0	0	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	6	6	0	0	12
415-515	5	4	0	2	11
430-530	5	4	0	2	11
445-545	3	3	0	10	16
500-600	0	4	0	10	14

BICYCLE COUNTS

15 MIN COUNTS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-415	0	0	0	0	0
415-430	0	0	0	0	0
430-445	0	1	0	0	1
445-500	0	1	0	0	1
500-515	0	1	0	0	1
515-530	0	0	1	0	1
530-545	0	1	0	0	1
545-600	1	0	0	1	2
HOUR TOTALS	NORTH LEG	EAST LEG	SOUTH LEG	WEST LEG	TOTAL
PERIOD	LEG	LEG	LEG	LEG	TOTAL
400-500	0	2	0	0	2
415-515	0	3	0	0	3
430-530	0	3	1	0	4
445-545	0	3	1	0	4
500-600	1	2	1	1	5

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #B BEAR VALLEY PARKWAY BETWEEN
 LAS PALMAS AND CANYON
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		NB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	32	34	18	11	95
1:00	9	12	10	14	45
2:00	7	12	2	13	34
3:00	3	4	6	5	18
4:00	14	7	10	22	53
5:00	16	19	25	38	98
6:00	36	62	82	126	306
7:00	183	256	226	203	868
8:00	250	156	126	117	649
9:00	100	108	114	104	426
10:00	138	103	108	131	480
11:00	134	128	126	167	555
12:00	144	146	156	140	586
13:00	128	167	194	161	650
14:00	190	208	292	266	956
15:00	250	303	324	248	1125
16:00	342	322	313	306	1283
17:00	328	319	333	324	1304
18:00	298	302	286	246	1132
19:00	192	212	209	162	775
20:00	172	166	220	196	754
21:00	178	142	109	90	519
22:00	92	96	77	56	321
23:00	52	38	45	28	163
				TOTAL	13195
AM PEAK HOUR		0715-0815			
VOLUME		935			
PM PEAK HOUR		1700-1800			
VOLUME		1304			

DIRECTION:		SB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	17	6	14	8	45
1:00	13	12	15	8	48
2:00	8	7	9	7	31
3:00	9	10	18	16	53
4:00	24	51	60	90	225
5:00	114	160	208	203	685
6:00	236	347	360	416	1359
7:00	410	434	344	334	1522
8:00	362	360	219	198	1139
9:00	172	188	181	168	709
10:00	152	142	140	152	586
11:00	152	140	142	160	594
12:00	140	154	149	140	583
13:00	146	168	156	151	621
14:00	174	218	318	243	953
15:00	232	208	204	200	844
16:00	205	220	188	210	823
17:00	184	180	199	213	776
18:00	207	180	164	162	713
19:00	150	110	104	108	472
20:00	78	88	94	101	361
21:00	62	67	62	52	243
22:00	53	36	32	25	146
23:00	20	28	24	12	84
				TOTAL	13615
AM PEAK HOUR		0630-0730			
VOLUME		1620			
PM PEAK HOUR		1415-1515			
VOLUME		1011			

TOTAL BI-DIRECTIONAL VOLUME

26810

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #C BEAR VALLEY PARKWAY NORTH OF
 MARY LANE/ENTRANCE DRIVE
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		NB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	32	34	18	10	94
1:00	10	13	11	14	48
2:00	8	12	2	14	36
3:00	3	4	6	5	18
4:00	14	7	10	21	52
5:00	18	18	24	45	105
6:00	40	68	79	117	304
7:00	192	300	229	272	993
8:00	216	144	116	120	596
9:00	102	114	116	120	452
10:00	139	105	106	126	476
11:00	133	136	136	162	567
12:00	151	146	151	142	590
13:00	136	175	192	169	672
14:00	216	252	339	291	1098
15:00	295	246	300	260	1101
16:00	300	318	302	304	1224
17:00	330	317	326	330	1303
18:00	301	319	298	252	1170
19:00	198	214	210	164	786
20:00	178	160	215	186	739
21:00	168	130	110	92	500
22:00	88	96	76	58	318
23:00	52	40	46	27	165
				TOTAL	13407
AM PEAK HOUR		0715-0815			
VOLUME		1017			
PM PEAK HOUR		1700-1800			
VOLUME		1303			

DIRECTION:		SB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	14	6	14	8	42
1:00	12	9	14	8	43
2:00	7	6	8	6	27
3:00	8	8	14	16	46
4:00	16	48	52	76	192
5:00	104	135	178	167	584
6:00	190	268	279	303	1040
7:00	262	250	236	216	964
8:00	286	278	181	154	899
9:00	139	153	148	142	582
10:00	136	118	122	124	500
11:00	121	117	122	139	499
12:00	120	128	126	114	488
13:00	112	137	135	119	503
14:00	127	154	232	216	729
15:00	226	198	174	147	745
16:00	170	182	148	168	668
17:00	148	149	153	158	608
18:00	170	148	140	128	586
19:00	114	84	86	86	370
20:00	66	78	90	95	329
21:00	54	64	54	51	223
22:00	44	32	24	24	124
23:00	18	23	22	11	74
				TOTAL	10865
AM PEAK HOUR		0615-0715			
VOLUME		1112			
PM PEAK HOUR		1430-1530			
VOLUME		872			

TOTAL BI-DIRECTIONAL VOLUME

24272

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #D BEAR VALLEY PARKWAY NORTH OF
 SAN PASQUAL ROAD
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		NB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	34	36	19	12	101
1:00	13	13	12	14	52
2:00	9	13	3	14	39
3:00	3	4	10	6	23
4:00	13	7	10	22	52
5:00	16	19	24	42	101
6:00	43	72	90	130	335
7:00	140	186	137	253	716
8:00	202	168	133	130	633
9:00	114	116	116	134	480
10:00	142	96	114	136	488
11:00	130	138	142	172	582
12:00	158	156	164	158	636
13:00	167	175	210	179	731
14:00	222	274	324	273	1093
15:00	280	240	298	274	1092
16:00	326	344	332	324	1326
17:00	340	352	331	346	1369
18:00	340	331	312	272	1255
19:00	194	220	208	182	804
20:00	170	175	200	184	729
21:00	184	119	122	95	520
22:00	82	91	84	54	311
23:00	64	42	45	30	181
				TOTAL	13649
AM PEAK HOUR		0715-0815			
VOLUME		778			
PM PEAK HOUR		1700-1800			
VOLUME		1369			

DIRECTION:		SB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	16	9	13	8	46
1:00	14	13	15	8	50
2:00	8	7	9	7	31
3:00	9	14	18	18	59
4:00	28	56	64	108	256
5:00	126	162	220	213	721
6:00	253	346	392	428	1419
7:00	456	449	433	321	1659
8:00	397	432	279	252	1360
9:00	217	216	218	202	853
10:00	182	160	166	179	687
11:00	156	178	177	184	695
12:00	182	175	174	158	689
13:00	158	176	194	160	688
14:00	172	174	316	332	994
15:00	357	286	235	206	1084
16:00	201	224	184	199	808
17:00	200	176	188	205	769
18:00	223	176	182	150	731
19:00	147	126	118	132	523
20:00	92	104	119	104	419
21:00	76	96	62	56	290
22:00	78	45	38	29	190
23:00	18	31	23	14	86
				TOTAL	15107
AM PEAK HOUR		0645-0745			
VOLUME		1766			
PM PEAK HOUR		1430-1530			
VOLUME		1291			

TOTAL BI-DIRECTIONAL VOLUME

28756

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #E BEAR VALLEY PARKWAY NORTH OF
 BEETHOVEN DRIVE
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		NB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	4	5	12	7	28
1:00	16	10	13	30	69
2:00	22	30	52	76	180
3:00	70	108	138	200	516
4:00	274	402	206	299	1181
5:00	278	232	198	201	909
6:00	166	213	214	226	819
7:00	217	180	172	209	778
8:00	184	222	228	242	876
9:00	212	246	216	218	892
10:00	228	240	290	266	1024
11:00	336	407	440	410	1593
12:00	416	386	406	434	1642
13:00	462	458	474	506	1900
14:00	492	552	494	488	2026
15:00	456	461	402	377	1696
16:00	300	323	256	236	1115
17:00	226	230	212	232	900
18:00	216	162	154	115	647
19:00	116	107	104	72	399
20:00	70	59	54	42	225
21:00	36	44	16	20	116
22:00	14	27	18	6	65
23:00	10	12	10	9	41
				TOTAL	19637
AM PEAK HOUR		1100-1200			
VOLUME		1593			
PM PEAK HOUR		1345-1445			
VOLUME		2044			

DIRECTION:		SB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	14	16	30	25	85
1:00	35	71	86	116	308
2:00	144	193	272	268	877
3:00	306	430	486	516	1738
4:00	475	533	552	428	1988
5:00	493	512	392	330	1727
6:00	290	261	271	280	1102
7:00	242	210	226	269	947
8:00	200	252	228	244	924
9:00	244	224	239	230	937
10:00	214	233	289	224	960
11:00	214	245	432	436	1327
12:00	456	390	309	268	1423
13:00	300	276	284	274	1134
14:00	278	260	306	298	1142
15:00	296	245	268	206	1015
16:00	206	210	180	164	760
17:00	116	117	154	148	535
18:00	133	121	74	66	394
19:00	90	56	39	38	223
20:00	26	35	32	14	107
21:00	22	10	12	16	60
22:00	9	6	17	11	43
23:00	11	4	11	18	44
				TOTAL	19800
AM PEAK HOUR		0345-0445			
VOLUME		2076			
PM PEAK HOUR		1200-1300			
VOLUME		1423			

TOTAL BI-DIRECTIONAL VOLUME	39437

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #F BEETHOVEN DRIVE WEST OF
 OF BEAR VALLEY PARKWAY/VIA RANCHO PARKWAY
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	6	8	4	4	22
1:00	2	4	5	4	15
2:00	2	0	0	1	3
3:00	0	0	0	3	3
4:00	0	0	3	4	7
5:00	3	5	3	3	14
6:00	10	9	13	32	64
7:00	62	102	52	78	294
8:00	54	41	38	37	170
9:00	30	15	32	30	107
10:00	30	30	34	44	138
11:00	39	37	49	60	185
12:00	66	70	60	72	268
13:00	74	59	90	80	303
14:00	110	130	134	151	525
15:00	114	112	132	117	475
16:00	156	152	149	166	623
17:00	146	158	162	144	610
18:00	150	146	114	106	516
19:00	122	116	84	79	401
20:00	81	84	62	81	308
21:00	78	60	73	40	251
22:00	28	38	24	16	106
23:00	15	18	4	6	43
				TOTAL	5451
AM PEAK HOUR		0700-0800			
VOLUME		294			
PM PEAK HOUR		1645-1745			
VOLUME		632			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	2	2	0	0	4
1:00	1	0	0	0	1
2:00	2	0	0	0	2
3:00	0	3	0	4	7
4:00	4	4	5	16	29
5:00	18	31	38	47	134
6:00	61	95	109	122	387
7:00	129	136	163	120	548
8:00	156	162	122	82	522
9:00	78	85	82	71	316
10:00	63	50	51	85	249
11:00	58	75	53	89	275
12:00	76	65	64	77	282
13:00	62	67	66	56	251
14:00	47	62	132	157	398
15:00	140	117	80	95	432
16:00	84	86	87	88	345
17:00	100	92	96	100	388
18:00	104	104	96	66	370
19:00	79	55	75	51	260
20:00	35	30	40	31	136
21:00	25	20	8	7	60
22:00	14	8	1	2	25
23:00	5	3	1	0	9
				TOTAL	5430
AM PEAK HOUR		0730-0830			
VOLUME		601			
PM PEAK HOUR		1430-1530			
VOLUME		546			

TOTAL BI-DIRECTIONAL VOLUME	10881

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #G BEETHOVEN DRIVE EAST OF I-15

DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	2	5	3	1	11
1:00	0	4	0	0	4
2:00	2	0	0	1	3
3:00	0	0	1	1	2
4:00	1	0	3	8	12
5:00	9	9	18	18	54
6:00	14	21	19	32	86
7:00	60	103	54	69	286
8:00	67	41	40	40	188
9:00	37	30	45	39	151
10:00	34	29	22	50	135
11:00	36	37	50	59	182
12:00	55	54	59	55	223
13:00	49	35	66	64	214
14:00	66	75	82	104	327
15:00	80	77	103	102	362
16:00	124	102	125	126	477
17:00	125	134	126	115	500
18:00	98	105	77	68	348
19:00	84	40	62	46	232
20:00	44	38	29	30	141
21:00	20	22	24	17	83
22:00	10	16	13	7	46
23:00	6	8	1	3	18
				TOTAL	4085
AM PEAK HOUR		0715-0815			
VOLUME		293			
PM PEAK HOUR		1645-1745			
VOLUME		511			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	3	0	1	1	5
1:00	1	0	0	0	1
2:00	0	0	0	0	0
3:00	0	1	0	1	2
4:00	2	5	5	12	24
5:00	16	21	38	38	113
6:00	52	84	100	117	353
7:00	112	119	156	95	482
8:00	119	147	105	74	445
9:00	65	65	49	32	211
10:00	36	28	42	44	150
11:00	42	54	38	49	183
12:00	53	49	41	50	193
13:00	66	48	53	64	231
14:00	65	56	112	121	354
15:00	135	106	76	71	388
16:00	88	76	70	69	303
17:00	77	72	70	73	292
18:00	79	83	77	52	291
19:00	65	53	56	48	222
20:00	60	37	39	57	193
21:00	56	31	18	18	123
22:00	19	13	9	2	43
23:00	9	6	4	1	20
				TOTAL	4622
AM PEAK HOUR		0730-0830			
VOLUME		517			
PM PEAK HOUR		1430-1530			
VOLUME		474			

TOTAL BI-DIRECTIONAL VOLUME

8707

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #H VIA RANCHO PARKWAY WEST OF FELICITA ROAD
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	4	3	4	1	12
1:00	1	0	3	2	6
2:00	0	0	4	2	6
3:00	1	1	3	2	7
4:00	4	7	7	9	27
5:00	25	35	39	43	142
6:00	38	63	102	104	307
7:00	188	188	159	170	705
8:00	144	110	114	81	449
9:00	91	78	72	68	309
10:00	67	60	55	66	248
11:00	52	71	51	66	240
12:00	70	55	64	62	251
13:00	52	41	56	61	210
14:00	65	92	109	92	358
15:00	92	69	77	74	312
16:00	98	74	82	85	339
17:00	79	87	84	82	332
18:00	71	93	68	64	296
19:00	39	33	27	33	132
20:00	32	23	30	18	103
21:00	15	24	17	14	70
22:00	7	11	10	7	35
23:00	6	4	3	5	18
				TOTAL	4914
AM PEAK HOUR		0700-0800			
VOLUME		705			
PM PEAK HOUR		1415-1515			
VOLUME		385			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	2	5	3	4	14
1:00	2	7	3	3	15
2:00	2	0	4	2	8
3:00	2	0	1	0	3
4:00	2	4	2	4	12
5:00	3	7	11	11	32
6:00	10	32	51	45	138
7:00	56	74	93	87	310
8:00	80	86	64	70	300
9:00	63	48	56	55	222
10:00	42	51	58	51	202
11:00	52	44	63	42	201
12:00	54	58	65	52	229
13:00	60	45	59	53	217
14:00	66	65	79	101	311
15:00	114	127	102	109	452
16:00	98	99	87	108	392
17:00	99	103	110	109	421
18:00	121	74	77	92	364
19:00	65	69	46	53	233
20:00	56	45	41	45	187
21:00	44	36	32	22	134
22:00	14	12	11	13	50
23:00	9	12	5	4	30
				TOTAL	4477
AM PEAK HOUR		0730-0830			
VOLUME		346			
PM PEAK HOUR		1500-1600			
VOLUME		452			

TOTAL BI-DIRECTIONAL VOLUME

9391

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #I VIA RANCHO PARKWAY WEST OF
 QUIET HILLS DRIVE/CAMINO DEL POSTIGO
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	4	2	3	2	11
1:00	2	0	3	2	7
2:00	0	0	3	2	5
3:00	1	1	4	3	9
4:00	4	6	9	8	27
5:00	28	36	39	45	148
6:00	43	87	134	141	405
7:00	253	270	195	241	959
8:00	186	128	122	103	539
9:00	110	98	68	70	346
10:00	80	76	58	71	285
11:00	58	84	62	63	267
12:00	82	56	74	60	272
13:00	52	54	72	61	239
14:00	84	96	124	99	403
15:00	113	97	86	80	376
16:00	107	74	93	89	363
17:00	88	104	94	94	380
18:00	78	89	67	66	300
19:00	44	44	30	38	156
20:00	30	25	27	22	104
21:00	20	27	16	14	77
22:00	6	10	12	6	34
23:00	6	6	3	4	19
				TOTAL	5731
AM PEAK HOUR		0700-0800			
VOLUME		959			
PM PEAK HOUR		1430-1530			
VOLUME		433			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	4	9	3	6	22
1:00	4	6	4	2	16
2:00	3	0	4	2	9
3:00	1	0	1	0	2
4:00	2	3	0	5	10
5:00	3	5	11	9	28
6:00	8	35	56	47	146
7:00	62	92	104	90	348
8:00	94	86	62	86	328
9:00	62	52	62	60	236
10:00	53	52	59	55	219
11:00	49	61	68	52	230
12:00	68	70	68	62	268
13:00	68	59	62	73	262
14:00	71	74	103	126	374
15:00	154	166	115	132	567
16:00	130	128	120	136	514
17:00	118	131	137	118	504
18:00	144	93	93	104	434
19:00	78	79	63	57	277
20:00	58	51	49	53	211
21:00	57	43	36	24	160
22:00	22	14	12	17	65
23:00	11	13	7	4	35
				TOTAL	5265
AM PEAK HOUR		0715-0815			
VOLUME		380			
PM PEAK HOUR		1500-1600			
VOLUME		567			

TOTAL BI-DIRECTIONAL VOLUME

10996

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #J VIA RANCHO PARKWAY WEST OF
 I-15 SB RAMPS
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	7	1	4	3	15
1:00	2	0	3	2	7
2:00	0	0	3	2	5
3:00	1	1	4	4	10
4:00	5	7	13	12	37
5:00	30	41	50	56	177
6:00	52	107	138	168	465
7:00	270	306	212	250	1038
8:00	218	140	152	124	634
9:00	108	120	94	92	414
10:00	82	88	84	90	344
11:00	76	92	81	82	331
12:00	100	68	86	74	328
13:00	64	62	89	74	289
14:00	94	108	137	112	451
15:00	121	105	104	93	423
16:00	108	96	100	98	402
17:00	90	111	100	106	407
18:00	92	88	93	72	345
19:00	55	50	35	41	181
20:00	38	28	31	27	124
21:00	18	30	25	11	84
22:00	8	13	13	8	42
23:00	7	6	4	5	22
				TOTAL	6575
AM PEAK HOUR		0700-0800			
VOLUME		1038			
PM PEAK HOUR		1415-1515			
VOLUME		478			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	6	9	4	7	26
1:00	3	6	5	3	17
2:00	2	2	3	2	9
3:00	1	0	1	1	3
4:00	2	4	1	5	12
5:00	3	6	14	10	33
6:00	13	39	60	51	163
7:00	60	90	100	86	336
8:00	98	98	72	94	362
9:00	64	54	72	82	272
10:00	67	60	66	62	255
11:00	66	70	76	64	276
12:00	88	86	88	81	343
13:00	86	82	70	92	330
14:00	92	100	112	152	456
15:00	166	186	138	142	632
16:00	144	142	144	160	590
17:00	137	150	162	132	581
18:00	172	116	124	119	531
19:00	104	95	83	72	354
20:00	72	71	62	65	270
21:00	63	46	53	28	190
22:00	31	21	16	22	90
23:00	12	17	9	5	43
				TOTAL	6174
AM PEAK HOUR		0730-0830			
VOLUME		382			
PM PEAK HOUR		1445-1545			
VOLUME		642			

TOTAL BI-DIRECTIONAL VOLUME

12749

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #K VIA RANCHO PARKWAY BETWEEN I-15 RAMPS

DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	10	6	8	6	30
1:00	4	3	10	2	19
2:00	2	6	8	1	17
3:00	4	4	8	8	24
4:00	4	7	5	12	28
5:00	14	17	22	53	106
6:00	36	54	57	87	234
7:00	192	206	97	158	653
8:00	126	102	120	108	456
9:00	100	167	163	154	584
10:00	136	142	150	167	595
11:00	175	188	186	218	767
12:00	186	208	174	174	742
13:00	200	168	190	168	726
14:00	234	259	276	224	993
15:00	244	229	192	214	879
16:00	228	187	226	228	869
17:00	224	238	220	238	920
18:00	224	224	240	186	874
19:00	158	144	108	110	520
20:00	111	106	88	82	387
21:00	58	65	57	37	217
22:00	37	38	32	16	123
23:00	15	18	12	16	61
				TOTAL	10824
AM PEAK HOUR		1100-1200			
VOLUME		767			
PM PEAK HOUR		1415-1515			
VOLUME		1003			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	25	18	19	16	78
1:00	18	21	17	12	68
2:00	11	14	11	7	43
3:00	11	7	22	21	61
4:00	29	49	70	98	246
5:00	108	146	210	214	678
6:00	241	315	360	374	1290
7:00	342	336	382	304	1364
8:00	333	364	266	294	1257
9:00	242	214	228	236	920
10:00	194	205	212	218	829
11:00	238	220	244	238	940
12:00	250	243	283	270	1046
13:00	241	271	308	274	1094
14:00	271	280	324	332	1207
15:00	404	382	314	298	1398
16:00	312	319	294	318	1243
17:00	298	298	302	272	1170
18:00	314	252	238	284	1088
19:00	234	230	190	176	830
20:00	163	184	186	173	706
21:00	166	151	152	108	577
22:00	96	82	63	52	293
23:00	40	41	45	17	143
				TOTAL	18569
AM PEAK HOUR		0645-0745			
VOLUME		1434			
PM PEAK HOUR		1430-1530			
VOLUME		1442			

TOTAL BI-DIRECTIONAL VOLUME

29393

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #L VIA RANCHO PARKWAY EAST OF I-15 NB RAMPS

DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	40	37	21	17	115
1:00	13	14	12	16	55
2:00	8	18	14	12	52
3:00	6	10	16	10	42
4:00	14	15	10	34	73
5:00	24	37	62	80	203
6:00	68	106	150	170	494
7:00	262	289	193	250	994
8:00	232	218	192	204	846
9:00	203	234	230	226	893
10:00	237	191	188	220	836
11:00	222	246	227	256	951
12:00	229	246	234	216	925
13:00	250	238	280	268	1036
14:00	324	358	376	353	1411
15:00	380	342	327	402	1451
16:00	415	376	412	445	1648
17:00	434	428	426	418	1706
18:00	389	413	379	330	1511
19:00	257	253	197	210	917
20:00	178	192	201	182	753
21:00	162	144	126	98	530
22:00	108	88	100	58	354
23:00	57	50	55	39	201
				TOTAL	17997
AM PEAK HOUR		0700-0800			
VOLUME		994			
PM PEAK HOUR		1645-1745			
VOLUME		1733			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	16	9	18	15	58
1:00	11	11	20	10	52
2:00	10	16	16	16	58
3:00	14	16	21	26	77
4:00	32	51	80	118	281
5:00	118	186	213	222	739
6:00	263	373	398	391	1425
7:00	420	428	414	381	1643
8:00	358	382	336	313	1389
9:00	261	226	257	230	974
10:00	190	180	257	228	855
11:00	192	222	209	206	829
12:00	236	228	200	212	876
13:00	236	214	249	206	905
14:00	218	224	352	359	1153
15:00	326	374	299	246	1245
16:00	260	242	249	240	991
17:00	284	250	244	224	1002
18:00	228	206	162	189	785
19:00	200	180	154	136	670
20:00	128	136	147	142	553
21:00	197	206	116	88	607
22:00	78	68	69	63	278
23:00	30	38	37	28	133
				TOTAL	17578
AM PEAK HOUR		0645-0745			
VOLUME		1653			
PM PEAK HOUR		1430-1530			
VOLUME		1411			

TOTAL BI-DIRECTIONAL VOLUME	35575

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #M VIA RANCHO PARKWAY WEST OF
 BEETHOVEN DRIVE
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	42	34	21	14	111
1:00	14	12	11	14	51
2:00	7	18	8	16	49
3:00	4	7	10	7	28
4:00	16	11	10	32	69
5:00	19	34	52	74	179
6:00	62	100	135	168	465
7:00	237	298	184	222	941
8:00	224	198	176	204	802
9:00	174	214	220	204	812
10:00	218	176	160	195	749
11:00	188	206	206	227	827
12:00	187	214	190	200	791
13:00	219	219	249	234	921
14:00	275	325	383	327	1310
15:00	339	310	318	368	1335
16:00	382	356	386	413	1537
17:00	410	428	382	422	1642
18:00	354	391	360	310	1415
19:00	250	240	188	199	877
20:00	173	178	192	182	725
21:00	159	138	118	92	507
22:00	102	92	92	59	345
23:00	60	44	52	35	191
				TOTAL	16679
AM PEAK HOUR		0700-0800			
VOLUME		941			
PM PEAK HOUR		1700-1800			
VOLUME		1642			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	22	15	14	14	65
1:00	15	14	18	10	57
2:00	9	8	10	10	37
3:00	13	13	30	26	82
4:00	32	68	82	113	295
5:00	132	166	246	240	784
6:00	249	380	406	417	1452
7:00	372	418	444	354	1588
8:00	352	408	300	288	1348
9:00	252	221	224	254	951
10:00	228	188	191	212	819
11:00	186	212	210	190	798
12:00	211	214	216	216	857
13:00	183	200	252	215	850
14:00	210	223	332	336	1101
15:00	376	316	256	224	1172
16:00	248	218	223	230	919
17:00	213	201	248	228	890
18:00	238	174	205	166	783
19:00	164	182	122	134	602
20:00	100	107	140	138	485
21:00	126	114	88	72	400
22:00	76	60	44	40	220
23:00	26	36	30	15	107
				TOTAL	16662
AM PEAK HOUR		0645-0745			
VOLUME		1651			
PM PEAK HOUR		1430-1530			
VOLUME		1360			

TOTAL BI-DIRECTIONAL VOLUME	33341

24-HOUR ADT COUNT SUMMARY

CLIENT: GIBSON TRANSPORTATION CONSULTING, INC.
 PROJECT: J1101 - WESTFIELD NORTH COUNTY (ESCONDIDO)
 LOCATION: #N SAN PASQUAL ROAD EAST OF
 BEAR VALLEY PARKWAY
 DATE: TUESDAY, APRIL 21ST 2015

DIRECTION:		EB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	6	2	5	4	17
1:00	1	2	1	2	6
2:00	2	4	4	2	12
3:00	1	1	2	0	4
4:00	4	3	4	20	31
5:00	6	14	26	40	86
6:00	34	56	54	94	238
7:00	94	128	82	59	363
8:00	83	86	86	76	331
9:00	69	110	100	103	382
10:00	87	78	68	84	317
11:00	57	77	89	76	299
12:00	63	84	72	86	305
13:00	74	77	84	102	337
14:00	112	125	168	179	584
15:00	144	160	144	141	589
16:00	135	144	117	178	574
17:00	156	175	150	144	625
18:00	154	140	106	84	484
19:00	90	74	70	66	300
20:00	58	53	66	70	247
21:00	50	46	33	29	158
22:00	34	24	24	14	96
23:00	11	16	12	10	49
				TOTAL	6434
AM PEAK HOUR		0915-1015			
VOLUME		400			
PM PEAK HOUR		1645-1745			
VOLUME		659			

DIRECTION:		WB			
TIME	00-15	15-30	30-45	45-60	HOUR TOTALS
0:00	6	4	1	2	13
1:00	0	1	2	2	5
2:00	2	1	2	3	8
3:00	4	3	10	8	25
4:00	7	20	22	22	71
5:00	24	45	49	68	186
6:00	74	108	124	130	436
7:00	160	211	160	141	672
8:00	118	104	108	80	410
9:00	96	58	70	80	304
10:00	72	60	74	78	284
11:00	67	75	70	58	270
12:00	71	62	66	96	295
13:00	68	85	106	88	347
14:00	92	100	262	146	600
15:00	134	124	116	118	492
16:00	138	118	140	108	504
17:00	118	122	122	115	477
18:00	132	96	91	51	370
19:00	56	34	41	25	156
20:00	15	18	44	32	109
21:00	28	9	7	3	47
22:00	7	10	4	11	32
23:00	5	6	8	0	19
				TOTAL	6132
AM PEAK HOUR		0700-0800			
VOLUME		672			
PM PEAK HOUR		1430-1530			
VOLUME		666			

TOTAL BI-DIRECTIONAL VOLUME

12566

Appendix C

Intersection Level of Service Worksheets

Vistro File: S:\...J1101 - VISTRO.vistro

Scenario 1: Existing - PM

Report File: S:\...E.pdf

6/18/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.779	27.2	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.401	7.2	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.380	5.7	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.484	13.8	B
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.564	17.0	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.305	10.0	A
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.215	20.9	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.074	17.5	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.203	19.3	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.077	19.2	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.059	18.4	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	WBL	0.254	10.7	B
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	WBL	0.455	6.6	A
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	SBL	0.814	47.9	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.756	78.5	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.355	36.6	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBT	0.584	23.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.779

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	186	1116	8	6	511	12	5	11	7	18	25	269
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	186	1116	8	6	511	12	5	11	7	18	25	269
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	279	2	2	128	3	1	3	2	5	6	67
Total Analysis Volume [veh/h]	186	1116	8	6	511	12	5	11	7	18	25	269
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	84	84	1	71	71	23	23	23	23
g / C, Green / Cycle	0.12	0.70	0.70	0.01	0.59	0.59	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.10	0.60	0.01	0.00	0.14	0.14	0.01	0.00	0.03	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1848	1695	1583	1657	1583
c, Capacity [veh/h]	217	1309	1113	15	1097	1088	359	299	355	299
d1, Uniform Delay [s]	51.58	13.21	5.32	59.15	11.80	11.80	39.82	39.65	40.41	47.56
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.30	7.17	0.01	16.20	0.52	0.52	0.05	0.03	0.15	9.71
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.85	0.01	0.40	0.24	0.24	0.04	0.02	0.12	0.90
d, Delay for Lane Group [s/veh]	60.88	20.37	5.33	75.35	12.31	12.32	39.87	39.69	40.56	57.27
Lane Group LOS	E	C	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	5.90	20.21	0.05	0.25	3.25	3.23	0.40	0.17	1.09	8.70
50th-Percentile Queue Length [ft]	147.41	505.35	1.36	6.13	81.34	80.87	9.96	4.35	27.20	217.62
95th-Percentile Queue Length [veh]	9.88	27.59	0.10	0.44	5.86	5.82	0.72	0.31	1.96	13.54
95th-Percentile Queue Length [ft]	246.97	689.69	2.45	11.03	146.41	145.57	17.93	7.83	48.95	338.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.88	20.37	5.33	75.35	12.32	12.32	39.87	39.87	39.69	40.56	40.56	57.27
Movement LOS	E	C	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	26.03			13.03			39.82			54.97		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	27.17											
Intersection LOS	C											
Intersection V/C	0.779											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:	Signalized	Delay (sec / veh):	7.2
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.401

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	1256	29	1	775	62	71	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1256	29	1	775	62	71	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	314	7	0	194	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	1256	29	1	775	62	71	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.35	0.35	0.00	0.23	0.23	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1848	1774	1863	1815	1404	1674	1380	1712
c, Capacity [veh/h]	31	1622	1610	3	1593	1552	72	46	61	47
d1, Uniform Delay [s]	58.47	1.53	1.53	59.86	1.63	1.63	59.90	57.60	60.00	56.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.07	0.73	0.74	78.06	0.41	0.42	44.27	9.53	2.10	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

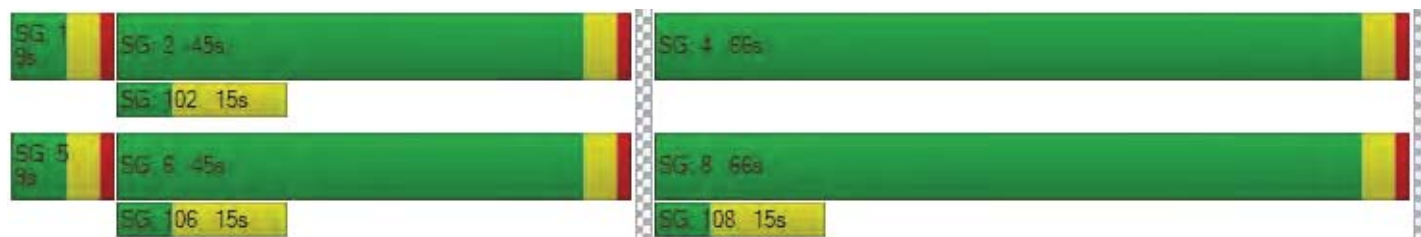
X, volume / capacity	0.52	0.40	0.40	0.40	0.27	0.27	0.98	0.54	0.25	0.13
d, Delay for Lane Group [s/veh]	71.54	2.26	2.26	137.92	2.04	2.05	104.17	67.13	62.10	58.13
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	1.03	1.02	0.08	0.86	0.84	3.15	0.87	0.50	0.20
50th-Percentile Queue Length [ft]	14.56	25.67	25.56	2.12	21.48	21.06	78.70	21.81	12.52	4.88
95th-Percentile Queue Length [veh]	1.05	1.85	1.84	0.15	1.55	1.52	5.67	1.57	0.90	0.35
95th-Percentile Queue Length [ft]	26.22	46.20	46.02	3.81	38.67	37.91	141.66	39.25	22.53	8.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.54	2.26	2.26	137.92	2.04	2.05	104.17	67.13	67.13	62.10	58.13	58.13
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	3.11			2.21			94.52			60.96		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.20											
Intersection LOS	A											
Intersection V/C	0.401											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	320	6	5	186	1	1	0	2	5	0	6
Total Analysis Volume [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	98	98	2	100	100	0	1	3	3
g / C, Green / Cycle	0.00	0.82	0.82	0.02	0.84	0.84	0.00	0.01	0.02	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.01	0.20	0.20	0.00	0.00	0.01	0.01
s, saturation flow rate [veh/h]	1774	1863	1852	1774	1863	1859	1774	1583	1774	1583
c, Capacity [veh/h]	3	1522	1513	36	1556	1553	6	13	38	42
d1, Uniform Delay [s]	59.83	3.08	3.09	58.26	2.03	2.03	59.70	59.28	58.16	57.70
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.88	0.89	11.91	0.36	0.37	34.03	24.81	11.89	9.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.43	0.43	0.53	0.24	0.24	0.36	0.47	0.55	0.53
d, Delay for Lane Group [s/veh]	104.98	3.97	3.97	70.17	2.40	2.40	93.73	84.09	70.05	67.70
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	2.89	2.87	0.68	1.04	1.04	0.12	0.27	0.76	0.78
50th-Percentile Queue Length [ft]	1.77	72.13	71.83	16.92	26.12	26.08	2.88	6.84	19.07	19.52
95th-Percentile Queue Length [veh]	0.13	5.19	5.17	1.22	1.88	1.88	0.21	0.49	1.37	1.41
95th-Percentile Queue Length [ft]	3.19	129.83	129.29	30.45	47.01	46.94	5.19	12.31	34.32	35.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	3.97	3.97	70.17	2.40	2.40	93.73	84.09	84.09	70.05	67.70	67.70
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	4.05			4.08			86.50			68.84		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	5.69											
Intersection LOS	A											
Intersection V/C	0.380											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	289	51	12	169	27	12	4	6	26	7	10
Total Analysis Volume [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	90	90	4	91	91	14	14	14	14
g / C, Green / Cycle	0.03	0.75	0.75	0.03	0.75	0.75	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.02	0.37	0.38	0.03	0.21	0.21	0.03	0.02	0.08	0.04
s, saturation flow rate [veh/h]	1774	1863	1767	1774	1863	1776	1330	1681	1367	1691
c, Capacity [veh/h]	53	1398	1327	62	1407	1342	140	192	165	194
d1, Uniform Delay [s]	57.69	5.94	5.98	57.45	4.56	4.57	54.86	48.08	55.32	48.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.25	1.26	1.36	18.62	0.51	0.53	1.34	0.46	3.90	1.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.50	0.50	0.78	0.28	0.28	0.33	0.19	0.63	0.34
d, Delay for Lane Group [s/veh]	73.94	7.21	7.34	76.07	5.07	5.10	56.21	48.54	59.22	49.99
Lane Group LOS	E	A	A	E	A	A	E	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.38	6.53	6.32	1.73	2.54	2.44	1.44	1.03	3.34	1.90
50th-Percentile Queue Length [ft]	34.59	163.17	157.94	43.26	63.58	60.92	35.96	25.71	83.50	47.46
95th-Percentile Queue Length [veh]	2.49	10.72	10.44	3.11	4.58	4.39	2.59	1.85	6.01	3.42
95th-Percentile Queue Length [ft]	62.27	267.92	260.99	77.87	114.44	109.65	64.72	46.28	150.30	85.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.94	7.26	7.34	76.07	5.08	5.10	56.21	48.54	48.54	59.22	49.99	49.99
Movement LOS	E	A	A	E	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	9.08			9.19			52.84			55.64		
Approach LOS	A			A			D			E		
d_I, Intersection Delay [s/veh]	13.76											
Intersection LOS	B											
Intersection V/C	0.484											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#5: Bear Valley Pkwy & San Pasqual Rd

Control Type: Signalized
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 17.0
 Level Of Service: B
 Volume to Capacity (v/c): 0.564

