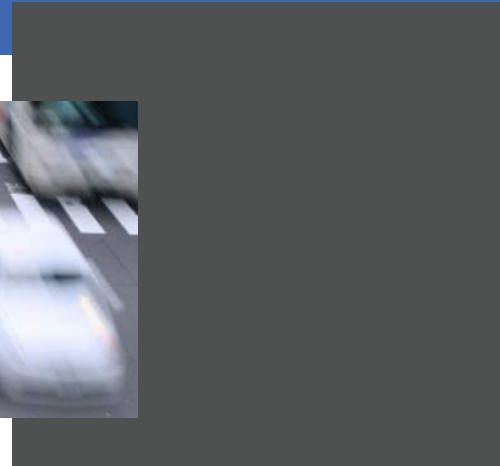




Master Plan of Arterial Highways Reclassification Study Final Report



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1 INTRODUCTION

The Master Plan of Arterial Highways (MPAH) of County of Orange was initially established in 1956 to ensure that a regional arterial highway network would be planned, developed, and preserved to supplement the County's developing major roadway system. It is continuously updated to reflect changing development and traffic patterns. The Orange County Transportation Authority (OCTA) is currently responsible for administering the MPAH through coordination with cities and the County.

The Center for Demographic Research at Cal State Fullerton University generates the official population forecasts for Orange County, the "Orange County Projections" (OCP). The OCP are used by OCTA for Countywide transportation planning. Over the last 10 years the projections have indicated reduced future growth compared to previous forecasts. As a result, some of the future planned roadway infrastructure to support the previously assumed higher population growth may no longer be necessary. The June 2023 OCP forecasts suggest a relatively modest six percent overall increase in population throughout Orange County from 3.14 million in 2022 to 3.32 million in 2045 (around a quarter percent growth per year), although certain areas within the County will experience higher localized growth, particularly in southern and eastern Orange County.

Iteris was contracted by the County of Orange, to perform a Master Plan of Arterial Highways (MPAH) Amendment traffic study. The Cities of Lake Forest and Mission Viejo provided input to the scope of work. This study evaluates the potential reclassification of Santiago Canyon Road (SCR) and El Toro Road (ETR) between SR-241 and Portola Parkway and the deletion of Blackstar Canyon Road from the MPAH. The proposed modifications are:

- The reclassification of Santiago Canyon Road (SCR) between SR-241 and Live Oak Canyon Road from its currently planned designation as a Primary Arterial (four-lane divided roadway) to a Divided Collector (2-lane divided roadway with a center turn-lane).
- The reclassification of El Toro Road (ETR) between Live Oak Canyon Road and Portola Parkway from its currently planned designation as a Major Arterial (six lane divided roadway) to either Existing conditions or an alternative configuration such as a Primary Arterial (four-lane divided roadway). Existing conditions for this roadway segment range from a six-lane divided highway immediately north of Portola Parkway which gradually narrows to a two-lane undivided highway immediately south of Live Oak Canyon Road.
- The deletion of Black Star Canyon Road between Silverado Canyon Road and the Orange County/Riverside County line.

The purpose of the MPAH Reclassification Study is to evaluate and document the effects of the proposed modifications to the MPAH on the study area traffic conditions. Stakeholders of the Project include County of Orange, City of Lake Forest, City of Mission Viejo, OCTA, the Transportation Corridor Agency (TCA) and Caltrans.

Traffic analysis was performed to assess traffic control alternatives at the intersection of SCR/ETR at Live Oak Canyon Road and a high-level review of speed and safety issues and bicycle lanes along SCR and ETR was performed.

1.1 Study Area

Santiago Canyon Road currently operates as a rural two-lane undivided collector generally separated by a double yellow line with occasional striped median and designated turn pockets. It has Class II bicycle lanes in both directions with unpaved shoulders. It is designated as a Primary Arterial (four lanes divided) in the MPAH. There is a half mile long northbound truck climbing lane immediately south of the northbound SR-241 off ramp.

El Toro Road currently operates as a two-lane undivided collector south of Live Oak Canyon Road and gradually widens to three, then four, five and finally to six-lane divided roadway at Portola Parkway. The adjacent land uses transition from rural in the northern part of the segment to suburban in the south. It is currently designated as a six lane Major Arterial in the MPAH.

Black Star Canyon Road exists primarily as a rural unpaved road with vehicular access mainly restricted to a small number of residents via a locked gate around a mile north of Silverado Canyon Road. The paved section at its southern end just north of Silverado Canyon Road serves as access to Baker Canyon and to county hiking and biking trails beyond the locked gate. It is currently designated as a Secondary Arterial in the MPAH.

Study area locations for analysis were confirmed with the County of Orange, City of Lake Forest, and City of Mission Viejo. There are twelve (12) study arterial segments and thirty-one (31) study intersections (including eleven (11) SR-241 ramp intersections) as depicted in **Figure 1-1** and listed in **Table 1-1** and **Table 1-2**. Four (4) of the study intersections are proposed future intersections – two (2) new intersections along El Toro Road to support future new housing tracts in the City of Mission Viejo and County of Orange and two (2) ramp intersections at a planned future interchange on SR-241 at Jeffery Road in the City of Irvine. The SR-241 northbound and southbound ramps at Portola Parkway and Alton Parkway both operate as Single Point Urban Interchanges (SPUIs) and are therefore each analyzed as a single intersection.

Table 1-1: Study Arterial Roadway Segments

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION
A	Santiago Canyon Road	SR-241 Northbound Off-Ramp to Irvine Lake	County of Orange
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County of Orange
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County of Orange
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County of Orange
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County of Orange / City of Lake Forest
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County of Orange / City of Lake Forest
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County of Orange / City of Lake Forest / City of Mission Viejo
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	City of Mission Viejo
I	El Toro Road	Marguerite Parkway to Portola Parkway	City of Lake Forest
J	Black Star Canyon Road	Silverado Canyon Road to County-controlled Gate	County of Orange
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County of Orange / City of Lake Forest
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County of Orange

Figure 1-1: Study Area Intersections and Arterial Roadway Segments

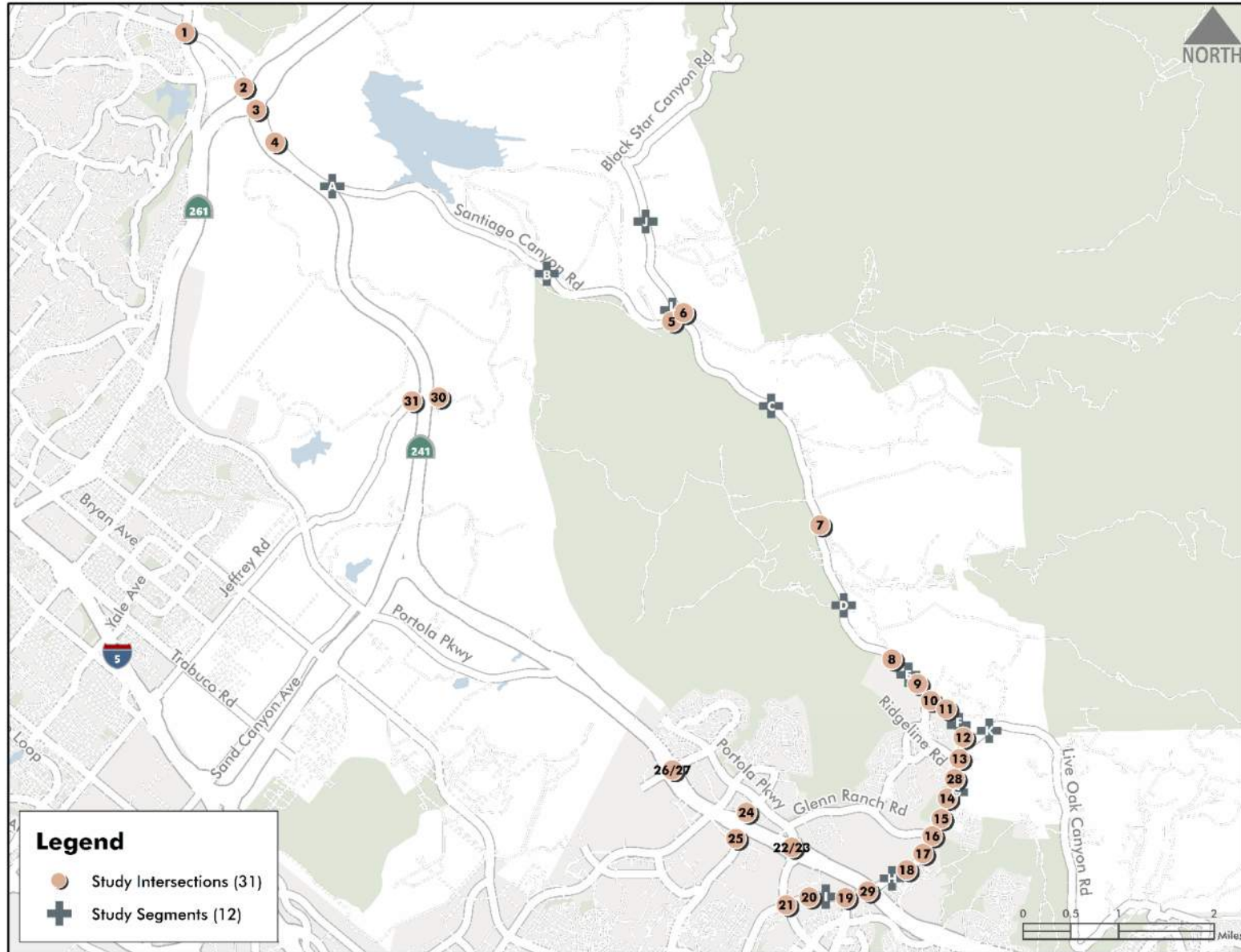


Table 1-2: Study Intersections

ID	INTERSECTION	TRAFFIC CONTROL	JURISDICTION
1	Jamboree Road at Chapman Avenue	Signalized	City of Orange
2	Santiago Canyon Road at SR-241/SR-261 Southbound Ramps	Signalized	Caltrans/City of Orange
3	Santiago Canyon Road at SR-241 Northbound On-ramp/SR-261 Off-ramp	Signalized	Caltrans/City of Orange
4	Santiago Canyon Road at SR-241 Northbound Off-ramp	Signalized	Caltrans/County of Orange
5	Santiago Canyon Road at Silverado Canyon Road	Unsignalized	County of Orange
6	Silverado Canyon Road at Blackstar Canyon Road	Unsignalized	County of Orange
7	Santiago Canyon Road at Modjeska Canyon Road	Unsignalized	County of Orange
8	Santiago Canyon Road at Modjeska Grade Road	Unsignalized	County of Orange/City of Lake Forest
9	Santiago Canyon Road at Saddlecrest	Unsignalized	County of Orange/City of Lake Forest
10	Santiago Canyon Road at Ridgeline Road North	Unsignalized	County of Orange
11	Santiago Canyon Road at Crystal Canyon Road	Unsignalized	County of Orange
12	Santiago Canyon Road at Live Oak Canyon Road	Unsignalized	City of Lake Forest
13	El Toro Road at Ridgeline Road South	Signalized	City of Lake Forest
14	El Toro Road at Valley Vista	Signalized	County of Orange
15	El Toro Road at Cielo Entrada	Unsignalized	County of Orange/City of Mission Viejo
16	El Toro Road at Glenn Ranch Road	Signalized	City of Mission Viejo
17	El Toro Road at Wandering Trails	Signalized	City of Mission Viejo
18	El Toro Road at Painted Trails	Signalized	City of Mission Viejo
19	El Toro Road at Marguerite Parkway	Signalized	City of Mission Viejo/City of Lake Forest
20	El Toro Road at Pheasant Creek	Signalized	City of Lake Forest
21	El Toro Road at Portola Parkway	Signalized	City of Lake Forest
22/23	Portola Parkway at SR-241 Northbound & Southbound Ramps ¹	Signalized	Caltrans/City of Lake Forest
24	Lake Forest Drive at SR-241 Northbound On-Ramp	Signalized	Caltrans/City of Lake Forest
25	Lake Forest Drive at SR-241 Southbound On-Ramp	Signalized	Caltrans/City of Lake Forest
26/27	Alton Parkway at SR-241 Northbound & Southbound Ramps ¹	Signalized	Caltrans/City of Lake Forest
28	<i>El Toro Road at Saddleback Meadows (Future Intersection)</i>	<i>Unsignalized</i>	<i>City of Mission Viejo</i>
29	<i>El Toro Road at Saddleback Place (Future Intersection)</i>	<i>Unsignalized</i>	<i>City of Mission Viejo</i>
30	<i>Jeffrey Road at SR-241 Northbound On-Ramp (Future Intersection)</i>	<i>Signalized</i>	<i>Caltrans/City of Irvine</i>
31	<i>Jeffrey Road at SR-241 Southbound Off-Ramp (Future Intersection)</i>	<i>Signalized</i>	<i>Caltrans/City Irvine</i>

Note: ¹ The ramp interchange pair operates as a Single-Point Urban Interchange (SPUI) and will be analyzed as a single location

1.2 Analysis Scenarios

Year 2045 is the future year scenario in SCAGs' Regional Transportation Plan (RTP) and OCTA's Long Range Transportation Plan (LRTP) and OCTA's traffic model OCTAM. The MPAH analysis was therefore performed for the following existing and future years:

- Existing Year (2023)
- Cumulative Year (2045): The cumulative year analysis includes:
 1. **No-Project (Current MPAH)** containing the Current MPAH assumptions.
 2. **With Project (Current Configuration)** reclassification scenario containing the reclassification of SCR and deletion of Black Star Canyon Road from the MPAH. In this scenario ETR is assumed to be reclassified back to the existing on-the-ground configuration which varies along the length of ETR.
 3. **With Project (Proposed Configuration)** reclassification scenario. Analysis of the With Project Current Configuration, (as shown in **Section 5**) indicated that if the Existing on-the ground configuration on El Toro Road between Glenn Ranch Road and Live Oak Canyon was retained then this segment would operate at unacceptable LOS. Therefore, this additional scenario was performed to test the reclassification of El Toro Road as a four-lane Primary Arterial between Portola Parkway and Live Oak Canyon Road.

Tables 1-3 and **Table 1-4** show the roadway lane configuration for each of the three scenarios tested.

Table 1-3 Santiago Canyon Road -Roadway Configurations

Segment	Current MPAH	Current Configuration	Proposed Configuration
Live Oak Canyon Road to 1.1 miles north of Haul Road	4D	2U	2D
1.1 miles north of Haul Road to SR-241		3U	3U [1]
SR-241 to SR-261		4U	4U [1]

[1] Existing configuration exceeds Proposed MPAH Reclassification capacity.

Table 1-4 Santiago Canyon Road -Roadway Configurations

Segment	Current MPAH	Current Configuration	Proposed Configuration
Portola Parkway to Pheasant Creek	6D	5D	5D [1]
Pheasant Creek to Marguerite Parkway		4D	4D
Marguerite Parkway to Painted Trails		5D	5D [1]
Painted Trails to Wandering Trails		4D	4D
Wandering Trails to Cielo Entrada		3D	4D
Cielo Entrada to Live Oak Canyon		2U	4D

[1] Existing configuration exceeds Proposed MPAH Reclassification capacity.

2 TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

Circulation system performance is defined by its level of service (LOS). LOS associated with the volume-to-capacity (V/C) ratios or delay for each of the analyzed arterial location are calculated using the existing and the post-processed future volumes. Intersection LOS is calculated using two methodologies, including the Intersection Capacity Utilization (ICU) methodology which simplifies the LOS by focusing on capacity, and the Highway Capacity Manual (HCM) methodology, which takes into account all movements and signal timing. This section describes the methodology used to evaluate the existing and future traffic operations conditions of the Project study area for the following analyses:

- Arterial Roadway V/C Analysis
- Intersection Analysis (ICU)
- Intersection Analysis (HCM)

2.1 Arterial Analysis Methodology

The arterial roadway analysis involves the calculation of average daily traffic (ADT) volume-to-capacity (V/C) ratios on study roadway segments. While each city adopts varying roadway classifications and capacities, **Table 2-1** summarizes the roadway capacities assumed for this study to maintain analysis consistency. Arterial level of service volume thresholds for arterial operations are summarized in **Table 2-2**. **Table 2-3** summarizes the arterial roadway segment relationship between V/C ratios and correlating LOS.

Table 2-1: Roadway Classification and Daily Capacities

Roadway Classification ¹	Number of Lanes	Daily Capacity ²
Principal Arterial	8 Lane Divided	75,000
Major Arterial	6 Lane Divided	56,300
Primary Arterial	4 Lane Divided	37,500
Rural Highway	2 Lane Undivided	26,800
Secondary Arterial	4 Lane Undivided	25,000
Divided Collector	2 Lane Divided	22,000
Collector Arterial	2 Lane Undivided	12,500

Notes:

1. Source: Orange County Transportation Authority’s Master Plan of Arterial Highways, August 2017
2. County of Orange Transportation Implementation Manual, September 2021

Table 2-2: Arterial Level of Service Volume Thresholds

Facility Type	Level of Service by Daily Traffic Volume					
	A	B	C	D	E	F
Primary (8 lanes divided)	45,000	52,500	60,000	67,500	75,000	>75,000
Major (6 lanes divided)	33,900	39,400	45,000	50,600	56,300	>56,300
Primary (4 Lanes divided)	22,500	26,300	30,000	33,800	37,500	>37,500
Secondary (4 lanes undivided)	15,000	17,500	20,000	22,500	25,000	>25,000
Commuter (2 Lanes undivided)	7,500	8,800	10,000	11,300	12,500	>12,500

Source: OCTA MPAH Guidelines Table A-4-1.

Table 2-3: Arterial Roadway V/C and LOS

LOS	Arterial Segment V/C Ratio
A	0.00 – 0.60
B	0.61 – 0.70
C	0.71 – 0.80
D	0.81 – 0.90
E	0.91 – 1.00
F	>1.00

Source: County of Orange Transportation Implementation Manual, Sept 2021

2.2 Intersection Analysis

County of Orange and Cities of Mission Viejo and Lake Forest have adopted the Intersection Capacity Utilization (ICU) methodology for signalized intersections and unsignalized intersections will be analyzed using the Highway Capacity Manual (HCM). HCM 6th Edition will be used for unsignalized intersections.

Caltrans requires HCM analysis for all its facilities. As such, LOS analysis will be completed for all Caltrans ramp intersections utilizing the HCM 6th Edition methodology.

2.2.1 Intersection Capacity Utilization (ICU) Methodology

For County of Orange and City of Mission Viejo locations, ICU analysis for this study was calculated using a standalone ICU spreadsheet that is used by the County throughout Orange County. For City of Lake Forest locations, the Lake Forest Traffic Model (LFTM) post-processor could have been used but the County’s ICU worksheet was used to maintain consistency throughout the corridor. For intersections evaluated using the ICU methodology, the following assumptions was applied:

- Base saturation flow rate = 1,700 passenger-car/hour/lane.
- Five (5) percent of total intersection capacity is lost due to the clearance interval.
- De-facto right-turn lane is assumed if 19 feet from edge of outside of through-lane exists and parking is prohibited during peak periods.
- Right-turn-on red (RTOR) utilization factor 0.75

Table 2-4 presents the V/C ratio associated with each LOS grade as well as a qualitative description of intersection operations at that grade.

Table 2-4: Intersection Level-of-Service V/C Definitions

LEVEL OF SERVICE	DESCRIPTION	SIGNALIZED INTERSECTION VOLUME-TO-CAPACITY (V/C)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	≤ 0.60
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>0.60 to 0.70
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>0.70 to 0.80
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>0.80 to 0.90
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>0.90 to 1.00
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 1.00

Source: Highway Capacity Manual 6th Edition

2.2.2 Highway Capacity Manual (HCM) Methodology

HCM intersection analysis was completed using Synchro 11 software utilizing the HCM 6th Edition methodology. The HCM 6th Edition methodology for signalized intersections defines the LOS by the average vehicle delay experienced by all vehicles traveling through the intersection. For evaluating project related impacts, signal timing splits are optimized under future scenarios as timing will likely be updated to accommodate changing demand over time. For unsignalized intersections by convention the LOS is assumed to be the approach with the highest delay not the overall intersection delay as a whole.

For intersections evaluated using the HCM methodology, the following assumptions was applied:

- Base saturation flow rate = 1,900 passenger-car/hour/lane
- Cycle length for future scenarios = 60 – 150 seconds
- Minimum green time per phase = 7 seconds
- Lost time per phase = 4 seconds
- Peak hour factor (PHF) extracted from existing counts applied to both existing and future analysis.
- Heavy vehicle = 2 %
- LOS results from optimized conditions will be reported for all future scenarios (including optimized signal phasing, signal timing splits and cycle lengths)

Table 2-5 presents the average delay associated with each LOS grade as well as a qualitative description of intersection operations at that grade.

Table 2-5: Intersection Level-of-Service Delay Definitions

LEVEL OF SERVICE	DESCRIPTION	SIGNALIZED INTERSECTION DELAY (SECONDS)	UNSIGNALIZED INTERSECTION DELAY (SECONDS)
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< 10.0	< 10.0
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	>10.0 and < 20.0	>10.0 and < 15.0
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	>20.0 and < 35.0	>15.0 and < 25.0
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	>35.0 and < 55.0	>25.0 and < 35.0
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	>55.0 and < 80.0	>35.0 and < 50.0
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80.0	> 50.0

Source: Highway Capacity Manual 6th Edition

2.3 Performance Standard and Impact Criteria

Traffic impacts associated with the MPAH reclassifications will be identified by comparing the results from the “With Project” and “No Project” post-processed model outputs. Impact criteria were established separately for intersections under the jurisdiction of OCTA Congestion Management Plan (CMP), Caltrans, County of Orange, and other local agencies within the study area. Each study intersection has been analyzed and evaluated in accordance with the impact criteria established by the MPAH guidelines.

2.3.1 Congestion Management Plan Criteria

The OCTA Congestion Management Plan (CMP) November 2023 establishes a target Level of Service of LOS E or better (V/C not to exceed 1.00) for arterials that are part of the CMP roadway network. An increase in project-related V/C ratio increase of 0.03 over the base condition or LOS degradation to LOS F are considered not in compliance with CMP LOS objectives and require a mitigation or a deficiency plan. However, none of the study area intersections or arterial segments are CMP locations.

2.3.2 Caltrans Criteria

Under Caltrans’ Traffic Impact Study Guideline, the HCM methodology is the standard operational analysis method. Caltrans impact criteria states that a target LOS at the transition between LOS C and LOS D is recommended. However, Caltrans also acknowledges that this target may not always be feasible and LOS D is acceptable. If a State highway facility is operating worse than the appropriate target LOS under the No Build conditions, the same LOS should be maintained under the Build conditions.

2.3.3 Local Agency Criteria

All applicable performance criteria for each jurisdiction will be considered. The County of Orange and the Cities of Lake Forest and Mission Viejo all consider LOS D to be an acceptable performance standard for non-CMP intersection locations. In addition, the County requires LOS C to be maintained for all uninterrupted highway links of three miles in length or more (i.e., between signalized intersections).

2.3.4 Performance Criteria Summary

The performance standards for each jurisdiction within the study area are summarized in **Table 2-6**.

Table 2-6: Performance Criteria by Jurisdiction

JURISDICTION	PERFORMANCE STANDARD	IMPACT CRITERIA
Caltrans	LOS D	Project LOS worsens to E or F and Project LOS is worse than Baseline LOS.
OCTA CMP	LOS E	Project LOS worsens to F; or if Baseline is LOS F and project-related V/C increase ≥ 0.03 .
County of Orange	Arterial Links ² : LOS C	Project LOS worsens to unacceptable LOS; or if Baseline is LOS E or worse and project-related V/C increase ≥ 0.01 .
	Intersections: LOS D	
City of Lake Forest	LOS D	Project LOS worsens to unacceptable LOS; or if Baseline is LOS E or worse and project-related V/C increase ≥ 0.01 .
City of Mission Viejo	LOS D	Project LOS worsens to unacceptable LOS; or if Baseline is LOS E or worse and project-related V/C increase ≥ 0.01 .
City of Orange	LOS D	Project LOS worsens to E or F; or if Baseline is LOS E or worse and project-related V/C increase ≥ 0.01 .

Notes:

1. The MPAH desired performance is LOS C for arterial links and LOS D for intersections or the local adopted standard. In cases where the criteria differ from the locally adopted standards, defer to the local standards.
2. The practice when planning the arterial system is to use LOS "C" for link capacities, with the intent of maintaining LOS "D" through intersections.

3 EXISTING CONDITIONS

This section presents the analysis results for arterial roadway segment and intersection operations under Existing Year AM and PM peak hours during the weekday (Tuesday to Thursday) and Midday peak hour during the weekend using existing volumes methodologies discussed in **Section 3**.

3.1 Existing Traffic Data

Existing traffic counts for the past 24 months were requested from each jurisdiction. In addition, a traffic count program was undertaken for the project in May 2023 to ensure current traffic characteristics were captured. ADT traffic data was available on Santiago Canyon Road (County of Orange -Spring 2023) and on El Toro Road (City of Lake Forest - 2021). The May 2023 count program included:

- 7-day ADT counts on 12 arterial segments along Santiago Canyon Road, El Toro Road, Silverado Canyon Road, Live Oak Canyon Road, and Blackstar Canyon Road.
- Daily vehicle classification counts (cars, trucks, cyclists, and motorcycles) at three locations on SCR and ETR for a Weekday, Saturday, and Sunday. There were also two classification counts available from the County's 2022 multimodal counts on Santiago Canyon for a single weekday only.
- Weekday Peak Hour Intersection turning movement counts at the 27 existing study intersections (7:00AM to 9:00 AM) and (4:00 PM to 6:00 PM). The peak hour is determined by the highest consecutive four fifteen-minute intervals within the two-hour peak period.
- Weekend (Saturday and Sunday) intersection turning movement counts at five of the busier intersections in the corridor (10 AM to 2PM). If the peak hour ADT for the segments associated with an intersection fell outside of the 10 AM to 2 PM count collection time period, factors were developed to adjust the peak hour turning movements upwards based on the approach volumes from the ADT counts in the peak shoulders . This was the case at Santiago Canyon Road/ Live Oak Canyon Road and El Toro Road/Glenn Ranch Road where peak hour factors of 1.087 and 1.029, respectively were applied to the traffic counts. The V/C ratio and delay at these intersections reflect the peak hour factor adjustment.

The ADT count summary and May 2023 hourly count graphs by segment (Saturday and Wednesday) are shown in **Appendix A**. Weekday intersection turning movement counts, and the weekend intersection turning movements are included in **Appendix B**, and **Appendix C**, respectively. The weekend factor development is provided in **Appendix D** and the vehicle classification counts are shown in **Appendix E**.

3.2 Arterial Roadway Analysis

Table 3-1 and **Table 3-2** present the number of lanes and posted speed limits along ETR and SCR in the northbound and southbound directions.

Table 3-1: Number of Lanes and Posted Speed Limit along ETR

DIRECTION	SEGMENT	# LANES	SPEED LIMIT
Northbound	Portola Parkway to Pheasant Creek	3D	55
	Pheasant Creek to Marguerite Parkway	2D	55
	Marguerite Parkway to Painted Trails	3D	50
	Painted Trails to Wandering Trails	2D	50
	Wandering Trails to Live Oak Canyon Road	1U	50
Southbound	Live Oak Canyon Road to Cielo Entrada	1U	55
	Cielo Entrada to Marguerite Parkway	2D	50
	Marguerite Parkway to Portola Parkway	2D	50

Table 3-2: Number of Lanes Posted Speed Limit along SCR

DIRECTION	SEGMENT	# LANES	SPEED LIMIT
Northbound	Live Oak Canyon Road to 1.1 north of Haul Road	1U	55
	1.1 mi north of Haul Road to Saddleback Entrance	2U	55
	Saddleback Entrance to SR-241 NB Off-Ramp	1U	55
	SR-241 NB Off-Ramp to Jamboree Road	2U	55
Southbound	Jamboree Road to Loma Ridge Road	2U	55
	Loma Ridge Road to Live Oak Canyon Road	1U	55

Table 3-3 and **Table 3-4** summarize the arterial LOS analysis in existing conditions for weekday (Tuesday to Thursday) and weekend, respectively. All study roadway segments are currently operating at acceptable LOS. **Figure 3-1** and **Figure 3-2** show the existing ADT on the study arterial segments for weekday (Tuesday to Thursday) and weekend, respectively.

Average daily traffic volumes on Live Oak Canyon, Silverado Canyon Road and Black Star Canyon Road were significantly higher during the weekend compared to the weekday. This additional weekend traffic is mainly recreational traffic accessing the Black Star Canyon hiking area, Maple Springs trail at the end of Silverado Canyon and access to O'Neil Regional Park via Live Oak Canyon Road. Despite the additional weekend recreational traffic, average traffic volumes on Santiago Canyon Road and El Toro Road are generally higher during the weekday compared to the weekend, suggesting corridor's utilization as a weekday commuting alternative to SR-241 and Jamboree Road.

Table 3-3: Existing Year Weekday (Tuesday to Thursday) Arterial Roadway Segment LOS

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	EXISTING				
				Lanes	Capacity	ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	2U	26,800	9,300	0.35	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	2U	26,800	9,100	0.34	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	2U	26,800	8,200	0.31	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	2U	26,800	8,000	0.30	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	2U	26,800	8,600	0.32	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	2U	26,800	7,500	0.28	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	2U	12,500	9,900	0.79	C
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	4U	25,000	15,100	0.60	B
I	El Toro Road	Marguerite Parkway to Portola Parkway [1]	Lake Forest	4D	37,500	12,200	0.33	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	3,200	0.26	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	2,800	0.22	A

[1] – Ongoing construction at El Toro Road/Portola Parkway intersection with reduced number of north-south through lanes and all left-turn lanes. 2021 Lake Forest ADT map volumes used instead

Table 3-4: Existing Year Weekend (Average Saturday/Sunday) Arterial Roadway Segment LOS

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	EXISTING				
				Lanes	Capacity	ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	2U	26,800	9,300	0.35	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	2U	26,800	8,900	0.33	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	2U	26,800	7,100	0.26	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	2U	26,800	6,700	0.25	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	2U	26,800	7,800	0.29	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	2U	26,800	7,300	0.27	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	2U	12,500	9,400	0.75	C
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	4U	25,000	13,600	0.54	A
I	El Toro Road	Marguerite Parkway to Portola Parkway [1]	Lake Forest	4D	37,500	12,600	0.34	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	900	0.07	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	5,100	0.41	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	4,600	0.37	A

[1] – Ongoing construction at El Toro/Portola intersection with reduced number of north-south through lanes and all left-turn lanes. Adjusted 2021 Lake Forest ADT map used instead

Figure 3-1: Existing Year Weekday (Tuesday to Thursday) Arterial Roadway Segments ADT LOS