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	1365	535	89	691	427	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1365	535	89	691	427	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	341	134	22	173	107	15
Total Analysis Volume [veh/h]	1365	535	89	691	427	58
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	74	0	15	89	31	31
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	83	83	8	95	17	17
g / C, Green / Cycle	0.69	0.69	0.06	0.79	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.38	0.34	0.05	0.19	0.12	0.04
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2452	1094	112	2795	501	230
d1, Uniform Delay [s]	9.29	8.63	55.38	3.35	50.00	45.47
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.92	1.56	11.69	0.21	4.23	0.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.49	0.79	0.25	0.85	0.25
d, Delay for Lane Group [s/veh]	10.21	10.20	67.07	3.56	54.23	46.03
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	8.52	6.45	2.96	1.58	6.42	1.55
50th-Percentile Queue Length [ft]	213.06	161.35	73.90	39.62	160.52	38.75
95th-Percentile Queue Length [veh]	13.31	10.62	5.32	2.85	10.58	2.79
95th-Percentile Queue Length [ft]	332.76	265.51	133.03	71.32	264.42	69.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.21	10.20	67.07	3.56	54.23	46.03
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	10.21		10.81		53.25	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	16.95					
Intersection LOS	B					
Intersection V/C	0.564					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

10.0
A
0.305

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	0	64	28	0	1	11	45	5	16	38	32
Total Analysis Volume [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	6	1	4	4	2	4	4
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.06	0.16	0.16	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.10	0.16	0.08	0.00	0.02	0.10	0.01	0.03	0.08	0.08
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1596
c, Capacity [veh/h]	572	412	572	412	102	305	259	134	339	291
d1, Uniform Delay [s]	8.70	7.82	8.49	6.58	10.93	9.28	8.50	10.62	8.70	8.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	1.52	0.17	0.01	2.88	1.79	0.13	2.46	0.86	1.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

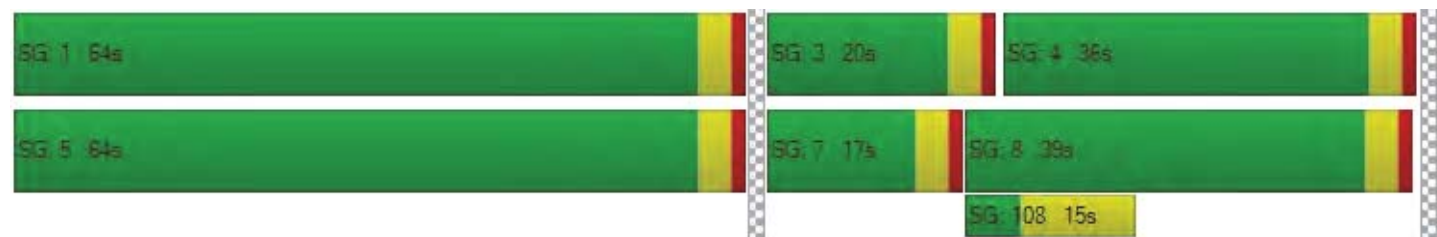
X, volume / capacity	0.25	0.62	0.20	0.01	0.43	0.59	0.08	0.46	0.43	0.46
d, Delay for Lane Group [s/veh]	8.93	9.34	8.66	6.60	13.80	11.07	8.63	13.08	9.57	9.88
Lane Group LOS	A	A	A	A	B	B	A	B	A	A
Critical Lane Group	no	yes	no	no	no	yes	no	yes	no	no
50th-Percentile Queue Length [veh]	0.17	0.30	0.13	0.00	0.23	0.68	0.07	0.30	0.49	0.46
50th-Percentile Queue Length [ft]	4.35	7.51	3.29	0.09	5.85	17.03	1.66	7.53	12.14	11.54
95th-Percentile Queue Length [veh]	0.31	0.54	0.24	0.01	0.42	1.23	0.12	0.54	0.87	0.83
95th-Percentile Queue Length [ft]	7.83	13.52	5.93	0.15	10.52	30.66	2.99	13.56	21.86	20.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.93	0.00	9.34	8.66	0.00	6.60	13.80	11.07	8.63	13.08	9.58	9.88
Movement LOS	A		A	A		A	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	9.19			8.57			11.35			10.33		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	9.96											
Intersection LOS	A											
Intersection V/C	0.305											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
#7: Beethoven Dr & Driveway #1

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 20.9
Level Of Service: C
Volume to Capacity (v/c): 0.215

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	62	44	39	293	501	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	44	39	293	501	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	11	10	73	125	25
Total Analysis Volume [veh/h]	62	44	39	293	501	100
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.08	0.04	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	20.90	12.35	8.84	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.80	0.27	0.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	20.01	6.70	3.12	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.35		1.04		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	C					

**Intersection Level Of Service Report
#8: Beethoven Dr & Driveway #2**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 17.5
 Level Of Service: C
 Volume to Capacity (v/c): 0.074

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	23	37	29	276	529	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	37	29	276	529	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	9	7	69	132	7
Total Analysis Volume [veh/h]	23	37	29	276	529	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.07	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	17.54	12.16	8.65	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.24	0.22	0.09	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	5.97	5.50	2.21	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.22		0.82		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.20					
Intersection LOS	C					

**Intersection Level Of Service Report
#9: Beethoven Dr & Driveway #3**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 19.3
 Level Of Service: C
 Volume to Capacity (v/c): 0.203

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	64	66	38	286	464	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	66	38	286	464	65
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	17	10	72	116	16
Total Analysis Volume [veh/h]	64	66	38	286	464	65
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.12	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.31	12.09	8.60	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.75	0.39	0.11	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	18.67	9.70	2.85	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.65		1.01		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.40					
Intersection LOS	C					

**Intersection Level Of Service Report
#10: Beethoven Dr & Driveway #4**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 19.2
 Level Of Service: C
 Volume to Capacity (v/c): 0.077

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	21	48	64	309	496	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	48	64	309	496	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	12	16	77	124	4
Total Analysis Volume [veh/h]	21	48	64	309	496	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.08	0.06	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.21	11.93	8.64	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.25	0.28	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	6.17	6.90	4.85	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.15		1.48		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.60					
Intersection LOS	C					

Intersection Level Of Service Report
#11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 18.4
Level Of Service: C
Volume to Capacity (v/c): 0.059

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	17	80	62	319	532	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	80	62	319	532	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	20	16	80	133	6
Total Analysis Volume [veh/h]	17	80	62	319	532	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.11	0.06	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	18.36	10.63	8.79	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.19	0.37	0.69	0.35	0.00	0.00
95th-Percentile Queue Length [ft]	4.70	9.33	17.29	8.64	0.00	0.00
d_A, Approach Delay [s/veh]	11.98		1.43		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.65					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.254

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	1	11	82	2	0	94	29	3	4	10
Total Analysis Volume [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	4	103	0	99	99	5	5
g / C, Green / Cycle	0.04	0.03	0.86	0.00	0.83	0.83	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.03	0.18	0.00	0.20	0.07	0.02	0.03
s, saturation flow rate [veh/h]	1183	1774	1854	1774	1863	1583	1584	1583
c, Capacity [veh/h]	80	59	1595	3	1543	1312	103	60
d1, Uniform Delay [s]	55.92	57.50	1.44	59.79	2.21	1.90	56.26	56.95
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.95	17.70	0.30	45.41	0.37	0.13	1.15	11.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.76	0.21	0.30	0.24	0.09	0.23	0.66
d, Delay for Lane Group [s/veh]	56.87	75.20	1.74	105.20	2.58	2.03	57.41	68.81
Lane Group LOS	E	E	A	F	A	A	E	E
Critical Lane Group	no	yes	no	no	yes	no	no	yes
50th-Percentile Queue Length [veh]	0.41	1.65	0.86	0.07	1.16	0.31	0.73	1.37
50th-Percentile Queue Length [ft]	10.15	41.15	21.60	1.78	29.12	7.76	18.16	34.20
95th-Percentile Queue Length [veh]	0.73	2.96	1.56	0.13	2.10	0.56	1.31	2.46
95th-Percentile Queue Length [ft]	18.27	74.08	38.88	3.20	52.42	13.97	32.69	61.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.87	56.87	56.87	75.20	1.74	1.74	105.20	2.58	2.03	57.41	57.41	68.81
Movement LOS	E	E	E	E	A	A	F	A	A	E	E	E
d_A, Approach Delay [s/veh]	56.87			10.37			2.66			64.53		
Approach LOS	E			B			A			E		
d_I, Intersection Delay [s/veh]	10.68											
Intersection LOS	B											
Intersection V/C	0.254											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

6.6
A
0.455

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	87	1	3	0	2	1	0	4	4	124	5
Total Analysis Volume [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	103	103	2	2	2	2	104	104
g / C, Green / Cycle	0.01	0.86	0.86	0.02	0.02	0.02	0.02	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.07	0.31	0.00	0.01	0.01	0.14	0.01
s, saturation flow rate [veh/h]	1774	3547	1852	65	1400	1583	1774	3547	1583
c, Capacity [veh/h]	20	3053	1594	48	61	33	33	3078	1374
d1, Uniform Delay [s]	58.94	1.24	1.24	59.98	59.97	58.15	58.35	1.22	1.06
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.09	0.05	0.09	24.66	0.57	12.06	12.15	0.11	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.08	0.08	0.42	0.08	0.52	0.52	0.16	0.01
d, Delay for Lane Group [s/veh]	74.03	1.29	1.34	84.64	60.54	70.21	70.50	1.33	1.07
Lane Group LOS	E	A	A	F	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	0.35	0.15	0.18	0.95	0.16	0.63	0.61	0.29	0.02
50th-Percentile Queue Length [ft]	8.74	3.79	4.47	23.73	4.08	15.63	15.27	7.15	0.54
95th-Percentile Queue Length [veh]	0.63	0.27	0.32	1.71	0.29	1.13	1.10	0.51	0.04
95th-Percentile Queue Length [ft]	15.73	6.83	8.04	42.71	7.35	28.13	27.49	12.86	0.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.03	1.31	1.34	84.64	84.64	84.64	60.54	70.21	70.21	70.50	1.33	1.07
Movement LOS	E	A	A	F	F	F	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	3.12			84.64			68.01			3.53		
Approach LOS	A			F			E			A		
d_I, Intersection Delay [s/veh]	6.62											
Intersection LOS	A											
Intersection V/C	0.455											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	47.9
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.814

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	42	186	31	36	31	15	41	38	183	95	12
Total Analysis Volume [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	59	59	9	64	64	5	9	9	27	31	31
g / C, Green / Cycle	0.04	0.49	0.49	0.08	0.53	0.53	0.04	0.07	0.07	0.22	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.47	0.07	0.04	0.08	0.03	0.05	0.05	0.21	0.11	0.03
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1746	780	134	1886	842	78	261	207	775	903	403
d1, Uniform Delay [s]	57.33	16.23	29.21	55.11	13.72	14.27	56.75	54.02	54.46	45.80	37.35	34.37
k, delay calibration	0.11	0.50	0.50	0.31	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.54	0.11	23.06	42.67	0.08	0.37	13.65	2.51	5.03	6.83	0.31	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

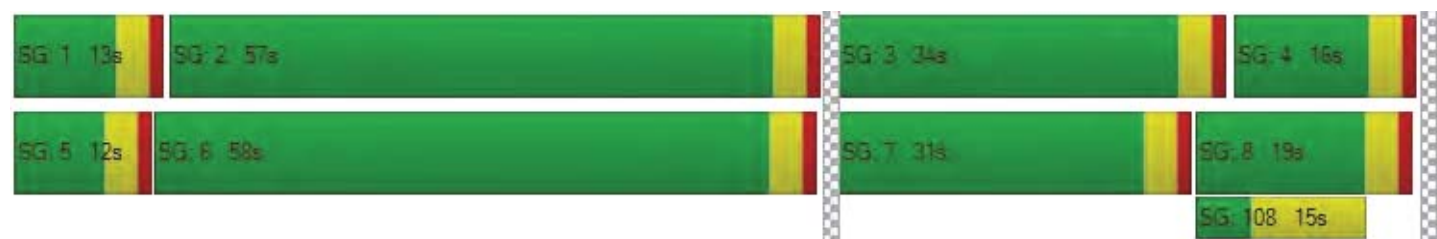
X, volume / capacity	0.76	0.10	0.96	0.92	0.08	0.15	0.76	0.63	0.74	0.95	0.42	0.12
d, Delay for Lane Group [s/veh]	73.87	16.34	52.27	97.78	13.80	14.64	70.40	56.53	59.49	52.63	37.67	34.50
Lane Group LOS	E	B	D	F	B	B	E	E	E	D	D	C
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	1.69	1.11	22.48	5.25	0.96	1.75	2.02	2.46	2.34	11.11	4.57	1.05
50th-Percentile Queue Length [ft]	42.26	27.71	562.03	131.35	23.94	43.75	50.62	61.39	58.51	277.63	114.21	26.13
95th-Percentile Queue Length [veh]	3.04	2.00	30.26	9.01	1.72	3.15	3.64	4.42	4.21	16.57	8.07	1.88
95th-Percentile Queue Length [ft]	76.07	49.88	756.43	225.33	43.08	78.75	91.11	110.51	105.32	414.27	201.84	47.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.87	16.34	52.27	97.78	13.80	14.64	70.40	56.53	59.49	52.63	37.67	34.50
Movement LOS	E	B	D	F	B	B	E	E	E	D	D	C
d_A, Approach Delay [s/veh]	47.16			40.55			59.90			46.99		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	47.86											
Intersection LOS	D											
Intersection V/C	0.814											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

78.5
E
0.756

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration	↵↵↵↵↵			↵↵↵			↵↵↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	72	257	79	147	22	73	161	11	12	50	53
Total Analysis Volume [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	13	22	22	34	34	34
g / C, Green / Cycle	0.29	0.29	0.29	0.11	0.19	0.19	0.11	0.18	0.18	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.10	0.08	0.37	0.09	0.17	0.06	0.08	0.13	0.03	0.03	0.06	0.13
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	986	1015	802	390	668	298	365	919	287	508	1015	453
d1, Uniform Delay [s]	34.07	33.32	42.87	51.98	47.41	41.89	52.42	46.13	41.42	31.42	32.42	35.33
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.70	135.16	4.00	3.92	0.54	3.95	0.98	0.25	0.35	0.43	3.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.28	1.28	0.81	0.88	0.29	0.79	0.70	0.15	0.09	0.20	0.47
d, Delay for Lane Group [s/veh]	35.08	34.02	178.03	55.98	51.33	42.43	56.37	47.11	41.67	31.77	32.85	38.77
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.91	3.14	25.91	4.73	8.63	2.24	4.36	5.92	1.09	1.07	2.34	5.72
50th-Percentile Queue Length [ft]	97.80	78.45	647.76	118.20	215.84	55.90	108.98	148.12	27.37	26.73	58.41	142.92
95th-Percentile Queue Length [veh]	7.04	5.65	39.22	8.29	13.45	4.02	7.78	9.92	1.97	1.92	4.21	9.64
95th-Percentile Queue Length [ft]	176.05	141.21	980.41	207.34	336.31	100.62	194.58	247.91	49.26	48.11	105.13	240.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.08	34.02	178.03	55.98	51.33	42.43	56.37	47.11	41.67	31.77	32.85	38.77
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	122.93			52.02			49.61			35.49		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	78.48											
Intersection LOS	E											
Intersection V/C	0.756											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#16: Via Rancho Pkwy & Driveway #7/Sunset Dr

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.355

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	10	1	15	15	398	8	6	226	17
Total Analysis Volume [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	55	55	64	64	4	41	41	3	40	40
g / C, Green / Cycle	0.46	0.46	0.53	0.53	0.04	0.34	0.34	0.02	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.30	0.30	0.01	0.18	0.04
s, saturation flow rate [veh/h]	1337	1461	1405	1583	3445	3547	1845	1774	5074	1583
c, Capacity [veh/h]	669	668	819	843	126	1219	634	42	1679	524
d1, Uniform Delay [s]	19.77	17.97	13.44	13.63	56.64	36.94	36.94	57.94	32.67	28.04
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.11	0.03	0.16	2.67	2.15	4.01	11.44	0.27	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.04	0.05	0.07	0.47	0.87	0.88	0.57	0.54	0.13
d, Delay for Lane Group [s/veh]	19.88	18.08	13.46	13.80	59.30	39.09	40.96	69.39	32.94	28.15
Lane Group LOS	B	B	B	B	E	D	D	E	C	C
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.45	0.42	0.57	0.87	0.90	14.33	15.24	0.84	6.91	1.33
50th-Percentile Queue Length [ft]	11.22	10.44	14.17	21.80	22.60	358.18	380.99	20.99	172.75	33.16
95th-Percentile Queue Length [veh]	0.81	0.75	1.02	1.57	1.63	20.53	21.64	1.51	11.22	2.39
95th-Percentile Queue Length [ft]	20.19	18.79	25.50	39.23	40.68	513.37	541.05	37.77	280.52	59.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.88	18.82	18.08	13.46	13.46	13.80	59.30	39.71	40.96	69.39	32.94	28.15
Movement LOS	B	B	B	B	B	B	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	18.98			13.66			40.42			33.50		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	36.64											
Intersection LOS	D											
Intersection V/C	0.355											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.584

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	221	60	27	351	32	14	4	3	131	6	16
Total Analysis Volume [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	73	73	6	77	77	4	4	21	21	21
g / C, Green / Cycle	0.01	0.61	0.61	0.05	0.64	0.64	0.03	0.03	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.01	0.17	0.15	0.03	0.40	0.08	0.02	0.02	0.15	0.15	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1741	1774	1781	1583
c, Capacity [veh/h]	24	3078	960	170	2279	1017	58	57	316	317	282
d1, Uniform Delay [s]	58.80	11.24	10.95	56.03	12.68	8.33	57.54	57.56	47.88	47.88	42.22
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.23	0.62	4.03	1.25	0.25	16.78	17.73	6.85	6.82	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.29	0.25	0.64	0.62	0.12	0.74	0.75	0.86	0.86	0.22
d, Delay for Lane Group [s/veh]	72.50	11.48	11.57	60.05	13.94	8.58	74.32	75.29	54.73	54.69	42.61
Lane Group LOS	E	B	B	E	B	A	E	E	D	D	D
Critical Lane Group	yes	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	3.46	2.86	1.72	10.85	1.30	1.57	1.57	8.48	8.51	1.64
50th-Percentile Queue Length [ft]	10.36	86.51	71.59	42.92	271.23	32.62	39.23	39.29	211.94	212.66	40.99
95th-Percentile Queue Length [veh]	0.75	6.23	5.15	3.09	16.25	2.35	2.82	2.83	13.25	13.29	2.95
95th-Percentile Queue Length [ft]	18.65	155.71	128.87	77.25	406.27	58.72	70.62	70.73	331.31	332.24	73.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	11.48	11.57	60.05	13.94	8.58	74.56	75.29	75.29	54.71	54.69	42.61
Movement LOS	E	B	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	12.09			16.60			74.80			53.46		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	23.04											
Intersection LOS	C											
Intersection V/C	0.584											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vistro File: S:\...J1101 - VISTRO.vistro
Report File: S:\...E+P.pdf

Scenario 2: Existing + Proj - PM
7/16/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.784	27.6	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.403	7.2	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.386	5.9	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.489	13.8	B
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.569	17.1	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.313	10.1	B
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.239	22.3	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.105	18.7	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.225	20.6	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.093	20.3	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.073	19.3	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	WBL	0.258	10.7	B
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	WBL	0.486	6.8	A
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	SBL	0.826	49.3	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.758	78.4	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.358	36.6	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBT	0.590	23.3	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.784

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	189	1121	8	6	519	12	5	11	7	18	25	273
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1121	8	6	519	12	5	11	7	18	25	273
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	280	2	2	130	3	1	3	2	5	6	68
Total Analysis Volume [veh/h]	189	1121	8	6	519	12	5	11	7	18	25	273
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	84	84	1	70	70	23	23	23	23
g / C, Green / Cycle	0.12	0.70	0.70	0.01	0.58	0.58	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.11	0.60	0.01	0.00	0.14	0.14	0.01	0.00	0.03	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1848	1695	1583	1656	1583
c, Capacity [veh/h]	220	1305	1109	15	1089	1080	363	303	359	303
d1, Uniform Delay [s]	51.48	13.52	5.41	59.15	12.07	12.08	39.57	39.41	40.16	47.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.29	7.53	0.01	16.20	0.53	0.54	0.05	0.03	0.15	9.97
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.86	0.01	0.40	0.24	0.24	0.04	0.02	0.12	0.90
d, Delay for Lane Group [s/veh]	60.77	21.05	5.42	75.35	12.61	12.62	39.62	39.44	40.31	57.38
Lane Group LOS	E	C	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	5.99	20.77	0.06	0.25	3.36	3.34	0.40	0.17	1.08	8.85
50th-Percentile Queue Length [ft]	149.69	519.29	1.38	6.13	83.93	83.46	9.93	4.33	27.10	221.28
95th-Percentile Queue Length [veh]	10.00	28.25	0.10	0.44	6.04	6.01	0.71	0.31	1.95	13.73
95th-Percentile Queue Length [ft]	250.02	706.16	2.48	11.03	151.08	150.22	17.87	7.80	48.78	343.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.77	21.05	5.42	75.35	12.61	12.62	39.62	39.62	39.44	40.31	40.31	57.38
Movement LOS	E	C	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	26.65			13.31			39.57			55.05		
Approach LOS	C			B			D			E		
d_I, Intersection Delay [s/veh]	27.61											
Intersection LOS	C											
Intersection V/C	0.784											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:	Signalized	Delay (sec / veh):	7.2
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.403

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	1264	29	1	787	62	71	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1264	29	1	787	62	71	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	316	7	0	197	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	1264	29	1	787	62	71	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.35	0.35	0.00	0.23	0.23	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1848	1774	1863	1815	1404	1674	1380	1712
c, Capacity [veh/h]	31	1622	1610	3	1593	1552	72	46	61	47
d1, Uniform Delay [s]	58.47	1.53	1.53	59.86	1.64	1.64	59.90	57.60	60.00	56.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.07	0.74	0.74	78.06	0.42	0.43	44.27	9.53	2.10	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

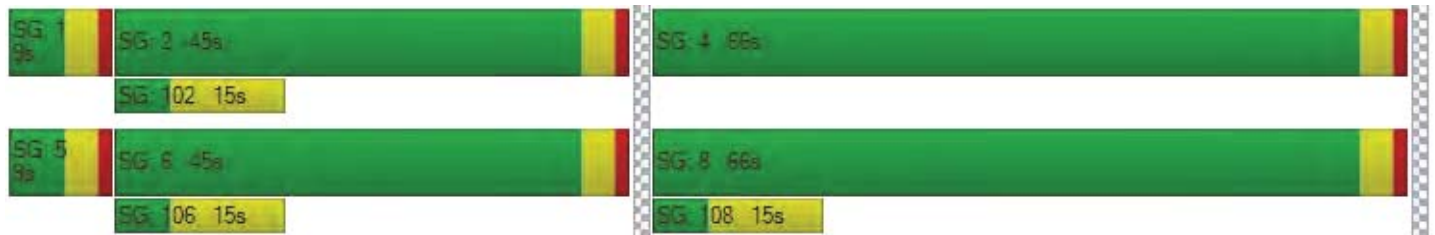
X, volume / capacity	0.52	0.40	0.40	0.40	0.27	0.27	0.98	0.54	0.25	0.13
d, Delay for Lane Group [s/veh]	71.54	2.27	2.28	137.92	2.05	2.06	104.17	67.13	62.10	58.13
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	1.04	1.03	0.08	0.88	0.86	3.15	0.87	0.50	0.20
50th-Percentile Queue Length [ft]	14.56	25.92	25.82	2.12	21.88	21.46	78.70	21.81	12.52	4.88
95th-Percentile Queue Length [veh]	1.05	1.87	1.86	0.15	1.58	1.54	5.67	1.57	0.90	0.35
95th-Percentile Queue Length [ft]	26.22	46.65	46.47	3.81	39.39	38.62	141.66	39.25	22.53	8.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.54	2.27	2.28	137.92	2.06	2.06	104.17	67.13	67.13	62.10	58.13	58.13
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	3.12			2.22			94.52			60.96		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.17											
Intersection LOS	A											
Intersection V/C	0.403											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	5.9
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	1286	25	19	754	4	2	0	6	26	0	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1286	25	19	754	4	2	0	6	26	0	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	322	6	5	189	1	1	0	2	7	0	6
Total Analysis Volume [veh/h]	1	1286	25	19	754	4	2	0	6	26	0	22
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	98	98	2	100	100	0	1	3	4
g / C, Green / Cycle	0.00	0.81	0.81	0.02	0.83	0.83	0.00	0.01	0.02	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.01	0.20	0.20	0.00	0.00	0.01	0.01
s, saturation flow rate [veh/h]	1774	1863	1850	1774	1863	1859	1774	1583	1774	1583
c, Capacity [veh/h]	3	1516	1506	36	1550	1547	6	13	44	47
d1, Uniform Delay [s]	59.83	3.21	3.21	58.26	2.12	2.12	59.70	59.28	57.95	57.33
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.91	0.91	11.91	0.38	0.38	34.03	24.81	12.27	7.22
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.43	0.43	0.53	0.24	0.24	0.36	0.47	0.60	0.47
d, Delay for Lane Group [s/veh]	104.98	4.11	4.12	70.17	2.50	2.50	93.73	84.09	70.22	64.55
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	3.03	3.02	0.68	1.12	1.12	0.12	0.27	0.94	0.76
50th-Percentile Queue Length [ft]	1.77	75.87	75.53	16.92	27.93	27.89	2.88	6.84	23.42	18.91
95th-Percentile Queue Length [veh]	0.13	5.46	5.44	1.22	2.01	2.01	0.21	0.49	1.69	1.36
95th-Percentile Queue Length [ft]	3.19	136.57	135.95	30.45	50.28	50.20	5.19	12.31	42.16	34.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	4.12	4.12	70.17	2.50	2.50	93.73	84.09	84.09	70.22	64.55	64.55
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	4.19			4.15			86.50			67.62		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	5.91											
Intersection LOS	A											
Intersection V/C	0.386											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.489

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	292	52	12	173	27	12	4	6	27	7	10
Total Analysis Volume [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	90	90	4	90	90	14	14	14	14
g / C, Green / Cycle	0.03	0.75	0.75	0.03	0.75	0.75	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.02	0.38	0.38	0.03	0.22	0.22	0.03	0.02	0.08	0.04
s, saturation flow rate [veh/h]	1774	1863	1767	1774	1863	1777	1330	1681	1367	1691
c, Capacity [veh/h]	53	1395	1323	62	1404	1340	143	196	168	197
d1, Uniform Delay [s]	57.69	6.07	6.10	57.45	4.66	4.66	54.61	47.88	55.15	48.75
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.31	1.30	1.39	18.65	0.52	0.55	1.28	0.45	3.85	0.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.50	0.51	0.78	0.29	0.29	0.32	0.18	0.63	0.34
d, Delay for Lane Group [s/veh]	74.00	7.36	7.50	76.11	5.18	5.21	55.89	48.32	59.00	49.75
Lane Group LOS	E	A	A	E	A	A	E	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.38	6.68	6.47	1.73	2.63	2.53	1.43	1.03	3.40	1.89
50th-Percentile Queue Length [ft]	34.61	167.03	161.85	43.27	65.86	63.14	35.85	25.66	85.00	47.35
95th-Percentile Queue Length [veh]	2.49	10.92	10.65	3.12	4.74	4.55	2.58	1.85	6.12	3.41
95th-Percentile Queue Length [ft]	62.29	273.00	266.16	77.89	118.54	113.65	64.53	46.18	153.01	85.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.00	7.42	7.50	76.11	5.19	5.21	55.89	48.32	48.32	59.00	49.75	49.75
Movement LOS	E	A	A	E	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	9.22			9.22			52.57			55.45		
Approach LOS	A			A			D			E		
d_I, Intersection Delay [s/veh]	13.81											
Intersection LOS	B											
Intersection V/C	0.489											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #5: Bear Valley Pkwy & San Pasqual Rd

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	1377	540	89	710	435	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1377	540	89	710	435	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	344	135	22	178	109	15
Total Analysis Volume [veh/h]	1377	540	89	710	435	58
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	74	0	15	89	31	31
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	83	83	8	94	18	18
g / C, Green / Cycle	0.69	0.69	0.06	0.79	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.39	0.34	0.05	0.20	0.13	0.04
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2443	1091	112	2786	509	234
d1, Uniform Delay [s]	9.49	8.81	55.38	3.45	49.86	45.22
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.95	1.61	11.69	0.22	4.23	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.50	0.79	0.25	0.86	0.25
d, Delay for Lane Group [s/veh]	10.43	10.41	67.07	3.67	54.09	45.77
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	8.74	6.61	2.96	1.67	6.54	1.54
50th-Percentile Queue Length [ft]	218.42	165.36	73.90	41.86	163.45	38.61
95th-Percentile Queue Length [veh]	13.58	10.83	5.32	3.01	10.73	2.78
95th-Percentile Queue Length [ft]	339.61	270.80	133.03	75.35	268.29	69.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.43	10.41	67.07	3.67	54.09	45.77
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	10.43		10.73		53.11	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	17.06					
Intersection LOS	B					
Intersection V/C	0.569					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

10.1
B
0.313

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	0	64	29	0	1	11	48	5	16	43	32
Total Analysis Volume [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	6	1	4	4	2	4	4
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.06	0.16	0.16	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.10	0.16	0.08	0.00	0.02	0.10	0.01	0.04	0.08	0.09
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1608
c, Capacity [veh/h]	573	413	573	413	102	310	263	136	346	299
d1, Uniform Delay [s]	8.73	7.89	8.53	6.63	11.02	9.36	8.52	10.69	8.75	8.80
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	1.54	0.17	0.01	2.86	1.97	0.13	2.44	0.91	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

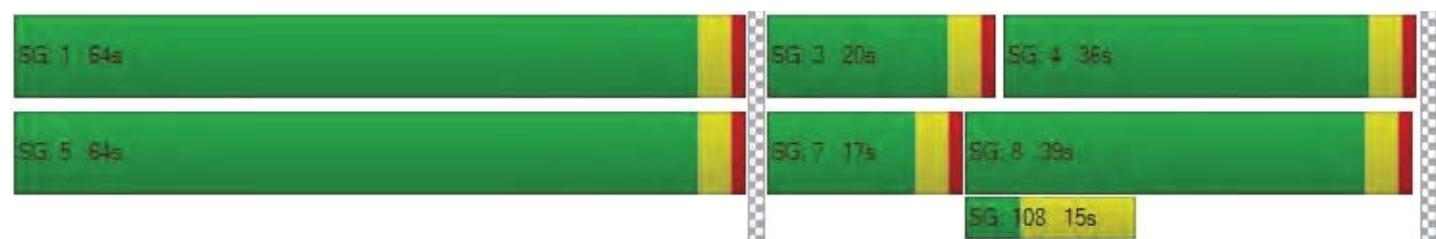
X, volume / capacity	0.25	0.62	0.20	0.01	0.43	0.61	0.08	0.46	0.45	0.47
d, Delay for Lane Group [s/veh]	8.95	9.43	8.70	6.64	13.88	11.33	8.65	13.13	9.67	9.97
Lane Group LOS	A	A	A	A	B	B	A	B	A	A
Critical Lane Group	no	yes	no	no	no	yes	no	yes	no	no
50th-Percentile Queue Length [veh]	0.18	0.31	0.14	0.00	0.24	0.74	0.07	0.31	0.52	0.50
50th-Percentile Queue Length [ft]	4.46	7.86	3.44	0.09	5.89	18.49	1.67	7.68	13.07	12.41
95th-Percentile Queue Length [veh]	0.32	0.57	0.25	0.01	0.42	1.33	0.12	0.55	0.94	0.89
95th-Percentile Queue Length [ft]	8.02	14.16	6.20	0.16	10.59	33.28	3.00	13.83	23.53	22.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.95	0.00	9.43	8.70	0.00	6.64	13.88	11.33	8.65	13.13	9.69	9.97
Movement LOS	A		A	A		A	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	9.26			8.61			11.55			10.39		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	10.06											
Intersection LOS	B											
Intersection V/C	0.313											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #7: Beethoven Dr & Driveway #1

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 22.3
Level Of Service: C
Volume to Capacity (v/c): 0.239

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	65	47	43	309	513	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	65	47	43	309	513	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	12	11	77	128	26
Total Analysis Volume [veh/h]	65	47	43	309	513	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.09	0.04	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	22.31	12.53	8.91	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.91	0.29	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	22.71	7.34	3.50	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.21		1.09		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.24					
Intersection LOS	C					

Intersection Level Of Service Report #8: Beethoven Dr & Driveway #2

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 18.7
Level Of Service: C
Volume to Capacity (v/c): 0.105

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	31	40	33	288	544	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	40	33	288	544	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	10	8	72	136	7
Total Analysis Volume [veh/h]	31	40	33	288	544	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.08	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	18.67	12.35	8.72	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.35	0.24	0.10	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	8.74	6.10	2.55	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.11		0.90		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.41					
Intersection LOS	C					

Intersection Level Of Service Report #9: Beethoven Dr & Driveway #3

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 20.6
Level Of Service: C
Volume to Capacity (v/c): 0.225

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	67	69	42	300	478	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	69	42	300	478	69
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	17	11	75	120	17
Total Analysis Volume [veh/h]	67	69	42	300	478	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.12	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.56	12.31	8.67	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.85	0.42	0.13	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	21.15	10.44	3.21	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.37		1.06		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.53					
Intersection LOS	C					

Intersection Level Of Service Report #10: Beethoven Dr & Driveway #4

Control Type:	Two-way stop	Delay (sec / veh):	20.3
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.093

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	24	51	68	324	508	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	51	68	324	508	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	13	17	81	127	5
Total Analysis Volume [veh/h]	24	51	68	324	508	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.09	0.07	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	20.29	12.11	8.71	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.30	0.30	0.21	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	7.57	7.52	5.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.73		1.51		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.70					
Intersection LOS	C					

Intersection Level Of Service Report #11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 19.3
Level Of Service: C
Volume to Capacity (v/c): 0.073

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	20	83	66	335	543	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	83	66	335	543	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	21	17	84	136	7
Total Analysis Volume [veh/h]	20	83	66	335	543	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.12	0.07	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	19.26	10.72	8.86	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.24	0.39	0.75	0.37	0.00	0.00
95th-Percentile Queue Length [ft]	5.90	9.85	18.70	9.35	0.00	0.00
d_A, Approach Delay [s/veh]	12.38		1.46		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.73					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	1	11	85	2	0	96	29	4	4	10
Total Analysis Volume [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	4	103	0	99	99	5	5
g / C, Green / Cycle	0.04	0.03	0.86	0.00	0.83	0.83	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.03	0.19	0.00	0.21	0.07	0.02	0.03
s, saturation flow rate [veh/h]	1073	1774	1854	1774	1863	1583	1463	1583
c, Capacity [veh/h]	76	59	1594	3	1542	1311	102	61
d1, Uniform Delay [s]	55.84	57.50	1.46	59.79	2.24	1.92	56.38	56.87
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.05	17.70	0.32	45.41	0.38	0.13	1.45	11.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.17	0.76	0.22	0.30	0.25	0.09	0.28	0.65
d, Delay for Lane Group [s/veh]	56.89	75.20	1.78	105.20	2.62	2.05	57.83	68.00
Lane Group LOS	E	E	A	F	A	A	E	E
Critical Lane Group	no	yes	no	no	yes	no	no	yes
50th-Percentile Queue Length [veh]	0.41	1.65	0.91	0.07	1.20	0.32	0.85	1.36
50th-Percentile Queue Length [ft]	10.17	41.16	22.72	1.78	30.09	8.05	21.32	33.95
95th-Percentile Queue Length [veh]	0.73	2.96	1.64	0.13	2.17	0.58	1.54	2.44
95th-Percentile Queue Length [ft]	18.31	74.08	40.89	3.20	54.17	14.50	38.38	61.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.89	56.89	56.89	75.20	1.78	1.78	105.20	2.62	2.05	57.83	57.83	68.00
Movement LOS	E	E	E	E	A	A	F	A	A	E	E	E
d_A, Approach Delay [s/veh]	56.89			10.16			2.69			63.81		
Approach LOS	E			B			A			E		
d_I, Intersection Delay [s/veh]	10.70											
Intersection LOS	B											
Intersection V/C	0.258											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	91	1	3	0	2	1	0	5	5	127	5
Total Analysis Volume [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	103	103	3	3	3	2	104	104
g / C, Green / Cycle	0.01	0.86	0.86	0.02	0.02	0.02	0.02	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.07	0.33	0.00	0.01	0.01	0.14	0.01
s, saturation flow rate [veh/h]	1774	3547	1852	63	1400	1583	1774	3547	1583
c, Capacity [veh/h]	20	3047	1592	49	61	34	34	3076	1373
d1, Uniform Delay [s]	58.94	1.28	1.28	59.98	59.97	58.13	58.29	1.23	1.07
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.09	0.05	0.10	25.73	0.57	13.49	12.06	0.12	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.08	0.08	0.43	0.08	0.56	0.53	0.16	0.01
d, Delay for Lane Group [s/veh]	74.03	1.33	1.37	85.71	60.54	71.62	70.35	1.35	1.09
Lane Group LOS	E	A	A	F	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	0.35	0.17	0.20	1.00	0.16	0.70	0.64	0.30	0.02
50th-Percentile Queue Length [ft]	8.74	4.18	4.89	24.98	4.08	17.59	16.10	7.60	0.59
95th-Percentile Queue Length [veh]	0.63	0.30	0.35	1.80	0.29	1.27	1.16	0.55	0.04
95th-Percentile Queue Length [ft]	15.73	7.52	8.81	44.97	7.35	31.66	28.98	13.69	1.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.03	1.34	1.37	85.71	85.71	85.71	60.54	71.62	71.62	70.35	1.35	1.09
Movement LOS	E	A	A	F	F	F	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	3.08			85.71			69.31			3.62		
Approach LOS	A			F			E			A		
d_I, Intersection Delay [s/veh]	6.83											
Intersection LOS	A											
Intersection V/C	0.486											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	49.3
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	42	191	31	38	33	18	43	38	183	96	12
Total Analysis Volume [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	59	59	9	64	64	6	9	9	27	30	30
g / C, Green / Cycle	0.04	0.49	0.49	0.08	0.53	0.53	0.05	0.07	0.07	0.22	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.48	0.07	0.04	0.08	0.04	0.05	0.05	0.21	0.11	0.03
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1746	780	134	1885	842	92	262	207	775	876	391
d1, Uniform Delay [s]	57.33	16.23	29.90	55.11	13.76	14.36	56.19	54.11	54.45	45.80	38.18	35.08
k, delay calibration	0.11	0.50	0.50	0.31	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.54	0.11	27.75	42.67	0.08	0.39	12.15	2.75	5.01	6.83	0.35	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.10	0.98	0.92	0.08	0.16	0.76	0.65	0.74	0.95	0.44	0.12
d, Delay for Lane Group [s/veh]	73.87	16.34	57.65	97.78	13.85	14.75	68.34	56.86	59.46	52.63	38.52	35.22
Lane Group LOS	E	B	E	F	B	B	E	E	E	D	D	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	1.69	1.11	24.36	5.25	1.02	1.88	2.36	2.55	2.34	11.11	4.68	1.06
50th-Percentile Queue Length [ft]	42.26	27.72	609.01	131.35	25.50	46.88	58.88	63.87	58.49	277.63	117.00	26.45
95th-Percentile Queue Length [veh]	3.04	2.00	32.45	9.01	1.84	3.38	4.24	4.60	4.21	16.57	8.23	1.90
95th-Percentile Queue Length [ft]	76.07	49.89	811.37	225.33	45.91	84.38	105.98	114.97	105.29	414.27	205.70	47.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.87	16.34	57.65	97.78	13.85	14.75	68.34	56.86	59.46	52.63	38.52	35.22
Movement LOS	E	B	E	F	B	B	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	51.45			39.50			59.91			47.27		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	49.28											
Intersection LOS	D											
Intersection V/C	0.826											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:	Signalized	Delay (sec / veh):	78.4
Analysis Method:	HCM2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.758