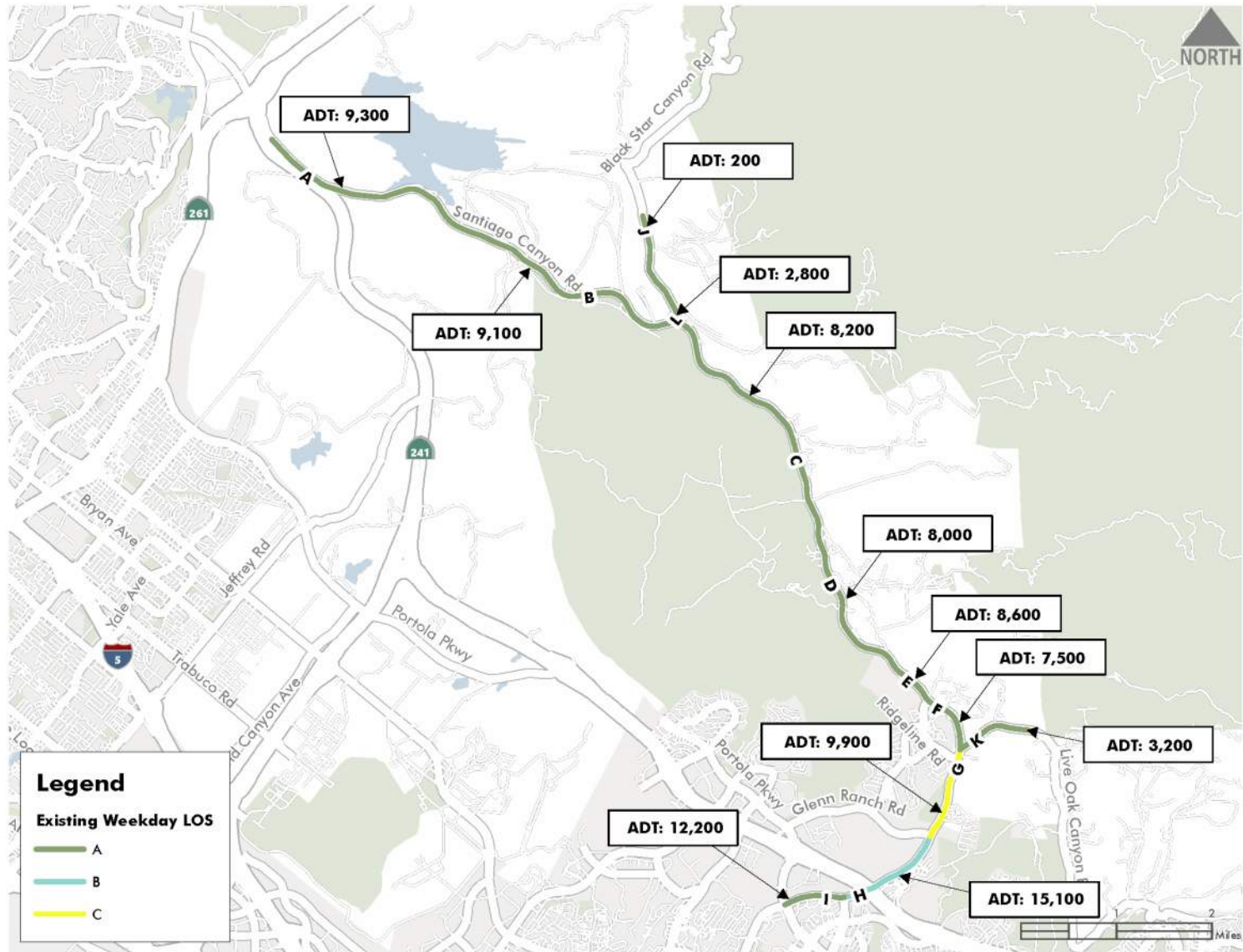
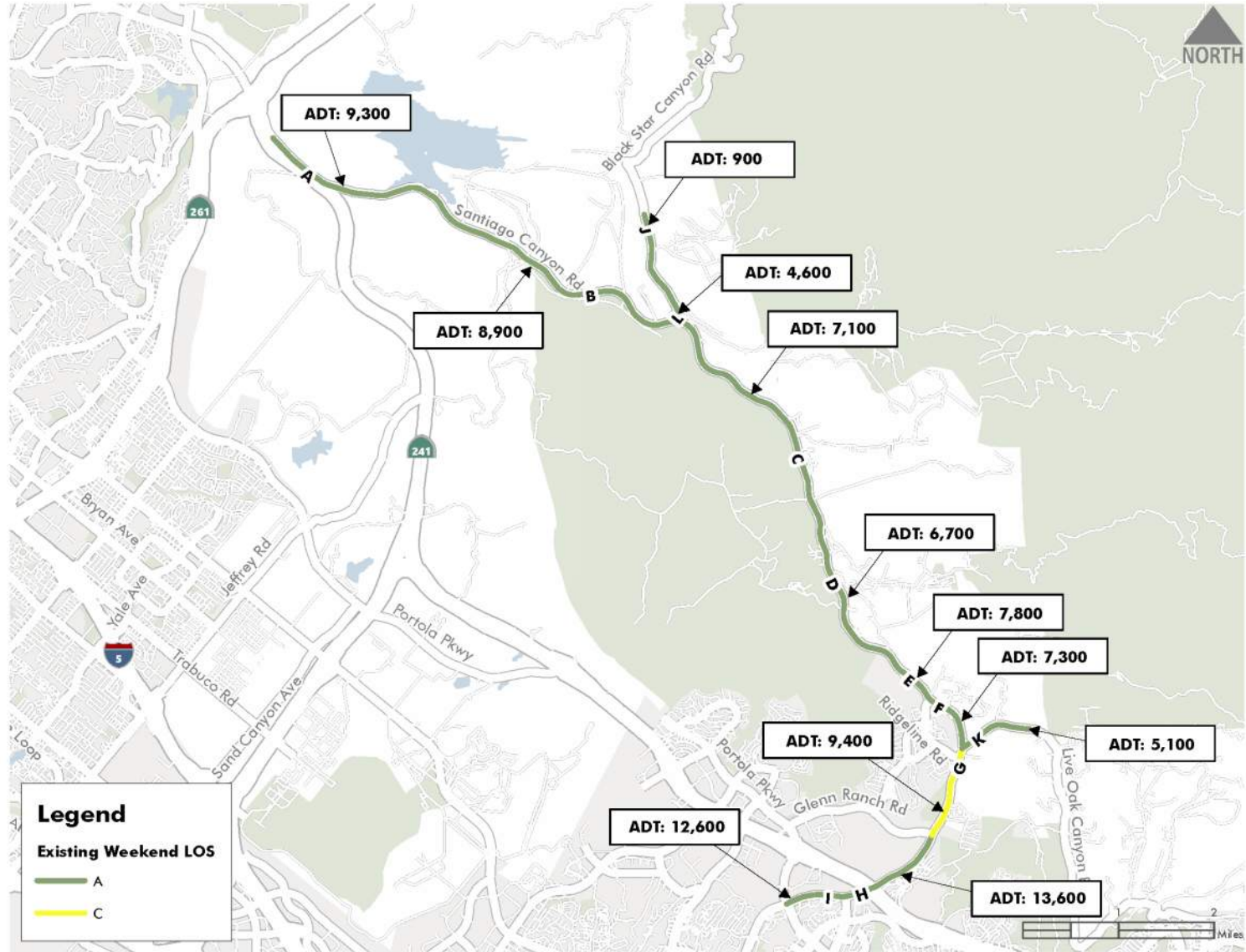


Figure 3-2: Existing Year Weekend Arterial Roadway Segments ADT LOS



3.3 Intersection Analysis

LOS analyses were conducted to evaluate existing intersection operations during the weekday (Tuesday to Thursday) for the AM and PM peak hours and weekend (Saturday and Sunday) Midday peak hour. All study ramp intersections that fall under Caltrans' jurisdiction and unsignalized intersections were analyzed per *HCM 6th Edition* methodology utilizing Synchro 11 software. All other signalized intersections were evaluated using the ICU methodology.

Table 3-5 and **Table 3-6** show the turning movement counts for the weekday (Tuesday to Thursday) AM and PM peaks hours, respectively. **Table 3-7** and **Table 3-8** show the turning movement counts for the weekend (Saturday and Sunday) Midday peaks hours, respectively. At the intersection of Santiago Canyon Road and Live Oak Canyon Road and El Toro Road and Glenn Ranch Road the peak ADT fell outside the count collection period and peak hour factors of 1.087 and 1.029, respectively were applied to the turning movement to account for this. The factors were developed using a comparison of the ADTs of the approach volumes during the midday count time period compared to the peak hour observed volumes from the ADT counts. The V/C ratio and delay at these intersections reflect the peak hour factor adjustment. **Figure 3-3** shows the existing intersection lane configurations.

Table 3-9 shows a comparison of total intersection approach volumes for Saturday and Sunday peak hours and the weekday AM and PM peak hours at five intersections along the corridor. The weekday PM peak hour is marginally busier than the weekday AM peak hour with Saturday (84% of PM peak hour) and Sunday (87% of PM peak hour) both with somewhat lower volumes.

Table 3-5: Existing Year Intersection Turning Movement Counts Weekday (Tuesday to Thursday) AM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	122	154	192	33	660	107	675	870	34	182	289	246
2	Santiago Canyon/SR-241/SR-261 SB Ramps	72	507	0	0	0	0	0	1,250	285	46	0	213
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	564	36	35	1	4	108	500	693	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	410	0	196	0	8	0	503	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	290	24	0	0	0	37	467	0	59	0	99
6	Silverado Canyon Road / Blackstar Canyon Road*	18	42	0	1	0	14	0	144	1	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	282	1	0	0	0	19	512	0	15	0	24
8	Santiago Canyon Road / Modjeska Grade Road*	0	280	14	0	0	0	1	532	0	37	0	2
9	Santiago Canyon Road / Saddle Crest*	0	293	10	0	0	0	3	562	0	5	0	4
10	Santiago Canyon Road / Ridgeline Road North*	16	234	0	60	0	12	0	428	126	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	239	16	0	0	0	4	439	0	25	0	13
12	Santiago Canyon Road / Live Oak Canyon Road*	0	199	58	0	0	0	98	367	0	90	0	58
13	El Toro Road / Ridgeline Road South*	99	240	0	18	0	242	0	447	10	0	0	0
14	El Toro Road / Valley Vista	0	313	27	0	0	0	18	668	0	89	0	27
15	El Toro Road / Cielo Entrada*	0	328	14	0	0	0	12	758	0	52	0	14
16	El Toro Road / Glenn Ranch Road	215	283	0	61	0	233	0	644	164	0	0	0
17	El Toro Road / Wandering Trails	0	447	20	0	0	0	28	848	0	60	0	50
18	El Toro Road / Painted Trails	0	415	52	0	0	0	18	887	0	144	0	56
19	El Toro Road / Marguerite Parkway	2	149	181	5	10	4	722	302	5	200	28	327
20	El Toro Road / Pheasant Creek	0	287	21	0	0	0	6	511	0	89	0	19
21	El Toro Road / Portola Parkway	268	196	470	85	927	326	31	387	174	434	1336	36
22	SR-241 NB Ramps / Portola Parkway	167	0	260	281	781	125	105	0	214	121	710	217
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	132	513	0	0	0	0	0	443	100
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	538	0	108	0	177	0	442	0
26	SR-241 NB Ramps / Alton Parkway	262	0	62	102	272	89	117	0	309	50	541	212
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	<i>Future Intersection</i>											
29	El Toro Road / Saddleback Place*	<i>Future Intersection</i>											
30	Jeffrey Road / SR-241 Northbound On-Ramp	<i>Future Intersection</i>											
31	Jeffrey Road / SR-241 Southbound Off-Ramp	<i>Future Intersection</i>											

Note: *Unsignalized Intersections

Table 3-6: Existing Year Intersection Turning Movement Counts Weekday (Tuesday to Thursday) PM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	277	954	166	24	295	79	249	232	55	175	961	808
2	Santiago Canyon/SR-241/SR-261 SB Ramps	26	1832	0	0	0	0	0	683	25	50	0	116
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	1590	46	296	1	44	133	358	236	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	684	0	978	0	34	0	393	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	624	43	0	0	0	132	264	0	39	0	76
6	Silverado Canyon Road / Blackstar Canyon Road*	26	146	0	2	0	33	0	87	7	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	665	10	0	0	0	23	247	0	13	0	18
8	Santiago Canyon Road / Modjeska Grade Road*	0	683	27	0	0	0	0	267	0	24	0	1
9	Santiago Canyon Road / Saddle Crest*	0	705	2	0	0	0	1	295	0	6	0	6
10	Santiago Canyon Road / Ridgeline Road North*	15	601	0	134	0	10	0	275	70	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	601	32	0	0	0	6	245	0	16	0	7
12	Santiago Canyon Road / Live Oak Canyon Road*	0	519	101	0	0	0	64	196	0	48	0	115
13	El Toro Road / Ridgeline Road South*	126	606	0	15	0	73	0	237	8	0	0	0
14	El Toro Road / Valley Vista	0	736	71	0	0	0	15	295	0	34	0	9
15	El Toro Road / Cielo Entrada*	0	803	32	0	0	0	6	341	0	28	0	4
16	El Toro Road / Glenn Ranch Road	179	636	0	202	0	162	0	299	64	0	0	0
17	El Toro Road / Wandering Trails	0	784	42	0	0	0	29	452	0	22	0	20
18	El Toro Road / Painted Trails	0	804	114	0	0	0	23	454	0	68	0	15
19	El Toro Road / Marguerite Parkway	9	290	288	11	40	8	354	157	9	138	24	608
20	El Toro Road / Pheasant Creek	0	593	47	0	0	0	13	286	0	40	0	14
21	El Toro Road / Portola Parkway	236	378	537	220	1358	376	11	178	132	403	1006	43
22	SR-241 NB Ramps / Portola Parkway	100	0	127	139	750	135	129	0	247	220	909	121
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	166	640	0	0	0	0	0	530	115
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	688	0	87	0	158	0	546	0
26	SR-241 NB Ramps / Alton Parkway	49	0	63	181	502	188	194	0	82	67	463	148
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	<i>Future Intersection</i>											
29	El Toro Road / Saddleback Place*	<i>Future Intersection</i>											
30	Jeffrey Road / SR-241 Northbound On-Ramp	<i>Future Intersection</i>											
31	Jeffrey Road / SR-241 Southbound Off-Ramp	<i>Future Intersection</i>											

Note: *Unsignalized Intersections

Table 3-7: Existing Year Intersection Turning Movement Counts Weekend (Saturday) Midday Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6	Silverado Canyon Road / Blackstar Canyon Road*	39	125	0	14	0	94	0	143	6	0	0	0
12	Santiago Canyon Road / Live Oak Canyon Road*	0	265	138	0	0	0	102	189	0	143	0	131
16	El Toro Road / Glenn Ranch Road	143	404	0	172	0	150	0	349	108	0	0	0
19	El Toro Road / Marguerite Parkway	162	37	408	6	217	190	10	10	10	328	241	4
21	El Toro Road / Portola Parkway	351	860	36	166	218	368	141	973	323	20	247	169

Note: *Unsignalized Intersections

Table 3-8: Existing Year Intersection Turning Movement Counts Weekend (Sunday) Midday Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
6	Silverado Canyon Road / Blackstar Canyon Road*	67	160	0	9	0	55	0	178	7	0	0	0
12	Santiago Canyon Road / Live Oak Canyon Road*	0	212	161	0	0	0	153	252	0	135	0	120
16	El Toro Road / Glenn Ranch Road	164	356	0	97	0	111	0	331	109	0	0	0
19	El Toro Road / Marguerite Parkway	161	14	290	17	251	198	41	309	268	274	226	5
21	El Toro Road / Portola Parkway	331	731	37	186	251	290	144	745	398	35	377	249

Note: *Unsignalized Intersections

Table 3-9: Existing Year Peak Hour Total Intersection Approach Volumes

ID	Intersection	Weekend		Weekday	
		Saturday	Sunday	AM Peak Hour	PM Peak Hour
6	Silverado Canyon Road / Blackstar Canyon Road*	421	476	220	301
12	Santiago Canyon Road / Live Oak Canyon Road*	968	950	1,056	1,043
16	El Toro Road / Glenn Ranch Road*	1,289	1,168	1,600	1,542
19	El Toro Road / Marguerite Parkway *	1,623	2,054	1,935	1,936
21	El Toro Road / Portola Parkway*	3,872	3,774	4,670	4,878
	Total	8,173	8,422	9,481	9,700
	% of PM Peak hour	84%	87%	98%	100%

Note: *Unsignalized Intersections

Figure 3-3: Existing Year Intersection Lane Configurations

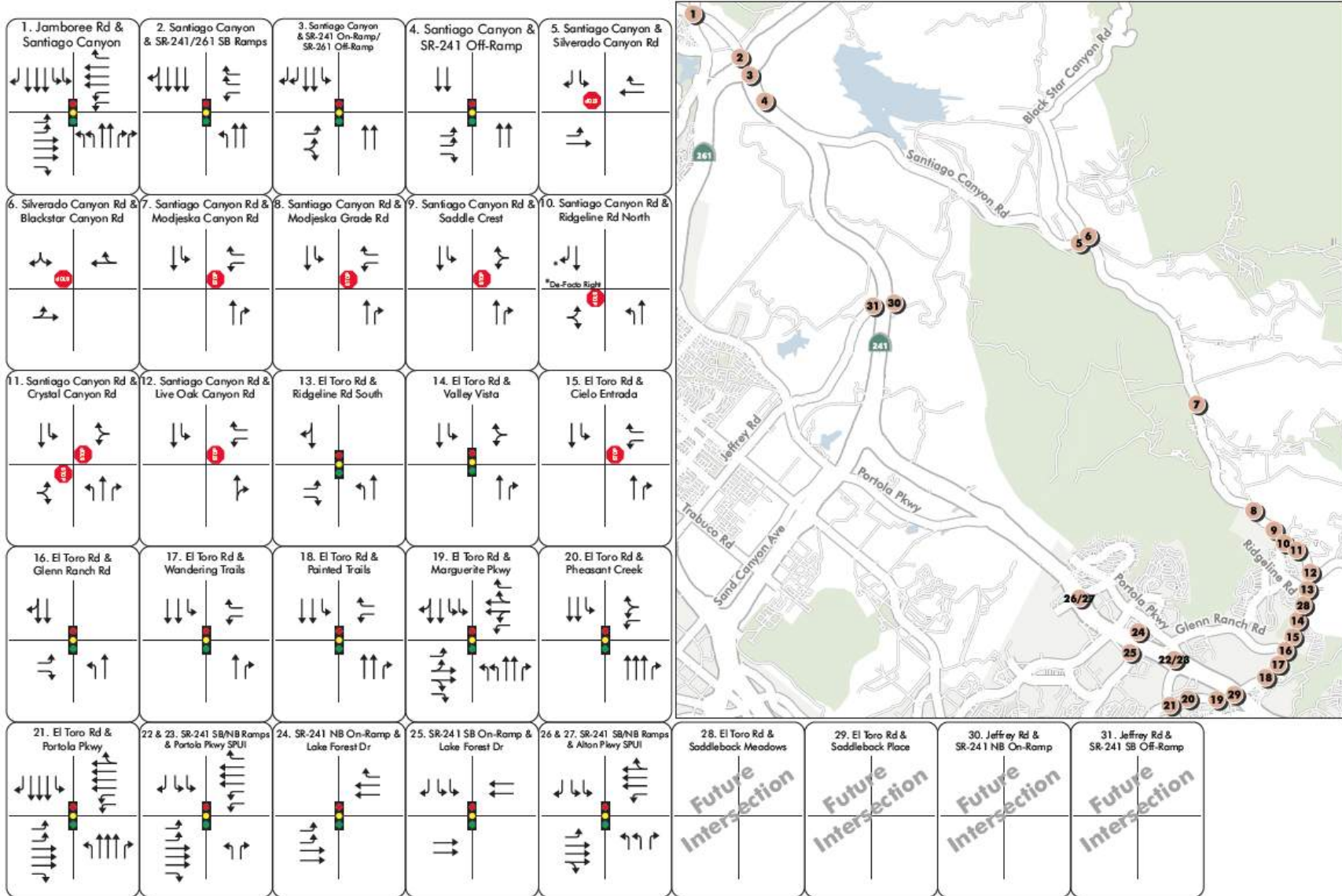


Table 3-10, Figure 3-4, and Figure 3-5 show the weekday (Tuesday to Thursday) ICU and HCM LOS for all study intersections in Existing conditions. Deficient locations are highlighted in red. Detailed ICU worksheets and Synchro HCM worksheets are included in **Appendix F** and **Appendix G**, respectively. The following intersections are currently operating at deficient LOS according to its local jurisdiction criteria for the in the Existing Year. At both of these locations the deficiency is due to delays at unsignalized intersections on the minor street approach accessing the major street.