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration	↵↵↵↵↵			↵↵↵			↵↵↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	76	257	84	148	22	73	162	12	12	53	53
Total Analysis Volume [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	13	21	21	34	34	34
g / C, Green / Cycle	0.29	0.29	0.29	0.12	0.19	0.19	0.11	0.18	0.18	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.10	0.09	0.37	0.10	0.17	0.06	0.08	0.13	0.03	0.03	0.06	0.13
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	984	1013	801	411	672	300	365	894	279	507	1013	452
d1, Uniform Delay [s]	34.13	33.51	42.90	51.61	47.34	41.77	52.42	46.71	42.03	31.52	32.59	35.41
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.76	136.24	4.00	3.93	0.54	3.95	1.13	0.29	0.38	0.47	3.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.30	1.28	0.82	0.88	0.29	0.79	0.72	0.17	0.10	0.21	0.47
d, Delay for Lane Group [s/veh]	35.14	34.27	179.14	55.61	51.27	42.31	56.37	47.84	42.32	31.90	33.05	38.90
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.92	3.31	25.98	5.02	8.69	2.23	4.36	6.01	1.21	1.14	2.49	5.76
50th-Percentile Queue Length [ft]	97.90	82.73	649.55	125.49	217.27	55.80	108.98	150.15	30.16	28.55	62.22	143.88
95th-Percentile Queue Length [veh]	7.05	5.96	39.34	8.69	13.53	4.02	7.78	10.02	2.17	2.06	4.48	9.69
95th-Percentile Queue Length [ft]	176.23	148.91	983.56	217.34	338.14	100.45	194.58	250.62	54.29	51.39	112.00	242.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.14	34.27	179.14	55.61	51.27	42.31	56.37	47.84	42.32	31.90	33.05	38.90
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	122.92			51.93			50.08			35.57		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	78.35											
Intersection LOS	E											
Intersection V/C	0.758											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#16: Via Rancho Pkwy & Driveway #7/Sunset Dr**

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	11	1	16	16	399	8	6	227	18
Total Analysis Volume [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	55	55	64	64	4	41	41	3	40	40
g / C, Green / Cycle	0.46	0.46	0.53	0.53	0.04	0.34	0.34	0.02	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.30	0.30	0.01	0.18	0.04
s, saturation flow rate [veh/h]	1333	1461	1403	1583	3445	3547	1845	1774	5074	1583
c, Capacity [veh/h]	667	667	817	842	129	1222	636	42	1679	524
d1, Uniform Delay [s]	19.87	18.02	13.50	13.70	56.62	36.90	36.90	57.94	32.71	28.12
k, delay calibration	0.50	0.50	0.14	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.11	0.03	0.17	2.86	2.15	4.00	11.44	0.27	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.04	0.05	0.07	0.49	0.87	0.88	0.57	0.54	0.14
d, Delay for Lane Group [s/veh]	19.98	18.12	13.53	13.87	59.47	39.04	40.91	69.39	32.98	28.23
Lane Group LOS	B	B	B	B	E	D	D	E	C	C
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.45	0.42	0.61	0.92	0.97	14.35	15.26	0.84	6.95	1.41
50th-Percentile Queue Length [ft]	11.24	10.47	15.29	22.97	24.16	358.68	381.54	20.99	173.71	35.24
95th-Percentile Queue Length [veh]	0.81	0.75	1.10	1.65	1.74	20.56	21.67	1.51	11.27	2.54
95th-Percentile Queue Length [ft]	20.23	18.84	27.53	41.34	43.49	513.98	541.71	37.77	281.78	63.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.98	18.87	18.12	13.53	13.53	13.87	59.47	39.66	40.91	69.39	32.98	28.23
Movement LOS	B	B	B	B	B	B	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	19.06			13.73			40.42			33.52		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	36.61											
Intersection LOS	D											
Intersection V/C	0.358											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	223	65	27	352	32	14	5	3	134	6	16
Total Analysis Volume [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	72	72	6	77	77	4	4	22	22	22
g / C, Green / Cycle	0.01	0.60	0.60	0.05	0.64	0.64	0.03	0.03	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.16	0.03	0.40	0.08	0.02	0.03	0.16	0.16	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1746	1774	1781	1583
c, Capacity [veh/h]	24	3055	953	170	2263	1010	59	59	323	324	288
d1, Uniform Delay [s]	58.80	11.53	11.36	56.03	13.04	8.55	57.49	57.50	47.64	47.64	41.83
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.24	0.70	4.03	1.30	0.25	16.44	17.23	6.82	6.78	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.29	0.27	0.64	0.62	0.12	0.74	0.75	0.86	0.86	0.22
d, Delay for Lane Group [s/veh]	72.50	11.77	12.07	60.06	14.34	8.80	73.92	74.74	54.47	54.43	42.21
Lane Group LOS	E	B	B	E	B	A	E	E	D	D	D
Critical Lane Group	yes	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	3.55	3.19	1.72	11.10	1.33	1.60	1.60	8.67	8.70	1.63
50th-Percentile Queue Length [ft]	10.36	88.84	79.65	42.92	277.47	33.16	39.98	40.03	216.72	217.45	40.76
95th-Percentile Queue Length [veh]	0.75	6.40	5.73	3.09	16.56	2.39	2.88	2.88	13.50	13.53	2.93
95th-Percentile Queue Length [ft]	18.65	159.92	143.36	77.26	414.06	59.68	71.97	72.05	337.43	338.37	73.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	11.77	12.07	60.06	14.34	8.80	74.11	74.74	74.74	54.45	54.43	42.21
Movement LOS	E	B	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	12.41			16.95			74.33			53.20		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	23.30											
Intersection LOS	C											
Intersection V/C	0.590											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vistro File: S:\...J1101 - VISTRO.vistro

Scenario 3: Near Term w/o Proj - PM

Report File: S:\...INTC.pdf

6/18/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.786	27.6	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.406	7.6	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.380	5.7	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.484	13.8	B
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.564	17.0	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.305	10.0	A
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.215	20.9	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.074	17.5	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.203	19.3	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.077	19.2	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.059	18.4	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	WBL	0.254	10.7	B
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	WBL	0.455	6.6	A
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	SBL	0.814	47.9	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.756	78.5	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.355	36.6	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBT	0.584	23.0	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.786

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	186	1130	8	6	517	14	5	11	7	29	25	269
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	186	1130	8	6	517	14	5	11	7	29	25	269
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	283	2	2	129	4	1	3	2	7	6	67
Total Analysis Volume [veh/h]	186	1130	8	6	517	14	5	11	7	29	25	269
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	84	84	1	71	71	23	23	23	23
g / C, Green / Cycle	0.12	0.70	0.70	0.01	0.59	0.59	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.10	0.61	0.01	0.00	0.14	0.14	0.01	0.00	0.05	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1846	1418	1583	1194	1583
c, Capacity [veh/h]	217	1309	1112	15	1096	1086	307	299	272	299
d1, Uniform Delay [s]	51.58	13.48	5.33	59.15	11.84	11.85	39.86	39.63	42.81	47.53
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.30	7.72	0.01	16.20	0.53	0.53	0.07	0.03	0.35	9.60
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.86	0.01	0.40	0.24	0.24	0.05	0.02	0.20	0.90
d, Delay for Lane Group [s/veh]	60.88	21.21	5.34	75.35	12.37	12.38	39.93	39.66	43.17	57.13
Lane Group LOS	E	C	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	5.90	21.01	0.05	0.25	3.32	3.30	0.40	0.17	1.48	8.69
50th-Percentile Queue Length [ft]	147.41	525.25	1.36	6.13	82.94	82.39	9.98	4.35	36.88	217.32
95th-Percentile Queue Length [veh]	9.88	28.53	0.10	0.44	5.97	5.93	0.72	0.31	2.66	13.53
95th-Percentile Queue Length [ft]	246.97	713.18	2.46	11.03	149.29	148.30	17.96	7.83	66.38	338.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.88	21.21	5.34	75.35	12.38	12.38	39.93	39.93	39.66	43.17	43.17	57.13
Movement LOS	E	C	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	26.69			13.08			39.85			54.79		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	27.63											
Intersection LOS	C											
Intersection V/C	0.786											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

7.6
A
0.406

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	1268	29	1	780	63	73	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1268	29	1	780	63	73	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	317	7	0	195	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	1268	29	1	780	63	73	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.35	0.35	0.00	0.23	0.23	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1848	1774	1863	1814	1404	1674	1380	1712
c, Capacity [veh/h]	31	1624	1611	2	1594	1553	71	45	60	46
d1, Uniform Delay [s]	58.47	1.52	1.52	59.87	1.62	1.62	59.92	57.67	60.00	57.01
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.13	0.74	0.75	81.55	0.41	0.42	56.40	10.24	2.12	1.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.40	0.40	0.40	0.27	0.27	1.03	0.56	0.25	0.13
d, Delay for Lane Group [s/veh]	71.60	2.26	2.27	141.41	2.03	2.04	116.33	67.92	62.12	58.27
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	1.02	1.02	0.09	0.86	0.84	3.38	0.88	0.50	0.20
50th-Percentile Queue Length [ft]	14.57	25.61	25.51	2.15	21.45	21.02	84.47	21.97	12.52	4.89
95th-Percentile Queue Length [veh]	1.05	1.84	1.84	0.15	1.54	1.51	6.08	1.58	0.90	0.35
95th-Percentile Queue Length [ft]	26.23	46.09	45.92	3.86	38.61	37.84	152.05	39.54	22.54	8.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.60	2.26	2.27	141.41	2.04	2.04	116.33	67.92	67.92	62.12	58.27	58.27
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	3.11			2.20			103.98			61.02		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.65											
Intersection LOS	A											
Intersection V/C	0.406											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.380

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	320	6	5	186	1	1	0	2	5	0	6
Total Analysis Volume [veh/h]	1	1278	22	19	742	4	2	0	6	21	0	22
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	98	98	2	100	100	0	1	3	3
g / C, Green / Cycle	0.00	0.82	0.82	0.02	0.84	0.84	0.00	0.01	0.02	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.01	0.20	0.20	0.00	0.00	0.01	0.01
s, saturation flow rate [veh/h]	1774	1863	1852	1774	1863	1859	1774	1583	1774	1583
c, Capacity [veh/h]	3	1522	1513	36	1556	1553	6	13	38	42
d1, Uniform Delay [s]	59.83	3.08	3.09	58.26	2.03	2.03	59.70	59.28	58.16	57.70
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.88	0.89	11.91	0.36	0.37	34.03	24.81	11.89	9.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.43	0.43	0.53	0.24	0.24	0.36	0.47	0.55	0.53
d, Delay for Lane Group [s/veh]	104.98	3.97	3.97	70.17	2.40	2.40	93.73	84.09	70.05	67.70
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	2.89	2.87	0.68	1.04	1.04	0.12	0.27	0.76	0.78
50th-Percentile Queue Length [ft]	1.77	72.13	71.83	16.92	26.12	26.08	2.88	6.84	19.07	19.52
95th-Percentile Queue Length [veh]	0.13	5.19	5.17	1.22	1.88	1.88	0.21	0.49	1.37	1.41
95th-Percentile Queue Length [ft]	3.19	129.83	129.29	30.45	47.01	46.94	5.19	12.31	34.32	35.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	3.97	3.97	70.17	2.40	2.40	93.73	84.09	84.09	70.05	67.70	67.70
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	4.05			4.08			86.50			68.84		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	5.69											
Intersection LOS	A											
Intersection V/C	0.380											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type: Signalized
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 13.8
 Level Of Service: B
 Volume to Capacity (v/c): 0.484

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	289	51	12	169	27	12	4	6	26	7	10
Total Analysis Volume [veh/h]	38	1156	204	48	675	106	46	14	22	104	28	38
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	90	90	4	91	91	14	14	14	14
g / C, Green / Cycle	0.03	0.75	0.75	0.03	0.75	0.75	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.02	0.37	0.38	0.03	0.21	0.21	0.03	0.02	0.08	0.04
s, saturation flow rate [veh/h]	1774	1863	1767	1774	1863	1776	1330	1681	1367	1691
c, Capacity [veh/h]	53	1398	1327	62	1407	1342	140	192	165	194
d1, Uniform Delay [s]	57.69	5.94	5.98	57.45	4.56	4.57	54.86	48.08	55.32	48.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.25	1.26	1.36	18.62	0.51	0.53	1.34	0.46	3.90	1.04
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.71	0.50	0.50	0.78	0.28	0.28	0.33	0.19	0.63	0.34
d, Delay for Lane Group [s/veh]	73.94	7.21	7.34	76.07	5.07	5.10	56.21	48.54	59.22	49.99
Lane Group LOS	E	A	A	E	A	A	E	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.38	6.53	6.32	1.73	2.54	2.44	1.44	1.03	3.34	1.90
50th-Percentile Queue Length [ft]	34.59	163.17	157.94	43.26	63.58	60.92	35.96	25.71	83.50	47.46
95th-Percentile Queue Length [veh]	2.49	10.72	10.44	3.11	4.58	4.39	2.59	1.85	6.01	3.42
95th-Percentile Queue Length [ft]	62.27	267.92	260.99	77.87	114.44	109.65	64.72	46.28	150.30	85.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.94	7.26	7.34	76.07	5.08	5.10	56.21	48.54	48.54	59.22	49.99	49.99
Movement LOS	E	A	A	E	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	9.08			9.19			52.84			55.64		
Approach LOS	A			A			D			E		
d_I, Intersection Delay [s/veh]	13.76											
Intersection LOS	B											
Intersection V/C	0.484											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #5: Bear Valley Pkwy & San Pasqual Rd

Control Type:	Signalized	Delay (sec / veh):	17.0
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	1365	535	89	691	427	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1365	535	89	691	427	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	341	134	22	173	107	15
Total Analysis Volume [veh/h]	1365	535	89	691	427	58
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	74	0	15	89	31	31
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	83	83	8	95	17	17
g / C, Green / Cycle	0.69	0.69	0.06	0.79	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.38	0.34	0.05	0.19	0.12	0.04
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2452	1094	112	2795	501	230
d1, Uniform Delay [s]	9.29	8.63	55.38	3.35	50.00	45.47
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.92	1.56	11.69	0.21	4.23	0.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.49	0.79	0.25	0.85	0.25
d, Delay for Lane Group [s/veh]	10.21	10.20	67.07	3.56	54.23	46.03
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	8.52	6.45	2.96	1.58	6.42	1.55
50th-Percentile Queue Length [ft]	213.06	161.35	73.90	39.62	160.52	38.75
95th-Percentile Queue Length [veh]	13.31	10.62	5.32	2.85	10.58	2.79
95th-Percentile Queue Length [ft]	332.76	265.51	133.03	71.32	264.42	69.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.21	10.20	67.07	3.56	54.23	46.03
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	10.21		10.81		53.25	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	16.95					
Intersection LOS	B					
Intersection V/C	0.564					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

10.0
A
0.305

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	0	64	28	0	1	11	45	5	16	38	32
Total Analysis Volume [veh/h]	143	0	255	112	0	5	44	179	21	62	153	126
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	6	1	4	4	2	4	4
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.06	0.16	0.16	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.10	0.16	0.08	0.00	0.02	0.10	0.01	0.03	0.08	0.08
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1596
c, Capacity [veh/h]	572	412	572	412	102	305	259	134	339	291
d1, Uniform Delay [s]	8.70	7.82	8.49	6.58	10.93	9.28	8.50	10.62	8.70	8.75
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	1.52	0.17	0.01	2.88	1.79	0.13	2.46	0.86	1.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.62	0.20	0.01	0.43	0.59	0.08	0.46	0.43	0.46
d, Delay for Lane Group [s/veh]	8.93	9.34	8.66	6.60	13.80	11.07	8.63	13.08	9.57	9.88
Lane Group LOS	A	A	A	A	B	B	A	B	A	A
Critical Lane Group	no	yes	no	no	no	yes	no	yes	no	no
50th-Percentile Queue Length [veh]	0.17	0.30	0.13	0.00	0.23	0.68	0.07	0.30	0.49	0.46
50th-Percentile Queue Length [ft]	4.35	7.51	3.29	0.09	5.85	17.03	1.66	7.53	12.14	11.54
95th-Percentile Queue Length [veh]	0.31	0.54	0.24	0.01	0.42	1.23	0.12	0.54	0.87	0.83
95th-Percentile Queue Length [ft]	7.83	13.52	5.93	0.15	10.52	30.66	2.99	13.56	21.86	20.77

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.93	0.00	9.34	8.66	0.00	6.60	13.80	11.07	8.63	13.08	9.58	9.88
Movement LOS	A		A	A		A	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	9.19			8.57			11.35			10.33		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	9.96											
Intersection LOS	A											
Intersection V/C	0.305											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report
#7: Beethoven Dr & Driveway #1**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 20.9
 Level Of Service: C
 Volume to Capacity (v/c): 0.215

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	62	44	39	293	501	100
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	44	39	293	501	100
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	11	10	73	125	25
Total Analysis Volume [veh/h]	62	44	39	293	501	100
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.08	0.04	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	20.90	12.35	8.84	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.80	0.27	0.12	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	20.01	6.70	3.12	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.35		1.04		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	C					

**Intersection Level Of Service Report
#8: Beethoven Dr & Driveway #2**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 17.5
 Level Of Service: C
 Volume to Capacity (v/c): 0.074

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	23	37	29	276	529	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	37	29	276	529	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	9	7	69	132	7
Total Analysis Volume [veh/h]	23	37	29	276	529	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.07	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	17.54	12.16	8.65	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.24	0.22	0.09	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	5.97	5.50	2.21	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.22		0.82		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.20					
Intersection LOS	C					

**Intersection Level Of Service Report
#9: Beethoven Dr & Driveway #3**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 19.3
 Level Of Service: C
 Volume to Capacity (v/c): 0.203

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	64	66	38	286	464	65
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	64	66	38	286	464	65
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	17	10	72	116	16
Total Analysis Volume [veh/h]	64	66	38	286	464	65
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.12	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.31	12.09	8.60	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.75	0.39	0.11	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	18.67	9.70	2.85	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.65		1.01		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.40					
Intersection LOS	C					

**Intersection Level Of Service Report
#10: Beethoven Dr & Driveway #4**

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 19.2
 Level Of Service: C
 Volume to Capacity (v/c): 0.077

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	21	48	64	309	496	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	48	64	309	496	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	12	16	77	124	4
Total Analysis Volume [veh/h]	21	48	64	309	496	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.08	0.06	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	19.21	11.93	8.64	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.25	0.28	0.19	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	6.17	6.90	4.85	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.15		1.48		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.60					
Intersection LOS	C					

Intersection Level Of Service Report
#11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 18.4
 Level Of Service: C
 Volume to Capacity (v/c): 0.059

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	17	80	62	319	532	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	80	62	319	532	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	20	16	80	133	6
Total Analysis Volume [veh/h]	17	80	62	319	532	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.11	0.06	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	18.36	10.63	8.79	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.19	0.37	0.69	0.35	0.00	0.00
95th-Percentile Queue Length [ft]	4.70	9.33	17.29	8.64	0.00	0.00
d_A, Approach Delay [s/veh]	11.98		1.43		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.65					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

10.7
B
0.254

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	1	11	82	2	0	94	29	3	4	10
Total Analysis Volume [veh/h]	2	9	2	45	329	9	1	375	114	10	14	40
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	4	103	0	99	99	5	5
g / C, Green / Cycle	0.04	0.03	0.86	0.00	0.83	0.83	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.03	0.18	0.00	0.20	0.07	0.02	0.03
s, saturation flow rate [veh/h]	1183	1774	1854	1774	1863	1583	1584	1583
c, Capacity [veh/h]	80	59	1595	3	1543	1312	103	60
d1, Uniform Delay [s]	55.92	57.50	1.44	59.79	2.21	1.90	56.26	56.95
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.95	17.70	0.30	45.41	0.37	0.13	1.15	11.86
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.16	0.76	0.21	0.30	0.24	0.09	0.23	0.66
d, Delay for Lane Group [s/veh]	56.87	75.20	1.74	105.20	2.58	2.03	57.41	68.81
Lane Group LOS	E	E	A	F	A	A	E	E
Critical Lane Group	no	yes	no	no	yes	no	no	yes
50th-Percentile Queue Length [veh]	0.41	1.65	0.86	0.07	1.16	0.31	0.73	1.37
50th-Percentile Queue Length [ft]	10.15	41.15	21.60	1.78	29.12	7.76	18.16	34.20
95th-Percentile Queue Length [veh]	0.73	2.96	1.56	0.13	2.10	0.56	1.31	2.46
95th-Percentile Queue Length [ft]	18.27	74.08	38.88	3.20	52.42	13.97	32.69	61.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.87	56.87	56.87	75.20	1.74	1.74	105.20	2.58	2.03	57.41	57.41	68.81
Movement LOS	E	E	E	E	A	A	F	A	A	E	E	E
d_A, Approach Delay [s/veh]	56.87			10.37			2.66			64.53		
Approach LOS	E			B			A			E		
d_I, Intersection Delay [s/veh]	10.68											
Intersection LOS	B											
Intersection V/C	0.254											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

6.6
A
0.455

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	87	1	3	0	2	1	0	4	4	124	5
Total Analysis Volume [veh/h]	9	348	4	11	1	8	5	0	17	17	497	18
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	103	103	2	2	2	2	104	104
g / C, Green / Cycle	0.01	0.86	0.86	0.02	0.02	0.02	0.02	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.07	0.31	0.00	0.01	0.01	0.14	0.01
s, saturation flow rate [veh/h]	1774	3547	1852	65	1400	1583	1774	3547	1583
c, Capacity [veh/h]	20	3053	1594	48	61	33	33	3078	1374
d1, Uniform Delay [s]	58.94	1.24	1.24	59.98	59.97	58.15	58.35	1.22	1.06
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.09	0.05	0.09	24.66	0.57	12.06	12.15	0.11	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.08	0.08	0.42	0.08	0.52	0.52	0.16	0.01
d, Delay for Lane Group [s/veh]	74.03	1.29	1.34	84.64	60.54	70.21	70.50	1.33	1.07
Lane Group LOS	E	A	A	F	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	0.35	0.15	0.18	0.95	0.16	0.63	0.61	0.29	0.02
50th-Percentile Queue Length [ft]	8.74	3.79	4.47	23.73	4.08	15.63	15.27	7.15	0.54
95th-Percentile Queue Length [veh]	0.63	0.27	0.32	1.71	0.29	1.13	1.10	0.51	0.04
95th-Percentile Queue Length [ft]	15.73	6.83	8.04	42.71	7.35	28.13	27.49	12.86	0.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.03	1.31	1.34	84.64	84.64	84.64	60.54	70.21	70.21	70.50	1.33	1.07
Movement LOS	E	A	A	F	F	F	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	3.12			84.64			68.01			3.53		
Approach LOS	A			F			E			A		
d_I, Intersection Delay [s/veh]	6.62											
Intersection LOS	A											
Intersection V/C	0.455											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

47.9
D
0.814

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	42	186	31	36	31	15	41	38	183	95	12
Total Analysis Volume [veh/h]	49	166	745	123	144	123	59	165	152	733	380	47
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	59	59	9	64	64	5	9	9	27	31	31
g / C, Green / Cycle	0.04	0.49	0.49	0.08	0.53	0.53	0.04	0.07	0.07	0.22	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.47	0.07	0.04	0.08	0.03	0.05	0.05	0.21	0.11	0.03
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1746	780	134	1886	842	78	261	207	775	903	403
d1, Uniform Delay [s]	57.33	16.23	29.21	55.11	13.72	14.27	56.75	54.02	54.46	45.80	37.35	34.37
k, delay calibration	0.11	0.50	0.50	0.31	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.54	0.11	23.06	42.67	0.08	0.37	13.65	2.51	5.03	6.83	0.31	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.10	0.96	0.92	0.08	0.15	0.76	0.63	0.74	0.95	0.42	0.12
d, Delay for Lane Group [s/veh]	73.87	16.34	52.27	97.78	13.80	14.64	70.40	56.53	59.49	52.63	37.67	34.50
Lane Group LOS	E	B	D	F	B	B	E	E	E	D	D	C
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	1.69	1.11	22.48	5.25	0.96	1.75	2.02	2.46	2.34	11.11	4.57	1.05
50th-Percentile Queue Length [ft]	42.26	27.71	562.03	131.35	23.94	43.75	50.62	61.39	58.51	277.63	114.21	26.13
95th-Percentile Queue Length [veh]	3.04	2.00	30.26	9.01	1.72	3.15	3.64	4.42	4.21	16.57	8.07	1.88
95th-Percentile Queue Length [ft]	76.07	49.88	756.43	225.33	43.08	78.75	91.11	110.51	105.32	414.27	201.84	47.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.87	16.34	52.27	97.78	13.80	14.64	70.40	56.53	59.49	52.63	37.67	34.50
Movement LOS	E	B	D	F	B	B	E	E	E	D	D	C
d_A, Approach Delay [s/veh]	47.16			40.55			59.90			46.99		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	47.86											
Intersection LOS	D											
Intersection V/C	0.814											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

78.5
E
0.756

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration	↵↵↵↵↵↵			↵↵↵			↵↵↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	72	257	79	147	22	73	161	11	12	50	53
Total Analysis Volume [veh/h]	351	289	1026	315	587	88	290	644	44	46	199	212
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	13	22	22	34	34	34
g / C, Green / Cycle	0.29	0.29	0.29	0.11	0.19	0.19	0.11	0.18	0.18	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.10	0.08	0.37	0.09	0.17	0.06	0.08	0.13	0.03	0.03	0.06	0.13
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	986	1015	802	390	668	298	365	919	287	508	1015	453
d1, Uniform Delay [s]	34.07	33.32	42.87	51.98	47.41	41.89	52.42	46.13	41.42	31.42	32.42	35.33
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.70	135.16	4.00	3.92	0.54	3.95	0.98	0.25	0.35	0.43	3.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.28	1.28	0.81	0.88	0.29	0.79	0.70	0.15	0.09	0.20	0.47
d, Delay for Lane Group [s/veh]	35.08	34.02	178.03	55.98	51.33	42.43	56.37	47.11	41.67	31.77	32.85	38.77
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.91	3.14	25.91	4.73	8.63	2.24	4.36	5.92	1.09	1.07	2.34	5.72
50th-Percentile Queue Length [ft]	97.80	78.45	647.76	118.20	215.84	55.90	108.98	148.12	27.37	26.73	58.41	142.92
95th-Percentile Queue Length [veh]	7.04	5.65	39.22	8.29	13.45	4.02	7.78	9.92	1.97	1.92	4.21	9.64
95th-Percentile Queue Length [ft]	176.05	141.21	980.41	207.34	336.31	100.62	194.58	247.91	49.26	48.11	105.13	240.95

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.08	34.02	178.03	55.98	51.33	42.43	56.37	47.11	41.67	31.77	32.85	38.77
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	122.93			52.02			49.61			35.49		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	78.48											
Intersection LOS	E											
Intersection V/C	0.756											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#16: Via Rancho Pkwy & Driveway #7/Sunset Dr**

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.355

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	10	1	15	15	398	8	6	226	17
Total Analysis Volume [veh/h]	24	4	23	39	2	60	59	1592	30	24	904	67
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	55	55	64	64	4	41	41	3	40	40
g / C, Green / Cycle	0.46	0.46	0.53	0.53	0.04	0.34	0.34	0.02	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.30	0.30	0.01	0.18	0.04
s, saturation flow rate [veh/h]	1337	1461	1405	1583	3445	3547	1845	1774	5074	1583
c, Capacity [veh/h]	669	668	819	843	126	1219	634	42	1679	524
d1, Uniform Delay [s]	19.77	17.97	13.44	13.63	56.64	36.94	36.94	57.94	32.67	28.04
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.11	0.03	0.16	2.67	2.15	4.01	11.44	0.27	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.04	0.05	0.07	0.47	0.87	0.88	0.57	0.54	0.13
d, Delay for Lane Group [s/veh]	19.88	18.08	13.46	13.80	59.30	39.09	40.96	69.39	32.94	28.15
Lane Group LOS	B	B	B	B	E	D	D	E	C	C
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.45	0.42	0.57	0.87	0.90	14.33	15.24	0.84	6.91	1.33
50th-Percentile Queue Length [ft]	11.22	10.44	14.17	21.80	22.60	358.18	380.99	20.99	172.75	33.16
95th-Percentile Queue Length [veh]	0.81	0.75	1.02	1.57	1.63	20.53	21.64	1.51	11.22	2.39
95th-Percentile Queue Length [ft]	20.19	18.79	25.50	39.23	40.68	513.37	541.05	37.77	280.52	59.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.88	18.82	18.08	13.46	13.46	13.80	59.30	39.71	40.96	69.39	32.94	28.15
Movement LOS	B	B	B	B	B	B	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	18.98			13.66			40.42			33.50		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	36.64											
Intersection LOS	D											
Intersection V/C	0.355											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

23.0
C
0.584

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	221	60	27	351	32	14	4	3	131	6	16
Total Analysis Volume [veh/h]	11	882	240	109	1402	126	57	16	13	522	23	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	73	73	6	77	77	4	4	21	21	21
g / C, Green / Cycle	0.01	0.61	0.61	0.05	0.64	0.64	0.03	0.03	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.01	0.17	0.15	0.03	0.40	0.08	0.02	0.02	0.15	0.15	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1741	1774	1781	1583
c, Capacity [veh/h]	24	3078	960	170	2279	1017	58	57	316	317	282
d1, Uniform Delay [s]	58.80	11.24	10.95	56.03	12.68	8.33	57.54	57.56	47.88	47.88	42.22
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.23	0.62	4.03	1.25	0.25	16.78	17.73	6.85	6.82	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.29	0.25	0.64	0.62	0.12	0.74	0.75	0.86	0.86	0.22
d, Delay for Lane Group [s/veh]	72.50	11.48	11.57	60.05	13.94	8.58	74.32	75.29	54.73	54.69	42.61
Lane Group LOS	E	B	B	E	B	A	E	E	D	D	D
Critical Lane Group	yes	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	3.46	2.86	1.72	10.85	1.30	1.57	1.57	8.48	8.51	1.64
50th-Percentile Queue Length [ft]	10.36	86.51	71.59	42.92	271.23	32.62	39.23	39.29	211.94	212.66	40.99
95th-Percentile Queue Length [veh]	0.75	6.23	5.15	3.09	16.25	2.35	2.82	2.83	13.25	13.29	2.95
95th-Percentile Queue Length [ft]	18.65	155.71	128.87	77.25	406.27	58.72	70.62	70.73	331.31	332.24	73.79

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	11.48	11.57	60.05	13.94	8.58	74.56	75.29	75.29	54.71	54.69	42.61
Movement LOS	E	B	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	12.09			16.60			74.80			53.46		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	23.04											
Intersection LOS	C											
Intersection V/C	0.584											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vistro File: S:\...\J1101 - VISTRO.vistro

Scenario 4: Near Term + Proj - PM

Report File: S:\...INTC+P.pdf

7/16/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.792	28.1	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.408	7.6	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.385	5.9	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.489	13.8	B
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.569	17.1	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.313	10.1	B
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.239	22.3	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.105	18.7	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.225	20.6	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.093	20.3	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.073	19.3	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	WBL	0.258	10.7	B
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	WBL	0.486	6.8	A
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	SBL	0.826	49.3	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.758	78.4	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.358	36.6	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBT	0.590	23.3	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	28.1
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	189	1135	8	6	525	14	5	11	7	29	25	273
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	189	1135	8	6	525	14	5	11	7	29	25	273
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	284	2	2	131	4	1	3	2	7	6	68
Total Analysis Volume [veh/h]	189	1135	8	6	525	14	5	11	7	29	25	273
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	84	84	1	70	70	23	23	23	23
g / C, Green / Cycle	0.12	0.70	0.70	0.01	0.58	0.58	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.11	0.61	0.01	0.00	0.15	0.15	0.01	0.00	0.05	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1846	1420	1583	1197	1583
c, Capacity [veh/h]	220	1304	1108	15	1088	1079	311	303	275	303
d1, Uniform Delay [s]	51.48	13.81	5.42	59.15	12.12	12.12	39.61	39.38	42.55	47.38
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.29	8.13	0.01	16.20	0.55	0.55	0.07	0.03	0.34	9.85
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.86	0.87	0.01	0.40	0.25	0.25	0.05	0.02	0.20	0.90
d, Delay for Lane Group [s/veh]	60.77	21.94	5.43	75.35	12.67	12.68	39.68	39.41	42.90	57.23
Lane Group LOS	E	C	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	5.99	21.60	0.06	0.25	3.42	3.40	0.40	0.17	1.47	8.84
50th-Percentile Queue Length [ft]	149.69	539.96	1.38	6.13	85.57	85.00	9.94	4.33	36.76	220.97
95th-Percentile Queue Length [veh]	10.00	29.22	0.10	0.44	6.16	6.12	0.72	0.31	2.65	13.71
95th-Percentile Queue Length [ft]	250.02	730.50	2.49	11.03	154.02	153.00	17.90	7.80	66.16	342.87

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.77	21.94	5.43	75.35	12.67	12.68	39.68	39.68	39.41	42.90	42.90	57.23
Movement LOS	E	C	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	27.35			13.36			39.60			54.86		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	28.09											
Intersection LOS	C											
Intersection V/C	0.792											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.408

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	1276	29	1	792	63	73	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1276	29	1	792	63	73	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	319	7	0	198	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	1276	29	1	792	63	73	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.35	0.35	0.00	0.23	0.23	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1848	1774	1863	1815	1404	1674	1380	1712
c, Capacity [veh/h]	31	1624	1611	2	1594	1553	71	45	60	46
d1, Uniform Delay [s]	58.47	1.52	1.52	59.87	1.62	1.62	59.92	57.67	60.00	57.01
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.13	0.75	0.75	81.55	0.42	0.43	56.40	10.24	2.12	1.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.52	0.40	0.40	0.40	0.27	0.27	1.03	0.56	0.25	0.13
d, Delay for Lane Group [s/veh]	71.60	2.27	2.28	141.41	2.05	2.06	116.33	67.92	62.12	58.27
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	1.03	1.03	0.09	0.87	0.86	3.38	0.88	0.50	0.20
50th-Percentile Queue Length [ft]	14.57	25.85	25.76	2.15	21.85	21.42	84.47	21.97	12.52	4.89
95th-Percentile Queue Length [veh]	1.05	1.86	1.85	0.15	1.57	1.54	6.08	1.58	0.90	0.35
95th-Percentile Queue Length [ft]	26.23	46.54	46.37	3.86	39.33	38.55	152.05	39.54	22.54	8.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.60	2.27	2.28	141.41	2.05	2.06	116.33	67.92	67.92	62.12	58.27	58.27
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	3.11			2.21			103.98			61.02		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.61											
Intersection LOS	A											
Intersection V/C	0.408											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	5.9
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.385

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	1286	25	19	754	4	2	0	6	25	0	22
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1286	25	19	754	4	2	0	6	25	0	22
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	322	6	5	189	1	1	0	2	6	0	6
Total Analysis Volume [veh/h]	1	1286	25	19	754	4	2	0	6	25	0	22
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	98	98	2	100	100	0	1	3	3
g / C, Green / Cycle	0.00	0.82	0.82	0.02	0.83	0.83	0.00	0.01	0.02	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.35	0.35	0.01	0.20	0.20	0.00	0.00	0.01	0.01
s, saturation flow rate [veh/h]	1774	1863	1850	1774	1863	1859	1774	1583	1774	1583
c, Capacity [veh/h]	3	1517	1507	36	1551	1548	6	13	43	46
d1, Uniform Delay [s]	59.83	3.19	3.19	58.26	2.11	2.11	59.70	59.28	57.98	57.40
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.90	0.91	11.91	0.38	0.38	34.03	24.81	12.15	7.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.43	0.43	0.53	0.24	0.24	0.36	0.47	0.59	0.48
d, Delay for Lane Group [s/veh]	104.98	4.09	4.10	70.17	2.48	2.48	93.73	84.09	70.13	65.04
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	3.01	3.00	0.68	1.11	1.11	0.12	0.27	0.90	0.76
50th-Percentile Queue Length [ft]	1.77	75.36	75.01	16.92	27.69	27.65	2.88	6.84	22.54	19.00
95th-Percentile Queue Length [veh]	0.13	5.43	5.40	1.22	1.99	1.99	0.21	0.49	1.62	1.37
95th-Percentile Queue Length [ft]	3.19	135.65	135.03	30.45	49.84	49.77	5.19	12.31	40.58	34.21

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	4.10	4.10	70.17	2.48	2.48	93.73	84.09	84.09	70.13	65.04	65.04
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	4.17			4.14			86.50			67.75		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	5.86											
Intersection LOS	A											
Intersection V/C	0.385											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.489

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	292	52	12	173	27	12	4	6	27	7	10
Total Analysis Volume [veh/h]	38	1167	206	48	691	106	46	14	22	106	28	38
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	90	90	4	90	90	14	14	14	14
g / C, Green / Cycle	0.03	0.75	0.75	0.03	0.75	0.75	0.12	0.12	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.02	0.38	0.38	0.03	0.22	0.22	0.03	0.02	0.08	0.04
s, saturation flow rate [veh/h]	1774	1863	1767	1774	1863	1777	1330	1681	1367	1691
c, Capacity [veh/h]	53	1395	1323	62	1404	1340	143	196	168	197
d1, Uniform Delay [s]	57.69	6.07	6.10	57.45	4.66	4.66	54.61	47.88	55.15	48.75
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.31	1.30	1.39	18.65	0.52	0.55	1.28	0.45	3.85	0.99
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.72	0.50	0.51	0.78	0.29	0.29	0.32	0.18	0.63	0.34
d, Delay for Lane Group [s/veh]	74.00	7.36	7.50	76.11	5.18	5.21	55.89	48.32	59.00	49.75
Lane Group LOS	E	A	A	E	A	A	E	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.38	6.68	6.47	1.73	2.63	2.53	1.43	1.03	3.40	1.89
50th-Percentile Queue Length [ft]	34.61	167.03	161.85	43.27	65.86	63.14	35.85	25.66	85.00	47.35
95th-Percentile Queue Length [veh]	2.49	10.92	10.65	3.12	4.74	4.55	2.58	1.85	6.12	3.41
95th-Percentile Queue Length [ft]	62.29	273.00	266.16	77.89	118.54	113.65	64.53	46.18	153.01	85.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.00	7.42	7.50	76.11	5.19	5.21	55.89	48.32	48.32	59.00	49.75	49.75
Movement LOS	E	A	A	E	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	9.22			9.22			52.57			55.45		
Approach LOS	A			A			D			E		
d_I, Intersection Delay [s/veh]	13.81											
Intersection LOS	B											
Intersection V/C	0.489											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #5: Bear Valley Pkwy & San Pasqual Rd

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.569

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	1377	540	89	710	435	58
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1377	540	89	710	435	58
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	344	135	22	178	109	15
Total Analysis Volume [veh/h]	1377	540	89	710	435	58
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	74	0	15	89	31	31
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	83	83	8	94	18	18
g / C, Green / Cycle	0.69	0.69	0.06	0.79	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.39	0.34	0.05	0.20	0.13	0.04
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2443	1091	112	2786	509	234
d1, Uniform Delay [s]	9.49	8.81	55.38	3.45	49.86	45.22
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.95	1.61	11.69	0.22	4.23	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.50	0.79	0.25	0.86	0.25
d, Delay for Lane Group [s/veh]	10.43	10.41	67.07	3.67	54.09	45.77
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	8.74	6.61	2.96	1.67	6.54	1.54
50th-Percentile Queue Length [ft]	218.42	165.36	73.90	41.86	163.45	38.61
95th-Percentile Queue Length [veh]	13.58	10.83	5.32	3.01	10.73	2.78
95th-Percentile Queue Length [ft]	339.61	270.80	133.03	75.35	268.29	69.50

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	10.43	10.41	67.07	3.67	54.09	45.77
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	10.43		10.73		53.11	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	17.06					
Intersection LOS	B					
Intersection V/C	0.569					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type: Signalized
 Analysis Method: HCM2010
 Analysis Period: 15 minutes

Delay (sec / veh): 10.1
 Level Of Service: B
 Volume to Capacity (v/c): 0.313

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	36	0	64	29	0	1	11	48	5	16	43	32
Total Analysis Volume [veh/h]	143	0	257	114	0	5	44	190	21	63	170	127
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	6	6	6	1	4	4	2	4	4
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.06	0.16	0.16	0.07	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.10	0.16	0.08	0.00	0.02	0.10	0.01	0.04	0.08	0.09
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1608
c, Capacity [veh/h]	573	413	573	413	102	310	263	136	346	299
d1, Uniform Delay [s]	8.73	7.89	8.53	6.63	11.02	9.36	8.52	10.69	8.75	8.80
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.23	1.54	0.17	0.01	2.86	1.97	0.13	2.44	0.91	1.17
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

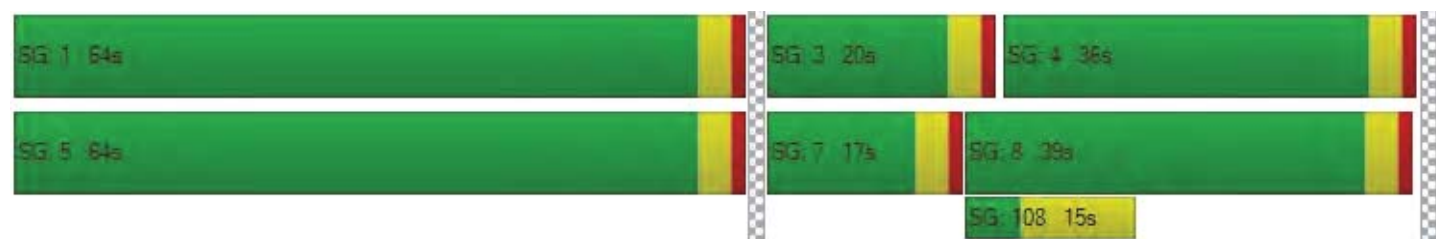
X, volume / capacity	0.25	0.62	0.20	0.01	0.43	0.61	0.08	0.46	0.45	0.47
d, Delay for Lane Group [s/veh]	8.95	9.43	8.70	6.64	13.88	11.33	8.65	13.13	9.67	9.97
Lane Group LOS	A	A	A	A	B	B	A	B	A	A
Critical Lane Group	no	yes	no	no	no	yes	no	yes	no	no
50th-Percentile Queue Length [veh]	0.18	0.31	0.14	0.00	0.24	0.74	0.07	0.31	0.52	0.50
50th-Percentile Queue Length [ft]	4.46	7.86	3.44	0.09	5.89	18.49	1.67	7.68	13.07	12.41
95th-Percentile Queue Length [veh]	0.32	0.57	0.25	0.01	0.42	1.33	0.12	0.55	0.94	0.89
95th-Percentile Queue Length [ft]	8.02	14.16	6.20	0.16	10.59	33.28	3.00	13.83	23.53	22.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.95	0.00	9.43	8.70	0.00	6.64	13.88	11.33	8.65	13.13	9.69	9.97
Movement LOS	A		A	A		A	B	B	A	B	A	A
d_A, Approach Delay [s/veh]	9.26			8.61			11.55			10.39		
Approach LOS	A			A			B			B		
d_I, Intersection Delay [s/veh]	10.06											
Intersection LOS	B											
Intersection V/C	0.313											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #7: Beethoven Dr & Driveway #1

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 22.3
Level Of Service: C
Volume to Capacity (v/c): 0.239

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	65	47	43	309	513	102
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	65	47	43	309	513	102
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	12	11	77	128	26
Total Analysis Volume [veh/h]	65	47	43	309	513	102
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.24	0.09	0.04	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	22.31	12.53	8.91	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.91	0.29	0.14	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	22.71	7.34	3.50	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.21		1.09		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.24					
Intersection LOS	C					

Intersection Level Of Service Report #8: Beethoven Dr & Driveway #2

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 18.7
Level Of Service: C
Volume to Capacity (v/c): 0.105

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	31	40	33	288	544	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	40	33	288	544	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	10	8	72	136	7
Total Analysis Volume [veh/h]	31	40	33	288	544	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.08	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	18.67	12.35	8.72	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.35	0.24	0.10	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	8.74	6.10	2.55	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.11		0.90		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.41					
Intersection LOS	C					

Intersection Level Of Service Report #9: Beethoven Dr & Driveway #3

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 20.6
Level Of Service: C
Volume to Capacity (v/c): 0.225

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	67	69	42	300	478	69
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	69	42	300	478	69
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	17	11	75	120	17
Total Analysis Volume [veh/h]	67	69	42	300	478	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.22	0.12	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.56	12.31	8.67	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.85	0.42	0.13	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	21.15	10.44	3.21	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.37		1.06		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.53					
Intersection LOS	C					

Intersection Level Of Service Report #10: Beethoven Dr & Driveway #4

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 20.3
Level Of Service: C
Volume to Capacity (v/c): 0.093

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	24	51	68	324	508	21
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	51	68	324	508	21
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	13	17	81	127	5
Total Analysis Volume [veh/h]	24	51	68	324	508	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.09	0.07	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	20.29	12.11	8.71	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.30	0.30	0.21	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	7.57	7.52	5.25	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.73		1.51		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.70					
Intersection LOS	C					

Intersection Level Of Service Report #11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 19.3
Level Of Service: C
Volume to Capacity (v/c): 0.073

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	20	83	66	335	543	27
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	83	66	335	543	27
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	21	17	84	136	7
Total Analysis Volume [veh/h]	20	83	66	335	543	27
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.12	0.07	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	19.26	10.72	8.86	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.24	0.39	0.75	0.37	0.00	0.00
95th-Percentile Queue Length [ft]	5.90	9.85	18.70	9.35	0.00	0.00
d_A, Approach Delay [s/veh]	12.38		1.46		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.73					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:	Signalized	Delay (sec / veh):	10.7
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	2	1	11	85	2	0	96	29	4	4	10
Total Analysis Volume [veh/h]	2	9	2	45	340	9	1	382	117	14	14	40
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	4	103	0	99	99	5	5
g / C, Green / Cycle	0.04	0.03	0.86	0.00	0.83	0.83	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.01	0.03	0.19	0.00	0.21	0.07	0.02	0.03
s, saturation flow rate [veh/h]	1073	1774	1854	1774	1863	1583	1463	1583
c, Capacity [veh/h]	76	59	1594	3	1542	1311	102	61
d1, Uniform Delay [s]	55.84	57.50	1.46	59.79	2.24	1.92	56.38	56.87
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.05	17.70	0.32	45.41	0.38	0.13	1.45	11.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.17	0.76	0.22	0.30	0.25	0.09	0.28	0.65
d, Delay for Lane Group [s/veh]	56.89	75.20	1.78	105.20	2.62	2.05	57.83	68.00
Lane Group LOS	E	E	A	F	A	A	E	E
Critical Lane Group	no	yes	no	no	yes	no	no	yes
50th-Percentile Queue Length [veh]	0.41	1.65	0.91	0.07	1.20	0.32	0.85	1.36
50th-Percentile Queue Length [ft]	10.17	41.16	22.72	1.78	30.09	8.05	21.32	33.95
95th-Percentile Queue Length [veh]	0.73	2.96	1.64	0.13	2.17	0.58	1.54	2.44
95th-Percentile Queue Length [ft]	18.31	74.08	40.89	3.20	54.17	14.50	38.38	61.12

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.89	56.89	56.89	75.20	1.78	1.78	105.20	2.62	2.05	57.83	57.83	68.00
Movement LOS	E	E	E	E	A	A	F	A	A	E	E	E
d_A, Approach Delay [s/veh]	56.89			10.16			2.69			63.81		
Approach LOS	E			B			A			E		
d_I, Intersection Delay [s/veh]	10.70											
Intersection LOS	B											
Intersection V/C	0.258											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.486

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	91	1	3	0	2	1	0	5	5	127	5
Total Analysis Volume [veh/h]	9	363	4	12	1	8	5	0	19	18	507	19
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	1	103	103	3	3	3	2	104	104
g / C, Green / Cycle	0.01	0.86	0.86	0.02	0.02	0.02	0.02	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.07	0.33	0.00	0.01	0.01	0.14	0.01
s, saturation flow rate [veh/h]	1774	3547	1852	63	1400	1583	1774	3547	1583
c, Capacity [veh/h]	20	3047	1592	49	61	34	34	3076	1373
d1, Uniform Delay [s]	58.94	1.28	1.28	59.98	59.97	58.13	58.29	1.23	1.07
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.09	0.05	0.10	25.73	0.57	13.49	12.06	0.12	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.45	0.08	0.08	0.43	0.08	0.56	0.53	0.16	0.01
d, Delay for Lane Group [s/veh]	74.03	1.33	1.37	85.71	60.54	71.62	70.35	1.35	1.09
Lane Group LOS	E	A	A	F	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	0.35	0.17	0.20	1.00	0.16	0.70	0.64	0.30	0.02
50th-Percentile Queue Length [ft]	8.74	4.18	4.89	24.98	4.08	17.59	16.10	7.60	0.59
95th-Percentile Queue Length [veh]	0.63	0.30	0.35	1.80	0.29	1.27	1.16	0.55	0.04
95th-Percentile Queue Length [ft]	15.73	7.52	8.81	44.97	7.35	31.66	28.98	13.69	1.06

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	74.03	1.34	1.37	85.71	85.71	85.71	60.54	71.62	71.62	70.35	1.35	1.09
Movement LOS	E	A	A	F	F	F	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	3.08			85.71			69.31			3.62		
Approach LOS	A			F			E			A		
d_I, Intersection Delay [s/veh]	6.83											
Intersection LOS	A											
Intersection V/C	0.486											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	49.3
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	42	191	31	38	33	18	43	38	183	96	12
Total Analysis Volume [veh/h]	49	166	764	123	153	131	70	171	152	733	384	47
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	59	59	9	64	64	6	9	9	27	30	30
g / C, Green / Cycle	0.04	0.49	0.49	0.08	0.53	0.53	0.05	0.07	0.07	0.22	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.03	0.05	0.48	0.07	0.04	0.08	0.04	0.05	0.05	0.21	0.11	0.03
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1746	780	134	1885	842	92	262	207	775	876	391
d1, Uniform Delay [s]	57.33	16.23	29.90	55.11	13.76	14.36	56.19	54.11	54.45	45.80	38.18	35.08
k, delay calibration	0.11	0.50	0.50	0.31	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.54	0.11	27.75	42.67	0.08	0.39	12.15	2.75	5.01	6.83	0.35	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.10	0.98	0.92	0.08	0.16	0.76	0.65	0.74	0.95	0.44	0.12
d, Delay for Lane Group [s/veh]	73.87	16.34	57.65	97.78	13.85	14.75	68.34	56.86	59.46	52.63	38.52	35.22
Lane Group LOS	E	B	E	F	B	B	E	E	E	D	D	D
Critical Lane Group	no	no	yes	yes	no	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	1.69	1.11	24.36	5.25	1.02	1.88	2.36	2.55	2.34	11.11	4.68	1.06
50th-Percentile Queue Length [ft]	42.26	27.72	609.01	131.35	25.50	46.88	58.88	63.87	58.49	277.63	117.00	26.45
95th-Percentile Queue Length [veh]	3.04	2.00	32.45	9.01	1.84	3.38	4.24	4.60	4.21	16.57	8.23	1.90
95th-Percentile Queue Length [ft]	76.07	49.89	811.37	225.33	45.91	84.38	105.98	114.97	105.29	414.27	205.70	47.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.87	16.34	57.65	97.78	13.85	14.75	68.34	56.86	59.46	52.63	38.52	35.22
Movement LOS	E	B	E	F	B	B	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	51.45			39.50			59.91			47.27		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	49.28											
Intersection LOS	D											
Intersection V/C	0.826											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

78.4
E
0.758

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration	↵↵↵↵↵			↵↵↵			↵↵↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	76	257	84	148	22	73	162	12	12	53	53
Total Analysis Volume [veh/h]	351	303	1026	335	591	88	290	647	48	49	211	213
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	13	21	21	34	34	34
g / C, Green / Cycle	0.29	0.29	0.29	0.12	0.19	0.19	0.11	0.18	0.18	0.29	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.10	0.09	0.37	0.10	0.17	0.06	0.08	0.13	0.03	0.03	0.06	0.13
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	984	1013	801	411	672	300	365	894	279	507	1013	452
d1, Uniform Delay [s]	34.13	33.51	42.90	51.61	47.34	41.77	52.42	46.71	42.03	31.52	32.59	35.41
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.01	0.76	136.24	4.00	3.93	0.54	3.95	1.13	0.29	0.38	0.47	3.49
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.30	1.28	0.82	0.88	0.29	0.79	0.72	0.17	0.10	0.21	0.47
d, Delay for Lane Group [s/veh]	35.14	34.27	179.14	55.61	51.27	42.31	56.37	47.84	42.32	31.90	33.05	38.90
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.92	3.31	25.98	5.02	8.69	2.23	4.36	6.01	1.21	1.14	2.49	5.76
50th-Percentile Queue Length [ft]	97.90	82.73	649.55	125.49	217.27	55.80	108.98	150.15	30.16	28.55	62.22	143.88
95th-Percentile Queue Length [veh]	7.05	5.96	39.34	8.69	13.53	4.02	7.78	10.02	2.17	2.06	4.48	9.69
95th-Percentile Queue Length [ft]	176.23	148.91	983.56	217.34	338.14	100.45	194.58	250.62	54.29	51.39	112.00	242.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.14	34.27	179.14	55.61	51.27	42.31	56.37	47.84	42.32	31.90	33.05	38.90
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	122.92			51.93			50.08			35.57		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	78.35											
Intersection LOS	E											
Intersection V/C	0.758											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#16: Via Rancho Pkwy & Driveway #7/Sunset Dr**

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.358

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	11	1	16	16	399	8	6	227	18
Total Analysis Volume [veh/h]	24	4	23	42	2	63	63	1595	30	24	908	71
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	55	55	64	64	4	41	41	3	40	40
g / C, Green / Cycle	0.46	0.46	0.53	0.53	0.04	0.34	0.34	0.02	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.30	0.30	0.01	0.18	0.04
s, saturation flow rate [veh/h]	1333	1461	1403	1583	3445	3547	1845	1774	5074	1583
c, Capacity [veh/h]	667	667	817	842	129	1222	636	42	1679	524
d1, Uniform Delay [s]	19.87	18.02	13.50	13.70	56.62	36.90	36.90	57.94	32.71	28.12
k, delay calibration	0.50	0.50	0.14	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.11	0.11	0.03	0.17	2.86	2.15	4.00	11.44	0.27	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.04	0.04	0.05	0.07	0.49	0.87	0.88	0.57	0.54	0.14
d, Delay for Lane Group [s/veh]	19.98	18.12	13.53	13.87	59.47	39.04	40.91	69.39	32.98	28.23
Lane Group LOS	B	B	B	B	E	D	D	E	C	C
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.45	0.42	0.61	0.92	0.97	14.35	15.26	0.84	6.95	1.41
50th-Percentile Queue Length [ft]	11.24	10.47	15.29	22.97	24.16	358.68	381.54	20.99	173.71	35.24
95th-Percentile Queue Length [veh]	0.81	0.75	1.10	1.65	1.74	20.56	21.67	1.51	11.27	2.54
95th-Percentile Queue Length [ft]	20.23	18.84	27.53	41.34	43.49	513.98	541.71	37.77	281.78	63.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	19.98	18.87	18.12	13.53	13.53	13.87	59.47	39.66	40.91	69.39	32.98	28.23
Movement LOS	B	B	B	B	B	B	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	19.06			13.73			40.42			33.52		
Approach LOS	B			B			D			C		
d_I, Intersection Delay [s/veh]	36.61											
Intersection LOS	D											
Intersection V/C	0.358											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	223	65	27	352	32	14	5	3	134	6	16
Total Analysis Volume [veh/h]	11	890	259	109	1407	126	57	18	13	534	24	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	72	72	6	77	77	4	4	22	22	22
g / C, Green / Cycle	0.01	0.60	0.60	0.05	0.64	0.64	0.03	0.03	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.01	0.18	0.16	0.03	0.40	0.08	0.02	0.03	0.16	0.16	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1746	1774	1781	1583
c, Capacity [veh/h]	24	3055	953	170	2263	1010	59	59	323	324	288
d1, Uniform Delay [s]	58.80	11.53	11.36	56.03	13.04	8.55	57.49	57.50	47.64	47.64	41.83
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.24	0.70	4.03	1.30	0.25	16.44	17.23	6.82	6.78	0.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.29	0.27	0.64	0.62	0.12	0.74	0.75	0.86	0.86	0.22
d, Delay for Lane Group [s/veh]	72.50	11.77	12.07	60.06	14.34	8.80	73.92	74.74	54.47	54.43	42.21
Lane Group LOS	E	B	B	E	B	A	E	E	D	D	D
Critical Lane Group	yes	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	3.55	3.19	1.72	11.10	1.33	1.60	1.60	8.67	8.70	1.63
50th-Percentile Queue Length [ft]	10.36	88.84	79.65	42.92	277.47	33.16	39.98	40.03	216.72	217.45	40.76
95th-Percentile Queue Length [veh]	0.75	6.40	5.73	3.09	16.56	2.39	2.88	2.88	13.50	13.53	2.93
95th-Percentile Queue Length [ft]	18.65	159.92	143.36	77.26	414.06	59.68	71.97	72.05	337.43	338.37	73.37

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	11.77	12.07	60.06	14.34	8.80	74.11	74.74	74.74	54.45	54.43	42.21
Movement LOS	E	B	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	12.41			16.95			74.33			53.20		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	23.30											
Intersection LOS	C											
Intersection V/C	0.590											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Report File: S:\...HY.pdf

Scenario 5: 2035 w/o Proj - PM
7/16/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.585	25.6	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.324	8.5	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.294	7.4	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.417	21.1	C
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.402	14.0	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.597	18.0	B
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.126	16.1	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.029	15.6	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.142	17.2	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.048	17.9	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.035	15.8	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	EBL	0.303	8.4	A
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	NEBR	0.339	10.2	B
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	NBL	0.429	44.8	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.815	79.9	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.244	43.7	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	SBL	0.531	24.3	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	25.6
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	205	748	21	13	469	25	1	8	2	25	42	271
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	205	748	21	13	469	25	1	8	2	25	42	271
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	187	5	3	117	6	0	2	1	6	11	68
Total Analysis Volume [veh/h]	205	748	21	13	469	25	1	8	2	25	42	271
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	83	83	2	69	69	23	23	23	23
g / C, Green / Cycle	0.13	0.69	0.69	0.02	0.58	0.58	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.12	0.40	0.01	0.01	0.13	0.13	0.00	0.00	0.04	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1830	1827	1583	1686	1583
c, Capacity [veh/h]	236	1292	1098	28	1073	1054	382	302	363	302
d1, Uniform Delay [s]	50.93	9.40	5.70	58.55	12.45	12.45	39.46	39.32	40.74	47.38
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.28	1.90	0.03	12.00	0.51	0.52	0.02	0.01	0.24	9.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.58	0.02	0.47	0.23	0.23	0.02	0.01	0.18	0.90
d, Delay for Lane Group [s/veh]	60.21	11.30	5.73	70.55	12.95	12.97	39.49	39.33	40.98	56.74
Lane Group LOS	E	B	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	6.48	8.97	0.15	0.47	3.19	3.15	0.22	0.05	1.71	8.73
50th-Percentile Queue Length [ft]	161.93	224.26	3.77	11.87	79.64	78.67	5.56	1.23	42.84	218.30
95th-Percentile Queue Length [veh]	10.65	13.88	0.27	0.85	5.73	5.66	0.40	0.09	3.08	13.58
95th-Percentile Queue Length [ft]	266.27	347.06	6.79	21.37	143.34	141.60	10.01	2.22	77.11	339.45

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.21	11.30	5.73	70.55	12.96	12.97	39.49	39.49	39.33	40.98	40.98	56.74
Movement LOS	E	B	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	21.47			14.44			39.46			53.62		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	25.57											
Intersection LOS	C											
Intersection V/C	0.585											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:	Signalized	Delay (sec / veh):	8.5
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.324

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	974	29	1	509	62	71	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	974	29	1	509	62	71	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	244	7	0	127	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	974	29	1	509	62	71	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.27	0.27	0.00	0.16	0.16	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1844	1774	1863	1793	1404	1674	1380	1712
c, Capacity [veh/h]	31	1622	1606	3	1593	1533	72	46	61	47
d1, Uniform Delay [s]	58.47	1.37	1.37	59.86	1.49	1.49	59.90	57.60	60.00	56.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.07	0.50	0.50	78.06	0.25	0.26	44.27	9.53	2.10	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

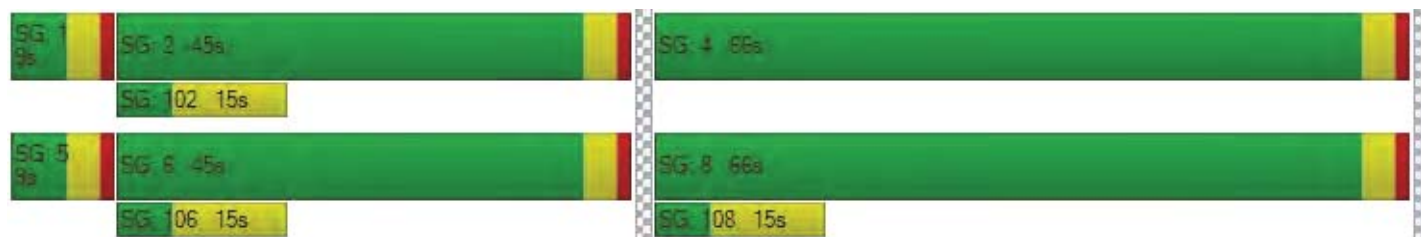
X, volume / capacity	0.52	0.31	0.31	0.40	0.18	0.18	0.98	0.54	0.25	0.13
d, Delay for Lane Group [s/veh]	71.54	1.87	1.87	137.92	1.74	1.76	104.17	67.13	62.10	58.13
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	0.71	0.71	0.08	0.54	0.52	3.15	0.87	0.50	0.20
50th-Percentile Queue Length [ft]	14.56	17.85	17.73	2.12	13.40	13.10	78.70	21.81	12.52	4.88
95th-Percentile Queue Length [veh]	1.05	1.29	1.28	0.15	0.96	0.94	5.67	1.57	0.90	0.35
95th-Percentile Queue Length [ft]	26.22	32.13	31.91	3.81	24.11	23.58	141.66	39.25	22.53	8.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.54	1.87	1.87	137.92	1.75	1.76	104.17	67.13	67.13	62.10	58.13	58.13
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	2.96			1.99			94.52			60.96		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	8.50											
Intersection LOS	A											
Intersection V/C	0.324											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	7.4
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.294

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	939	18	17	492	4	2	0	6	36	0	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	939	18	17	492	4	2	0	6	36	0	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	235	5	4	123	1	1	0	2	9	0	9
Total Analysis Volume [veh/h]	1	939	18	17	492	4	2	0	6	36	0	35
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	97	97	2	99	99	0	1	4	4
g / C, Green / Cycle	0.00	0.81	0.81	0.02	0.83	0.83	0.00	0.01	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.00	0.26	0.26	0.01	0.13	0.13	0.00	0.00	0.02	0.02
s, saturation flow rate [veh/h]	1774	1863	1850	1774	1863	1857	1774	1583	1774	1583
c, Capacity [veh/h]	3	1510	1500	33	1541	1537	6	13	52	54
d1, Uniform Delay [s]	59.83	2.90	2.90	58.37	2.07	2.07	59.70	59.28	57.69	57.22
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.55	0.56	12.06	0.22	0.23	34.03	24.81	14.68	11.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.32	0.32	0.52	0.16	0.16	0.36	0.47	0.69	0.64
d, Delay for Lane Group [s/veh]	104.98	3.45	3.46	70.44	2.29	2.29	93.73	84.09	72.37	69.15
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	2.00	1.98	0.61	0.72	0.72	0.12	0.27	1.31	1.24
50th-Percentile Queue Length [ft]	1.77	49.90	49.61	15.26	17.95	17.92	2.88	6.84	32.63	30.94
95th-Percentile Queue Length [veh]	0.13	3.59	3.57	1.10	1.29	1.29	0.21	0.49	2.35	2.23
95th-Percentile Queue Length [ft]	3.19	89.82	89.29	27.47	32.30	32.25	5.19	12.31	58.74	55.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	3.46	3.46	70.44	2.29	2.29	93.73	84.09	84.09	72.37	69.15	69.15
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	3.56			4.55			86.50			70.78		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.40											
Intersection LOS	A											
Intersection V/C	0.294											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type:	Signalized	Delay (sec / veh):	21.1
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.417

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	63	767	150	40	428	60	166	22	199	15	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	767	150	40	428	60	166	22	199	15	1	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	192	38	10	107	15	42	6	50	4	0	6
Total Analysis Volume [veh/h]	63	767	150	40	428	60	166	22	199	15	1	23
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	83	83	4	82	82	21	21	21	21
g / C, Green / Cycle	0.05	0.70	0.70	0.03	0.68	0.68	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.04	0.25	0.25	0.02	0.13	0.13	0.12	0.14	0.01	0.02
s, saturation flow rate [veh/h]	1774	1863	1758	1774	1863	1784	1381	1607	1155	1593
c, Capacity [veh/h]	82	1295	1222	55	1267	1213	257	279	87	277
d1, Uniform Delay [s]	56.55	7.46	7.46	57.61	7.09	7.10	50.16	47.49	57.97	41.59
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.64	0.79	0.84	16.44	0.35	0.37	2.73	5.03	0.93	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.36	0.36	0.73	0.20	0.20	0.65	0.79	0.17	0.09
d, Delay for Lane Group [s/veh]	70.20	8.25	8.30	74.05	7.43	7.46	52.89	52.53	58.90	41.72
Lane Group LOS	E	A	A	E	A	A	D	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	yes	no	no
50th-Percentile Queue Length [veh]	2.20	4.88	4.62	1.43	2.15	2.09	5.17	6.88	0.48	0.62
50th-Percentile Queue Length [ft]	55.00	121.90	115.46	35.69	53.86	52.25	129.28	172.03	11.92	15.41
95th-Percentile Queue Length [veh]	3.96	8.50	8.14	2.57	3.88	3.76	8.90	11.18	0.86	1.11
95th-Percentile Queue Length [ft]	98.99	212.43	203.57	64.24	96.95	94.04	222.52	279.58	21.45	27.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.20	8.27	8.30	74.05	7.45	7.46	52.89	52.53	52.53	58.90	41.72	41.72
Movement LOS	E	A	A	E	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.26			12.49			52.68			48.33		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	21.14											
Intersection LOS	C											
Intersection V/C	0.417											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #5: Bear Valley Pkwy & San Pasqual Rd

Control Type:	Signalized	Delay (sec / veh):	14.0
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.402

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	952	413	73	588	307	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	952	413	73	588	307	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	238	103	18	147	77	5
Total Analysis Volume [veh/h]	952	413	73	588	307	19
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	19	0	47	66	54	54
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	88	88	6	99	13	13
g / C, Green / Cycle	0.74	0.74	0.05	0.82	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.27	0.26	0.04	0.17	0.09	0.01
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2608	1164	95	2917	382	176
d1, Uniform Delay [s]	5.74	5.68	56.00	2.27	52.04	47.98
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	0.85	11.99	0.16	3.99	0.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.35	0.77	0.20	0.80	0.11
d, Delay for Lane Group [s/veh]	6.14	6.53	67.99	2.42	56.03	48.25
Lane Group LOS	A	A	E	A	E	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	4.00	3.59	2.45	0.89	4.64	0.52
50th-Percentile Queue Length [ft]	99.99	89.64	61.18	22.30	116.05	12.97
95th-Percentile Queue Length [veh]	7.20	6.45	4.41	1.61	8.18	0.93
95th-Percentile Queue Length [ft]	179.99	161.35	110.13	40.14	204.38	23.34

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.14	6.53	67.99	2.42	56.03	48.25
Movement LOS	A	A	E	A	E	D
d_A, Approach Delay [s/veh]	6.26		9.66		55.57	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	14.05					
Intersection LOS	B					
Intersection V/C	0.402					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.597

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	115	0	61	146	0	11	18	137	384	424	98	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	115	0	61	146	0	11	18	137	384	424	98	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	0	15	37	0	3	5	34	96	106	25	4
Total Analysis Volume [veh/h]	115	0	61	146	0	11	18	137	384	424	98	17
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8	8	1	14	14	14	27	27
g / C, Green / Cycle	0.17	0.17	0.17	0.17	0.02	0.30	0.30	0.29	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.10	0.01	0.01	0.07	0.24	0.24	0.03	0.03
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1769
c, Capacity [veh/h]	327	265	327	265	40	551	469	509	1044	991
d1, Uniform Delay [s]	20.00	17.32	20.49	16.77	23.18	12.84	15.71	16.05	4.79	4.79
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.64	0.44	0.96	0.06	7.77	0.23	3.60	3.64	0.02	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.35	0.23	0.45	0.04	0.45	0.25	0.82	0.83	0.06	0.06
d, Delay for Lane Group [s/veh]	20.64	17.76	21.44	16.83	30.95	13.08	19.31	19.69	4.81	4.82
Lane Group LOS	C	B	C	B	C	B	B	B	A	A
Critical Lane Group	no	no	yes	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.96	0.45	1.25	0.08	0.27	1.00	3.76	4.20	0.19	0.18
50th-Percentile Queue Length [ft]	23.89	11.29	31.35	1.95	6.76	24.90	94.01	105.01	4.67	4.49
95th-Percentile Queue Length [veh]	1.72	0.81	2.26	0.14	0.49	1.79	6.77	7.56	0.34	0.32
95th-Percentile Queue Length [ft]	43.01	20.32	56.42	3.50	12.17	44.81	169.22	189.02	8.41	8.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.64	0.00	17.76	21.44	0.00	16.83	30.95	13.08	19.31	19.69	4.81	4.82
Movement LOS	C		B	C		B	C	B	B	B	A	A
d_A, Approach Delay [s/veh]	19.64			21.12			18.12			16.52		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	18.03											
Intersection LOS	B											
Intersection V/C	0.597											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #7: Beethoven Dr & Driveway #1

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 16.1
Level Of Service: C
Volume to Capacity (v/c): 0.126

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	47	54	11	542	190	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	54	11	542	190	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	14	3	136	48	2
Total Analysis Volume [veh/h]	47	54	11	542	190	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.06	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	16.08	9.54	7.64	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.43	0.20	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	10.74	5.09	0.60	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.58		0.15		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.59					
Intersection LOS	C					

Intersection Level Of Service Report #8: Beethoven Dr & Driveway #2

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 15.6
Level Of Service: C
Volume to Capacity (v/c): 0.029

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	10	47	8	543	241	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	47	8	543	241	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	12	2	136	60	3
Total Analysis Volume [veh/h]	10	47	8	543	241	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.06	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	15.62	9.83	7.76	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.09	0.19	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	2.21	4.72	0.46	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	10.85		0.11		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.79					
Intersection LOS	C					

Intersection Level Of Service Report #9: Beethoven Dr & Driveway #3

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.2
Level Of Service: C
Volume to Capacity (v/c): 0.142

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	49	82	11	501	287	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	82	11	501	287	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	21	3	125	72	2
Total Analysis Volume [veh/h]	49	82	11	501	287	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.11	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	17.18	10.40	7.87	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.49	0.37	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	12.28	9.19	0.66	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.94		0.17		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.90					
Intersection LOS	C					

Intersection Level Of Service Report #10: Beethoven Dr & Driveway #4

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 17.9
Level Of Service: C
Volume to Capacity (v/c): 0.048

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	14	57	23	499	372	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	57	23	499	372	11
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	14	6	125	93	3
Total Analysis Volume [veh/h]	14	57	23	499	372	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.09	0.02	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.86	10.88	8.12	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.15	0.28	0.06	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	3.74	6.96	1.50	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.26		0.36		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.08					
Intersection LOS	C					

Intersection Level Of Service Report #11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 15.8
Level Of Service: C
Volume to Capacity (v/c): 0.035

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	12	100	22	509	431	11
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	100	22	509	431	11
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	25	6	127	108	3
Total Analysis Volume [veh/h]	12	100	22	509	431	11
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.13	0.02	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	15.82	10.27	8.30	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.11	0.44	0.93	0.47	0.00	0.00
95th-Percentile Queue Length [ft]	2.70	10.93	23.25	11.63	0.00	0.00
d_A, Approach Delay [s/veh]	10.87		0.34		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.29					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:	Signalized	Delay (sec / veh):	8.4
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.303