- 10. Santiago Canyon Road at Ridgeline Road North (PM LOS E)
- 15. El Toro Road at Cielo Entrada (AM LOS E)

The five (5) intersections where weekend counts were collected currently operate at acceptable LOS for the weekend as shown in **Table 3-11, Figure 3-6, and Figure 3-7**. Detailed ICU worksheets and Synchro HCM worksheets are shown in **Appendix F** and **Appendix G**, respectively.

Table 3-10: Existing Year Intersection LOS for Weekday (Tuesday to Thursday) AM and PM Peak Hours

ID	STUDY INTERSECTION	JURISDICTION	EXISTING							
			ICU				HCM			
			AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
1	Jamboree Road at Chapman Avenue	County	0.48	A	0.81	D	--	--	--	--
2	Santiago Canyon Road at SR-241/SR-261 Southbound Ramps	Caltrans/Orange	--	--	--	--	9.0	A	6.3	A
3	Santiago Canyon Road at SR-241 Northbound On-ramp/SR-261 Off-ramp	Caltrans/Orange	--	--	--	--	6.0	A	15.9	B
4	Santiago Canyon Road at SR-241 Northbound Off-ramp	Caltrans/Orange	--	--	--	--	5.2	A	10.1	B
5	Santiago Canyon Road at Silverado Canyon Road*	County	--	--	--	--	21.1	C	31.0	D
6	Silverado Canyon Road at Blackstar Canyon Road*	County	--	--	--	--	9.2	A	9.0	A
7	Santiago Canyon Road at Modjeska Canyon Road*	County	--	--	--	--	13.6	B	16.1	C
8	Santiago Canyon Road at Modjeska Grade Road*	County/Lake Forest	--	--	--	--	18.5	C	19.3	C
9	Santiago Canyon Road at Saddlecrest*	County/Lake Forest	--	--	--	--	14.6	B	16.7	C
10	Santiago Canyon Road at Ridgeline Road North*	County	--	--	--	--	17.5	C	35.5	E
11	Santiago Canyon Road at Crystal Canyon Road*	County	--	--	--	--	15.2	C	18.8	C
12	Santiago Canyon Road at Live Oak Canyon Road*	Lake Forest	--	--	--	--	18.3	C	16.7	C
13	El Toro Road at Ridgeline Road South*	Lake Forest	0.46	A	0.42	A	--	--	--	--
14	El Toro Road at Valley Vista	County	0.55	A	0.53	A	--	--	--	--
15	El Toro Road at Cielo Entrada*	County/Mission Viejo	--	--	--	--	37.0	E	24.1	C
16	El Toro Road at Glenn Ranch Road	Mission Viejo	0.46	A	0.54	A	--	--	--	--
17	El Toro Road at Wandering Trails	Mission Viejo	0.36	A	0.54	A	--	--	--	--
18	El Toro Road at Painted Trails	Mission Viejo	0.40	A	0.34	A	--	--	--	--
19	El Toro Road at Marguerite Parkway	Mission Viejo/Lake Forest	0.39	A	0.41	A	--	--	--	--
20	El Toro Road at Pheasant Creek	Lake Forest	0.24	A	0.19	A	--	--	--	--
21	El Toro Road at Portola Parkway	Lake Forest	0.59	A	0.61	B	--	--	--	--
22/23	Portola Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/Lake Forest	--	--	--	--	11.4	B	11.0	B
24	Lake Forest Drive at SR-241 Northbound On-Ramp	Caltrans/Lake Forest	--	--	--	--	3.0	A	3.1	A
25	Lake Forest Drive at SR-241 Southbound On-Ramp	Caltrans/Lake Forest	--	--	--	--	5.9	A	5.7	A
26/27	Alton Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/Lake Forest	--	--	--	--	10.8	B	10.9	B

Note: *Unsignalized Intersection

¹The ramp interchange pair operates as a Single-Point Urban Interchange (SPUI) and will be analyzed as a single location. ²Shaded cells denote deficient locations.

Table 3-11: Existing Year Intersection LOS for Weekend Midday Peak Hour

ID	STUDY INTERSECTION	JURISDICTION	EXISTING							
			ICU				HCM			
			Midday				Midday			
			Saturday		Sunday		Saturday		Sunday	
			V/C	LOS	V/C	LOS	Delay	LOS	Delay	LOS
6	Silverado Canyon Road at Blackstar Canyon Road*	County	--	--	--	--	10.1	B	10.7	B
12	Santiago Canyon Road at Live Oak Canyon Road*	Lake Forest	--	--	--	--	18.1	C	23.9	C
16	El Toro Road at Glenn Ranch Road	Mission Viejo	0.39	A	0.33	A	--	--	--	--
19	El Toro Road at Marguerite Parkway	Mission Viejo/ Lake Forest	0.42	A	0.66	B	--	--	--	--
21	El Toro Road at Portola Parkway	Lake Forest	0.53	A	0.54	A	--	--	--	--

Note: *Unsignalized Intersection

Figure 3-4: Existing Year Study Intersection Weekday (Tuesday to Thursday) AM Peak Hour LOS

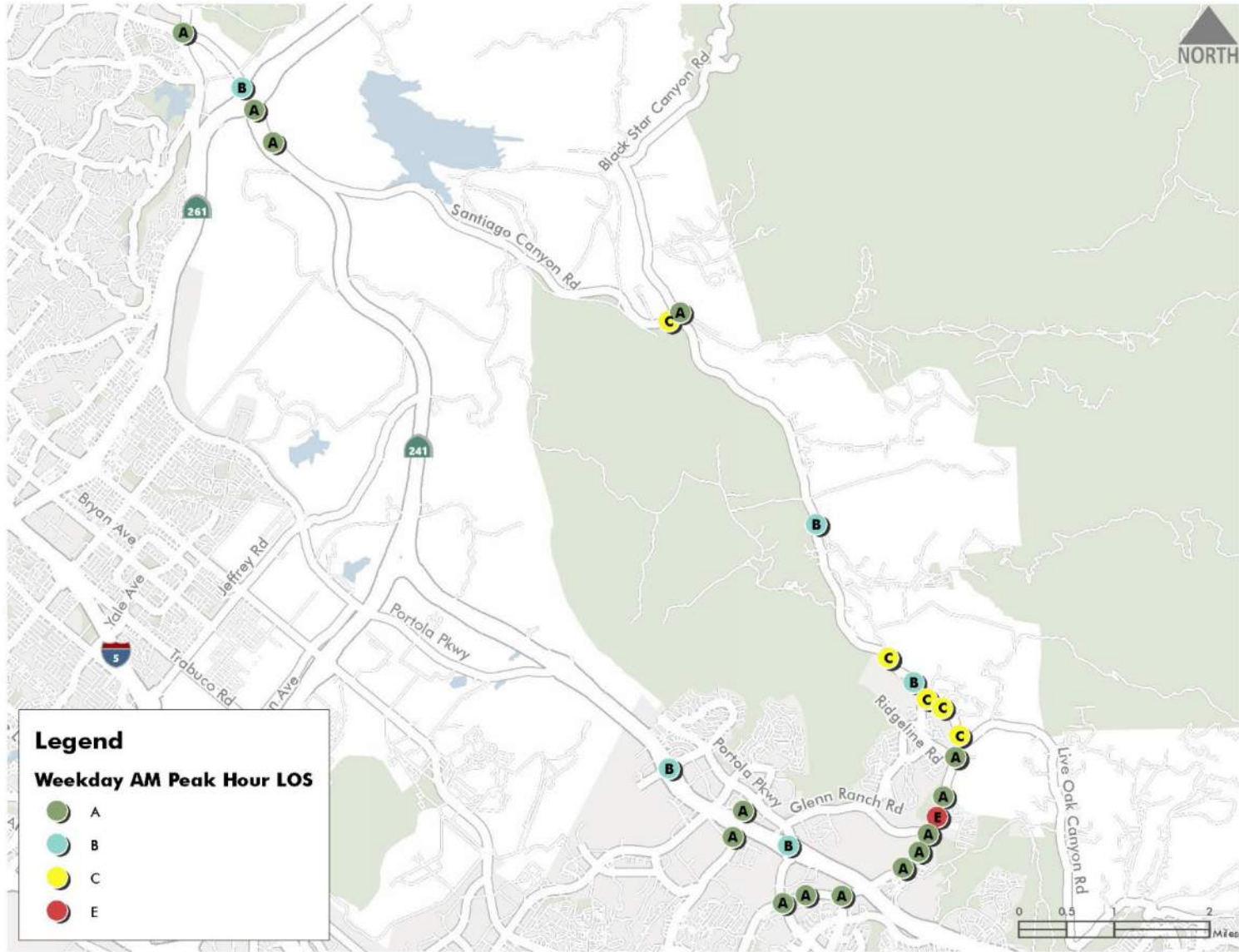


Figure 3-5: Existing Year Study Intersection Weekday (Tuesday to Thursday) PM Peak Hour LOS

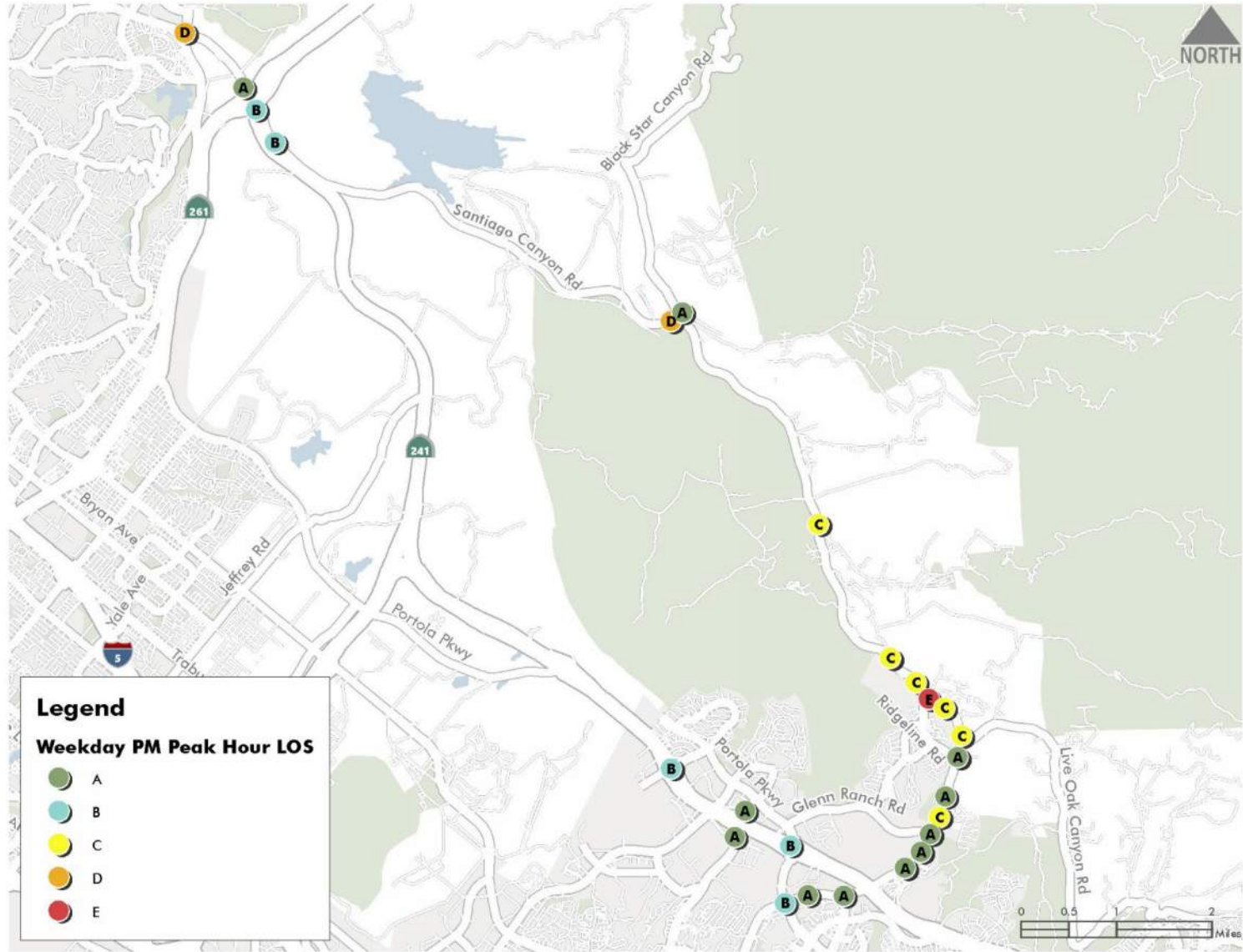


Figure 3-6: Existing Year Study Intersection Weekend (Saturday) Midday Peak Hour LOS