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	1	2	3	21	433	10	24	456	125	31	15	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	3	21	433	10	24	456	125	31	15	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	5	108	3	6	114	31	8	4	2
Total Analysis Volume [veh/h]	1	2	3	21	433	10	24	456	125	31	15	8
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	3	99	3	100	100	6	6
g / C, Green / Cycle	0.05	0.02	0.83	0.02	0.83	0.83	0.05	0.05
(v / s)_i Volume / Saturation Flow Rate	0.01	0.01	0.24	0.01	0.24	0.08	0.04	0.01
s, saturation flow rate [veh/h]	972	1774	1855	1774	1863	1583	1051	1583
c, Capacity [veh/h]	83	37	1536	41	1545	1314	102	78
d1, Uniform Delay [s]	54.45	58.18	2.34	58.05	2.30	1.89	56.53	54.51
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.37	12.55	0.47	12.68	0.49	0.14	3.10	0.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.56	0.29	0.59	0.30	0.10	0.45	0.10
d, Delay for Lane Group [s/veh]	54.82	70.73	2.81	70.73	2.79	2.03	59.62	55.08
Lane Group LOS	D	E	A	E	A	A	E	E
Critical Lane Group	no	yes	no	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	0.18	0.76	1.87	0.85	1.49	0.34	1.44	0.24
50th-Percentile Queue Length [ft]	4.58	19.06	46.85	21.24	37.32	8.53	35.97	5.96
95th-Percentile Queue Length [veh]	0.33	1.37	3.37	1.53	2.69	0.61	2.59	0.43
95th-Percentile Queue Length [ft]	8.24	34.31	84.34	38.23	67.17	15.35	64.75	10.73

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.82	54.82	54.82	70.73	2.81	2.81	70.73	2.79	2.03	59.62	59.62	55.08
Movement LOS	D	D	D	E	A	A	E	A	A	E	E	E
d_A, Approach Delay [s/veh]	54.82			5.89			5.33			58.95		
Approach LOS	D			A			A			E		
d_I, Intersection Delay [s/veh]	8.39											
Intersection LOS	A											
Intersection V/C	0.303											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:	Signalized	Delay (sec / veh):	10.2
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.339

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	37	377	62	5	1	6	9	1	10	83	589	17
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	377	62	5	1	6	9	1	10	83	589	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	94	16	1	0	2	2	0	3	21	147	4
Total Analysis Volume [veh/h]	37	377	62	5	1	6	9	1	10	83	589	17
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	99	99	2	2	2	7	103	103
g / C, Green / Cycle	0.03	0.83	0.83	0.01	0.01	0.01	0.06	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.08	0.15	0.01	0.01	0.05	0.17	0.01
s, saturation flow rate [veh/h]	1774	3547	1734	80	1403	1605	1774	3547	1583
c, Capacity [veh/h]	53	2928	1431	44	61	23	107	3035	1355
d1, Uniform Delay [s]	57.65	1.99	2.00	59.98	59.98	58.70	55.56	1.49	1.26
k, delay calibration	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.15	0.07	0.14	3.34	1.10	15.02	11.28	0.14	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

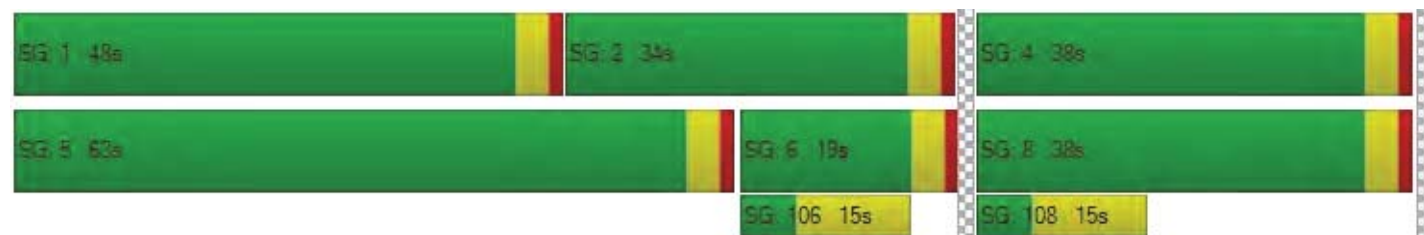
X, volume / capacity	0.70	0.10	0.10	0.27	0.15	0.48	0.78	0.19	0.01
d, Delay for Lane Group [s/veh]	72.80	2.06	2.14	63.32	61.08	73.72	66.84	1.64	1.28
Lane Group LOS	E	A	A	E	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.31	0.38	0.42	0.41	0.30	0.43	2.75	0.49	0.03
50th-Percentile Queue Length [ft]	32.77	9.60	10.45	10.28	7.41	10.74	68.80	12.31	0.68
95th-Percentile Queue Length [veh]	2.36	0.69	0.75	0.74	0.53	0.77	4.95	0.89	0.05
95th-Percentile Queue Length [ft]	58.98	17.28	18.81	18.51	13.33	19.33	123.85	22.16	1.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.80	2.08	2.14	63.32	63.32	63.32	61.08	73.72	73.72	66.84	1.64	1.28
Movement LOS	E	A	A	E	E	E	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	7.58			63.32			68.03			9.48		
Approach LOS	A			E			E			A		
d_I, Intersection Delay [s/veh]	10.25											
Intersection LOS	B											
Intersection V/C	0.339											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	44.8
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.429

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	12	135	91	69	193	161	177	55	779	478	287
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	12	135	91	69	193	161	177	55	779	478	287
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	34	23	17	48	40	44	14	195	120	72
Total Analysis Volume [veh/h]	49	12	135	91	69	193	161	177	55	779	478	287
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	57	57	8	61	61	13	8	8	31	26	26
g / C, Green / Cycle	0.04	0.48	0.48	0.06	0.51	0.51	0.11	0.07	0.07	0.25	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.03	0.00	0.09	0.05	0.02	0.12	0.09	0.05	0.02	0.23	0.13	0.18
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1691	755	116	1793	801	190	248	196	878	771	344
d1, Uniform Delay [s]	57.34	16.49	17.97	55.30	14.96	16.71	52.62	54.66	52.97	43.07	42.48	44.90
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.65	0.01	0.52	11.12	0.04	0.71	9.82	3.80	0.77	3.27	0.82	5.28
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.01	0.18	0.79	0.04	0.24	0.85	0.71	0.28	0.89	0.62	0.83
d, Delay for Lane Group [s/veh]	73.98	16.50	18.49	66.42	15.00	17.42	62.44	58.46	53.74	46.34	43.30	50.17
Lane Group LOS	E	B	B	E	B	B	E	E	D	D	D	D
Critical Lane Group	yes	no	no	no	no	yes	no	yes	no	yes	no	no
50th-Percentile Queue Length [veh]	1.69	0.08	2.02	3.05	0.48	3.09	5.16	2.69	0.79	11.11	6.31	8.40
50th-Percentile Queue Length [ft]	42.30	1.99	50.48	76.24	11.99	77.29	128.99	67.21	19.78	277.76	157.79	210.08
95th-Percentile Queue Length [veh]	3.05	0.14	3.63	5.49	0.86	5.56	8.89	4.84	1.42	16.58	10.43	13.16
95th-Percentile Queue Length [ft]	76.14	3.59	90.86	137.24	21.58	139.12	222.13	120.98	35.60	414.42	260.79	328.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.98	16.50	18.49	66.42	15.00	17.42	62.44	58.46	53.74	46.34	43.30	50.17
Movement LOS	E	B	B	E	B	B	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	32.24			29.58			59.43			46.11		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	44.77											
Intersection LOS	D											
Intersection V/C	0.429											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:	Signalized	Delay (sec / veh):	79.9
Analysis Method:	HCM2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.815

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration	↵↵↵↵↵↵			↵↵↵			↵↵↵↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	294	1026	314	588	31	325	700	40	43	261	288
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	294	1026	314	588	31	325	700	40	43	261	288
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	74	257	79	147	8	81	175	10	11	65	72
Total Analysis Volume [veh/h]	351	294	1026	314	588	31	325	700	40	43	261	288
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	14	23	23	34	34	34
g / C, Green / Cycle	0.28	0.28	0.28	0.11	0.19	0.19	0.12	0.19	0.19	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.10	0.08	0.37	0.09	0.17	0.02	0.09	0.14	0.03	0.02	0.07	0.18
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	969	997	788	389	666	297	401	971	303	499	997	445
d1, Uniform Delay [s]	34.55	33.83	43.17	52.00	47.49	40.41	51.77	45.56	40.29	31.80	33.49	37.93
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.05	0.75	145.01	4.00	4.07	0.15	3.94	1.03	0.20	0.34	0.64	7.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.29	1.30	0.81	0.88	0.10	0.81	0.72	0.13	0.09	0.26	0.65
d, Delay for Lane Group [s/veh]	35.60	34.59	188.18	56.00	51.57	40.56	55.71	46.58	40.48	32.14	34.13	45.01
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.95	3.23	26.56	4.71	8.67	0.76	4.87	6.43	0.98	1.01	3.15	8.53
50th-Percentile Queue Length [ft]	98.71	80.67	663.89	117.83	216.76	18.92	121.75	160.74	24.43	25.14	78.81	213.34
95th-Percentile Queue Length [veh]	7.11	5.81	40.36	8.27	13.50	1.36	8.49	10.59	1.76	1.81	5.67	13.32
95th-Percentile Queue Length [ft]	177.68	145.21	1008.95	206.84	337.49	34.05	212.22	264.70	43.98	45.25	141.86	333.11

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.60	34.59	188.18	56.00	51.57	40.56	55.71	46.58	40.48	32.14	34.13	45.01
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	129.11			52.69			49.14			39.28		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	79.91											
Intersection LOS	E											
Intersection V/C	0.815											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#16: Via Rancho Pkwy & Driveway #7/Sunset Dr

Control Type:	Signalized	Delay (sec / veh):	43.7
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.244

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	36	2	57	55	1007	30	24	416	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	36	2	57	55	1007	30	24	416	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	9	1	14	14	252	8	6	104	16
Total Analysis Volume [veh/h]	24	4	23	36	2	57	55	1007	30	24	416	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	69	69	78	78	4	27	27	3	25	25
g / C, Green / Cycle	0.58	0.58	0.65	0.65	0.04	0.22	0.22	0.02	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.19	0.19	0.01	0.08	0.04
s, saturation flow rate [veh/h]	1366	1459	1407	1583	3445	3547	1835	1774	5074	1583
c, Capacity [veh/h]	847	843	991	1034	123	792	410	42	1071	334
d1, Uniform Delay [s]	12.06	10.87	7.39	7.49	56.67	44.83	44.84	57.94	40.66	38.87
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.07	0.02	0.10	2.51	2.96	5.53	11.44	0.23	0.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.03	0.04	0.06	0.45	0.86	0.86	0.57	0.39	0.19
d, Delay for Lane Group [s/veh]	12.13	10.94	7.40	7.59	59.17	47.79	50.37	69.39	40.89	39.14
Lane Group LOS	B	B	A	A	E	D	D	E	D	D
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.34	0.31	0.37	0.58	0.84	9.77	10.41	0.84	3.46	1.52
50th-Percentile Queue Length [ft]	8.52	7.66	9.18	14.54	21.04	244.22	260.35	20.99	86.38	37.90
95th-Percentile Queue Length [veh]	0.61	0.55	0.66	1.05	1.52	14.89	15.71	1.51	6.22	2.73
95th-Percentile Queue Length [ft]	15.33	13.79	16.52	26.18	37.88	372.37	392.66	37.77	155.49	68.22

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.13	11.50	10.94	7.40	7.40	7.59	59.17	48.62	50.37	69.39	40.89	39.14
Movement LOS	B	B	B	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	11.54			7.52			49.20			42.03		
Approach LOS	B			A			D			D		
d_I, Intersection Delay [s/veh]	43.75											
Intersection LOS	D											
Intersection V/C	0.244											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:	Signalized	Delay (sec / veh):	24.3
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.531

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	375	520	109	900	105	37	10	13	465	67	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	375	520	109	900	105	37	10	13	465	67	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	94	130	27	225	26	9	3	3	116	17	16
Total Analysis Volume [veh/h]	11	375	520	109	900	105	37	10	13	465	67	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	74	74	6	78	78	3	3	21	21	21
g / C, Green / Cycle	0.01	0.62	0.62	0.05	0.65	0.65	0.03	0.03	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.01	0.07	0.33	0.03	0.25	0.07	0.02	0.02	0.15	0.15	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1712	1774	1795	1583
c, Capacity [veh/h]	24	3131	977	170	2316	1034	47	46	308	312	275
d1, Uniform Delay [s]	58.80	9.51	13.11	56.02	9.69	7.74	57.83	57.86	48.15	48.15	42.67
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.08	2.08	4.02	0.49	0.20	13.22	14.61	6.89	6.79	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.12	0.53	0.64	0.39	0.10	0.64	0.65	0.86	0.86	0.23
d, Delay for Lane Group [s/veh]	72.50	9.58	15.19	60.04	10.18	7.94	71.05	72.47	55.04	54.94	43.09
Lane Group LOS	E	A	B	E	B	A	E	E	E	D	D
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	1.26	7.68	1.72	5.39	1.03	1.08	1.08	8.26	8.34	1.65
50th-Percentile Queue Length [ft]	10.36	31.57	191.93	42.91	134.63	25.78	27.01	27.12	206.40	208.55	41.26
95th-Percentile Queue Length [veh]	0.75	2.27	12.22	3.09	9.19	1.86	1.94	1.95	12.97	13.08	2.97
95th-Percentile Queue Length [ft]	18.65	56.82	305.53	77.25	229.77	46.40	48.62	48.81	324.21	326.97	74.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	9.58	15.19	60.04	10.18	7.94	71.32	72.47	72.47	55.00	54.94	43.09
Movement LOS	E	A	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	13.56			14.85			71.76			53.73		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	24.34											
Intersection LOS	C											
Intersection V/C	0.531											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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Scenario 6: 2035 + Proj - PM

Report File: S:\...\HY+P.pdf

6/18/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Bear Valley Pkwy & Sunset Dr/Ranchito Dr	Signalized	HCM2010	SBL	0.590	25.7	C
2	Bear Valley Pkwy & Las Palmas Ave/Peet Ln	Signalized	HCM2010	SBL	0.327	8.4	A
3	Bear Valley Pkwy & Canyon Rd/Driveway	Signalized	HCM2010	NBL	0.299	7.6	A
4	Bear Valley Pkwy & Entrance Dr/Mary Ln	Signalized	HCM2010	SBL	0.420	21.0	C
5	Bear Valley Pkwy & San Pasqual Rd	Signalized	HCM2010	SBL	0.408	14.1	B
6	I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd	Signalized	HCM2010	EBL	0.599	18.0	B
7	Beethoven Dr & Driveway #1	Two-way stop	HCM2010	NEBL	0.142	16.9	C
8	Beethoven Dr & Driveway #2	Two-way stop	HCM2010	NEBL	0.054	16.5	C
9	Beethoven Dr & Driveway #3	Two-way stop	HCM2010	NEBL	0.159	18.1	C
10	Beethoven Dr & Driveway #4	Two-way stop	HCM2010	NEBL	0.061	18.8	C
11	Beethoven Dr & Driveway #5	Two-way stop	HCM2010	NEBL	0.046	16.5	C
12	Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr	Signalized	HCM2010	EBL	0.314	8.6	A
13	Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo	Signalized	HCM2010	NEBR	0.365	10.3	B
14	Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd	Signalized	HCM2010	NBL	0.436	44.9	D
15	Via Rancho Pkwy & Driveway #6/I-15 NB Ramps	Signalized	HCM2010	NBR	0.817	79.8	E
16	Via Rancho Pkwy & Driveway #7/Sunset Dr	Signalized	HCM2010	WBL	0.247	43.7	D
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBR	0.547	24.6	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

#1: Bear Valley Pkwy & Sunset Dr/Ranchito Dr

Control Type:	Signalized	Delay (sec / veh):	25.7
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Approach	Northbound			Southbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	0	0	0	1	0	0	1
Pocket Length [ft]	485.00	100.00	100.00	125.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	80.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			no		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Ranchito Drive			Sunset Drive		
Base Volume Input [veh/h]	208	753	21	13	477	25	1	8	2	25	42	275
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	208	753	21	13	477	25	1	8	2	25	42	275
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	52	188	5	3	119	6	0	2	1	6	11	69
Total Analysis Volume [veh/h]	208	753	21	13	477	25	1	8	2	25	42	275
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	C	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	83	83	2	69	69	23	23	23	23
g / C, Green / Cycle	0.14	0.69	0.69	0.02	0.57	0.57	0.19	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.12	0.40	0.01	0.01	0.14	0.14	0.00	0.00	0.04	0.17
s, saturation flow rate [veh/h]	1774	1863	1583	1774	1863	1830	1827	1583	1685	1583
c, Capacity [veh/h]	239	1287	1094	28	1065	1046	386	306	367	306
d1, Uniform Delay [s]	50.83	9.60	5.80	58.55	12.73	12.74	39.21	39.07	40.49	47.23
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.27	1.95	0.03	12.00	0.53	0.54	0.02	0.01	0.24	9.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.87	0.58	0.02	0.47	0.24	0.24	0.02	0.01	0.18	0.90
d, Delay for Lane Group [s/veh]	60.10	11.55	5.83	70.55	13.25	13.27	39.24	39.08	40.72	56.58
Lane Group LOS	E	B	A	E	B	B	D	D	D	E
Critical Lane Group	no	yes	no	yes	no	no	no	no	no	yes
50th-Percentile Queue Length [veh]	6.57	9.19	0.15	0.47	3.29	3.25	0.22	0.05	1.71	8.85
50th-Percentile Queue Length [ft]	164.20	229.68	3.82	11.87	82.21	81.21	5.54	1.23	42.68	221.37
95th-Percentile Queue Length [veh]	10.77	14.16	0.27	0.85	5.92	5.85	0.40	0.09	3.07	13.74
95th-Percentile Queue Length [ft]	269.28	353.96	6.87	21.37	147.97	146.18	9.97	2.21	76.83	343.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.10	11.55	5.83	70.55	13.26	13.27	39.24	39.24	39.08	40.72	40.72	56.58
Movement LOS	E	B	A	E	B	B	D	D	D	D	D	E
d_A, Approach Delay [s/veh]	21.71			14.71			39.21			53.47		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	25.74											
Intersection LOS	C											
Intersection V/C	0.590											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
#2: Bear Valley Pkwy & Las Palmas Ave/Peet Ln

Control Type:	Signalized	Delay (sec / veh):	8.4
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.327

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	115.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00
Speed [mph]	45.00			45.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			yes			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Bear Valley Parkway			Las Palmas Avenue		
Base Volume Input [veh/h]	16	982	29	1	521	62	71	9	16	15	3	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	982	29	1	521	62	71	9	16	15	3	3
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	246	7	0	130	16	18	2	4	4	1	1
Total Analysis Volume [veh/h]	16	982	29	1	521	62	71	9	16	15	3	3
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	105	105	0	103	103	3	3	3	3
g / C, Green / Cycle	0.02	0.87	0.87	0.00	0.86	0.86	0.03	0.03	0.03	0.03
(v / s)_i Volume / Saturation Flow Rate	0.01	0.27	0.27	0.00	0.16	0.16	0.05	0.01	0.01	0.00
s, saturation flow rate [veh/h]	1774	1863	1844	1774	1863	1794	1404	1674	1380	1712
c, Capacity [veh/h]	31	1622	1606	3	1593	1534	72	46	61	47
d1, Uniform Delay [s]	58.47	1.37	1.37	59.86	1.50	1.50	59.90	57.60	60.00	56.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.07	0.50	0.51	78.06	0.26	0.27	44.27	9.53	2.10	1.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

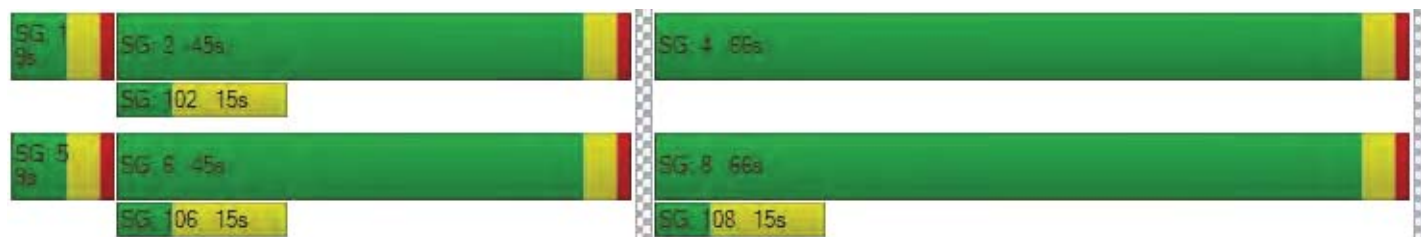
X, volume / capacity	0.52	0.31	0.31	0.40	0.19	0.19	0.98	0.54	0.25	0.13
d, Delay for Lane Group [s/veh]	71.54	1.88	1.88	137.92	1.75	1.77	104.17	67.13	62.10	58.13
Lane Group LOS	E	A	A	F	A	A	F	E	E	E
Critical Lane Group	no	no	yes	yes	no	no	yes	no	no	no
50th-Percentile Queue Length [veh]	0.58	0.72	0.72	0.08	0.55	0.54	3.15	0.87	0.50	0.20
50th-Percentile Queue Length [ft]	14.56	18.05	17.92	2.12	13.73	13.43	78.70	21.81	12.52	4.88
95th-Percentile Queue Length [veh]	1.05	1.30	1.29	0.15	0.99	0.97	5.67	1.57	0.90	0.35
95th-Percentile Queue Length [ft]	26.22	32.49	32.26	3.81	24.72	24.17	141.66	39.25	22.53	8.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.54	1.88	1.88	137.92	1.76	1.77	104.17	67.13	67.13	62.10	58.13	58.13
Movement LOS	E	A	A	F	A	A	F	E	E	E	E	E
d_A, Approach Delay [s/veh]	2.97			1.99			94.52			60.96		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	8.43											
Intersection LOS	A											
Intersection V/C	0.327											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
#3: Bear Valley Pkwy & Canyon Rd/Driveway

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.299

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	250.00	100.00	100.00	100.00	100.00	100.00	80.00	100.00	100.00	60.00	100.00	100.00
Speed [mph]	45.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Driveway			Canyon Road		
Base Volume Input [veh/h]	1	947	21	17	504	4	2	0	6	40	0	35
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	947	21	17	504	4	2	0	6	40	0	35
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	237	5	4	126	1	1	0	2	10	0	9
Total Analysis Volume [veh/h]	1	947	21	17	504	4	2	0	6	40	0	35
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	97	97	2	99	99	0	1	4	4
g / C, Green / Cycle	0.00	0.81	0.81	0.02	0.83	0.83	0.00	0.01	0.03	0.04
(v / s)_i Volume / Saturation Flow Rate	0.00	0.26	0.26	0.01	0.14	0.14	0.00	0.00	0.02	0.02
s, saturation flow rate [veh/h]	1774	1863	1849	1774	1863	1858	1774	1583	1774	1583
c, Capacity [veh/h]	3	1507	1496	33	1538	1534	6	13	55	57
d1, Uniform Delay [s]	59.83	2.96	2.96	58.37	2.11	2.11	59.70	59.28	57.64	57.04
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	45.15	0.57	0.57	12.06	0.23	0.23	34.03	24.81	16.34	10.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.30	0.32	0.32	0.52	0.17	0.17	0.36	0.47	0.72	0.61
d, Delay for Lane Group [s/veh]	104.98	3.53	3.53	70.44	2.34	2.34	93.73	84.09	73.97	67.30
Lane Group LOS	F	A	A	E	A	A	F	F	E	E
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no
50th-Percentile Queue Length [veh]	0.07	2.06	2.05	0.61	0.75	0.75	0.12	0.27	1.46	1.22
50th-Percentile Queue Length [ft]	1.77	51.59	51.24	15.26	18.84	18.81	2.88	6.84	36.60	30.45
95th-Percentile Queue Length [veh]	0.13	3.71	3.69	1.10	1.36	1.35	0.21	0.49	2.64	2.19
95th-Percentile Queue Length [ft]	3.19	92.87	92.24	27.47	33.91	33.86	5.19	12.31	65.88	54.80

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	104.98	3.53	3.53	70.44	2.34	2.34	93.73	84.09	84.09	73.97	67.30	67.30
Movement LOS	F	A	A	E	A	A	F	F	F	E	E	E
d_A, Approach Delay [s/veh]	3.63			4.55			86.50			70.86		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	7.56											
Intersection LOS	A											
Intersection V/C	0.299											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#4: Bear Valley Pkwy & Entrance Dr/Mary Ln

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM2010	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

Intersection Setup

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	140.00	100.00	100.00	150.00	100.00	100.00	50.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	30.00			45.00			15.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			yes		

Volumes

Name	Bear Valley Parkway			Bear Valley Parkway			Entrance Drive			Mary Lane		
Base Volume Input [veh/h]	63	778	152	40	444	60	166	22	199	17	1	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	63	778	152	40	444	60	166	22	199	17	1	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	195	38	10	111	15	42	6	50	4	0	6
Total Analysis Volume [veh/h]	63	778	152	40	444	60	166	22	199	17	1	23
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	L	C	C	L	C	L	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	83	83	4	82	82	21	21	21	21
g / C, Green / Cycle	0.05	0.70	0.70	0.03	0.68	0.68	0.17	0.17	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.04	0.26	0.26	0.02	0.14	0.14	0.12	0.14	0.01	0.02
s, saturation flow rate [veh/h]	1774	1863	1758	1774	1863	1786	1381	1607	1155	1593
c, Capacity [veh/h]	82	1295	1222	55	1267	1215	257	279	87	277
d1, Uniform Delay [s]	56.55	7.49	7.49	57.61	7.12	7.13	50.16	47.49	58.07	41.59
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.64	0.81	0.86	16.44	0.36	0.38	2.73	5.03	1.08	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

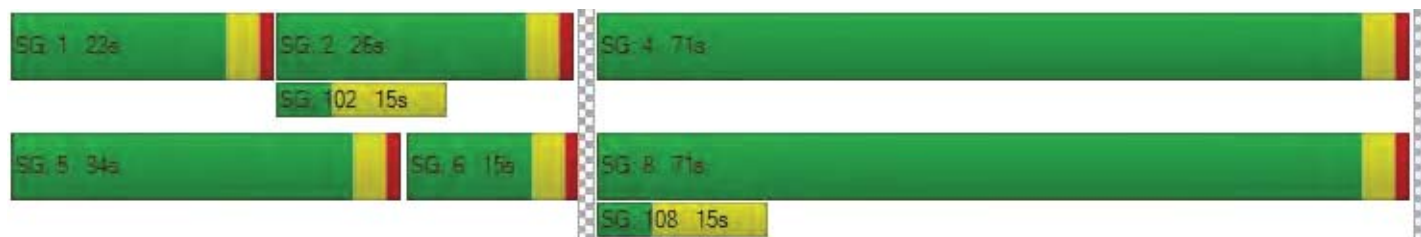
X, volume / capacity	0.77	0.37	0.37	0.73	0.20	0.20	0.65	0.79	0.20	0.09
d, Delay for Lane Group [s/veh]	70.20	8.31	8.35	74.05	7.48	7.51	52.89	52.53	59.16	41.72
Lane Group LOS	E	A	A	E	A	A	D	D	E	D
Critical Lane Group	no	no	yes	yes	no	no	no	yes	no	no
50th-Percentile Queue Length [veh]	2.20	4.97	4.71	1.43	2.24	2.17	5.17	6.88	0.54	0.62
50th-Percentile Queue Length [ft]	55.00	124.24	117.69	35.69	55.90	54.24	129.28	172.03	13.55	15.41
95th-Percentile Queue Length [veh]	3.96	8.63	8.27	2.57	4.02	3.91	8.90	11.18	0.98	1.11
95th-Percentile Queue Length [ft]	98.99	215.64	206.64	64.24	100.62	97.64	222.52	279.58	24.39	27.75

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	70.20	8.33	8.35	74.05	7.50	7.51	52.89	52.53	52.53	59.16	41.72	41.72
Movement LOS	E	A	A	E	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	12.26			12.39			52.68			48.95		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	21.02											
Intersection LOS	C											
Intersection V/C	0.420											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report #5: Bear Valley Pkwy & San Pasqual Rd

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.408

Intersection Setup

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	1	0	0	0
Pocket Length [ft]	100.00	170.00	140.00	100.00	100.00	100.00
Speed [mph]	30.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		yes	

Volumes

Name	Bear Valley Parkway		Bear Valley Parkway		San Pasqual Road	
Base Volume Input [veh/h]	964	418	73	607	315	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	964	418	73	607	315	19
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	241	105	18	152	79	5
Total Analysis Volume [veh/h]	964	418	73	607	315	19
Presence of On-Street Parking	no	no	no	no	no	no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Protected	Overlap
Signal Group	2	0	1	6	7	4
Auxiliary Signal Groups						4
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	5	0	5	5	5	5
Maximum Green [s]	30	0	30	30	30	30
Amber [s]	3.0	0.0	3.0	3.0	3.0	3.0
All red [s]	1.0	0.0	1.0	1.0	1.0	1.0
Split [s]	19	0	47	66	54	54
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	3.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	10	0	0	10	10	0
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	2.0
Minimum Recall	no		no	no	no	no
Maximum Recall	no		no	no	no	no
Pedestrian Recall	no		no	no	no	no
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Calculations

Lane Group	C	R	L	C	L	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	88	88	6	98	14	14
g / C, Green / Cycle	0.73	0.73	0.05	0.82	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.27	0.26	0.04	0.17	0.09	0.01
s, saturation flow rate [veh/h]	3547	1583	1774	3547	3445	1583
c, Capacity [veh/h]	2599	1160	95	2908	390	179
d1, Uniform Delay [s]	5.87	5.81	56.00	2.34	51.89	47.72
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.41	0.87	11.99	0.16	3.98	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.36	0.77	0.21	0.81	0.11
d, Delay for Lane Group [s/veh]	6.28	6.68	67.99	2.51	55.87	47.97
Lane Group LOS	A	A	E	A	E	D
Critical Lane Group	yes	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	4.12	3.69	2.45	0.96	4.76	0.52
50th-Percentile Queue Length [ft]	103.10	92.32	61.18	23.92	118.98	12.92
95th-Percentile Queue Length [veh]	7.42	6.65	4.41	1.72	8.34	0.93
95th-Percentile Queue Length [ft]	185.58	166.18	110.13	43.06	208.42	23.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	6.28	6.68	67.99	2.51	55.87	47.97
Movement LOS	A	A	E	A	E	D
d_A, Approach Delay [s/veh]	6.40		9.54		55.42	
Approach LOS	A		A		E	
d_I, Intersection Delay [s/veh]	14.13					
Intersection LOS	B					
Intersection V/C	0.408					

Sequence

Ring 1	1	2	-	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#6: I-15 NB/SB HOV Ramps & Beethoven Dr/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM2010	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.599

Intersection Setup

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Approach	Northbound			Southbound			Eastbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	1	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	350.00	100.00	100.00	350.00	80.00	100.00	100.00	115.00	100.00	115.00
Speed [mph]	65.00			65.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 HOV Ramps			I-15 HOV Ramps			Del Lago Boulevard			Beethoven Drive		
Base Volume Input [veh/h]	115	0	63	148	0	11	18	148	384	425	115	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	115	0	63	148	0	11	18	148	384	425	115	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	0	16	37	0	3	5	37	96	106	29	5
Total Analysis Volume [veh/h]	115	0	63	148	0	11	18	148	384	425	115	18
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	R	L	R	L	C	R	L	C	C
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	8	8	8	1	14	14	14	27	27
g / C, Green / Cycle	0.17	0.17	0.17	0.17	0.02	0.30	0.30	0.29	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.10	0.01	0.01	0.08	0.24	0.24	0.04	0.04
s, saturation flow rate [veh/h]	1412	1583	1412	1583	1774	1863	1583	1774	1863	1776
c, Capacity [veh/h]	329	267	329	267	40	551	469	509	1044	996
d1, Uniform Delay [s]	20.06	17.40	20.58	16.83	23.35	13.02	15.83	16.17	4.85	4.85
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.64	0.45	0.97	0.06	7.79	0.26	3.60	3.67	0.03	0.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

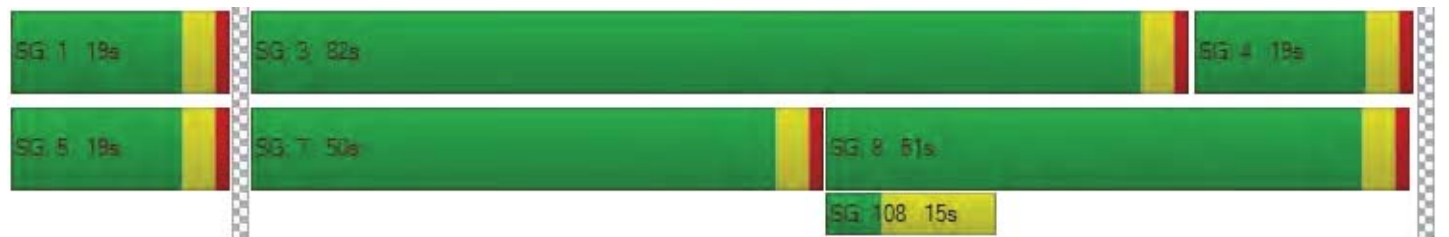
X, volume / capacity	0.35	0.24	0.45	0.04	0.45	0.27	0.82	0.83	0.06	0.07
d, Delay for Lane Group [s/veh]	20.69	17.85	21.55	16.89	31.15	13.28	19.43	19.84	4.87	4.88
Lane Group LOS	C	B	C	B	C	B	B	B	A	A
Critical Lane Group	no	no	yes	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.96	0.47	1.28	0.08	0.27	1.09	3.80	4.25	0.22	0.21
50th-Percentile Queue Length [ft]	24.08	11.77	32.08	1.96	6.81	27.37	94.90	106.37	5.49	5.29
95th-Percentile Queue Length [veh]	1.73	0.85	2.31	0.14	0.49	1.97	6.83	7.64	0.40	0.38
95th-Percentile Queue Length [ft]	43.34	21.19	57.75	3.53	12.25	49.26	170.82	190.94	9.89	9.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.69	0.00	17.85	21.55	0.00	16.89	31.15	13.28	19.43	19.84	4.87	4.88
Movement LOS	C		B	C		B	C	B	B	B	A	A
d_A, Approach Delay [s/veh]	19.69			21.23			18.16			16.27		
Approach LOS	B			C			B			B		
d_I, Intersection Delay [s/veh]	17.96											
Intersection LOS	B											
Intersection V/C	0.599											

Sequence

Ring 1	1	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
#7: Beethoven Dr & Driveway #1

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 16.9
Level Of Service: C
Volume to Capacity (v/c): 0.142

Intersection Setup

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #1		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	50	57	15	558	202	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	57	15	558	202	10
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	14	4	140	51	3
Total Analysis Volume [veh/h]	50	57	15	558	202	10
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.07	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	16.89	9.64	7.68	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.49	0.22	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	12.23	5.49	0.84	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.03		0.20		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.69					
Intersection LOS	C					

**Intersection Level Of Service Report
#8: Beethoven Dr & Driveway #2**

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 16.5
Level Of Service: C
Volume to Capacity (v/c): 0.054

Intersection Setup

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #2		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	18	50	12	555	256	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	50	12	555	256	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	13	3	139	64	3
Total Analysis Volume [veh/h]	18	50	12	555	256	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.06	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	16.47	9.95	7.80	0.00	0.00	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh]	0.17	0.21	0.03	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	4.28	5.15	0.70	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.68		0.17		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.98					
Intersection LOS	C					

Intersection Level Of Service Report
#9: Beethoven Dr & Driveway #3

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 18.1
Level Of Service: C
Volume to Capacity (v/c): 0.159

Intersection Setup

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		no	

Volumes

Name	Driveway #3		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	52	85	15	515	300	12
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	85	15	515	300	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	4	129	75	3
Total Analysis Volume [veh/h]	52	85	15	515	300	12
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.12	0.01	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	18.11	10.55	7.92	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.56	0.39	0.04	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	13.98	9.78	0.91	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	13.42		0.22		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.00					
Intersection LOS	C					

Intersection Level Of Service Report
#10: Beethoven Dr & Driveway #4

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 18.8
Level Of Service: C
Volume to Capacity (v/c): 0.061

Intersection Setup

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	0	0	0
Pocket Length [ft]	75.00	100.00	125.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		no		yes	

Volumes

Name	Driveway #4		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	17	60	27	514	384	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	60	27	514	384	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	15	7	129	96	4
Total Analysis Volume [veh/h]	17	60	27	514	384	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.09	0.02	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	18.78	11.03	8.18	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.19	0.30	0.07	0.00	0.00	0.00
95th-Percentile Queue Length [ft]	4.85	7.51	1.79	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.74		0.41		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.18					
Intersection LOS	C					

Intersection Level Of Service Report
#11: Beethoven Dr & Driveway #5

Control Type: Two-way stop
Analysis Method: HCM2010
Analysis Period: 15 minutes

Delay (sec / veh): 16.5
Level Of Service: C
Volume to Capacity (v/c): 0.046

Intersection Setup

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Approach	Northeastbound		Northwestbound		Southeastbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0
Pocket Length [ft]	75.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	15.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	no		yes		no	

Volumes

Name	Driveway #5		Beethoven Drive		Beethoven Drive	
Base Volume Input [veh/h]	15	103	26	525	442	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	103	26	525	442	15
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	26	7	131	111	4
Total Analysis Volume [veh/h]	15	103	26	525	442	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	no		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.13	0.02	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	16.49	10.36	8.35	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh]	0.14	0.46	0.99	0.50	0.00	0.00
95th-Percentile Queue Length [ft]	3.58	11.45	24.82	12.41	0.00	0.00
d_A, Approach Delay [s/veh]	11.14		0.39		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	1.36					
Intersection LOS	C					