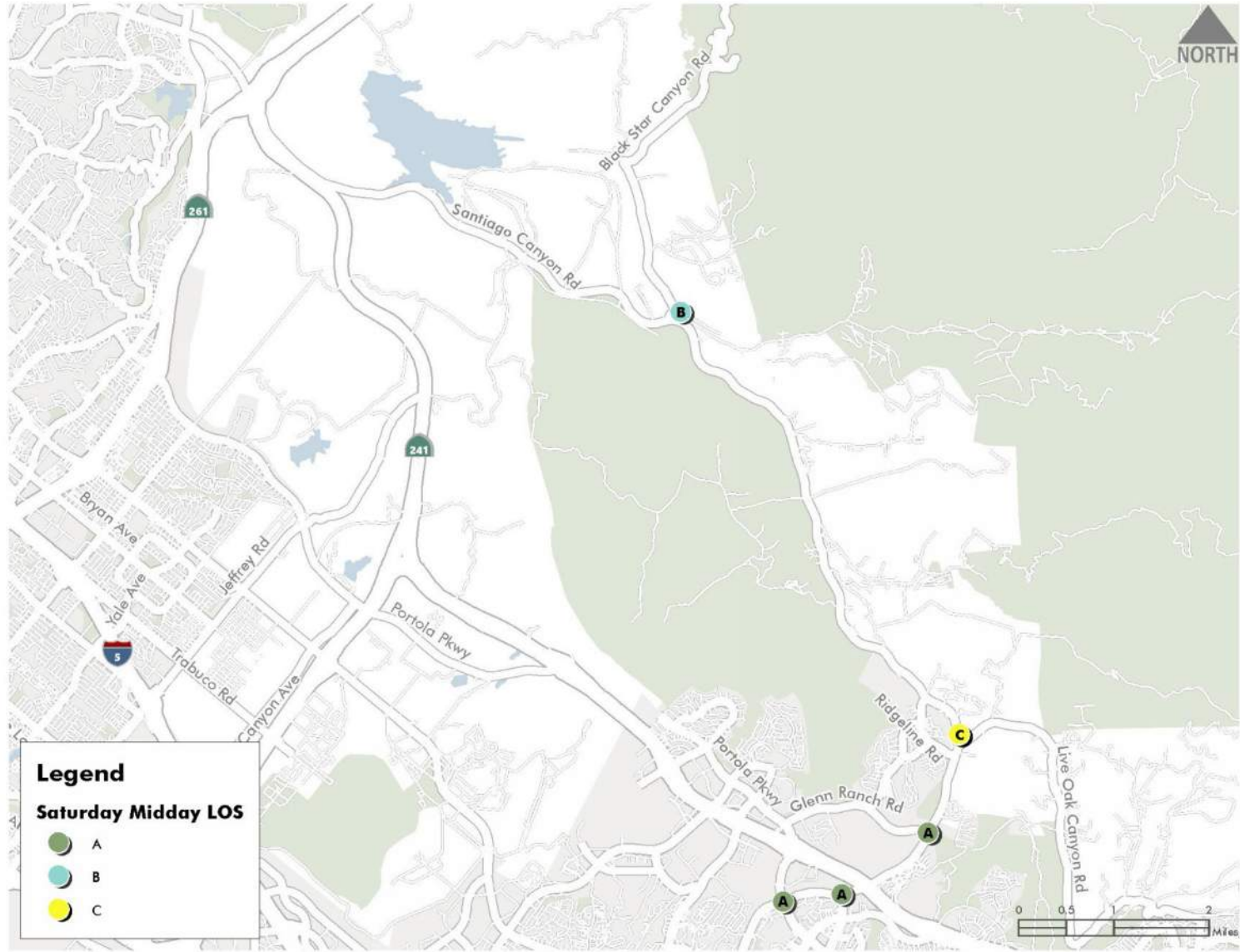
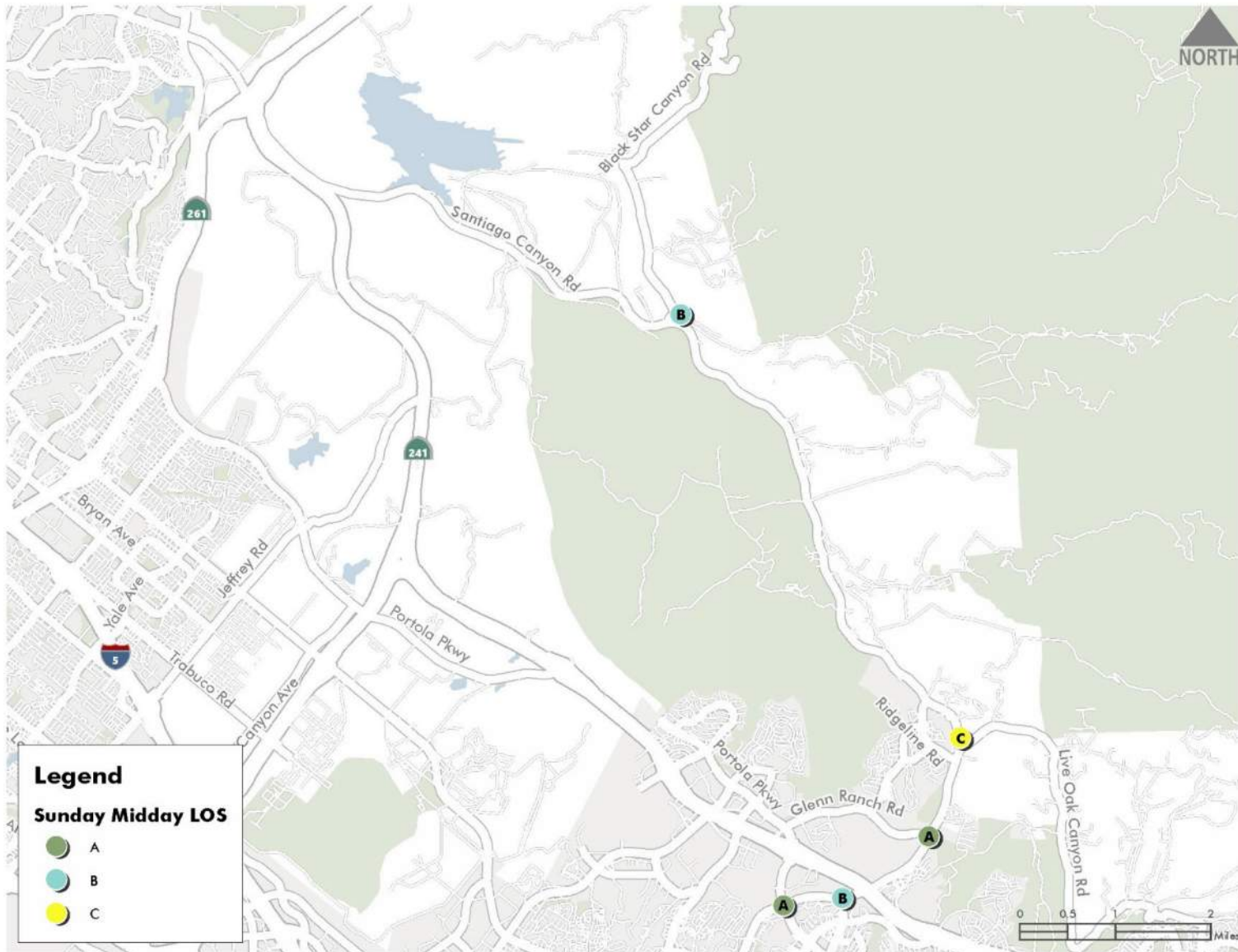


Figure 3-7: Existing Year Study Intersection Weekend (Sunday) Midday Peak Hour LOS



3.4 Vehicle Classification Counts

Vehicle classification counts were collected at three segments for Tuesday, Saturday, and Sunday in May 2023 between 6AM and 6PM. The percentage mode split for motorcycles, trucks and bicycles was compared to the equivalent 12-hour vehicle count to determine mode splits as shown in **Table 3-12**.

Motorcycles – Motorcycles are a popular mode of transportation in the study corridor during the weekend, with Cooks Corner Bar/Restaurant being a well know destination for motorcycle riders. Motorcycle mode split of up to 19% was observed on Santiago Canyon Road on a Sunday with lower but still significant volumes and mode split volumes on El Toro Road. During the weekday, the observed motorcycles only represent around 1% of all traffic.

Trucks – The study corridor is not a truck corridor and carries relatively few trucks during the week with a modest mode split of around 2%. During the weekend truck volumes are minimal.

Bicycles – Bicycles are also a popular mode of transportation at the weekend, though not as numerous as motorcycles. A mode split of 7% was observed on a Sunday near Cooks Corner. The corridor is popular with road cycle club group rides and mountain bikers use Santiago Canyon Road to access Whiting Ranch and the Santiago Truck/Luge trail often starting and ending at Cooks Corner. During the weekdays very few bicycles were observed.

Table 3-12: Existing Year Vehicle Mode Split (May 2023 6AM to 6PM)

Segment	Roadway	From	To	Jurisdiction	Classification	Tuesday		Saturday		Sunday	
						Volume	%	Volume	%	Volume	%
C	Santiago Canyon Road	Silverado Canyon Road	Modjeska Canyon Road	County of Orange	Motorcycles	96	1%	-	-	998	19%
					Trucks	143	2%	-	-	10	<1%
					Bicycles	32	0%	-	-	182	4%
					Cars/Light trucks	6,505	96%			3,989	77%
					12-Hour vehicle	6,776	100%	-	-	5,179	100%
G	El Toro Road	Live Oak Canyon Road	Glenn Ranch Road	County of Orange/Lake Forest/Mission Viejo	Motorcycles	62	1%	393	5%	553	8%
					Trucks	133	2%	42	1%	22	<1%
					Bicycles	26	0%	166	2%	466	7%
					Cars/Light trucks	7,752	97%			5,633	84%
					12-Hour vehicle	7,973	100%	7,982	100%	6,674	100%
I	El Toro Road	Marguerite Parkway	Portola Parkway	City of Lake Forest	Motorcycles	44	1%	175	2%	305	4%
					Trucks	159	2%	28	0%	9	<1%
					Bicycles	13	0%	56	1%	93	1%
					Cars/Light trucks	7,412	97%			7,773	95%
					12-Hour vehicle	7,628	100%	7,752	100%	8,180	100%

3.5 Transit

There are no transit routes along the study corridor itself, although as of September 2023, OCTA transit routes 82 and 89 serve the very southern extent of the corridor with bus stops located at the intersection of El Toro Road and Portola Parkway/Santa Margarita Parkway. Route 82 is an hourly weekday service between Foothill Ranch and Rancho Santa Margarita traversing Portola Parkway/Santa Margarita Parkway while Route 89 provides a 35-minute peak and hourly off-peak service along El Toro Road to/from Laguna Beach.

4 DEVELOPMENT OF FUTURE TRAFFIC VOLUMES

Future traffic volume development was performed using the Orange County Transportation Analysis Model (OCTAM 5) and is consistent with general regional practices.

4.1 OCTAM TAZ System and Highway Network

OCTA's traffic model OCTAM 5 was used as the starting point for the traffic volume forecasting. OCTAM has an existing year of 2016 and a Future Buildout year of 2045.

The standard Traffic Analysis Zone (TAZ) system for OCTAM is shown in **Figure 4-1**. The general level of detail of the model zone system was considered adequate to perform the level of traffic analysis required to study the three MPAH amendments. While disaggregation of the TAZ system was beyond the scope of work for this project, it was determined that some additional level of zone detail in the corridor would improve the representation of the loading of driveways onto SCR and ETR including the two future developments at Saddleback Meadows and Saddleback Place.

A review of the standard TAZ system indicated that there were numerous TAZs in the northern part of the study area representing existing and open space with no future land uses assumed in OCTAM. These "empty" TAZ were therefore "recycled" and used in a quasi-disaggregation process and reallocated to represent the loading of residential communities onto the roadway. The reallocated TAZs were: TAZs 834, 844, 845, 858 and 865. The updated TAZ system loading onto the highway network is shown in **Figure 4-2**.

In addition, in model socioeconomic data (SED) was split between an original TAZ and a relocated TAZ at two locations:

- Saddleback Crest/Crystal Canyon – SED for TAZ 872 split between original TAZ 872 and relocated TAZ 834.
- Wandering Trails/Painted Trails – SED for TAZ 1488 split between original TAZ 1488 and relocated TAZ 865.

Figure 4-1: Standard OCTAM Traffic Analysis Zone (TAZ) System

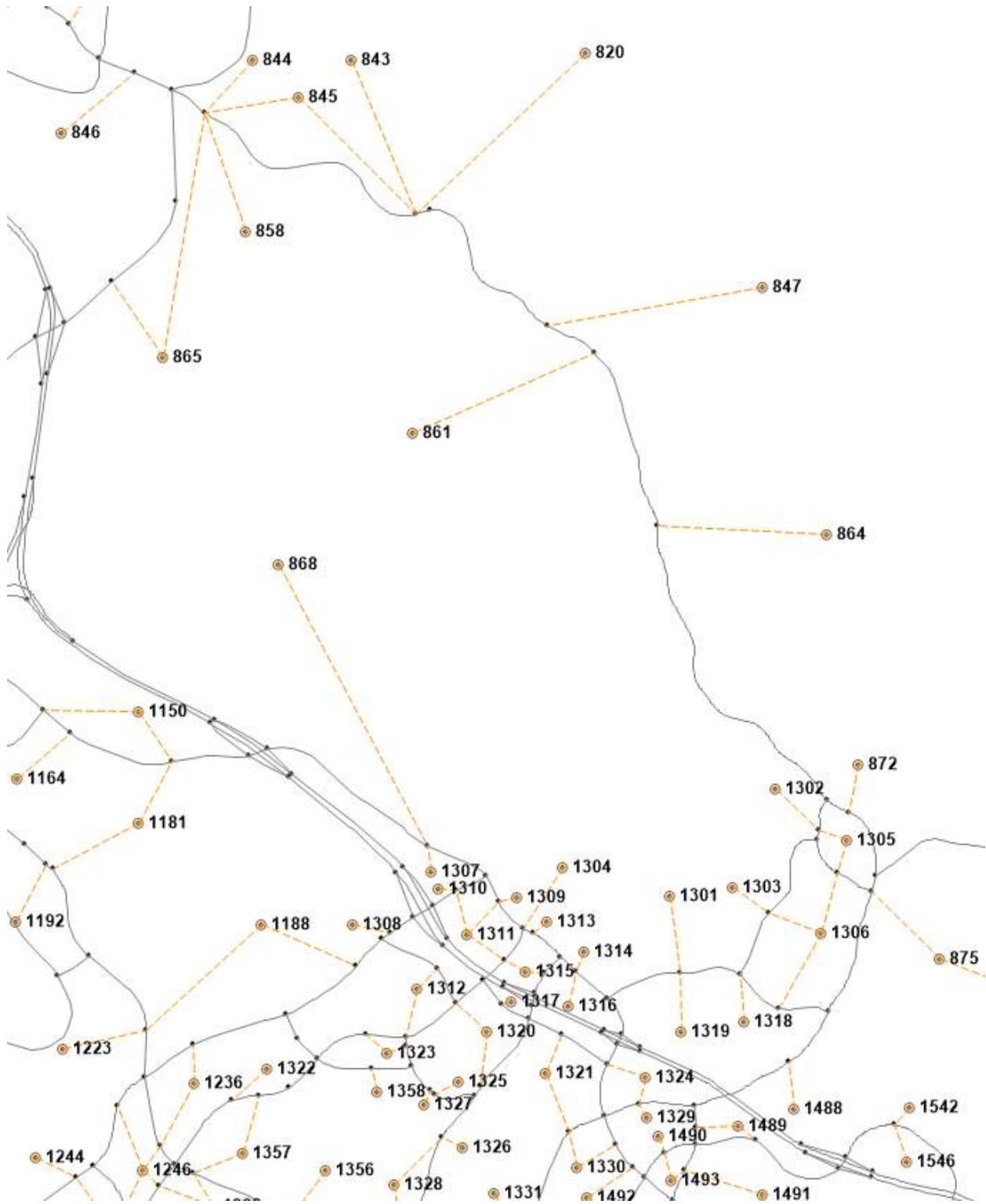
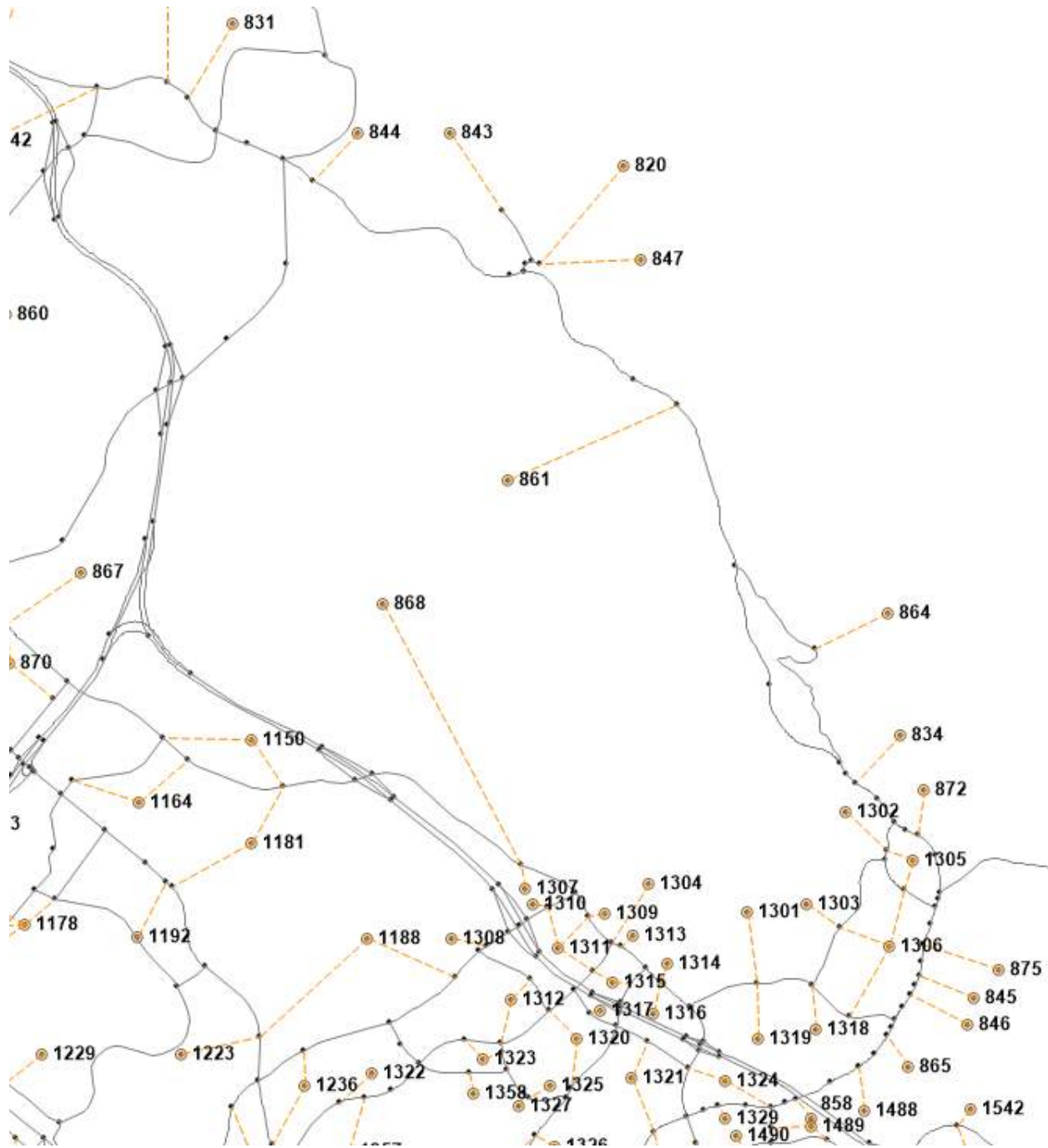


Figure 4-2: Revised OCTAM Traffic Analysis Zone (TAZ) System



4.2 Socioeconomic Data and Trip Generation

OCTAM is a socioeconomic-based traffic model which uses population and employment data to generate trips. Socioeconomic data variables include total population, employed population, dwelling units, median income, retail employment, service employment, other employment, school, and university enrollment. A review of OCTAM Year 2045 socioeconomic data assumptions was performed and adjustments were deemed necessary in two locations.