Intersection Level Of Service Report**#12: Via Rancho Pkwy & Felicita Rd/Quiet Hills Dr**

Control Type:	Signalized	Delay (sec / veh):	8.6
Analysis Method:	HCM2010	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.314

Intersection Setup

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Approach	Northbound			Eastbound			Westbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	60.00	100.00	100.00	40.00	100.00	80.00	100.00	100.00	75.00
Speed [mph]	25.00			30.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			no			yes		

Volumes

Name	Quiet Hills Drive			Via Rancho Parkway			Via Rancho Parkway			Felicita Road		
Base Volume Input [veh/h]	1	2	3	21	444	10	24	463	128	35	15	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	3	21	444	10	24	463	128	35	15	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	1	1	5	111	3	6	116	32	9	4	2
Total Analysis Volume [veh/h]	1	2	3	21	444	10	24	463	128	35	15	8
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	L	C	L	C	R	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	3	98	3	99	99	7	7
g / C, Green / Cycle	0.06	0.02	0.82	0.02	0.82	0.82	0.06	0.06
(v / s)_i Volume / Saturation Flow Rate	0.01	0.01	0.24	0.01	0.25	0.08	0.05	0.01
s, saturation flow rate [veh/h]	1043	1774	1856	1774	1863	1583	984	1583
c, Capacity [veh/h]	94	37	1523	41	1533	1303	106	89
d1, Uniform Delay [s]	53.67	58.18	2.55	58.05	2.51	2.05	56.02	53.72
k, delay calibration	0.11	0.11	0.50	0.11	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	12.55	0.50	12.68	0.51	0.15	3.21	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.56	0.30	0.59	0.30	0.10	0.47	0.09
d, Delay for Lane Group [s/veh]	53.95	70.73	3.05	70.73	3.01	2.20	59.24	54.15
Lane Group LOS	D	E	A	E	A	A	E	D
Critical Lane Group	no	yes	no	no	yes	no	yes	no
50th-Percentile Queue Length [veh]	0.18	0.76	2.08	0.85	1.67	0.38	1.56	0.23
50th-Percentile Queue Length [ft]	4.52	19.06	51.98	21.24	41.76	9.58	39.04	5.87
95th-Percentile Queue Length [veh]	0.33	1.37	3.74	1.53	3.01	0.69	2.81	0.42
95th-Percentile Queue Length [ft]	8.13	34.31	93.57	38.23	75.16	17.24	70.27	10.57

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.95	53.95	53.95	70.73	3.05	3.05	70.73	3.01	2.20	59.24	59.24	54.15
Movement LOS	D	D	D	E	A	A	E	A	A	E	E	D
d_A, Approach Delay [s/veh]	53.95			6.04			5.49			58.54		
Approach LOS	D			A			A			E		
d_I, Intersection Delay [s/veh]	8.63											
Intersection LOS	A											
Intersection V/C	0.314											

Sequence

Ring 1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#13: Via Rancho Pkwy & Quiet Hills Dr/Camino del Postigo**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

10.3
B
0.365

Intersection Setup

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Approach	Southbound			Westbound			Northeastbound			Northwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Pocket Length [ft]	350.00	100.00	100.00	100.00	100.00	100.00	60.00	100.00	100.00	360.00	100.00	100.00
Speed [mph]	45.00			25.00			25.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			yes		

Volumes

Name	Via Rancho Parkway			Camino del Postigo			Quiet Hills Drive			Via Rancho Parkway		
Base Volume Input [veh/h]	37	392	62	6	1	6	9	1	12	84	599	18
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	392	62	6	1	6	9	1	12	84	599	18
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	98	16	2	0	2	2	0	3	21	150	5
Total Analysis Volume [veh/h]	37	392	62	6	1	6	9	1	12	84	599	18
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	C	C	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	99	99	2	2	2	7	103	103
g / C, Green / Cycle	0.03	0.82	0.82	0.01	0.01	0.01	0.06	0.86	0.86
(v / s)_i Volume / Saturation Flow Rate	0.02	0.09	0.09	0.17	0.01	0.01	0.05	0.17	0.01
s, saturation flow rate [veh/h]	1774	3547	1738	76	1403	1602	1774	3547	1583
c, Capacity [veh/h]	53	2922	1432	45	61	24	108	3032	1354
d1, Uniform Delay [s]	57.65	2.03	2.04	59.98	59.98	58.66	55.52	1.52	1.28
k, delay calibration	0.11	0.50	0.50	0.17	0.11	0.11	0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	15.15	0.07	0.15	5.30	1.10	17.29	11.21	0.15	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

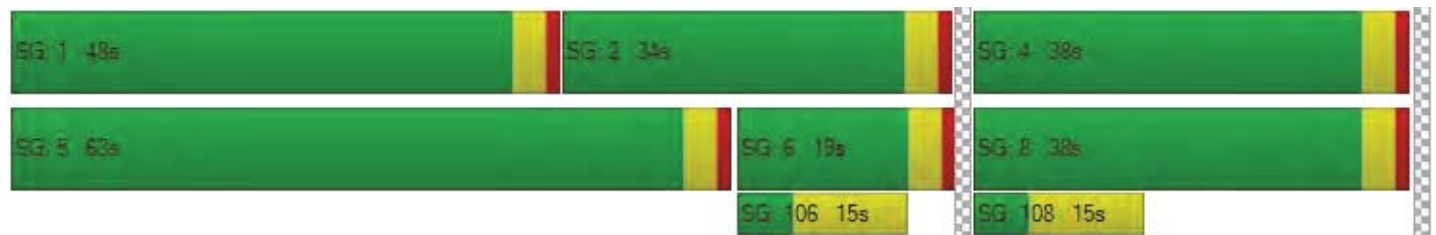
X, volume / capacity	0.70	0.10	0.11	0.29	0.15	0.54	0.78	0.20	0.01
d, Delay for Lane Group [s/veh]	72.80	2.10	2.19	65.28	61.07	75.95	66.73	1.66	1.29
Lane Group LOS	E	A	A	E	E	E	E	A	A
Critical Lane Group	yes	no	no	yes	no	no	no	yes	no
50th-Percentile Queue Length [veh]	1.31	0.41	0.44	0.47	0.30	0.51	2.78	0.51	0.03
50th-Percentile Queue Length [ft]	32.77	10.18	11.06	11.71	7.41	12.79	69.56	12.84	0.74
95th-Percentile Queue Length [veh]	2.36	0.73	0.80	0.84	0.53	0.92	5.01	0.92	0.05
95th-Percentile Queue Length [ft]	58.98	18.32	19.92	21.07	13.33	23.02	125.21	23.11	1.33

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.80	2.12	2.19	65.28	65.28	65.28	61.07	75.95	75.95	66.73	1.66	1.29
Movement LOS	E	A	A	E	E	E	E	E	E	E	A	A
d_A, Approach Delay [s/veh]	7.46			65.28			69.86			9.45		
Approach LOS	A			E			E			A		
d_I, Intersection Delay [s/veh]	10.33											
Intersection LOS	B											
Intersection V/C	0.365											

Sequence

Ring 1	1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#14: Via Rancho Pkwy & I-15 SB Ramps/Del Lago Blvd**

Control Type:	Signalized	Delay (sec / veh):	44.9
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.436

Intersection Setup

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	400.00	100.00	400.00	110.00	100.00	150.00	360.00	100.00	190.00	600.00	100.00	90.00
Speed [mph]	65.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			no			no			no		

Volumes

Name	I-15 Southbound Ramps			Del Lago Boulevard			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	49	12	154	91	78	201	172	183	55	779	482	287
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	12	154	91	78	201	172	183	55	779	482	287
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	3	39	23	20	50	43	46	14	195	121	72
Total Analysis Volume [veh/h]	49	12	154	91	78	201	172	183	55	779	482	287
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	57	57	8	61	61	14	9	9	31	26	26
g / C, Green / Cycle	0.04	0.48	0.48	0.06	0.50	0.50	0.11	0.07	0.07	0.25	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.03	0.00	0.10	0.05	0.02	0.13	0.10	0.05	0.02	0.23	0.14	0.18
s, saturation flow rate [veh/h]	1774	3547	1583	1774	3547	1583	1774	3547	2803	3445	3547	1583
c, Capacity [veh/h]	64	1685	752	116	1787	798	201	254	201	878	756	337
d1, Uniform Delay [s]	57.34	16.60	18.33	55.30	15.11	16.93	52.24	54.55	52.77	43.07	43.02	45.41
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.13	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	16.65	0.01	0.62	11.12	0.05	0.76	11.63	3.81	0.73	3.27	0.90	6.03
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.01	0.20	0.79	0.04	0.25	0.85	0.72	0.27	0.89	0.64	0.85
d, Delay for Lane Group [s/veh]	73.98	16.61	18.95	66.42	15.16	17.68	63.87	58.36	53.50	46.34	43.92	51.44
Lane Group LOS	E	B	B	E	B	B	E	E	D	D	D	D
Critical Lane Group	yes	no	no	no	no	yes	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	1.69	0.08	2.35	3.05	0.55	3.25	5.60	2.78	0.79	11.11	6.42	8.52
50th-Percentile Queue Length [ft]	42.30	2.00	58.67	76.24	13.65	81.35	140.07	69.45	19.72	277.76	160.51	212.89
95th-Percentile Queue Length [veh]	3.05	0.14	4.22	5.49	0.98	5.86	9.48	5.00	1.42	16.58	10.58	13.30
95th-Percentile Queue Length [ft]	76.14	3.60	105.61	137.24	24.57	146.43	237.11	125.01	35.50	414.42	264.40	332.53

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.98	16.61	18.95	66.42	15.16	17.68	63.87	58.36	53.50	46.34	43.92	51.44
Movement LOS	E	B	B	E	B	B	E	E	D	D	D	D
d_A, Approach Delay [s/veh]	31.36			29.14			60.02			46.53		
Approach LOS	C			C			E			D		
d_I, Intersection Delay [s/veh]	44.89											
Intersection LOS	D											
Intersection V/C	0.436											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report**#15: Via Rancho Pkwy & Driveway #6/I-15 NB Ramps**

Control Type:	Signalized	Delay (sec / veh):	79.8
Analysis Method:	HCM2010	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.817

Intersection Setup

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Approach	Northbound			Eastbound			Westbound			Southwestbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	2	0	2	2	0	1	2	0	1	0	0	0
Pocket Length [ft]	275.00	100.00	275.00	175.00	100.00	210.00	340.00	100.00	190.00	100.00	100.00	100.00
Speed [mph]	65.00			45.00			45.00			15.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	I-15 Northbound Ramps			Via Rancho Parkway			Via Rancho Parkway			Driveway #6		
Base Volume Input [veh/h]	351	308	1026	334	592	31	325	703	44	46	273	289
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	351	308	1026	334	592	31	325	703	44	46	273	289
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	77	257	84	148	8	81	176	11	12	68	72
Total Analysis Volume [veh/h]	351	308	1026	334	592	31	325	703	44	46	273	289
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	34	34	34	14	23	23	14	22	22	34	34	34
g / C, Green / Cycle	0.28	0.28	0.28	0.12	0.19	0.19	0.12	0.19	0.19	0.28	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.10	0.09	0.37	0.10	0.17	0.02	0.09	0.14	0.03	0.03	0.08	0.18
s, saturation flow rate [veh/h]	3445	3547	2803	3445	3547	1583	3445	5074	1583	1774	3547	1583
c, Capacity [veh/h]	967	995	787	410	670	299	401	946	295	498	995	444
d1, Uniform Delay [s]	34.60	34.03	43.20	51.63	47.43	40.30	51.77	46.14	40.88	31.90	33.67	38.02
k, delay calibration	0.50	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.06	0.81	146.13	4.00	4.08	0.15	3.94	1.17	0.23	0.37	0.68	7.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.36	0.31	1.30	0.82	0.88	0.10	0.81	0.74	0.15	0.09	0.27	0.65
d, Delay for Lane Group [s/veh]	35.66	34.84	189.34	55.63	51.50	40.45	55.71	47.31	41.11	32.27	34.35	45.22
Lane Group LOS	D	C	F	E	D	D	E	D	D	C	C	D
Critical Lane Group	no	no	yes	no	yes	no	yes	no	no	no	no	yes
50th-Percentile Queue Length [veh]	3.95	3.40	26.63	5.00	8.73	0.76	4.87	6.52	1.09	1.08	3.31	8.59
50th-Percentile Queue Length [ft]	98.81	85.01	665.70	125.12	218.19	18.88	121.75	162.91	27.15	26.97	82.84	214.63
95th-Percentile Queue Length [veh]	7.11	6.12	40.49	8.67	13.57	1.36	8.49	10.70	1.95	1.94	5.96	13.39
95th-Percentile Queue Length [ft]	177.86	153.02	1012.15	216.85	339.31	33.99	212.22	267.57	48.87	48.55	149.11	334.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	35.66	34.84	189.34	55.63	51.50	40.45	55.71	47.31	41.11	32.27	34.35	45.22
Movement LOS	D	C	F	E	D	D	E	D	D	C	C	D
d_A, Approach Delay [s/veh]	129.08			52.59			49.61			39.36		
Approach LOS	F			D			D			D		
d_I, Intersection Delay [s/veh]	79.81											
Intersection LOS	E											
Intersection V/C	0.817											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#16: Via Rancho Pkwy & Driveway #7/Sunset Dr

Control Type:	Signalized	Delay (sec / veh):	43.7
Analysis Method:	HCM2010	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.247

Intersection Setup

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	2	0	0	1	0	1
Pocket Length [ft]	60.00	100.00	100.00	100.00	100.00	80.00	235.00	100.00	100.00	160.00	100.00	160.00
Speed [mph]	25.00			15.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	yes			yes			yes			yes		

Volumes

Name	Sunset Drive			Driveway #7			Via Rancho Parkway			Via Rancho Parkway		
Base Volume Input [veh/h]	24	4	23	39	2	60	59	1010	30	24	420	67
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	4	23	39	2	60	59	1010	30	24	420	67
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	6	10	1	15	15	253	8	6	105	17
Total Analysis Volume [veh/h]	24	4	23	39	2	60	59	1010	30	24	420	67
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	C	C	C	R	L	C	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	69	69	78	78	4	27	27	3	25	25
g / C, Green / Cycle	0.58	0.58	0.65	0.65	0.04	0.22	0.22	0.02	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.02	0.02	0.03	0.04	0.02	0.19	0.19	0.01	0.08	0.04
s, saturation flow rate [veh/h]	1364	1459	1405	1583	3445	3547	1835	1774	5074	1583
c, Capacity [veh/h]	845	843	989	1033	126	794	411	42	1070	334
d1, Uniform Delay [s]	12.12	10.90	7.43	7.53	56.64	44.79	44.80	57.94	40.72	39.00
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	0.07	0.02	0.11	2.67	2.95	5.52	11.44	0.23	0.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.03	0.03	0.04	0.06	0.47	0.86	0.86	0.57	0.39	0.20
d, Delay for Lane Group [s/veh]	12.19	10.97	7.44	7.64	59.30	47.75	50.32	69.39	40.95	39.29
Lane Group LOS	B	B	A	A	E	D	D	E	D	D
Critical Lane Group	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.34	0.31	0.40	0.61	0.90	9.79	10.44	0.84	3.49	1.62
50th-Percentile Queue Length [ft]	8.54	7.68	9.94	15.37	22.60	244.87	261.03	20.99	87.32	40.43
95th-Percentile Queue Length [veh]	0.61	0.55	0.72	1.11	1.63	14.93	15.74	1.51	6.29	2.91
95th-Percentile Queue Length [ft]	15.37	13.82	17.90	27.67	40.68	373.18	393.51	37.77	157.18	72.78

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	12.19	11.54	10.97	7.44	7.44	7.64	59.30	48.57	50.32	69.39	40.95	39.29
Movement LOS	B	B	B	A	A	A	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	11.59			7.56			49.20			42.07		
Approach LOS	B			A			D			D		
d_I, Intersection Delay [s/veh]	43.66											
Intersection LOS	D											
Intersection V/C	0.247											

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report

#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

24.6
C
0.547

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	383	539	109	905	105	37	12	13	477	68	63
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	383	539	109	905	105	37	12	13	477	68	63
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	96	135	27	226	26	9	3	3	119	17	16
Total Analysis Volume [veh/h]	11	383	539	109	905	105	37	12	13	477	68	63
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	74	74	6	78	78	3	3	21	21	21
g / C, Green / Cycle	0.01	0.61	0.61	0.05	0.65	0.65	0.03	0.03	0.18	0.18	0.18
(v / s)_i Volume / Saturation Flow Rate	0.01	0.08	0.34	0.03	0.26	0.07	0.02	0.02	0.15	0.15	0.04
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1719	1774	1795	1583
c, Capacity [veh/h]	24	3109	970	170	2301	1027	48	47	315	319	281
d1, Uniform Delay [s]	58.80	9.74	13.65	56.02	9.95	7.93	57.80	57.83	47.92	47.91	42.28
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.08	2.29	4.02	0.51	0.20	13.43	14.68	6.86	6.76	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.12	0.56	0.64	0.39	0.10	0.64	0.66	0.86	0.86	0.22
d, Delay for Lane Group [s/veh]	72.50	9.82	15.94	60.04	10.45	8.13	71.24	72.51	54.78	54.67	42.68
Lane Group LOS	E	A	B	E	B	A	E	E	D	D	D
Critical Lane Group	no	no	yes	yes	no	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	1.31	8.24	1.72	5.51	1.05	1.12	1.12	8.45	8.53	1.64
50th-Percentile Queue Length [ft]	10.36	32.80	206.08	42.92	137.86	26.19	27.91	28.00	211.20	213.33	41.03
95th-Percentile Queue Length [veh]	0.75	2.36	12.95	3.09	9.37	1.89	2.01	2.02	13.21	13.32	2.95
95th-Percentile Queue Length [ft]	18.65	59.04	323.80	77.25	234.14	47.15	50.24	50.41	330.37	333.10	73.85

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	9.82	15.94	60.04	10.45	8.13	71.44	72.51	72.51	54.73	54.67	42.68
Movement LOS	E	A	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	14.10			15.07			71.87			53.47		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	24.61											
Intersection LOS	C											
Intersection V/C	0.547											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Vistro File: S:\...\J1101 - VISTRO.vistro

Scenario 7: Near Term + Const - PM

Report File: S:\...\NTC+C.pdf

8/19/2015

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
17	Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr	Signalized	HCM2010	NWBT	0.594	24.3	C

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value; for all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report**#17: Bear Valley Pkwy/Via Rancho Pkwy & Beethoven Dr**

Control Type:
Analysis Method:
Analysis Period:

Signalized
HCM2010
15 minutes

Delay (sec / veh):
Level Of Service:
Volume to Capacity (v/c):

24.3
C
0.594

Intersection Setup

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Approach	Southbound			Northeastbound			Northwestbound			Southeastbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	1	2	0	0	1	0	0	0	0	1
Pocket Length [ft]	125.00	100.00	125.00	275.00	100.00	100.00	80.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	no			no			yes			no		

Volumes

Name	Bear Valley Parkway			Via Rancho Parkway			Beethoven Drive			Beethoven Drive		
Base Volume Input [veh/h]	11	882	240	109	1402	126	57	16	13	552	26	159
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	882	240	109	1402	126	57	16	13	552	26	159
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	221	60	27	351	32	14	4	3	138	7	40
Total Analysis Volume [veh/h]	11	882	240	109	1402	126	57	16	13	552	26	159
Presence of On-Street Parking	no		no	no		no	no		no	no		no
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	no
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	1.00

Phasing & Timing

[illegible]

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	L	C	R
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	71	71	6	76	76	4	4	23	23	23
g / C, Green / Cycle	0.01	0.60	0.60	0.05	0.63	0.63	0.03	0.03	0.19	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.01	0.17	0.15	0.03	0.40	0.08	0.02	0.02	0.16	0.16	0.10
s, saturation flow rate [veh/h]	1774	5074	1583	3445	3547	1583	1774	1741	1774	1782	1583
c, Capacity [veh/h]	24	3019	942	170	2237	999	58	57	337	338	301
d1, Uniform Delay [s]	58.80	11.92	11.61	56.03	13.53	8.89	57.54	57.56	47.05	47.04	43.79
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.70	0.25	0.65	4.03	1.34	0.26	16.78	17.73	6.30	6.23	1.44
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.29	0.25	0.64	0.63	0.13	0.74	0.75	0.86	0.86	0.53
d, Delay for Lane Group [s/veh]	72.50	12.17	12.26	60.06	14.87	9.15	74.32	75.29	53.34	53.27	45.23
Lane Group LOS	E	B	B	E	B	A	E	E	D	D	D
Critical Lane Group	yes	no	no	no	yes	no	no	yes	yes	no	no
50th-Percentile Queue Length [veh]	0.41	3.60	2.98	1.72	11.32	1.36	1.57	1.57	8.90	8.92	4.39
50th-Percentile Queue Length [ft]	10.36	90.01	74.45	42.92	283.00	33.99	39.23	39.29	222.58	223.11	109.63
95th-Percentile Queue Length [veh]	0.75	6.48	5.36	3.09	16.84	2.45	2.82	2.83	13.80	13.82	7.82
95th-Percentile Queue Length [ft]	18.65	162.03	134.02	77.26	420.95	61.19	70.62	70.73	344.92	345.59	195.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	72.50	12.17	12.26	60.06	14.87	9.15	74.56	75.29	75.29	53.31	53.27	45.23
Movement LOS	E	B	B	E	B	A	E	E	E	D	D	D
d_A, Approach Delay [s/veh]	12.77			17.44			74.80			51.56		
Approach LOS	B			B			E			D		
d_I, Intersection Delay [s/veh]	24.34											
Intersection LOS	C											
Intersection V/C	0.594											

Sequence

Ring 1	2	6	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



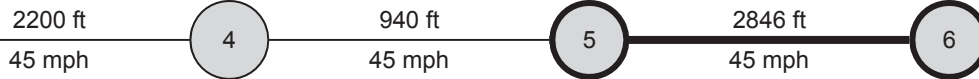
Appendix D

Peak Hour Street Segment Level of Service Worksheets

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	47.52			44.30		
5	Running Speed, mph	40.83			43.81		
5	Through Delay, s/veh	17.43			3.69		
5	Travel Time, s	64.95			47.98		
5	Travel Speed, mph	29.88			40.44		
5	Stop Rate, stops/veh	0.39			0.14		
5	Spatial Stop Rate, stops/mi	0.72			0.26		
5	Through vol/cap Ratio	0.89			0.27		
5	Percent of Base FFS	64.36			87.12		
5	Level of Service	C			A		
5	Auto Traveler Perception Score	2.25			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.50	E	3.71	D
5	Bicycle Segment LOS Score / LOS	3.70	D	3.46	C
5	Transit Segment LOS Score / LOS	0.65	A	0.18	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	189.81	179.02
Facility Travel Speed, mph	33.45	35.46
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	72.05	76.39
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

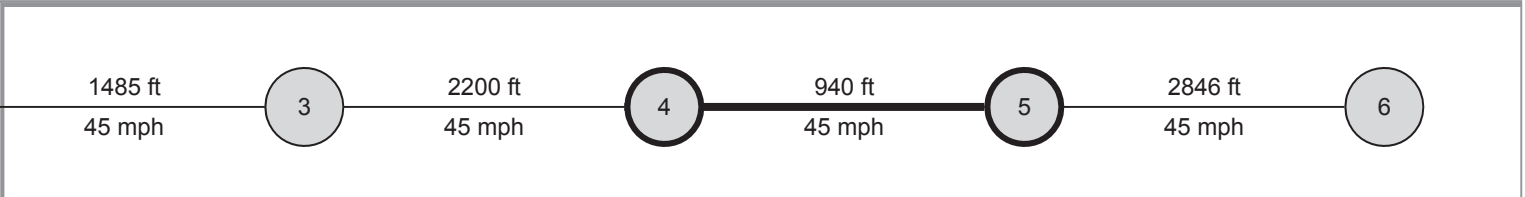
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.62	D
Bicycle Facility LOS Score / LOS	3.59	D	3.45	C
Transit Facility LOS Score / LOS	0.54	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.93			17.64		
4	Running Speed, mph	35.74			36.34		
4	Through Delay, s/veh	2.64			1.40		
4	Travel Time, s	20.57			19.04		
4	Travel Speed, mph	31.15			33.65		
4	Stop Rate, stops/veh	0.08			0.05		
4	Spatial Stop Rate, stops/mi	0.45			0.28		
4	Through vol/cap Ratio	0.44			0.26		
4	Percent of Base FFS	67.10			72.50		
4	Level of Service	B			B		
4	Auto Traveler Perception Score	2.21			2.18		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.81	D	3.57	D
4	Bicycle Segment LOS Score / LOS	3.51	D	3.44	C
4	Transit Segment LOS Score / LOS	0.96	A	0.71	A

Facility Output Data

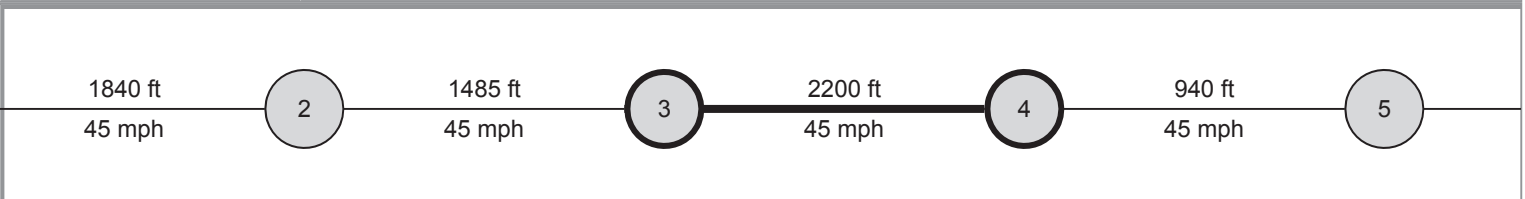
	Northbound	Southbound
Facility Travel Time, s	189.81	179.02
Facility Travel Speed, mph	33.45	35.46
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	72.05	76.39
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.62	D
Bicycle Facility LOS Score / LOS	3.59	D	3.45	C
Transit Facility LOS Score / LOS	0.54	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.54			34.98		
3	Running Speed, mph	42.20			42.88		
3	Through Delay, s/veh	2.99			5.59		
3	Travel Time, s	38.53			40.57		
3	Travel Speed, mph	38.93			36.98		
3	Stop Rate, stops/veh	0.09			0.21		
3	Spatial Stop Rate, stops/mi	0.22			0.51		
3	Through vol/cap Ratio	0.46			0.26		
3	Percent of Base FFS	83.86			79.65		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.17			2.22		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.91	D	3.66	D
3	Bicycle Segment LOS Score / LOS	3.52	D	3.46	C
3	Transit Segment LOS Score / LOS	0.33	A	0.55	A

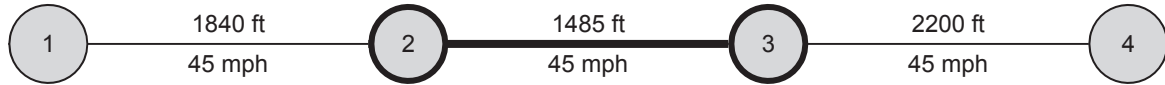
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.81		179.02	
Facility Travel Speed, mph		33.45		35.46	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.05		76.39	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.54	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.45			24.88		
2	Running Speed, mph	39.79			40.69		
2	Through Delay, s/veh	2.14			3.01		
2	Travel Time, s	27.59			27.89		
2	Travel Speed, mph	36.70			36.30		
2	Stop Rate, stops/veh	0.06			0.11		
2	Spatial Stop Rate, stops/mi	0.20			0.41		
2	Through vol/cap Ratio	0.51			0.25		
2	Percent of Base FFS	79.06			78.19		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.17			2.20		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.98	D	3.20	C
2	Bicycle Segment LOS Score / LOS	3.53	D	3.45	C
2	Transit Segment LOS Score / LOS	0.44	A	0.57	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.81		179.02	
Facility Travel Speed, mph		33.45		35.46	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.05		76.39	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.54	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	31.07			29.83		
1	Running Speed, mph	40.38			42.06		
1	Through Delay, s/veh	7.10			13.70		
1	Travel Time, s	38.17			43.53		
1	Travel Speed, mph	32.87			28.82		
1	Stop Rate, stops/veh	0.22			0.32		
1	Spatial Stop Rate, stops/mi	0.62			0.91		
1	Through vol/cap Ratio	0.62			0.40		
1	Percent of Base FFS	70.81			62.08		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.44			2.28		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	4.25	D	3.80	D
1	Bicycle Segment LOS Score / LOS	3.57	D	3.45	C
1	Transit Segment LOS Score / LOS	0.52	A	1.03	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.81		179.02	
Facility Travel Speed, mph		33.45		35.46	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.05		76.39	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.54	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information					Streets Information	
Agency	Gibson Transportation Consulting, Inc.				Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015		Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour		Number of Iterations	15
File Name	E - VRP - PM.xus	Analysis Year	2014		System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo			Analysis Period	1> 4:00
Project Description						



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.32			33.07		
1	Running Speed, mph	43.16			42.18		
1	Through Delay, s/veh	2.01			2.82		
1	Travel Time, s	34.33			35.89		
1	Travel Speed, mph	40.63			38.87		
1	Stop Rate, stops/veh	0.08			0.10		
1	Spatial Stop Rate, stops/mi	0.19			0.26		
1	Through vol/cap Ratio	0.08			0.31		
1	Percent of Base FFS	87.53			83.73		
1	Level of Service	A			B		
1	Auto Traveler Perception Score	2.17			2.18		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.40	C	3.82	D
1	Bicycle Segment LOS Score / LOS	3.35	C	3.49	C
1	Transit Segment LOS Score / LOS	0.26	A	0.28	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		211.51		174.01	
Facility Travel Speed, mph		25.94		31.53	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.87		67.91	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

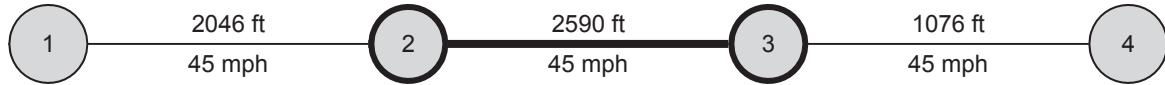
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.53	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.66	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postigo	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.14			40.35		
2	Running Speed, mph	44.00			43.77		
2	Through Delay, s/veh	28.72			0.38		
2	Travel Time, s	68.86			40.73		
2	Travel Speed, mph	25.64			43.36		
2	Stop Rate, stops/veh	0.63			0.01		
2	Spatial Stop Rate, stops/mi	1.28			0.03		
2	Through vol/cap Ratio	0.13			0.18		
2	Percent of Base FFS	55.24			93.40		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.33			2.15		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.81	D	3.14	C
2	Bicycle Segment LOS Score / LOS	3.38	C	3.43	C
2	Transit Segment LOS Score / LOS	1.21	A	0.13	A

Facility Output Data

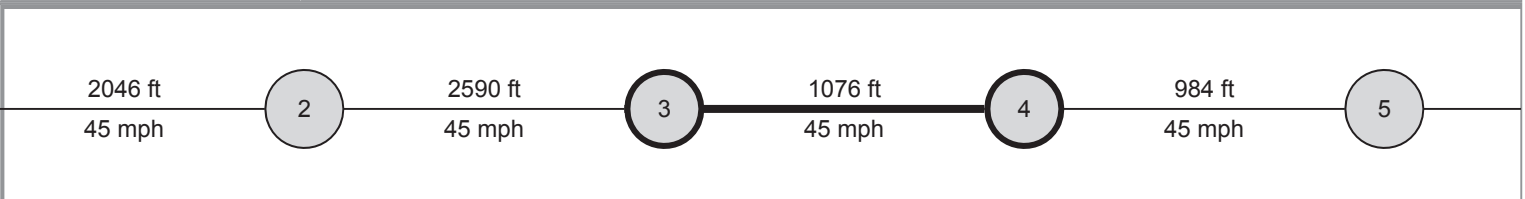
	Eastbound	Westbound
Facility Travel Time, s	211.51	174.01
Facility Travel Speed, mph	25.94	31.53
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	55.87	67.91
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.32	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.53	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.66	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.53			19.62		
3	Running Speed, mph	37.56			37.39		
3	Through Delay, s/veh	19.30			17.52		
3	Travel Time, s	38.83			37.14		
3	Travel Speed, mph	18.89			19.75		
3	Stop Rate, stops/veh	0.47			0.51		
3	Spatial Stop Rate, stops/mi	2.30			2.49		
3	Through vol/cap Ratio	0.40			0.21		
3	Percent of Base FFS	40.70			42.55		
3	Level of Service	D			D		
3	Auto Traveler Perception Score	2.50			2.53		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.78	D	3.50	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.50	C
3	Transit Segment LOS Score / LOS	1.88	A	1.82	A

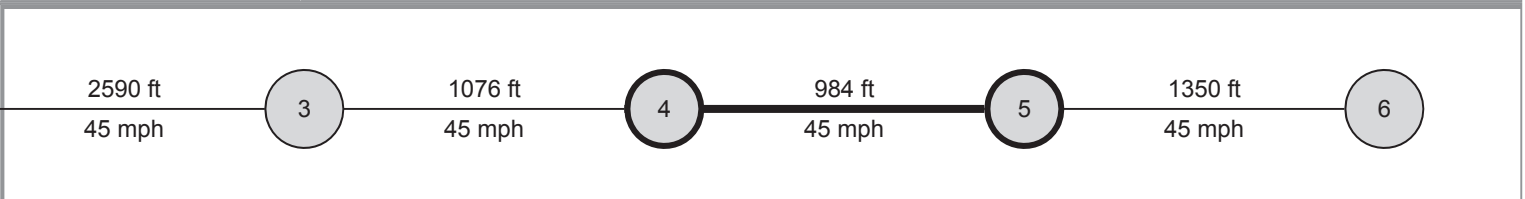
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		211.51		174.01	
Facility Travel Speed, mph		25.94		31.53	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.87		67.91	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.53	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.66	A

HCS 2010 Urban Street Segment Report

General Information					Streets Information	
Agency	Gibson Transportation Consulting, Inc.				Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015		Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour		Number of Iterations	15
File Name	E - VRP - PM.xus	Analysis Year	2014		System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd			Analysis Period	1> 4:00
Project Description						



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.39			18.12		
4	Running Speed, mph	36.47			37.02		
4	Through Delay, s/veh	2.50			17.63		
4	Travel Time, s	20.89			35.75		
4	Travel Speed, mph	32.11			18.77		
4	Stop Rate, stops/veh	0.08			0.42		
4	Spatial Stop Rate, stops/mi	0.45			2.28		
4	Through vol/cap Ratio	0.40			0.29		
4	Percent of Base FFS	69.17			40.43		
4	Level of Service	B			D		
4	Auto Traveler Perception Score	2.21			2.49		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.78	D	3.75	D
4	Bicycle Segment LOS Score / LOS	3.49	C	3.42	C
4	Transit Segment LOS Score / LOS	0.50	A	1.81	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		211.51		174.01	
Facility Travel Speed, mph		25.94		31.53	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.87		67.91	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

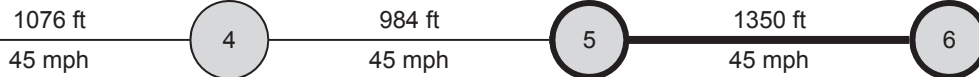
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.53	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.66	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	E - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.72			22.95		
5	Running Speed, mph	38.80			40.11		
5	Through Delay, s/veh	24.87			1.56		
5	Travel Time, s	48.59			24.51		
5	Travel Speed, mph	18.94			37.56		
5	Stop Rate, stops/veh	0.59			0.06		
5	Spatial Stop Rate, stops/mi	2.31			0.23		
5	Through vol/cap Ratio	0.86			0.24		
5	Percent of Base FFS	40.80			80.91		
5	Level of Service	D			B		
5	Auto Traveler Perception Score	2.50			2.17		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.06	D	3.69	D
5	Bicycle Segment LOS Score / LOS	3.54	D	3.43	C
5	Transit Segment LOS Score / LOS	0.51	A	0.48	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	211.51	174.01
Facility Travel Speed, mph	25.94	31.53
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	55.87	67.91
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.32	2.24

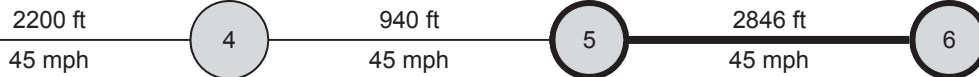
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.53	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.66	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	47.56			44.31		
5	Running Speed, mph	40.80			43.79		
5	Through Delay, s/veh	18.75			3.79		
5	Travel Time, s	66.31			48.10		
5	Travel Speed, mph	29.26			40.35		
5	Stop Rate, stops/veh	0.43			0.14		
5	Spatial Stop Rate, stops/mi	0.80			0.27		
5	Through vol/cap Ratio	0.90			0.27		
5	Percent of Base FFS	63.04			86.91		
5	Level of Service	C			A		
5	Auto Traveler Perception Score	2.26			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.51	E	3.72	D
5	Bicycle Segment LOS Score / LOS	3.71	D	3.46	C
5	Transit Segment LOS Score / LOS	0.65	A	0.18	A

Facility Output Data

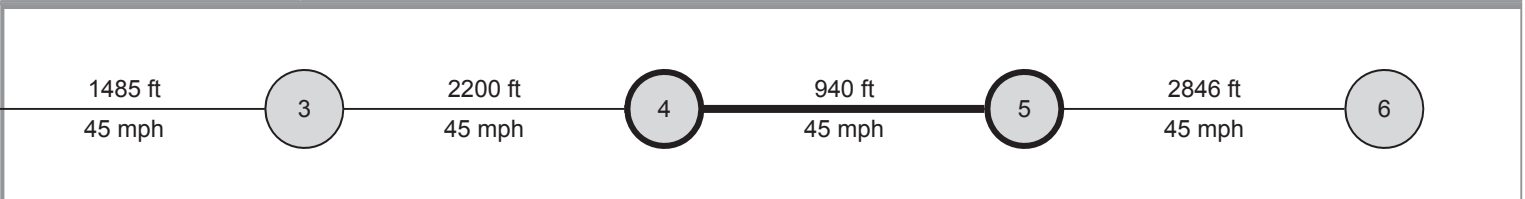
	Northbound	Southbound
Facility Travel Time, s	191.54	180.61
Facility Travel Speed, mph	33.14	35.15
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.40	75.72
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.55	A	0.57	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.94			17.64		
4	Running Speed, mph	35.73			36.32		
4	Through Delay, s/veh	2.66			1.43		
4	Travel Time, s	20.59			19.08		
4	Travel Speed, mph	31.12			33.59		
4	Stop Rate, stops/veh	0.08			0.05		
4	Spatial Stop Rate, stops/mi	0.45			0.29		
4	Through vol/cap Ratio	0.44			0.26		
4	Percent of Base FFS	67.04			72.36		
4	Level of Service	B			B		
4	Auto Traveler Perception Score	2.21			2.18		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.81	D	3.57	D
4	Bicycle Segment LOS Score / LOS	3.51	D	3.45	C
4	Transit Segment LOS Score / LOS	0.96	A	0.71	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		191.54		180.61	
Facility Travel Speed, mph		33.14		35.15	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		71.40		75.72	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

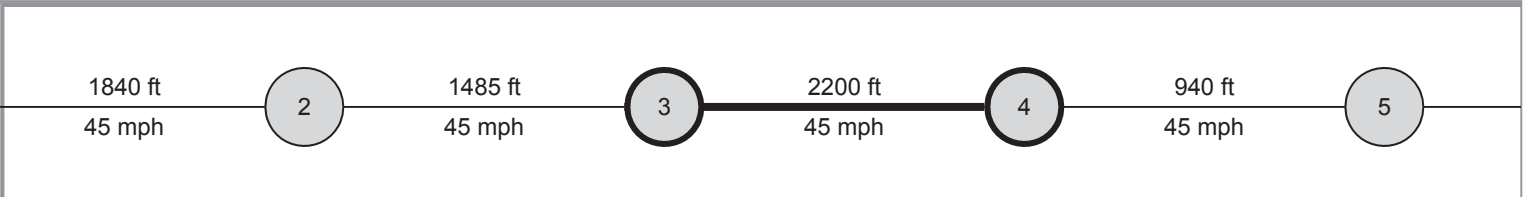
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.63	D
Bicycle Facility LOS Score / LOS		3.59	D	3.46	C
Transit Facility LOS Score / LOS		0.55	A	0.57	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.55			34.99		
3	Running Speed, mph	42.19			42.87		
3	Through Delay, s/veh	3.04			5.56		
3	Travel Time, s	38.60			40.56		
3	Travel Speed, mph	38.86			36.99		
3	Stop Rate, stops/veh	0.09			0.21		
3	Spatial Stop Rate, stops/mi	0.22			0.51		
3	Through vol/cap Ratio	0.47			0.26		
3	Percent of Base FFS	83.72			79.67		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.17			2.21		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.91	D	3.67	D
3	Bicycle Segment LOS Score / LOS	3.52	D	3.46	C
3	Transit Segment LOS Score / LOS	0.33	A	0.55	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	191.54	180.61
Facility Travel Speed, mph	33.14	35.15
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.40	75.72
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

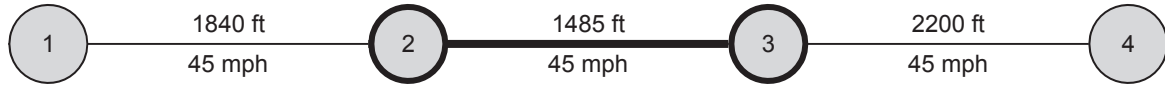
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.55	A	0.57	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.46			24.90		
2	Running Speed, mph	39.77			40.67		
2	Through Delay, s/veh	2.13			3.24		
2	Travel Time, s	27.59			28.14		
2	Travel Speed, mph	36.70			35.99		
2	Stop Rate, stops/veh	0.06			0.12		
2	Spatial Stop Rate, stops/mi	0.20			0.44		
2	Through vol/cap Ratio	0.52			0.26		
2	Percent of Base FFS	79.05			77.52		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.17			2.20		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.98	D	3.21	C
2	Bicycle Segment LOS Score / LOS	3.53	D	3.45	C
2	Transit Segment LOS Score / LOS	0.44	A	0.59	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	191.54	180.61
Facility Travel Speed, mph	33.14	35.15
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.40	75.72
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.55	A	0.57	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	31.09			29.84		
1	Running Speed, mph	40.35			42.04		
1	Through Delay, s/veh	7.36			14.90		
1	Travel Time, s	38.45			44.75		
1	Travel Speed, mph	32.63			28.04		
1	Stop Rate, stops/veh	0.22			0.34		
1	Spatial Stop Rate, stops/mi	0.64			0.98		
1	Through vol/cap Ratio	0.62			0.42		
1	Percent of Base FFS	70.29			60.40		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.45			2.29		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	4.25	E	3.81	D
1	Bicycle Segment LOS Score / LOS	3.57	D	3.45	C
1	Transit Segment LOS Score / LOS	0.52	A	1.09	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		191.54		180.61	
Facility Travel Speed, mph		33.14		35.15	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		71.40		75.72	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.63	D
Bicycle Facility LOS Score / LOS		3.59	D	3.46	C
Transit Facility LOS Score / LOS		0.55	A	0.57	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.33			33.09		
1	Running Speed, mph	43.15			42.15		
1	Through Delay, s/veh	2.14			2.30		
1	Travel Time, s	34.47			35.40		
1	Travel Speed, mph	40.47			39.41		
1	Stop Rate, stops/veh	0.08			0.08		
1	Spatial Stop Rate, stops/mi	0.21			0.21		
1	Through vol/cap Ratio	0.08			0.31		
1	Percent of Base FFS	87.17			84.89		
1	Level of Service	A			B		
1	Auto Traveler Perception Score	2.17			2.17		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.40	C	3.83	D
1	Bicycle Segment LOS Score / LOS	3.35	C	3.49	C
1	Transit Segment LOS Score / LOS	0.27	A	0.28	A

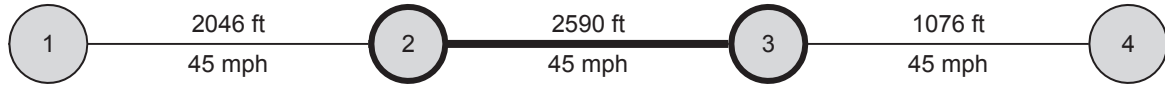
Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		212.23		174.79	
Facility Travel Speed, mph		25.85		31.39	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.68		67.61	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.53	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.67	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postigo	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.16			40.36		
2	Running Speed, mph	43.98			43.76		
2	Through Delay, s/veh	27.09			0.40		
2	Travel Time, s	67.25			40.76		
2	Travel Speed, mph	26.26			43.32		
2	Stop Rate, stops/veh	0.59			0.01		
2	Spatial Stop Rate, stops/mi	1.21			0.03		
2	Through vol/cap Ratio	0.14			0.19		
2	Percent of Base FFS	56.57			93.33		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.32			2.15		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.82	D	3.14	C
2	Bicycle Segment LOS Score / LOS	3.39	C	3.43	C
2	Transit Segment LOS Score / LOS	1.16	A	0.13	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		212.23		174.79	
Facility Travel Speed, mph		25.85		31.39	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.68		67.61	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

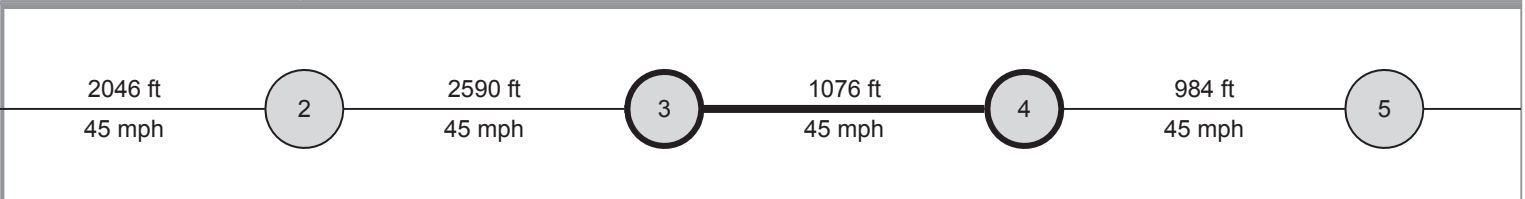
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.53	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.67	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.55			19.62		
3	Running Speed, mph	37.53			37.38		
3	Through Delay, s/veh	19.59			17.90		
3	Travel Time, s	39.14			37.52		
3	Travel Speed, mph	18.74			19.55		
3	Stop Rate, stops/veh	0.48			0.51		
3	Spatial Stop Rate, stops/mi	2.34			2.51		
3	Through vol/cap Ratio	0.40			0.21		
3	Percent of Base FFS	40.38			42.12		
3	Level of Service	D			D		
3	Auto Traveler Perception Score	2.50			2.53		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.79	D	3.50	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.50	C
3	Transit Segment LOS Score / LOS	1.89	A	1.84	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	212.23	174.79
Facility Travel Speed, mph	25.85	31.39
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	55.68	67.61
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.32	2.24

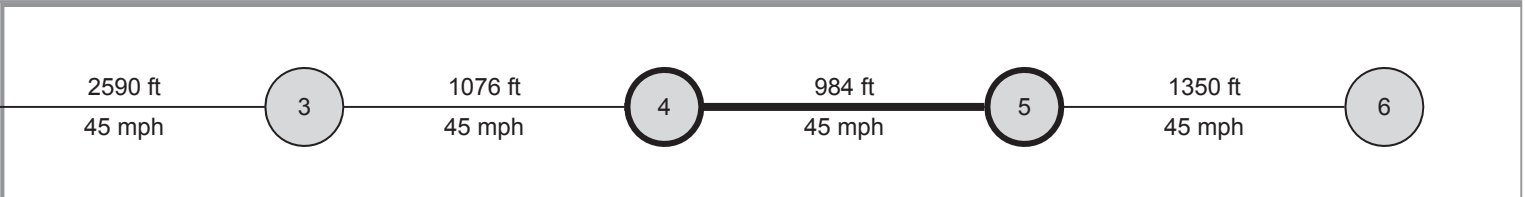
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.53	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.67	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.40			18.12		
4	Running Speed, mph	36.47			37.02		
4	Through Delay, s/veh	2.76			18.46		
4	Travel Time, s	21.15			36.58		
4	Travel Speed, mph	31.72			18.34		
4	Stop Rate, stops/veh	0.09			0.44		
4	Spatial Stop Rate, stops/mi	0.50			2.36		
4	Through vol/cap Ratio	0.40			0.29		
4	Percent of Base FFS	68.32			39.51		
4	Level of Service	B			E		
4	Auto Traveler Perception Score	2.21			2.51		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.78	D	3.75	D
4	Bicycle Segment LOS Score / LOS	3.49	C	3.43	C
4	Transit Segment LOS Score / LOS	0.50	A	1.85	A

Facility Output Data

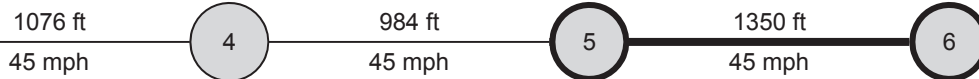
	Eastbound	Westbound
Facility Travel Time, s	212.23	174.79
Facility Travel Speed, mph	25.85	31.39
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	55.68	67.61
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.32	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.53	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.67	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	EP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.73			22.95		
5	Running Speed, mph	38.79			40.10		
5	Through Delay, s/veh	26.49			1.57		
5	Travel Time, s	50.21			24.52		
5	Travel Speed, mph	18.33			37.54		
5	Stop Rate, stops/veh	0.62			0.06		
5	Spatial Stop Rate, stops/mi	2.42			0.23		
5	Through vol/cap Ratio	0.87			0.24		
5	Percent of Base FFS	39.49			80.86		
5	Level of Service	E			B		
5	Auto Traveler Perception Score	2.51			2.17		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.06	D	3.69	D
5	Bicycle Segment LOS Score / LOS	3.54	D	3.43	C
5	Transit Segment LOS Score / LOS	0.52	A	0.48	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		212.23		174.79	
Facility Travel Speed, mph		25.85		31.39	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		55.68		67.61	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.32		2.24	

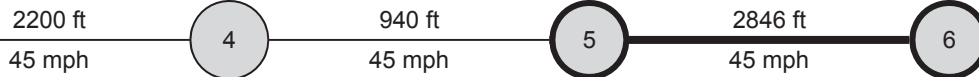
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.53	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.67	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	47.53			44.30		
5	Running Speed, mph	40.82			43.80		
5	Through Delay, s/veh	17.07			3.98		
5	Travel Time, s	64.60			48.28		
5	Travel Speed, mph	30.04			40.19		
5	Stop Rate, stops/veh	0.36			0.15		
5	Spatial Stop Rate, stops/mi	0.67			0.28		
5	Through vol/cap Ratio	0.89			0.27		
5	Percent of Base FFS	64.71			86.57		
5	Level of Service	C			A		
5	Auto Traveler Perception Score	2.24			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.50	E	3.71	D
5	Bicycle Segment LOS Score / LOS	3.71	D	3.46	C
5	Transit Segment LOS Score / LOS	0.65	A	0.18	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	189.89	179.16
Facility Travel Speed, mph	33.43	35.44
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	72.02	76.33
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

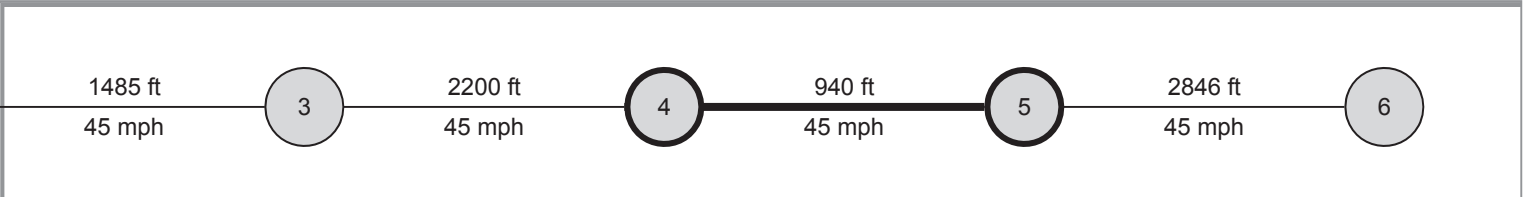
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.62	D
Bicycle Facility LOS Score / LOS	3.59	D	3.45	C
Transit Facility LOS Score / LOS	0.55	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.93			17.64		
4	Running Speed, mph	35.74			36.33		
4	Through Delay, s/veh	3.61			0.95		
4	Travel Time, s	21.54			18.59		
4	Travel Speed, mph	29.75			34.48		
4	Stop Rate, stops/veh	0.12			0.03		
4	Spatial Stop Rate, stops/mi	0.67			0.19		
4	Through vol/cap Ratio	0.44			0.26		
4	Percent of Base FFS	64.09			74.27		
4	Level of Service	C			B		
4	Auto Traveler Perception Score	2.24			2.17		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.81	D	3.57	D
4	Bicycle Segment LOS Score / LOS	3.51	D	3.44	C
4	Transit Segment LOS Score / LOS	1.05	A	0.66	A

Facility Output Data

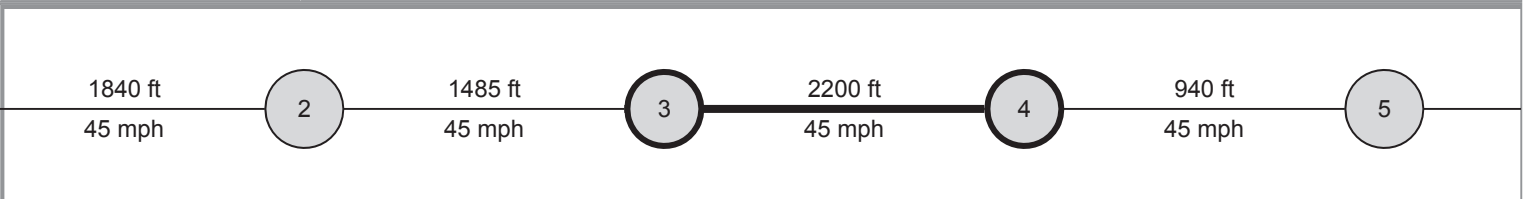
	Northbound	Southbound
Facility Travel Time, s	189.89	179.16
Facility Travel Speed, mph	33.43	35.44
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	72.02	76.33
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.62	D
Bicycle Facility LOS Score / LOS	3.59	D	3.45	C
Transit Facility LOS Score / LOS	0.55	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.54			34.98		
3	Running Speed, mph	42.20			42.88		
3	Through Delay, s/veh	2.44			5.82		
3	Travel Time, s	37.99			40.80		
3	Travel Speed, mph	39.49			36.77		
3	Stop Rate, stops/veh	0.07			0.22		
3	Spatial Stop Rate, stops/mi	0.17			0.53		
3	Through vol/cap Ratio	0.46			0.26		
3	Percent of Base FFS	85.07			79.20		
3	Level of Service	A			B		
3	Auto Traveler Perception Score	2.17			2.22		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.91	D	3.66	D
3	Bicycle Segment LOS Score / LOS	3.52	D	3.46	C
3	Transit Segment LOS Score / LOS	0.33	A	0.56	A

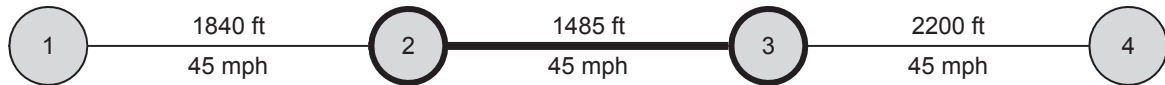
Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.89		179.16	
Facility Travel Speed, mph		33.43		35.44	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.02		76.33	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.55	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.45			24.89		
2	Running Speed, mph	39.79			40.69		
2	Through Delay, s/veh	2.14			3.01		
2	Travel Time, s	27.59			27.89		
2	Travel Speed, mph	36.70			36.30		
2	Stop Rate, stops/veh	0.06			0.11		
2	Spatial Stop Rate, stops/mi	0.20			0.41		
2	Through vol/cap Ratio	0.51			0.25		
2	Percent of Base FFS	79.06			78.19		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.17			2.20		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.98	D	3.20	C
2	Bicycle Segment LOS Score / LOS	3.53	D	3.45	C
2	Transit Segment LOS Score / LOS	0.44	A	0.57	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.89		179.16	
Facility Travel Speed, mph		33.43		35.44	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.02		76.33	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.55	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	31.07			29.83		
1	Running Speed, mph	40.38			42.05		
1	Through Delay, s/veh	7.10			13.76		
1	Travel Time, s	38.17			43.59		
1	Travel Speed, mph	32.87			28.78		
1	Stop Rate, stops/veh	0.22			0.32		
1	Spatial Stop Rate, stops/mi	0.62			0.92		
1	Through vol/cap Ratio	0.62			0.41		
1	Percent of Base FFS	70.80			62.00		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.44			2.28		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	4.25	D	3.80	D
1	Bicycle Segment LOS Score / LOS	3.57	D	3.45	C
1	Transit Segment LOS Score / LOS	0.52	A	1.04	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		189.89		179.16	
Facility Travel Speed, mph		33.43		35.44	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		72.02		76.33	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.62	D
Bicycle Facility LOS Score / LOS		3.59	D	3.45	C
Transit Facility LOS Score / LOS		0.55	A	0.55	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.32			33.07		
1	Running Speed, mph	43.16			42.18		
1	Through Delay, s/veh	2.01			2.81		
1	Travel Time, s	34.33			35.89		
1	Travel Speed, mph	40.63			38.87		
1	Stop Rate, stops/veh	0.08			0.10		
1	Spatial Stop Rate, stops/mi	0.19			0.26		
1	Through vol/cap Ratio	0.08			0.31		
1	Percent of Base FFS	87.53			83.74		
1	Level of Service	A			B		
1	Auto Traveler Perception Score	2.17			2.18		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.40	C	3.82	D
1	Bicycle Segment LOS Score / LOS	3.35	C	3.49	C
1	Transit Segment LOS Score / LOS	0.26	A	0.28	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		209.72		171.55	
Facility Travel Speed, mph		26.16		31.98	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		56.35		68.89	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.31		2.24	

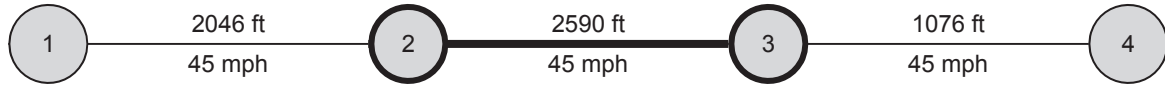
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.74	D	3.54	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.85	A	0.64	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postigo	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.14			40.35		
2	Running Speed, mph	44.00			43.77		
2	Through Delay, s/veh	28.02			0.34		
2	Travel Time, s	68.16			40.69		
2	Travel Speed, mph	25.91			43.40		
2	Stop Rate, stops/veh	0.62			0.01		
2	Spatial Stop Rate, stops/mi	1.26			0.03		
2	Through vol/cap Ratio	0.13			0.18		
2	Percent of Base FFS	55.81			93.49		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.33			2.14		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.81	D	3.17	C
2	Bicycle Segment LOS Score / LOS	3.38	C	3.43	C
2	Transit Segment LOS Score / LOS	1.19	A	0.13	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	209.72	171.55
Facility Travel Speed, mph	26.16	31.98
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.35	68.89
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

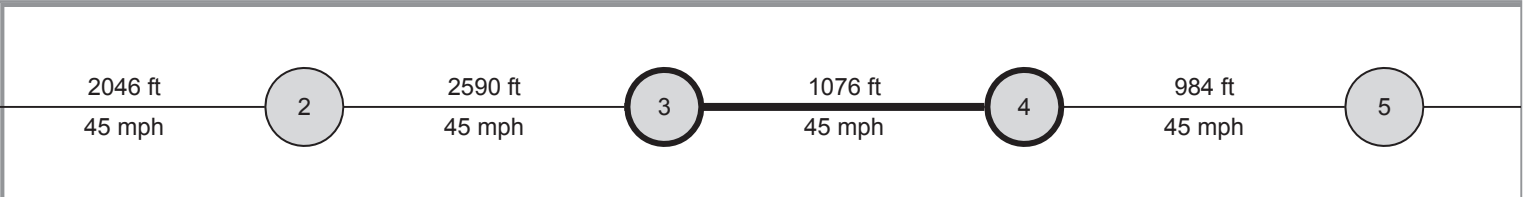
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.64	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.53			19.62		
3	Running Speed, mph	37.56			37.39		
3	Through Delay, s/veh	19.17			15.23		
3	Travel Time, s	38.70			34.85		
3	Travel Speed, mph	18.96			21.05		
3	Stop Rate, stops/veh	0.47			0.45		
3	Spatial Stop Rate, stops/mi	2.29			2.18		
3	Through vol/cap Ratio	0.40			0.20		
3	Percent of Base FFS	40.84			45.35		
3	Level of Service	D			D		
3	Auto Traveler Perception Score	2.49			2.48		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.82	D	3.50	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.50	C
3	Transit Segment LOS Score / LOS	1.87	A	1.70	A

Facility Output Data

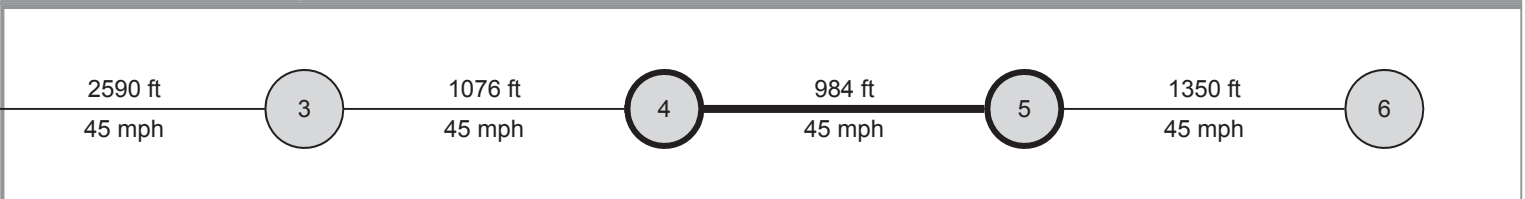
	Eastbound	Westbound
Facility Travel Time, s	209.72	171.55
Facility Travel Speed, mph	26.16	31.98
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.35	68.89
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.64	A

HCS 2010 Urban Street Segment Report

General Information					Streets Information	
Agency	Gibson Transportation Consulting, Inc.				Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015		Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour		Number of Iterations	15
File Name	C - VRP - PM.xus	Analysis Year	2014		System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd			Analysis Period	1> 4:00
Project Description						



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.39			18.12		
4	Running Speed, mph	36.47			37.02		
4	Through Delay, s/veh	2.58			17.34		
4	Travel Time, s	20.98			35.46		
4	Travel Speed, mph	31.98			18.92		
4	Stop Rate, stops/veh	0.09			0.42		
4	Spatial Stop Rate, stops/mi	0.47			2.24		
4	Through vol/cap Ratio	0.40			0.29		
4	Percent of Base FFS	68.90			40.76		
4	Level of Service	B			D		
4	Auto Traveler Perception Score	2.21			2.49		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.78	D	3.75	D
4	Bicycle Segment LOS Score / LOS	3.49	C	3.42	C
4	Transit Segment LOS Score / LOS	0.50	A	1.79	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		209.72		171.55	
Facility Travel Speed, mph		26.16		31.98	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		56.35		68.89	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.31		2.24	

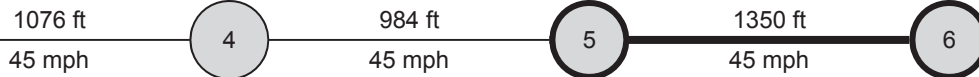
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.64	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	C - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.72			22.95		
5	Running Speed, mph	38.80			40.11		
5	Through Delay, s/veh	23.82			1.72		
5	Travel Time, s	47.54			24.66		
5	Travel Speed, mph	19.36			37.32		
5	Stop Rate, stops/veh	0.57			0.06		
5	Spatial Stop Rate, stops/mi	2.23			0.25		
5	Through vol/cap Ratio	0.85			0.24		
5	Percent of Base FFS	41.70			80.39		
5	Level of Service	D			B		
5	Auto Traveler Perception Score	2.48			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.06	D	3.69	D
5	Bicycle Segment LOS Score / LOS	3.54	D	3.43	C
5	Transit Segment LOS Score / LOS	0.51	A	0.49	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	209.72	171.55
Facility Travel Speed, mph	26.16	31.98
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.35	68.89
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

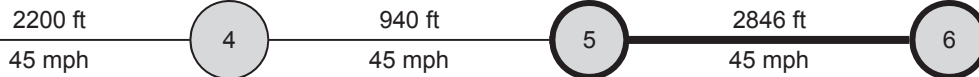
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.74	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.85	A	0.64	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	47.57			44.32		
5	Running Speed, mph	40.79			43.78		
5	Through Delay, s/veh	18.33			4.11		
5	Travel Time, s	65.90			48.43		
5	Travel Speed, mph	29.45			40.07		
5	Stop Rate, stops/veh	0.40			0.16		
5	Spatial Stop Rate, stops/mi	0.75			0.29		
5	Through vol/cap Ratio	0.90			0.28		
5	Percent of Base FFS	63.43			86.32		
5	Level of Service	C			A		
5	Auto Traveler Perception Score	2.25			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.50	E	3.72	D
5	Bicycle Segment LOS Score / LOS	3.71	D	3.46	C
5	Transit Segment LOS Score / LOS	0.65	A	0.18	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	191.50	180.31
Facility Travel Speed, mph	33.15	35.21
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.41	75.85
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

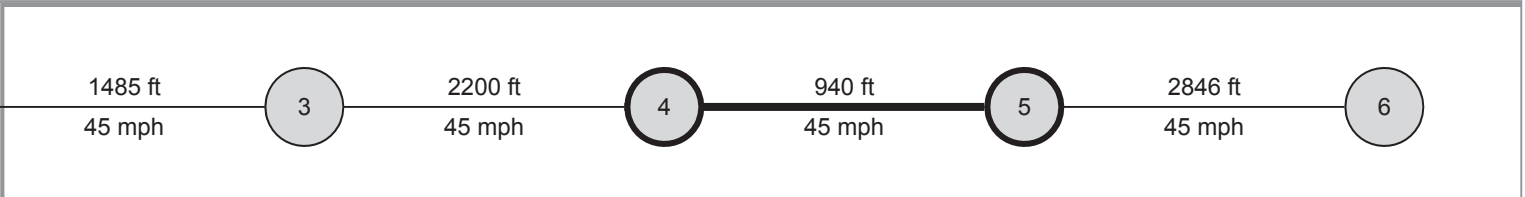
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.56	A	0.56	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.94			17.65		
4	Running Speed, mph	35.73			36.32		
4	Through Delay, s/veh	3.58			0.95		
4	Travel Time, s	21.52			18.60		
4	Travel Speed, mph	29.78			34.46		
4	Stop Rate, stops/veh	0.12			0.03		
4	Spatial Stop Rate, stops/mi	0.65			0.19		
4	Through vol/cap Ratio	0.44			0.26		
4	Percent of Base FFS	64.15			74.24		
4	Level of Service	C			B		
4	Auto Traveler Perception Score	2.24			2.17		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.81	D	3.58	D
4	Bicycle Segment LOS Score / LOS	3.51	D	3.45	C
4	Transit Segment LOS Score / LOS	1.05	A	0.66	A

Facility Output Data

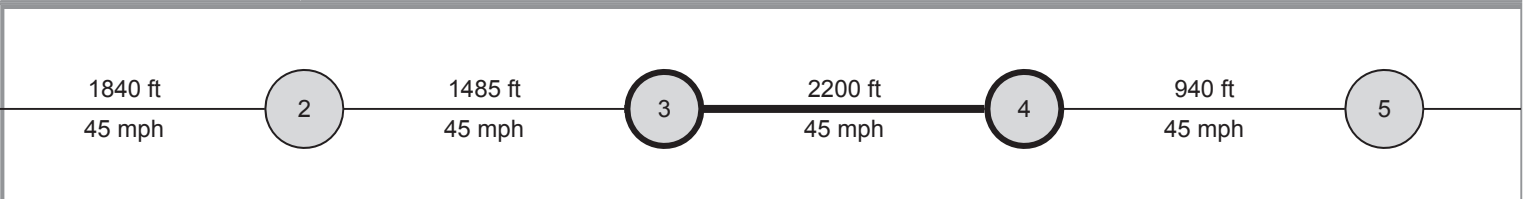
	Northbound	Southbound
Facility Travel Time, s	191.50	180.31
Facility Travel Speed, mph	33.15	35.21
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.41	75.85
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.56	A	0.56	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.55			35.00		
3	Running Speed, mph	42.19			42.86		
3	Through Delay, s/veh	2.48			5.78		
3	Travel Time, s	38.04			40.78		
3	Travel Speed, mph	39.44			36.78		
3	Stop Rate, stops/veh	0.07			0.22		
3	Spatial Stop Rate, stops/mi	0.18			0.53		
3	Through vol/cap Ratio	0.47			0.26		
3	Percent of Base FFS	84.95			79.23		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.17			2.22		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.91	D	3.67	D
3	Bicycle Segment LOS Score / LOS	3.52	D	3.46	C
3	Transit Segment LOS Score / LOS	0.33	A	0.56	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		191.50		180.31	
Facility Travel Speed, mph		33.15		35.21	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		71.41		75.85	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

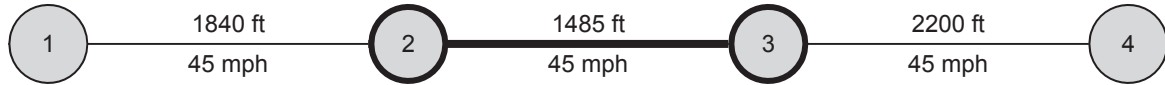
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.63	D
Bicycle Facility LOS Score / LOS		3.59	D	3.46	C
Transit Facility LOS Score / LOS		0.56	A	0.56	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.46			24.90		
2	Running Speed, mph	39.77			40.66		
2	Through Delay, s/veh	2.14			3.10		
2	Travel Time, s	27.59			28.00		
2	Travel Speed, mph	36.70			36.17		
2	Stop Rate, stops/veh	0.05			0.12		
2	Spatial Stop Rate, stops/mi	0.20			0.42		
2	Through vol/cap Ratio	0.52			0.26		
2	Percent of Base FFS	79.05			77.91		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.17			2.20		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.98	D	3.21	C
2	Bicycle Segment LOS Score / LOS	3.53	D	3.45	C
2	Transit Segment LOS Score / LOS	0.44	A	0.58	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	191.50	180.31
Facility Travel Speed, mph	33.15	35.21
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	71.41	75.85
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.25	2.21

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	4.16	D	3.63	D
Bicycle Facility LOS Score / LOS	3.59	D	3.46	C
Transit Facility LOS Score / LOS	0.56	A	0.56	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	31.09			29.85		
1	Running Speed, mph	40.35			42.03		
1	Through Delay, s/veh	7.36			14.66		
1	Travel Time, s	38.45			44.51		
1	Travel Speed, mph	32.62			28.19		
1	Stop Rate, stops/veh	0.22			0.34		
1	Spatial Stop Rate, stops/mi	0.64			0.97		
1	Through vol/cap Ratio	0.62			0.42		
1	Percent of Base FFS	70.28			60.72		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.45			2.28		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	4.25	E	3.81	D
1	Bicycle Segment LOS Score / LOS	3.57	D	3.45	C
1	Transit Segment LOS Score / LOS	0.52	A	1.08	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		191.50		180.31	
Facility Travel Speed, mph		33.15		35.21	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		71.41		75.85	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.25		2.21	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		4.16	D	3.63	D
Bicycle Facility LOS Score / LOS		3.59	D	3.46	C
Transit Facility LOS Score / LOS		0.56	A	0.56	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.33			33.09		
1	Running Speed, mph	43.15			42.15		
1	Through Delay, s/veh	2.14			2.25		
1	Travel Time, s	34.47			35.34		
1	Travel Speed, mph	40.47			39.47		
1	Stop Rate, stops/veh	0.08			0.08		
1	Spatial Stop Rate, stops/mi	0.21			0.20		
1	Through vol/cap Ratio	0.08			0.31		
1	Percent of Base FFS	87.17			85.03		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.17			2.17		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.40	C	3.83	D
1	Bicycle Segment LOS Score / LOS	3.35	C	3.49	C
1	Transit Segment LOS Score / LOS	0.27	A	0.28	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		209.47		172.17	
Facility Travel Speed, mph		26.19		31.86	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		56.42		68.64	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.31		2.24	

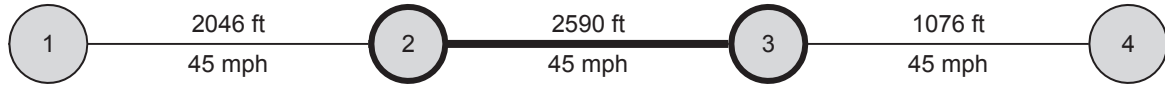
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.75	D	3.54	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.84	A	0.65	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postigo	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.16			40.36		
2	Running Speed, mph	43.98			43.76		
2	Through Delay, s/veh	26.35			0.37		
2	Travel Time, s	66.51			40.73		
2	Travel Speed, mph	26.55			43.36		
2	Stop Rate, stops/veh	0.58			0.01		
2	Spatial Stop Rate, stops/mi	1.19			0.03		
2	Through vol/cap Ratio	0.13			0.19		
2	Percent of Base FFS	57.20			93.40		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.32			2.14		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.82	D	3.17	C
2	Bicycle Segment LOS Score / LOS	3.39	C	3.43	C
2	Transit Segment LOS Score / LOS	1.14	A	0.13	A

Facility Output Data

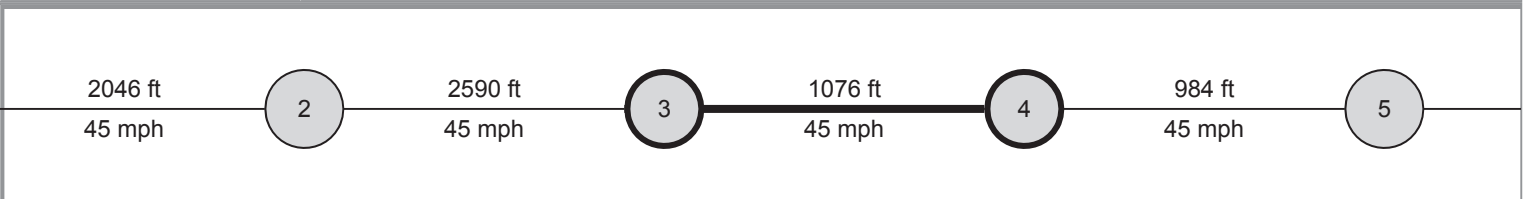
	Eastbound	Westbound
Facility Travel Time, s	209.47	172.17
Facility Travel Speed, mph	26.19	31.86
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.42	68.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.75	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.84	A	0.65	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.55			19.62		
3	Running Speed, mph	37.53			37.38		
3	Through Delay, s/veh	19.22			15.63		
3	Travel Time, s	38.76			35.26		
3	Travel Speed, mph	18.93			20.81		
3	Stop Rate, stops/veh	0.47			0.45		
3	Spatial Stop Rate, stops/mi	2.28			2.21		
3	Through vol/cap Ratio	0.40			0.21		
3	Percent of Base FFS	40.77			44.83		
3	Level of Service	D			D		
3	Auto Traveler Perception Score	2.49			2.48		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.82	D	3.50	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.50	C
3	Transit Segment LOS Score / LOS	1.88	A	1.72	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		209.47		172.17	
Facility Travel Speed, mph		26.19		31.86	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		56.42		68.64	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.31		2.24	