- Santiago Hills is a future new residential development located off Santiago Canyon Road at the north end of the study area between SR-261 and Jamboree Road. The number of residential units was revised down from 1,680 units in OCTAM to 1,180 units based on most recent available data from the City of Orange.
- The site of the old Nakase Nursery in the City of Lake Forest was still assumed to be office land use in 2045 OCTAM rather than the new residential development which is currently under construction. The data was updated to assume residential units using data obtained from a traffic study performed for the City of Lake Forest.

Land use data for the two new future residential developments on El Toro Road, Saddleback Place/Nuevo El Toro (91 residential units) and Saddleback Meadows (181 residential units) were obtained from traffic studies performed for the City of Mission Viejo.

4.3 Existing Year Model Validation

The Existing Year OCTAM was run using the updated TAZ system and revised socioeconomic data for the Existing year. Daily OCTAM volumes along Santiago Canyon Road and El Toro Road were compared to observed traffic counts. As shown in **Table 4-1** OCTAM was underestimating the existing volumes in the study area by around 30%.

Table 4-1 – Initial OCTAM Model Volumes versus Observed Traffic Counts

ID	Roadway	Segment	2023 Count	OCTAM	Diff	%
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	9,336	7,123	-2,213	-24%
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	9,111	6,335	-2,776	-30%
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	8,182	4,772	-3,410	-42%
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	7,991	4,074	-3,917	-49%
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	8,646	5,830	-2,816	-33%
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	7,496	3,019	-4,477	-60%
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	9,935	4,178	-5,757	-58%
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	12,810	11,009	-1,801	-14%
I	El Toro Road	Marguerite Parkway to Portola Parkway	12,160	13,623	1,463	12%
		Total	85,667	59,965	-25,702	-30%

A series of localized validation adjustments were made to OCTAM in the study area including adjusting assumed traffic speeds and changing the classification of SCR from suburban to rural which provides the roadway with a higher speed and capacity in the OCTAM model lookup tables. After a series of iterative rounds of validation adjustments, the final validation results are shown in **Table 4-2**. The overall model volumes are within 5% of observed counts and can be considered validated for forecasting purposes.

Table 4-2 – OCTAM Model Volumes versus Observed Traffic Counts after Localized Validation Adjustments

ID	Roadway	Segment	2023 Count	Adjusted OCTAM	Diff	%
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	9,336	10,783	1447	16%
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	9,111	10,019	908	10%
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	8,182	8,341	159	2%
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	7,991	7,356	-635	-8%
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	8,646	8,894	248	3%
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	7,496	7,389	-107	-1%
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	9,935	10,739	804	8%
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	15,100	13,388	578	5%
I	El Toro Road	Marguerite Parkway to Portola Parkway	12160	13,154	994	8%
Total			85,667	90,063	4,396	5%

4.4 Future Forecast OCTAM Volumes

The existing year validation adjustments were carried forward to 2045 along with the updated Year 2045 social economic data. The 2045 No Project network assumes the current MPAH network improvements that widen ETR to six lanes and SCR to 4 lanes. As a result of the combination of increased network speed and capacity on the corridor and elsewhere in the county along with increased population and employment growth, the daily traffic volumes along the corridor are anticipated to increase by around 36% overall, a little over 1% per year as shown in **Table 4-3**.

Table 4-3 – Year 2045 OCTAM Model Volumes versus Existing OCTAM No Project (Current MPAH)

ID	Roadway	Segment	Existing OCTAM	2045 OCTAM	Diff	%
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	10,783	13,512	2,729	25%
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	10,019	14,504	4,484	45%
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	8,341	12,287	3,947	47%
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	7,356	11,165	3,810	52%
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	8,894	13,288	4,393	49%
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	7,389	11,176	3,787	51%
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	10,739	14,987	4,248	40%
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	13,388	17,699	4,312	32%
I	El Toro Road	Marguerite Parkway to Portola Parkway	13,154	13,528	374	3%
Total			90,063	122,146	32,084	36%

The With Project scenario assumes the MPAH amendments which reduce the number of lanes and capacity throughout the corridor. The OCTAM networks were revised to code SCR as represented in OCTAM as a 2-lane collector with a center-turn lane. While the number of lanes is the same in existing the roadway capacity is assumed to be higher than the existing network which for the most part is a 2-lane undivided. For ETR the number of lanes varies in Existing conditions between Portola Parkway and Live Oak Canyon Road. To assess possible improvements at a localized segment level ETR was coded as its existing conditions in 2045 With Project (Current Configuration). When the speed and capacity are reduced the volumes along the corridor reduce significantly compared to No project (Current MPAH). The volumes along the corridor reduce to 4% above existing conditions as shown in **Table 4-4**.

Table 4-4 – Year 2045 OCTAM Model Volumes versus Existing OCTAM With Project (Current Configuration)

ID	Roadway	Segment	2019 Model	2045 Model	Diff	Diff %
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	10,783	10087	-696	-6%
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	10,019	10475	455	5%
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	8,341	8264	-76	-1%
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	7,356	7153	-202	-3%
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	8,894	9321	427	5%
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	7,389	7642	253	3%
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	10,739	11189	450	4%
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	13,388	15062	1674	13%
I	El Toro Road	Marguerite Parkway to Portola Parkway	13,154	14206	1052	8%
		Total	90,063	93,400	3,337	4%

An increase of 4% above existing conditions might seem like a relatively modest increase given the new development on El Toro Road and a 6% population growth countywide. However, there are two others future MPAH network improvements outside the study corridor that could affect traffic patterns in the corridor 2045 compared to Existing conditions. Firstly, the SR-241 southbound off-ramp at SCR and shown in **Figure 4-3**. This location currently operates as a T-Intersection. In the future OCTAM network there is an assumed future improvement of an additional connector that allows vehicles from the southbound off-ramp to proceed south through the intersection to access Jamboree Road via the future Handy Creek Road. This new facility reduced the travel distance and time to access Jamboree Road from southbound SR-241. For some origin/destination pairs this new connection will improve the desirability of southbound Jamboree Road compared to SCR/ETR.

Figure 4-3 – Future SR-241 Southbound Off Ramp Connection to Jamboree Road



The OCTAM 2045 network also assumes the future Portola Parkway extension from the City of Lake Forest boundary to SR-241 in the City of Irvine as shown in **Figure 4-4**. This future new connection is assumed in the MPAH and provides a new connection to SR-241 and also significantly reduces travel times to Jamboree Road via Portola Parkway in the City of Irvine for some origin-destination pairs. Both SR-241 and Jamboree Road are alternative travel routes to the study corridor for some origin-destination pairs.

Figure 4-4 – Future Portola Parkway Connection to SR-241



Since these two future improvements are assumed in the 2045 No Project condition and attract traffic away from the study corridor, a 4% increase in the study corridor compared to existing conditions seems reasonable.

4.5 Future Volume Postprocessing

Future model raw volumes for arterial intersection and roadway segment were post-processed using standard post-processing methodology as defined in NCHRP Report 255.

OCTAM model data combined with existing traffic volumes was used as the basis to develop future post-processed volumes. The methodology factors the existing counts by the difference between future and existing model volumes. Different methodologies were used for roadway segment ADT volumes and intersection turning movements. The future year post-processed roadway segment ADT volumes were calculated as follows:

- If the existing count volume is less than the existing model volume, use a ratio refinement process:
 - $Future\ PostProcessed\ Volume = Existing\ Count \times \left(\frac{Future\ Model\ Volume}{Existing\ Model\ Volume} \right)$
- If the existing count volume is greater than the existing model volume, use an incremental refinement process:
 - $Future\ PostProcessed\ Volume = Existing\ Count + (Future\ Model\ Volume - Existing\ Model\ Volume)$

Intersection turning movements were post-processed using a standard Furness process that iteratively grows existing turning movements counts using the growth between the existing and future OCTAM approach and departure volumes for each intersection leg.

5 YEAR 2045 ANALYSIS

This section presents the results for roadway segment and arterial intersection operations under Cumulative Year 2045 weekday conditions using forecasted volumes from **Section 4** and the methodologies discussed in **Section 2**.

The future weekend daily and Midday peak hour were not analyzed since observed weekday peak hour volumes were higher than weekend volumes as noted previously in **Section 3**.

5.1 Year 2045 No Project (Current MPAH) Scenario

This section presents the analysis results for arterial facilities under Cumulative Year 2045 No Project (Current MPAH) scenario.

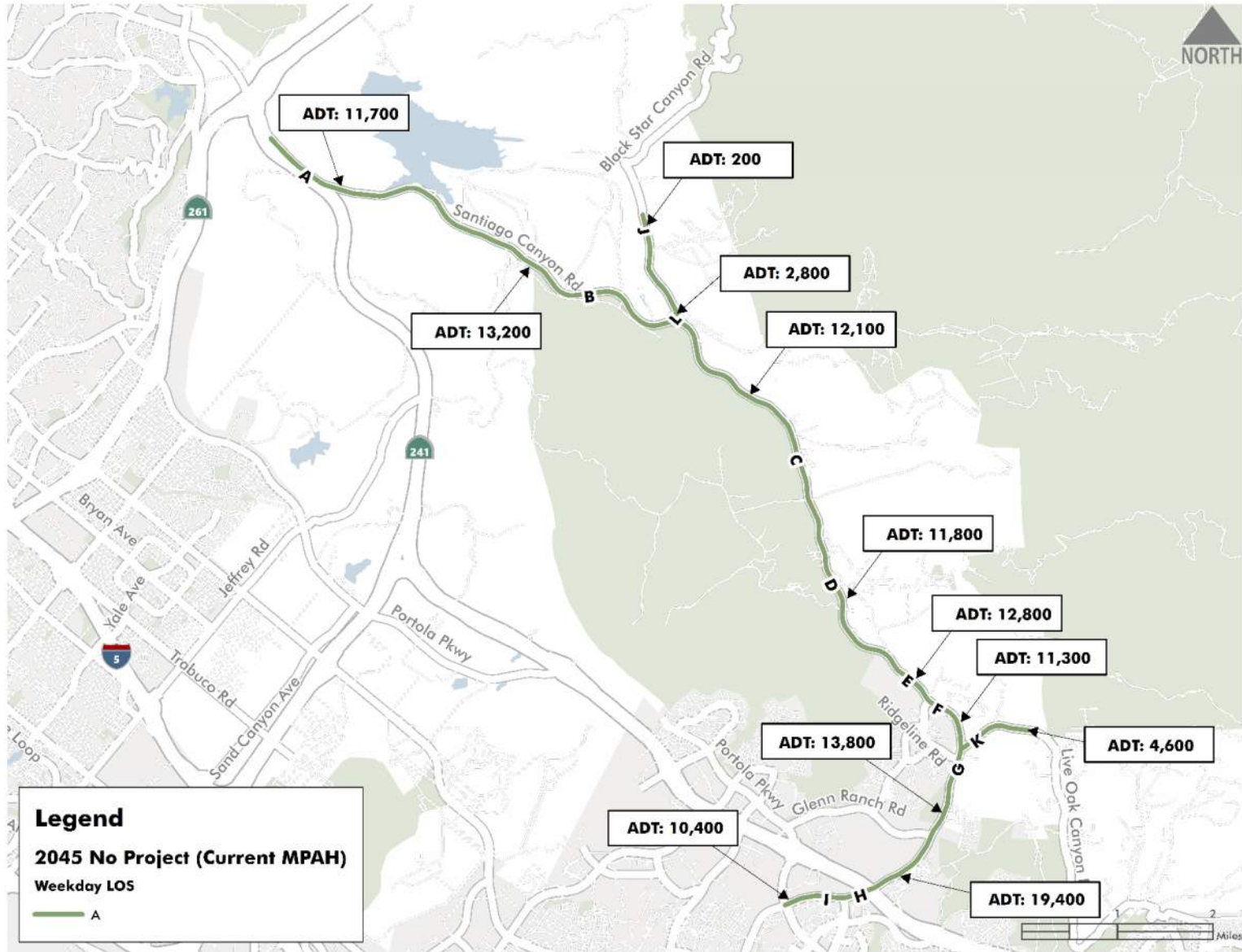
5.1.1 Arterial Analysis

Table 5-1 shows the arterial roadway analysis results for weekday Year 2045 No Project (Current MPAH) scenario. All of the study roadway segments are projected to operate at acceptable LOS. **Figure 5-1** shows the ADT on the study arterial segments for the Year 2045 No Project (Current MPAH) scenario for weekday (Tuesday to Thursday).

Table 5-1: Year 2045 No Project (Current MPAH) Weekday Arterial Roadway Segment LOS

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	YEAR 2045 NO PROJECT (CURRENT MPAH)				
				Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	4D	37,500	11,700	0.31	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	4D	37,500	13,200	0.35	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	4D	37,500	12,100	0.32	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	4D	37,500	11,800	0.31	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	4D	37,500	12,800	0.34	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	4D	37,500	11,300	0.30	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	6D	56,300	13,800	0.25	A
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	6D	56,300	19,400	0.34	A
I	El Toro Road	Marguerite Parkway to Portola Parkway	Lake Forest	6D	56,300	10,400	0.18	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	4,600	0.37	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	2,800	0.23	A

Figure 5-1: Year 2045 No Project (Current MPAH) Weekday Study Arterial Roadway Segment ADT and LOS



5.1.2 Intersection Analysis

Cumulative Year 2045 No Project (Current MPAH) intersection lane configurations for the study intersections were adjusted to account for the widening of Santiago Canyon Road to four lanes and El Toro Road to six lanes. The assumed lane configurations are shown in **Figure 5-2**.

Figure 5-2: Year 2045 No Project (Current MPAH) Study Intersection Lane Configuration

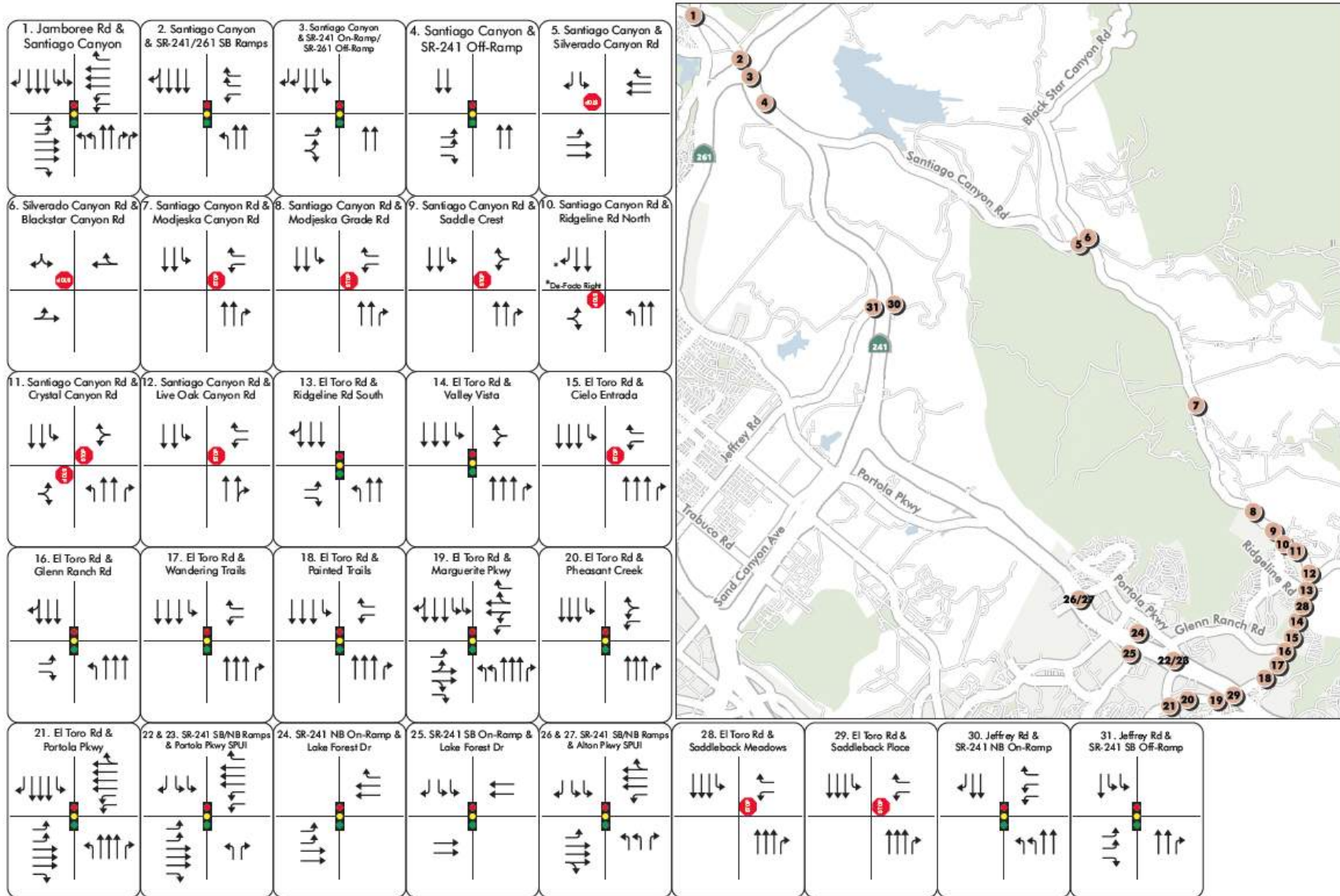


Table 5-2 and **Table 5-3** display the turning movement counts for the weekday AM and PM peaks hours, respectively. **Table 5-4** summarizes the ICU and HCM LOS for all study intersections for the Cumulative Year 2045 No Project (Current MPAH) scenario. Deficient locations as defined are highlighted in red. Detailed ICU worksheets and Synchro HCM worksheets for all study intersections are included in **Appendix F** and **Appendix G**, respectively.

Most of the deficiencies are at unsignalized intersections where the critical delay is due to vehicles from the minor street approach suffering delays accessing the major street (in particular making left-turns) due to high volumes of traffic on the major street.

Table 5-2: Year 2045 No Project (Current MPAH) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) AM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	157	136	174	38	777	83	884	751	63	325	1106	649
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	1314	0	0	0	0	0	1478	512	80	1053	479
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	1218	787	180	52	361	72	578	1048	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	1352	0	290	0	11	0	500	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	1304	46	0	0	0	22	477	0	49	0	111
6	Silverado Canyon Road / Blackstar Canyon Road*	19	48	0	1	0	15	0	143	1	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	1288	4	0	0	0	17	509	0	18	0	32
8	Santiago Canyon Road / Modjeska Grade Road*	0	1283	16	0	0	0	0	532	0	37	0	2
9	Santiago Canyon Road / Saddle Crest*	0	1228	35	0	0	0	4	522	0	53	0	73
10	Santiago Canyon Road / Ridgeline Road North*	33	1075	0	195	0	19	0	425	113	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	1062	19	0	0	0	1	440	0	40	0	26
12	Santiago Canyon Road / Live Oak Canyon Road*	0	901	96	0	0	0	70	405	0	152	0	173
13	El Toro Road / Ridgeline Road South*	108	965	0	28	0	224	0	533	5	0	0	0
14	El Toro Road / Valley Vista	0	1033	35	0	0	0	11	838	0	136	0	49
15	El Toro Road / Cielo Entrada*	0	1046	17	0	0	0	9	935	0	46	0	18
16	El Toro Road / Glenn Ranch Road	205	862	0	198	0	280	0	807	174	0	0	0
17	El Toro Road / Wandering Trials	0	995	27	0	0	0	21	1066	0	60	0	50
18	El Toro Road / Painted Trails	0	981	61	0	0	0	9	1131	0	155	0	46
19	El Toro Road / Marguerite Parkway	1	254	121	9	7	2	977	342	7	166	27	831
20	El Toro Road / Pheasant Creek	0	326	21	0	0	0	6	514	0	87	0	20
21	El Toro Road / Portola Parkway	291	219	508	98	1036	410	29	405	163	481	1324	37
22	SR-241 NB Ramps / Portola Parkway	249	0	318	356	3245	353	124	0	309	177	1860	142
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	301	513	0	0	0	0	0	481	156
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	710	0	75	0	203	0	473	0
26	SR-241 NB Ramps / Alton Parkway	448	0	19	233	833	250	29	0	433	23	1580	81
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	1077	32	0	0	0	11	858	0	94	0	31
29	El Toro Road / Saddleback Place*	0	1077	9	0	0	0	1	1336	0	28	0	4
30	Jeffrey Road / SR-241 Northbound On-Ramp	40	53	0	0	0	0	0	200	0	0	0	25
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	93	0	0	0	705	34	166	0	0	0	0

Note: *Unsignalized Intersections

Table 5-3: Year 2045 No Project (Current MPAH) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) PM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	296	1038	282	42	813	108	503	233	70	145	1006	861
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	1860	0	0	0	0	0	1308	42	117	514	127
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	1710	999	310	21	985	239	681	538	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	824	0	1072	0	34	0	750	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	712	23	0	0	0	153	757	0	45	0	75
6	Silverado Canyon Road / Blackstar Canyon Road*	27	146	0	2	0	35	0	90	7	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	727	6	0	0	0	35	738	0	15	0	19
8	Santiago Canyon Road / Modjeska Grade Road*	0	743	27	0	0	0	0	758	0	24	0	1
9	Santiago Canyon Road / Saddle Crest*	0	744	52	0	0	0	43	759	0	32	0	22
10	Santiago Canyon Road / Ridgeline Road North*	19	705	0	135	0	9	0	643	189	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	706	41	0	0	0	17	600	0	17	0	8
12	Santiago Canyon Road / Live Oak Canyon Road*	0	635	157	0	0	0	130	490	0	73	0	112
13	El Toro Road / Ridgeline Road South*	119	780	0	17	0	75	0	555	15	0	0	0
14	El Toro Road / Valley Vista	0	963	106	0	0	0	31	627	0	46	0	10
15	El Toro Road / Cielo Entrada*	0	1070	28	0	0	0	10	674	0	27	0	5
16	El Toro Road / Glenn Ranch Road	241	819	0	250	0	134	0	519	174	0	0	0
17	El Toro Road / Wandering Trails	0	1028	42	0	0	0	29	647	0	23	0	19
18	El Toro Road / Painted Trails	0	1054	117	0	0	0	20	668	0	73	0	12
19	El Toro Road / Marguerite Parkway	7	360	203	16	34	7	498	222	14	109	21	842
20	El Toro Road / Pheasant Creek	0	593	46	0	0	0	14	321	0	40	0	14
21	El Toro Road / Portola Parkway	252	378	538	219	1356	409	12	203	147	441	1077	43
22	SR-241 NB Ramps / Portola Parkway	208	0	129	251	1117	241	93	0	365	172	1214	96
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	172	640	0	0	0	0	0	546	109
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	708	0	67	0	181	0	574	0
26	SR-241 NB Ramps / Alton Parkway	259	0	169	210	428	303	163	0	136	75	540	119
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	896	108	0	0	0	36	652	0	61	0	21
29	El Toro Road / Saddleback Place*	0	1178	28	0	0	0	4	762	0	17	0	2
30	Jeffrey Road / SR-241 Northbound On-Ramp	440	160	0	0	0	0	0	71	0	0	0	21
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	601	0	0	0	220	22	49	0	0	0	0

Note: *Unsignalized Intersections

Figure 5-3 and **Figure 5-4** summarize the LOS for all study area intersections for AM and PM peak hours, respectively. The following eleven intersections are forecast to operate deficiently under Year 2045 No Project (Current MPAH) scenario:

- 3. Santiago Canyon Road at SR-241/SR-261 Northbound Ramps (PM LOS F)
- 5. Santiago Canyon Road at Silverado Canyon Road (AM and PM LOS F)
- 7. Santiago Canyon Road at Modjeska Canyon Road (AM LOS E)
- 8. Santiago Canyon Road at Modjeska Grade Road (AM LOS F)
- 9. Santiago Canyon Road at Saddlecrest (AM LOS F)
- 10. Santiago Canyon Road at Ridgeline Road North (AM and PM LOS F)
- 11. Santiago Canyon Road at Crystal Canyon Road (AM LOS F)
- 12. Santiago Canyon Road at Live Oak Canyon Road (AM LOS F and PM LOS E)
- 15. Santiago Canyon Road at Cielo Entrada (AM LOS F)
- 28. El Toro Road at Saddleback Meadows (AM LOS F)
- 29. El Toro Road at Saddleback Place (AM LOS E)

Table 5-4: Year 2045 No Project (Current MPAH) Intersection LOS

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 NO PROJECT (CURRENT MPAH)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
1	Jamboree Road at Chapman Avenue	County	0.48	A	0.81	D	--	--	--	--	0.60	A	0.87	D	--	--	--	--
2	Santiago Canyon Road at SR-241/SR-261 Southbound Ramps	Caltrans/Orange	--	--	--	--	9.0	A	6.3	A	--	--	--	--	26.8	C	14.7	B
3	Santiago Canyon Road at SR-241 Northbound On-ramp/SR-261 Off-ramp	Caltrans/Orange	--	--	--	--	6.0	A	15.9	B	--	--	--	--	13.4	B	92.7	F
4	Santiago Canyon Road at SR-241 Northbound Off-ramp	Caltrans/Orange	--	--	--	--	5.2	A	10.1	B	--	--	--	--	6.2	A	14.2	B
5	Santiago Canyon Road at Silverado Canyon Road	County	--	--	--	--	21.1	C	31.0	D	--	--	--	--	145.5	F	67.9	F
6	Silverado Canyon Road at Blackstar Canyon Road	County	--	--	--	--	9.2	A	9.0	A	--	--	--	--	9.2	A	9.0	A
7	Santiago Canyon Road at Modjeska Canyon Road	County	--	--	--	--	13.6	B	16.1	C	--	--	--	--	41.6	E	19.2	C
8	Santiago Canyon Road at Modjeska Grade Road	County/Lake Forest	--	--	--	--	18.5	C	19.3	C	--	--	--	--	95.4	F	26.6	D
9	Santiago Canyon Road at Saddlecrest	County/Lake Forest	--	--	--	--	14.6	B	16.7	C	--	--	--	--	110.2	F	26.2	D
10	Santiago Canyon Road at Ridgeline Road North	County	--	--	--	--	17.5	C	35.5	E	--	--	--	--	134.3	F	65.9	F
11	Santiago Canyon Road at Crystal Canyon Road	County	--	--	--	--	15.2	C	18.8	C	--	--	--	--	60.2	F	25.2	D
12	Santiago Canyon Road at Live Oak Canyon Road	Lake Forest	--	--	--	--	18.3	C	16.7	C	--	--	--	--	176.5	F	35.4	E
13	El Toro Road at Ridgeline Road South	Lake Forest	0.46	A	0.42	A	--	--	--	--	0.40	A	0.29	A	--	--	--	--
14	El Toro Road at Valley Vista	County	0.55	A	0.53	A	--	--	--	--	0.42	A	0.31	A	--	--	--	--
15	El Toro Road at Cielo Entrada	County/Mission Viejo	--	--	--	--	37.0	E	24.1	C	--	--	--	--	50.6	F	25.3	D
16	El Toro Road at Glenn Ranch Road	Mission Viejo	0.46	A	0.54	A	--	--	--	--	0.48	A	0.46	A	--	--	--	--

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 NO PROJECT (CURRENT MPAH)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
17	El Toro Road at Wandering Trails	Mission Viejo	0.36	A	0.54	A	--	--	--	--	0.29	A	0.28	A	--	--	--	--
18	El Toro Road at Painted Trails	Mission Viejo	0.40	A	0.34	A	--	--	--	--	0.36	A	0.31	A	--	--	--	--
19	El Toro Road at Marguerite Parkway	Mission Viejo/ Lake Forest	0.39	A	0.41	A	--	--	--	--	0.46	A	0.46	A	--	--	--	--
20	El Toro Road at Pheasant Creek	Lake Forest	0.24	A	0.19	A	--	--	--	--	0.19	A	0.19	A	--	--	--	--
21	El Toro Road at Portola Parkway	Lake Forest	0.59	A	0.61	B	--	--	--	--	0.65	B	0.63	B	--	--	--	--
22/23	Portola Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	11.4	B	11.0	B	--	--	--	--	25.6	C	12.1	B
24	Lake Forest Drive at SR-241 Northbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	3.0	A	3.1	A	--	--	--	--	6.6	A	3.1	A
25	Lake Forest Drive at SR-241 Southbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	5.9	A	5.7	A	--	--	--	--	7.4	A	5.8	A
26/27	Alton Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	10.8	B	10.9	B	--	--	--	--	18.7	B	11.9	B
28	El Toro Road at Saddleback Meadows	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	53.6	F	29.2	D
29	El Toro Road at Saddleback Place	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	38.6	E	31.1	D
30	Jeffrey Road at SR-241 Northbound On-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	6.1	A	7.4	A
31	Jeffrey Road at SR-241 Southbound Off-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	9.9	A	9.0	A

Note: *Unsignalized Intersection

¹ The ramp interchange pair operates as a Single Point Urban Interchange (SPUI) and will be analyzed as a single location.

² Shaded cells denote deficient locations.