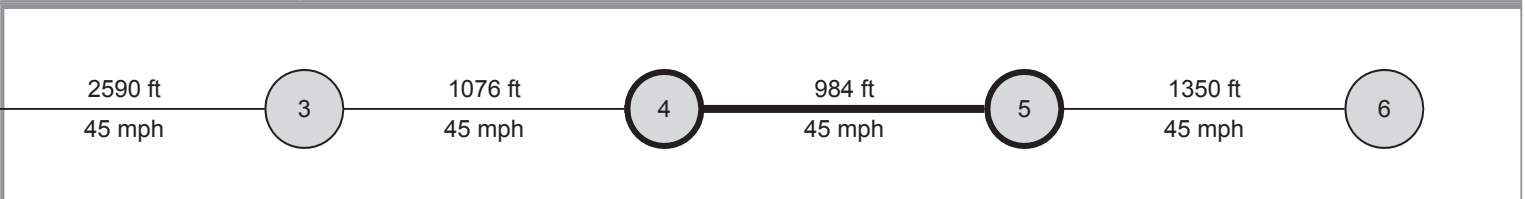
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.75	D	3.54	D
Bicycle Facility LOS Score / LOS		3.43	C	3.45	C
Transit Facility LOS Score / LOS		0.84	A	0.65	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.40			18.12		
4	Running Speed, mph	36.47			37.02		
4	Through Delay, s/veh	2.84			18.03		
4	Travel Time, s	21.23			36.15		
4	Travel Speed, mph	31.60			18.56		
4	Stop Rate, stops/veh	0.10			0.43		
4	Spatial Stop Rate, stops/mi	0.52			2.30		
4	Through vol/cap Ratio	0.40			0.29		
4	Percent of Base FFS	68.07			39.97		
4	Level of Service	B			E		
4	Auto Traveler Perception Score	2.22			2.50		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.78	D	3.75	D
4	Bicycle Segment LOS Score / LOS	3.49	C	3.43	C
4	Transit Segment LOS Score / LOS	0.50	A	1.83	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	209.47	172.17
Facility Travel Speed, mph	26.19	31.86
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.42	68.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

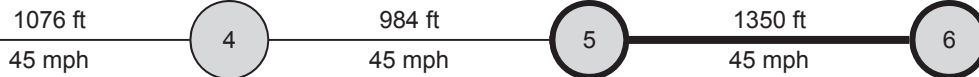
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.75	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.84	A	0.65	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	CP - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.73			22.95		
5	Running Speed, mph	38.79			40.10		
5	Through Delay, s/veh	24.76			1.74		
5	Travel Time, s	48.49			24.69		
5	Travel Speed, mph	18.98			37.27		
5	Stop Rate, stops/veh	0.59			0.06		
5	Spatial Stop Rate, stops/mi	2.31			0.25		
5	Through vol/cap Ratio	0.85			0.24		
5	Percent of Base FFS	40.89			80.30		
5	Level of Service	D			B		
5	Auto Traveler Perception Score	2.50			2.18		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.06	D	3.69	D
5	Bicycle Segment LOS Score / LOS	3.54	D	3.43	C
5	Transit Segment LOS Score / LOS	0.52	A	0.49	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	209.47	172.17
Facility Travel Speed, mph	26.19	31.86
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	56.42	68.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.31	2.24

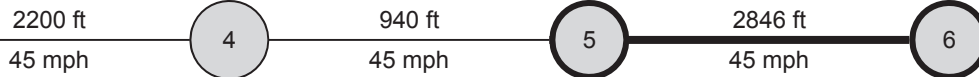
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.75	D	3.54	D
Bicycle Facility LOS Score / LOS	3.43	C	3.45	C
Transit Facility LOS Score / LOS	0.84	A	0.65	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	46.16			44.23		
5	Running Speed, mph	42.04			43.88		
5	Through Delay, s/veh	8.35			0.75		
5	Travel Time, s	54.51			44.98		
5	Travel Speed, mph	35.60			43.14		
5	Stop Rate, stops/veh	0.25			0.03		
5	Spatial Stop Rate, stops/mi	0.46			0.05		
5	Through vol/cap Ratio	0.61			0.25		
5	Percent of Base FFS	76.69			92.94		
5	Level of Service	B			A		
5	Auto Traveler Perception Score	2.21			2.15		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.26	E	3.68	D
5	Bicycle Segment LOS Score / LOS	3.60	D	3.45	C
5	Transit Segment LOS Score / LOS	0.48	A	0.16	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.29	175.50
Facility Travel Speed, mph	35.61	36.17
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.70	77.92
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

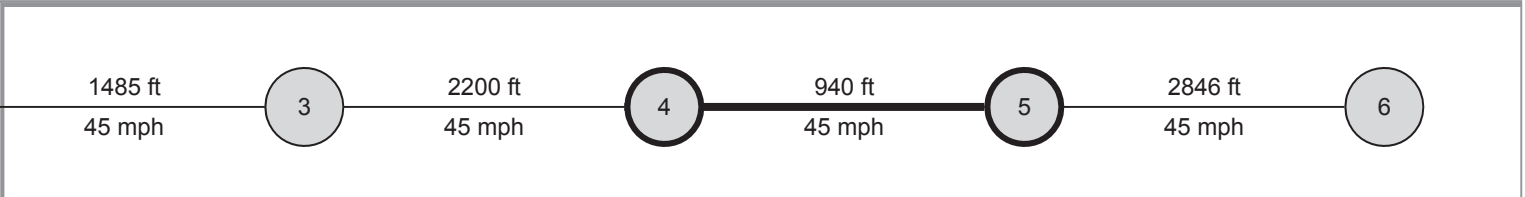
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.91	D	3.59	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.47	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.75			17.60		
4	Running Speed, mph	36.10			36.41		
4	Through Delay, s/veh	0.86			3.88		
4	Travel Time, s	18.62			21.49		
4	Travel Speed, mph	34.43			29.83		
4	Stop Rate, stops/veh	0.03			0.15		
4	Spatial Stop Rate, stops/mi	0.14			0.85		
4	Through vol/cap Ratio	0.33			0.24		
4	Percent of Base FFS	74.16			64.25		
4	Level of Service	B			C		
4	Auto Traveler Perception Score	2.16			2.27		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.67	D	3.54	D
4	Bicycle Segment LOS Score / LOS	3.47	C	3.43	C
4	Transit Segment LOS Score / LOS	0.70	A	0.93	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.29	175.50
Facility Travel Speed, mph	35.61	36.17
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.70	77.92
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

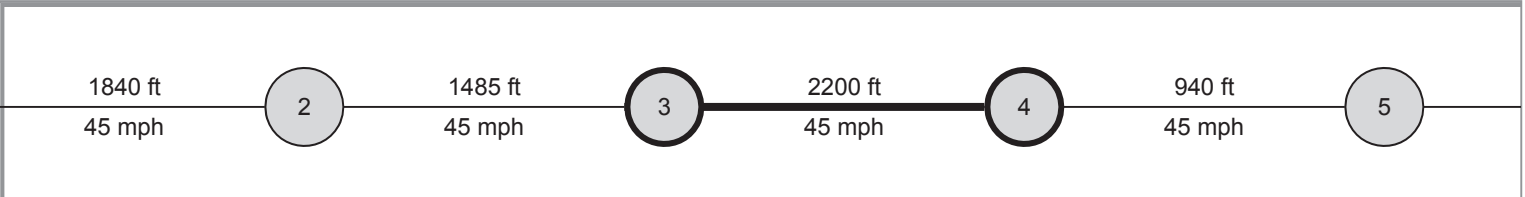
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.91	D	3.59	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.47	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.18			34.92		
3	Running Speed, mph	42.64			42.95		
3	Through Delay, s/veh	4.86			5.73		
3	Travel Time, s	40.04			40.65		
3	Travel Speed, mph	37.46			36.90		
3	Stop Rate, stops/veh	0.18			0.20		
3	Spatial Stop Rate, stops/mi	0.43			0.48		
3	Through vol/cap Ratio	0.35			0.26		
3	Percent of Base FFS	80.71			79.48		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.20			2.21		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.60	D	3.67	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.44	C
3	Transit Segment LOS Score / LOS	0.56	A	0.55	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.29	175.50
Facility Travel Speed, mph	35.61	36.17
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.70	77.92
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

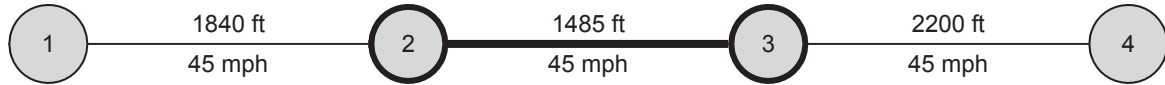
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.91	D	3.59	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.47	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.06			24.92		
2	Running Speed, mph	40.40			40.63		
2	Through Delay, s/veh	3.02			2.70		
2	Travel Time, s	28.08			27.61		
2	Travel Speed, mph	36.06			36.67		
2	Stop Rate, stops/veh	0.10			0.10		
2	Spatial Stop Rate, stops/mi	0.34			0.36		
2	Through vol/cap Ratio	0.35			0.26		
2	Percent of Base FFS	77.68			78.98		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.19			2.19		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.76	D	3.13	C
2	Bicycle Segment LOS Score / LOS	3.48	C	3.45	C
2	Transit Segment LOS Score / LOS	0.32	A	0.56	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.29	175.50
Facility Travel Speed, mph	35.61	36.17
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.70	77.92
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.91	D	3.59	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.47	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	30.44			29.79		
1	Running Speed, mph	41.22			42.11		
1	Through Delay, s/veh	6.61			10.98		
1	Travel Time, s	37.05			40.77		
1	Travel Speed, mph	33.86			30.77		
1	Stop Rate, stops/veh	0.24			0.28		
1	Spatial Stop Rate, stops/mi	0.68			0.80		
1	Through vol/cap Ratio	0.40			0.19		
1	Percent of Base FFS	72.95			66.29		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.45			2.26		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.99	D	3.78	D
1	Bicycle Segment LOS Score / LOS	3.52	D	3.44	C
1	Transit Segment LOS Score / LOS	0.37	A	0.90	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		178.29		175.50	
Facility Travel Speed, mph		35.61		36.17	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		76.70		77.92	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.24		2.20	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.91	D	3.59	D
Bicycle Facility LOS Score / LOS		3.52	D	3.44	C
Transit Facility LOS Score / LOS		0.47	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.39			32.94		
1	Running Speed, mph	43.07			42.35		
1	Through Delay, s/veh	2.60			1.78		
1	Travel Time, s	34.99			34.72		
1	Travel Speed, mph	39.86			40.18		
1	Stop Rate, stops/veh	0.10			0.07		
1	Spatial Stop Rate, stops/mi	0.26			0.17		
1	Through vol/cap Ratio	0.09			0.25		
1	Percent of Base FFS	85.88			86.55		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.18			2.17		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.44	C	3.76	D
1	Bicycle Segment LOS Score / LOS	3.37	C	3.49	C
1	Transit Segment LOS Score / LOS	0.32	A	0.25	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		179.55		169.70	
Facility Travel Speed, mph		30.55		32.33	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		65.82		69.64	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.26		2.24	

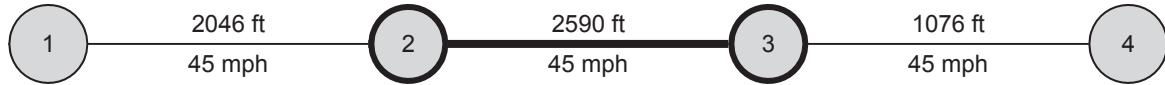
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.68	D	3.54	D
Bicycle Facility LOS Score / LOS		3.41	C	3.43	C
Transit Facility LOS Score / LOS		0.65	A	0.61	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postigo	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.17			40.32		
2	Running Speed, mph	43.96			43.80		
2	Through Delay, s/veh	16.82			0.84		
2	Travel Time, s	56.99			41.15		
2	Travel Speed, mph	30.99			42.91		
2	Stop Rate, stops/veh	0.45			0.03		
2	Spatial Stop Rate, stops/mi	0.93			0.06		
2	Through vol/cap Ratio	0.10			0.16		
2	Percent of Base FFS	66.76			92.44		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.28			2.15		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.68	D	3.42	C
2	Bicycle Segment LOS Score / LOS	3.39	C	3.43	C
2	Transit Segment LOS Score / LOS	0.84	A	0.13	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	179.55	169.70
Facility Travel Speed, mph	30.55	32.33
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	65.82	69.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.26	2.24

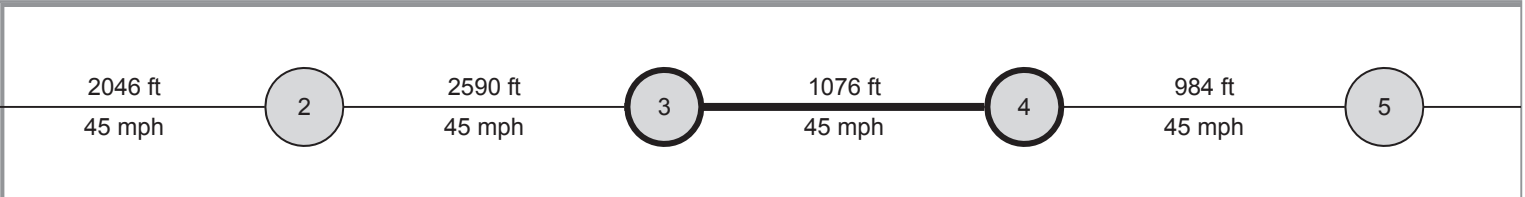
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.41	C	3.43	C
Transit Facility LOS Score / LOS	0.65	A	0.61	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.19			19.47		
3	Running Speed, mph	38.23			37.68		
3	Through Delay, s/veh	10.81			15.75		
3	Travel Time, s	30.00			35.22		
3	Travel Speed, mph	24.46			20.83		
3	Stop Rate, stops/veh	0.27			0.46		
3	Spatial Stop Rate, stops/mi	1.34			2.25		
3	Through vol/cap Ratio	0.16			0.15		
3	Percent of Base FFS	52.68			44.87		
3	Level of Service	C			D		
3	Auto Traveler Perception Score	2.34			2.49		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.87	D	3.38	C
3	Bicycle Segment LOS Score / LOS	3.40	C	3.50	C
3	Transit Segment LOS Score / LOS	1.28	A	1.68	A

Facility Output Data

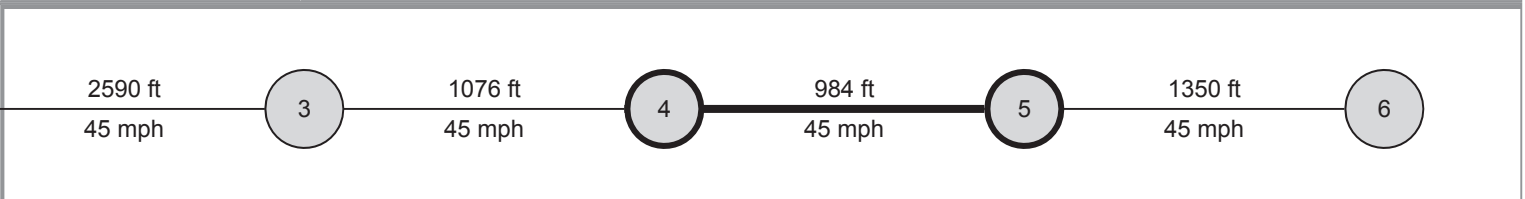
	Eastbound	Westbound
Facility Travel Time, s	179.55	169.70
Facility Travel Speed, mph	30.55	32.33
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	65.82	69.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.26	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.41	C	3.43	C
Transit Facility LOS Score / LOS	0.65	A	0.61	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.26			17.97		
4	Running Speed, mph	36.75			37.34		
4	Through Delay, s/veh	2.09			14.34		
4	Travel Time, s	20.35			32.31		
4	Travel Speed, mph	32.97			20.77		
4	Stop Rate, stops/veh	0.07			0.36		
4	Spatial Stop Rate, stops/mi	0.40			1.94		
4	Through vol/cap Ratio	0.31			0.13		
4	Percent of Base FFS	71.02			44.73		
4	Level of Service	B			D		
4	Auto Traveler Perception Score	2.20			2.44		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.67	D	3.61	D
4	Bicycle Segment LOS Score / LOS	3.46	C	3.37	C
4	Transit Segment LOS Score / LOS	0.44	A	1.57	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		179.55		169.70	
Facility Travel Speed, mph		30.55		32.33	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		65.82		69.64	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.26		2.24	

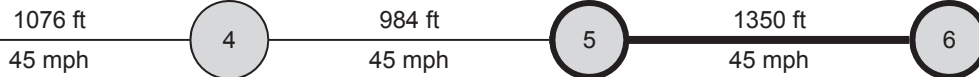
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.68	D	3.54	D
Bicycle Facility LOS Score / LOS		3.41	C	3.43	C
Transit Facility LOS Score / LOS		0.65	A	0.61	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035 - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.41			22.75		
5	Running Speed, mph	39.32			40.45		
5	Through Delay, s/veh	13.81			3.55		
5	Travel Time, s	37.22			26.30		
5	Travel Speed, mph	24.73			35.00		
5	Stop Rate, stops/veh	0.34			0.13		
5	Spatial Stop Rate, stops/mi	1.34			0.53		
5	Through vol/cap Ratio	0.59			0.10		
5	Percent of Base FFS	53.27			75.39		
5	Level of Service	C			B		
5	Auto Traveler Perception Score	2.34			2.22		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	3.88	D	3.53	D
5	Bicycle Segment LOS Score / LOS	3.50	C	3.36	C
5	Transit Segment LOS Score / LOS	0.42	A	0.56	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	179.55	169.70
Facility Travel Speed, mph	30.55	32.33
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	65.82	69.64
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.26	2.24

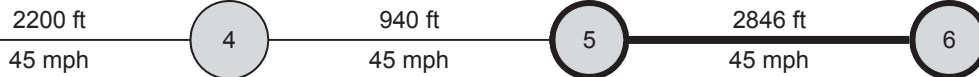
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.41	C	3.43	C
Transit Facility LOS Score / LOS	0.65	A	0.61	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Las Palmas Ave	Sunset Dr/Ranchito Dr		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
5	45	45	1	2	2846	2846	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h	never	never			never	
5	Shared Lane Spillback Time, h	never		never	never		
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	46.18			44.24		
5	Running Speed, mph	42.02			43.87		
5	Through Delay, s/veh	8.77			0.74		
5	Travel Time, s	54.96			44.97		
5	Travel Speed, mph	35.31			43.15		
5	Stop Rate, stops/veh	0.26			0.03		
5	Spatial Stop Rate, stops/mi	0.48			0.05		
5	Through vol/cap Ratio	0.62			0.25		
5	Percent of Base FFS	76.06			92.95		
5	Level of Service	B			A		
5	Auto Traveler Perception Score	2.21			2.15		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	4.27	E	3.69	D
5	Bicycle Segment LOS Score / LOS	3.60	D	3.45	C
5	Transit Segment LOS Score / LOS	0.48	A	0.17	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.89	175.77
Facility Travel Speed, mph	35.49	36.12
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.45	77.80
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.92	D	3.60	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.48	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Driveway/Canyon Rd	Las Palmas Ave		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
4	45	45	2	2	940	940	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	17.76			17.61		
4	Running Speed, mph	36.09			36.40		
4	Through Delay, s/veh	0.87			3.93		
4	Travel Time, s	18.63			21.54		
4	Travel Speed, mph	34.41			29.75		
4	Stop Rate, stops/veh	0.03			0.15		
4	Spatial Stop Rate, stops/mi	0.14			0.86		
4	Through vol/cap Ratio	0.33			0.24		
4	Percent of Base FFS	74.13			64.09		
4	Level of Service	B			C		
4	Auto Traveler Perception Score	2.16			2.27		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.67	D	3.54	D
4	Bicycle Segment LOS Score / LOS	3.47	C	3.43	C
4	Transit Segment LOS Score / LOS	0.70	A	0.94	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.89	175.77
Facility Travel Speed, mph	35.49	36.12
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.45	77.80
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

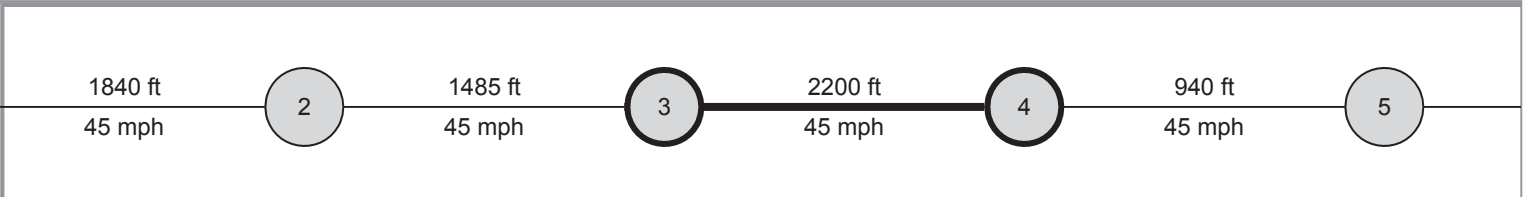
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.92	D	3.60	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.48	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Entrance Dr/Mary Ln	Driveway/Canyon Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
3	45	45	2	2	2200	2200	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never			never		
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	35.19			34.93		
3	Running Speed, mph	42.63			42.94		
3	Through Delay, s/veh	5.04			5.43		
3	Travel Time, s	40.22			40.37		
3	Travel Speed, mph	37.29			37.16		
3	Stop Rate, stops/veh	0.19			0.19		
3	Spatial Stop Rate, stops/mi	0.45			0.46		
3	Through vol/cap Ratio	0.36			0.26		
3	Percent of Base FFS	80.33			80.05		
3	Level of Service	B			B		
3	Auto Traveler Perception Score	2.21			2.21		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.61	D	3.67	D
3	Bicycle Segment LOS Score / LOS	3.48	C	3.44	C
3	Transit Segment LOS Score / LOS	0.57	A	0.53	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.89	175.77
Facility Travel Speed, mph	35.49	36.12
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.45	77.80
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

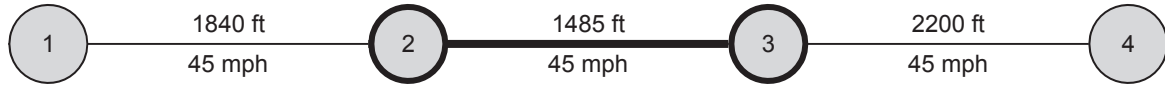
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.92	D	3.60	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.48	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	San Pasqual Rd	Entrance Dr/Mary Ln		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
2	45	45	2	2	1485	1485	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement		2	12	1	6	
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h				never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	25.07			24.93		
2	Running Speed, mph	40.39			40.61		
2	Through Delay, s/veh	3.03			2.78		
2	Travel Time, s	28.09			27.71		
2	Travel Speed, mph	36.04			36.54		
2	Stop Rate, stops/veh	0.10			0.10		
2	Spatial Stop Rate, stops/mi	0.34			0.37		
2	Through vol/cap Ratio	0.36			0.27		
2	Percent of Base FFS	77.64			78.71		
2	Level of Service	B			B		
2	Auto Traveler Perception Score	2.19			2.19		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.76	D	3.13	C
2	Bicycle Segment LOS Score / LOS	3.48	C	3.45	C
2	Transit Segment LOS Score / LOS	0.32	A	0.57	A

Facility Output Data

	Northbound	Southbound
Facility Travel Time, s	178.89	175.77
Facility Travel Speed, mph	35.49	36.12
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	76.45	77.80
Facility Level of Service	B	B
Facility Auto Traveler Perception Score	2.24	2.20

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.92	D	3.60	D
Bicycle Facility LOS Score / LOS	3.52	D	3.44	C
Transit Facility LOS Score / LOS	0.48	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	Jun 3, 2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - BVP - PM.xus	Analysis Year	2015	System Cycle Length, s	120
Intersections	Via Ranco Pwky/Beethoven Dr	San Pasqual Rd		Analysis Period	1> 7:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
1	45	45	2	3	1840	1840	50	50	0	0	70	70	0.0	0.0

		Northbound			Southbound		
Segment Output Data		NBL	NBT	NBR	SBL	SBT	SBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h			never	never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	30.45			29.80		
1	Running Speed, mph	41.20			42.09		
1	Through Delay, s/veh	6.53			11.38		
1	Travel Time, s	36.99			41.18		
1	Travel Speed, mph	33.92			30.47		
1	Stop Rate, stops/veh	0.23			0.29		
1	Spatial Stop Rate, stops/mi	0.66			0.82		
1	Through vol/cap Ratio	0.41			0.20		
1	Percent of Base FFS	73.07			65.63		
1	Level of Service	B			C		
1	Auto Traveler Perception Score	2.45			2.26		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	4.00	D	3.78	D
1	Bicycle Segment LOS Score / LOS	3.52	D	3.44	C
1	Transit Segment LOS Score / LOS	0.38	A	0.92	A

Facility Output Data		Northbound		Southbound	
Facility Travel Time, s		178.89		175.77	
Facility Travel Speed, mph		35.49		36.12	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		76.45		77.80	
Facility Level of Service		B		B	
Facility Auto Traveler Perception Score		2.24		2.20	

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.92	D	3.60	D
Bicycle Facility LOS Score / LOS		3.52	D	3.44	C
Transit Facility LOS Score / LOS		0.48	A	0.54	A

HCS 2010 Urban Street Segment Report

General Information				Streets Information	
Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Felicita Rd/Quiet Hills Dr	Quiet Hills Dr/Camino Del Postigo		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
1	45	45	3	1	2046	2046	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
1	Bay/Lane Spillback Time, h		never			never	
1	Shared Lane Spillback Time, h	never			never		never
1	Base Free-Flow Speed, mph	46.42			46.42		
1	Running Time, s	32.40			32.96		
1	Running Speed, mph	43.06			42.33		
1	Through Delay, s/veh	2.58			2.38		
1	Travel Time, s	34.98			35.34		
1	Travel Speed, mph	39.88			39.47		
1	Stop Rate, stops/veh	0.10			0.09		
1	Spatial Stop Rate, stops/mi	0.26			0.23		
1	Through vol/cap Ratio	0.10			0.26		
1	Percent of Base FFS	85.92			85.03		
1	Level of Service	A			A		
1	Auto Traveler Perception Score	2.18			2.17		

Multimodal Results (Segment)

1	Pedestrian Segment LOS Score / LOS	3.44	C	3.76	D
1	Bicycle Segment LOS Score / LOS	3.37	C	3.49	C
1	Transit Segment LOS Score / LOS	0.32	A	0.25	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		180.50		171.60	
Facility Travel Speed, mph		30.39		31.97	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		65.47		68.87	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.26		2.24	

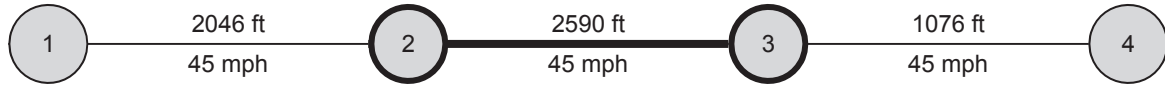
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.68	D	3.54	D
Bicycle Facility LOS Score / LOS		3.42	C	3.44	C
Transit Facility LOS Score / LOS		0.65	A	0.62	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Quiet Hills Dr/Camino Del Postig	Del Lago Blvd/I-15 SB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
2	45	45	2	2	2590	2590	50	50	0	0	70	70	0.0	0.0

Segment Output Data		Eastbound			Westbound		
		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
2	Bay/Lane Spillback Time, h		never			never	
2	Shared Lane Spillback Time, h	never		never	never		
2	Base Free-Flow Speed, mph	46.42			46.42		
2	Running Time, s	40.19			40.33		
2	Running Speed, mph	43.94			43.79		
2	Through Delay, s/veh	17.21			0.93		
2	Travel Time, s	57.39			41.25		
2	Travel Speed, mph	30.77			42.81		
2	Stop Rate, stops/veh	0.46			0.03		
2	Spatial Stop Rate, stops/mi	0.94			0.07		
2	Through vol/cap Ratio	0.11			0.17		
2	Percent of Base FFS	66.28			92.21		
2	Level of Service	C			A		
2	Auto Traveler Perception Score	2.28			2.15		

Multimodal Results (Segment)

2	Pedestrian Segment LOS Score / LOS	3.69	D	3.40	C
2	Bicycle Segment LOS Score / LOS	3.40	C	3.43	C
2	Transit Segment LOS Score / LOS	0.86	A	0.13	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		180.50		171.60	
Facility Travel Speed, mph		30.39		31.97	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		65.47		68.87	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.26		2.24	

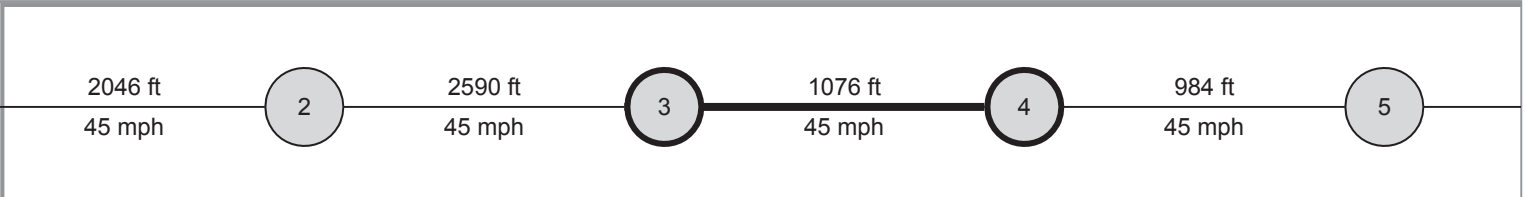
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.42	C	3.44	C
Transit Facility LOS Score / LOS	0.65	A	0.62	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Del Lago Blvd/I-15 SB Ramps	Driveway #6/I-15 NB Ramps		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
3	45	45	2	2	1076	1076	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
3	Bay/Lane Spillback Time, h		never			never	
3	Shared Lane Spillback Time, h	never		never	never		never
3	Base Free-Flow Speed, mph	46.42			46.42		
3	Running Time, s	19.20			19.47		
3	Running Speed, mph	38.20			37.67		
3	Through Delay, s/veh	10.40			16.02		
3	Travel Time, s	29.61			35.49		
3	Travel Speed, mph	24.78			20.67		
3	Stop Rate, stops/veh	0.26			0.46		
3	Spatial Stop Rate, stops/mi	1.29			2.24		
3	Through vol/cap Ratio	0.17			0.16		
3	Percent of Base FFS	53.38			44.53		
3	Level of Service	C			D		
3	Auto Traveler Perception Score	2.33			2.49		

Multimodal Results (Segment)

3	Pedestrian Segment LOS Score / LOS	3.88	D	3.38	C
3	Bicycle Segment LOS Score / LOS	3.41	C	3.50	C
3	Transit Segment LOS Score / LOS	1.26	A	1.69	A

Facility Output Data

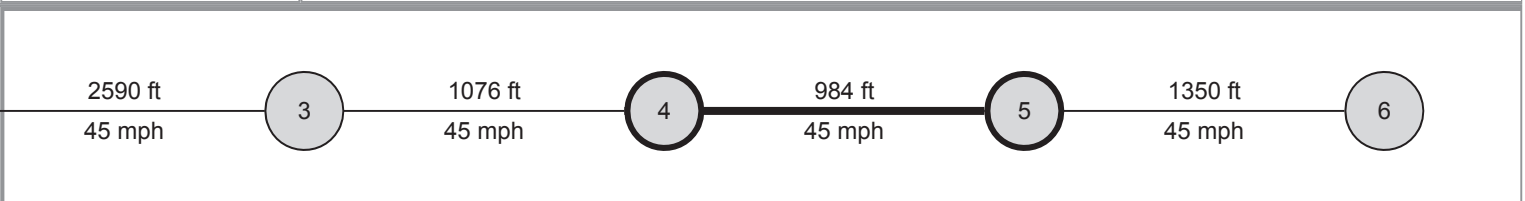
	Eastbound	Westbound
Facility Travel Time, s	180.50	171.60
Facility Travel Speed, mph	30.39	31.97
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	65.47	68.87
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.26	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.42	C	3.44	C
Transit Facility LOS Score / LOS	0.65	A	0.62	A

HCS 2010 Urban Street Segment Report

General Information					Streets Information	
Agency	Gibson Transportation Consulting, Inc.				Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015		Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour		Number of Iterations	15
File Name	2035P - VRP - PM.xus	Analysis Year	2014		System Cycle Length, s	120
Intersections	Driveway #6/I-15 NB Ramps	Driveway #7/Sunset Blvd			Analysis Period	1> 4:00
Project Description						



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
4	45	45	3	3	984	984	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
4	Bay/Lane Spillback Time, h		never			never	
4	Shared Lane Spillback Time, h	never			never		never
4	Base Free-Flow Speed, mph	46.42			46.42		
4	Running Time, s	18.26			17.97		
4	Running Speed, mph	36.74			37.34		
4	Through Delay, s/veh	2.09			15.17		
4	Travel Time, s	20.35			33.14		
4	Travel Speed, mph	32.97			20.24		
4	Stop Rate, stops/veh	0.07			0.38		
4	Spatial Stop Rate, stops/mi	0.40			2.03		
4	Through vol/cap Ratio	0.31			0.13		
4	Percent of Base FFS	71.02			43.61		
4	Level of Service	B			D		
4	Auto Traveler Perception Score	2.20			2.45		

Multimodal Results (Segment)

4	Pedestrian Segment LOS Score / LOS	3.67	D	3.61	D
4	Bicycle Segment LOS Score / LOS	3.46	C	3.37	C
4	Transit Segment LOS Score / LOS	0.44	A	1.61	A

Facility Output Data		Eastbound		Westbound	
Facility Travel Time, s		180.50		171.60	
Facility Travel Speed, mph		30.39		31.97	
Facility Base Free Flow Speed, mph		46.42		46.42	
Facility Percent of Base FFS		65.47		68.87	
Facility Level of Service		C		B	
Facility Auto Traveler Perception Score		2.26		2.24	

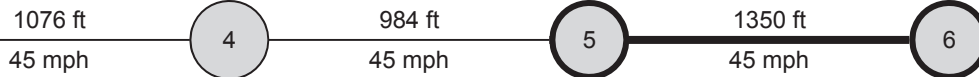
Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS		3.68	D	3.54	D
Bicycle Facility LOS Score / LOS		3.42	C	3.44	C
Transit Facility LOS Score / LOS		0.65	A	0.62	A

HCS 2010 Urban Street Segment Report

General Information

Agency	Gibson Transportation Consulting, Inc.			Number of Intersections	6
Analyst	R Gibson	Analysis Date	6/3/2015	Number of Segments	5
Jurisdiction	City of Escondido	Time Period	PM Peak Hour	Number of Iterations	15
File Name	2035P - VRP - PM.xus	Analysis Year	2014	System Cycle Length, s	120
Intersections	Driveway #7/Sunset Blvd	Bear Valley Pkwy/Beethoven Dr		Analysis Period	1> 4:00
Project Description					



Basic Segment Information

Segment	Speed Limit		Through Lanes		Segment Length		Intersection Wid		Length of RM		Percent Curb		Other Delay	
	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB	EB	WB
5	45	45	2	3	1350	1350	50	50	0	0	70	70	0.0	0.0

		Eastbound			Westbound		
Segment Output Data		EBL	EBT	EBR	WBL	WBT	WBR
Segment	Movement	5	2	12	1	6	16
5	Bay/Lane Spillback Time, h		never			never	
5	Shared Lane Spillback Time, h	never			never		never
5	Base Free-Flow Speed, mph	46.42			46.42		
5	Running Time, s	23.42			22.76		
5	Running Speed, mph	39.30			40.45		
5	Through Delay, s/veh	14.76			3.62		
5	Travel Time, s	38.18			26.37		
5	Travel Speed, mph	24.11			34.90		
5	Stop Rate, stops/veh	0.36			0.14		
5	Spatial Stop Rate, stops/mi	1.43			0.54		
5	Through vol/cap Ratio	0.60			0.10		
5	Percent of Base FFS	51.94			75.19		
5	Level of Service	C			B		
5	Auto Traveler Perception Score	2.36			2.22		

Multimodal Results (Segment)

5	Pedestrian Segment LOS Score / LOS	3.89	D	3.53	D
5	Bicycle Segment LOS Score / LOS	3.50	D	3.36	C
5	Transit Segment LOS Score / LOS	0.42	A	0.57	A

Facility Output Data

	Eastbound	Westbound
Facility Travel Time, s	180.50	171.60
Facility Travel Speed, mph	30.39	31.97
Facility Base Free Flow Speed, mph	46.42	46.42
Facility Percent of Base FFS	65.47	68.87
Facility Level of Service	C	B
Facility Auto Traveler Perception Score	2.26	2.24

Multimodal Results (Facility)

Pedestrian Facility LOS Score / LOS	3.68	D	3.54	D
Bicycle Facility LOS Score / LOS	3.42	C	3.44	C
Transit Facility LOS Score / LOS	0.65	A	0.62	A