Figure 5-3: Year 2045 No Project (Current MPAH) Study Intersection AM Peak Hour LOS

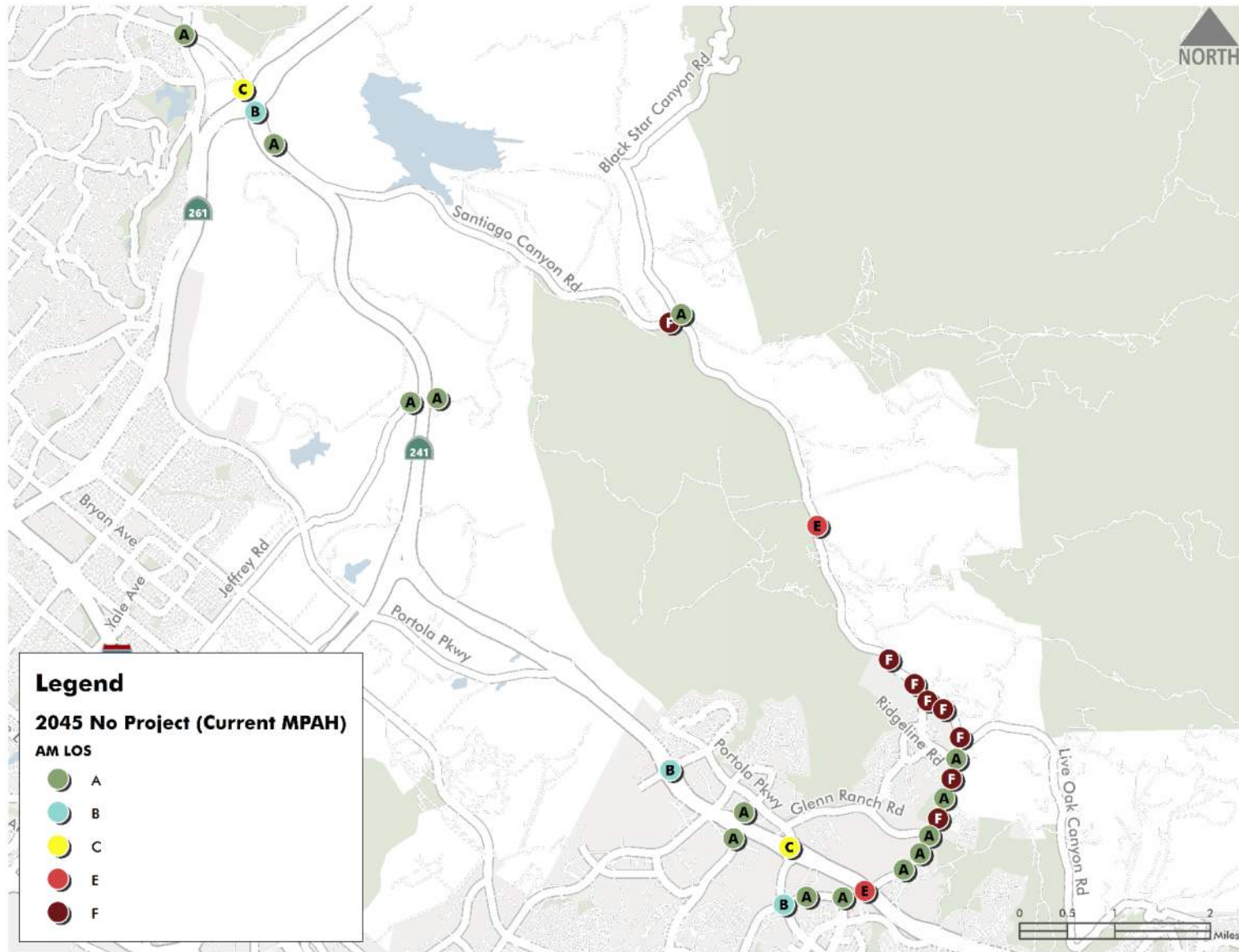
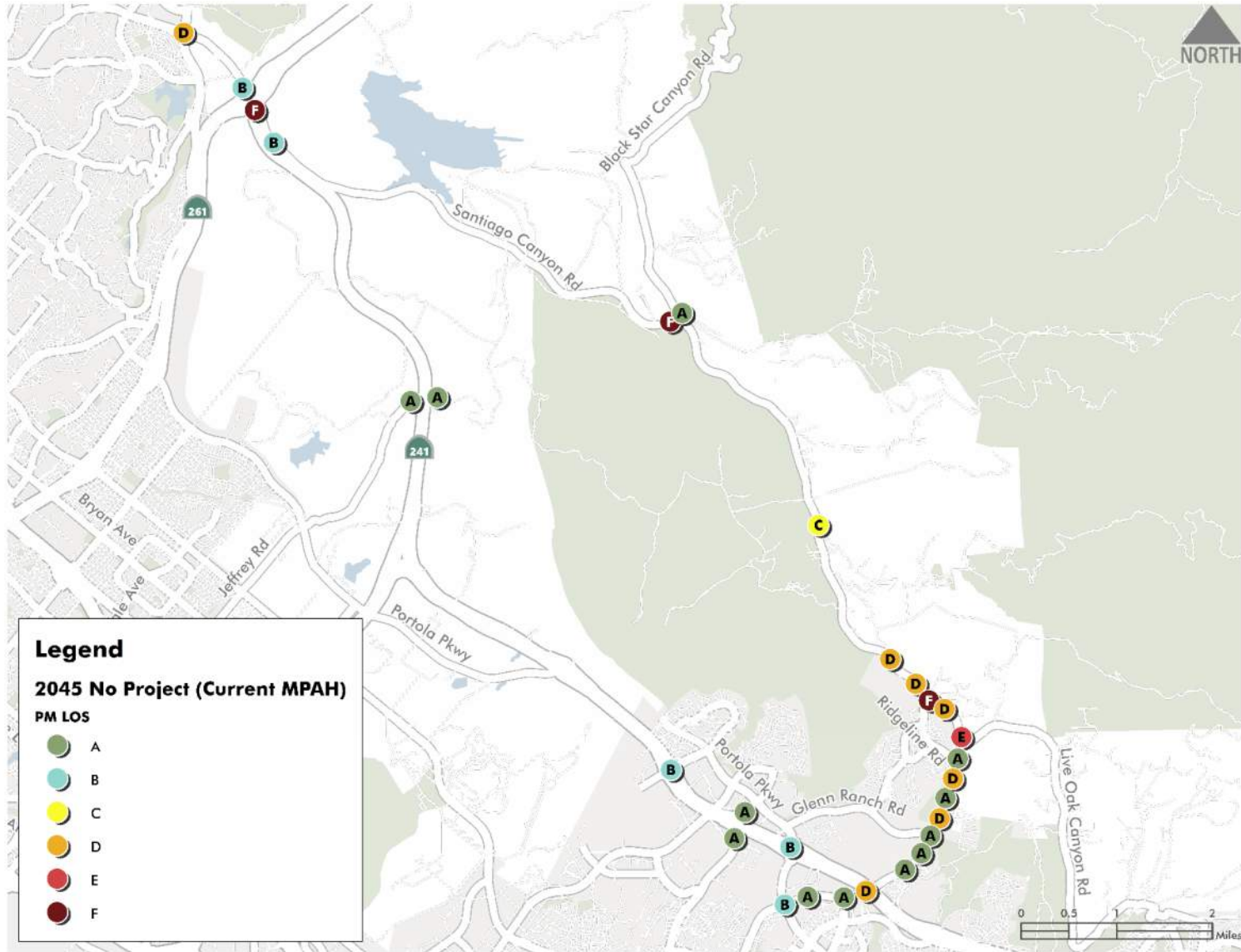


Figure 5-4: Year 2045 No Project (Current MPAH) Study Intersection PM Peak Hour LOS



5.2 Year 2045 With Project (Current Configuration) Scenario

This section presents the analysis results in the Cumulative Year 2045 With Project (Current Configuration) scenario.

5.1.1 Arterial Analysis

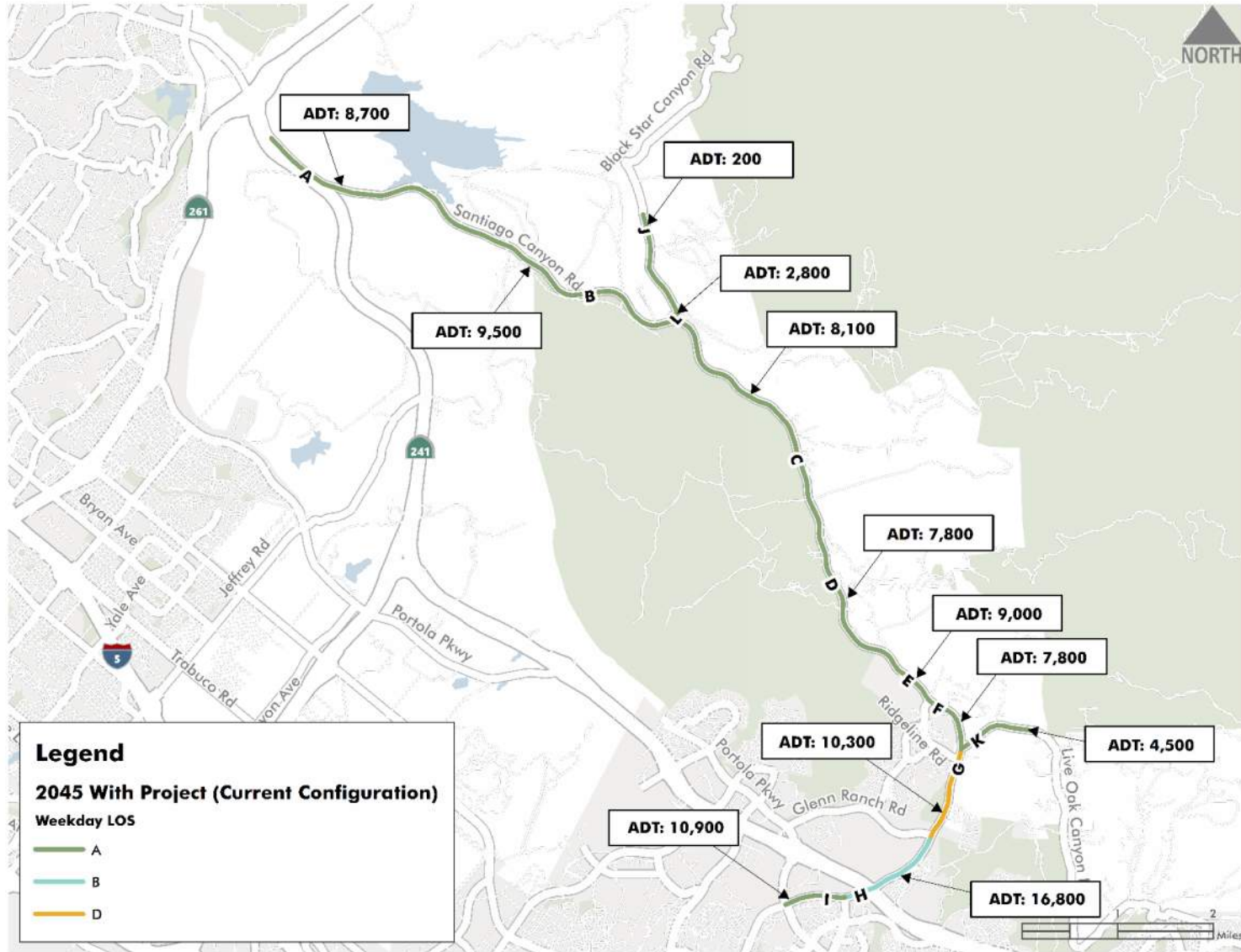
Table 5-5 summarize the arterial roadway analysis results under Year 2045 With Project (Current Configuration) scenario for weekday (Tuesday to Thursday). All of the study roadway segments are projected to operate at acceptable LOS. **Figure 5-4** display the ADT on the study arterial segments for the weekday Year 2045 With Project (Current Configuration) scenario.

However, the segment of ETR between Live Oak Canyon road and Glenn Ranch Road operates at LOS D.

Table 5-5: Year 2045 With Project (Current Configuration) Weekday Arterial Roadway Segment LOS

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	Existing					YEAR 2045 WITH PROJECT (CURRENT CONFIGURATION)				
				Lanes	Capacity	ADT (Rounded)	V/C	LOS	Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	2U	26,800	9,300	0.35	A	2U	26,800	8,700	0.32	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	2U	26,800	8,900	0.33	A	2U	26,800	9,500	0.35	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	2U	26,800	7,100	0.26	A	2U	26,800	8,100	0.30	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	2U	26,800	6,700	0.25	A	2U	26,800	7,800	0.29	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	2U	26,800	7,800	0.29	A	2U	26,800	9,000	0.34	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	2U	26,800	7,300	0.27	A	2U	26,800	7,800	0.29	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	2U	12,500	9,400	0.75	C	2U	12,500	10,300	0.83	D
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	4U	25,000	13,600	0.54	A	4U	25,000	16,800	0.67	B
I	El Toro Road	Marguerite Parkway to Portola Parkway	Lake Forest	4D	37,500	12,600	0.34	A	4D	37,500	10,900	0.29	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	900	0.07	A	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	5,100	0.41	A	2U	12,500	4,500	0.36	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	4,600	0.37	A	2U	12,500	2,800	0.23	A

Figure 5-5: Year 2045 With Project (Current Configuration) Weekday Study Arterial Roadway Segment ADT LOS



Since the arterial segment operating at LOS D is not uniform in terms of number of lanes and median treatment, the segment was further broken down into smaller components and the LOS recalculated as shown in **Table 5-6**. The mini segment from Saddleback Meadows to Valley Vista Way is forecast to operate at LOS E and the segment between Valley Vista and Cielo Entrada is forecast to operate at LOS F. Both of these segments currently operate as a two-lane undivided roadway.

Table 5-6: Year 2045 With Project (Current Configuration) Weekday Arterial Roadway Mini-Segment LOS

Segment	Jurisdiction	Direction	Volume	Facility Type	Daily Capacity (veh/day)	Arterial Roadway V/C Ratio	Arterial Roadway LOS
Live Oak Canyon Road to Ridgeline South	County / Lake Forest / Mission Viejo	Both	8,600	2U	12,500	0.69	B
Ridgeline South to Saddleback Meadows		Both	10,300	2U	12,500	0.83	D
Saddleback Meadows to Valley Vista Way		Both	11,500	2U	12,500	0.92	E
Valley Vista Way to Cielo Entrada		Both	13,200	2U	12,500	1.06	F
Cielo Entrada to Glenn Ranch Road		NB	6,900	3D	9,375	0.74	C
		SB	6,900	3D	18,750	0.37	A
Glenn Ranch Road to Wandering Trails	Mission Viejo	NB	5,900	3D	9,375	0.63	B
		SB	5,900	3D	18,750	0.31	A
Wandering Trails to Painted Trails		NB	5,900	3D	9,375	0.63	B
		SB	5,900	3D	18,750	0.32	A
Painted Trails to Saddleback Place		Both	13,900	4D	37,500	0.37	A
Saddleback Place to Margarita Parkway	Lake Forest	Both	14,500	4D	37,500	0.39	A

5.1.2 Intersection Analysis

Cumulative Year 2045 With Project (Current Configuration) intersection lane configurations for the study intersections were assumed to be the same as existing conditions with the exception of the four new intersections and the additional new through movement at intersection #2 Santiago Canyon Road /SR-241/SR-261 SB Ramps. The assumed for future lane configurations are shown in **Figure 5-5**. **Table 5-7** and **Table 5-8** display the weekday turning movement volumes AM and PM peak hours, respectively. **Table 5-8** summarizes the ICU and HCM LOS for all study intersections for the Cumulative Year 2045 With Project (Current Configuration) scenario. Deficient locations are highlighted in red. Detailed ICU worksheets and Synchro HCM worksheets for all study intersections are included in **Appendix F** and **Appendix G**, respectively.

Table 5-7: Year 2045 With Project (Current Configuration) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) AM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	190	173	206	40	756	90	847	800	62	269	847	522
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	771	0	0	0	0	0	1402	553	57	1069	467
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	703	613	150	59	365	62	444	1064	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	519	0	413	0	13	0	498	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	439	30	0	0	0	37	472	0	54	0	107
6	Silverado Canyon Road / Blackstar Canyon Road*	19	48	0	1	0	15	0	143	1	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	423	1	0	0	0	19	509	0	18	0	31
8	Santiago Canyon Road / Modjeska Grade Road*	0	419	16	0	0	0	1	532	0	37	0	2
9	Santiago Canyon Road / Saddle Crest*	0	371	29	0	0	0	9	511	0	56	0	66
10	Santiago Canyon Road / Ridgeline Road North*	20	329	0	82	0	14	0	426	128	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	320	16	0	0	0	4	425	0	39	0	26
12	Santiago Canyon Road / Live Oak Canyon Road*	0	220	63	0	0	0	106	322	0	150	0	121
13	El Toro Road / Ridgeline Road South*	103	288	0	21	0	235	0	454	11	0	0	0
14	El Toro Road / Valley Vista	0	357	29	0	0	0	17	679	0	142	0	43
15	El Toro Road / Cielo Entrada*	0	370	12	0	0	0	14	785	0	46	0	17
16	El Toro Road / Glenn Ranch Road	207	288	0	100	0	349	0	650	172	0	0	0
17	El Toro Road / Wandering Trails	0	450	20	0	0	0	28	985	0	64	0	47
18	El Toro Road / Painted Trails	0	433	57	0	0	0	13	1059	0	165	0	38
19	El Toro Road / Marguerite Parkway	2	174	192	5	9	5	815	454	6	259	27	351
20	El Toro Road / Pheasant Creek	0	323	20	0	0	0	7	725	0	90	0	18
21	El Toro Road / Portola Parkway	268	210	493	104	1109	384	43	532	232	462	1378	40
22	SR-241 NB Ramps / Portola Parkway	244	0	311	357	3276	358	135	0	337	178	1867	141
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	472	513	0	0	0	0	0	468	213
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	886	0	69	0	216	0	475	0
26	SR-241 NB Ramps / Alton Parkway	446	0	20	223	822	252	30	0	430	28	1724	91
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	393	32	0	0	0	11	699	0	94	0	31
29	El Toro Road / Saddleback Place*	0	514	9	0	0	0	1	1273	0	28	0	4
30	Jeffrey Road / SR-241 Northbound On-Ramp	30	53	0	0	0	0	0	162	0	0	0	30
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	83	0	0	0	703	26	136	0	0	0	0

Note: *Unsignalized Intersections

Table 5-8: Year 2045 With Project (Current Configuration) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) PM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	300	1050	271	42	766	112	477	242	70	147	978	837
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	1840	0	0	0	0	0	1173	63	67	493	106
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	1628	1016	343	25	899	190	418	668	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	717	0	1097	0	35	0	392	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	622	35	0	0	0	141	356	0	41	0	78
6	Silverado Canyon Road / Blackstar Canyon Road*	27	146	0	2	0	35	0	90	7	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	664	10	0	0	0	30	336	0	14	0	19
8	Santiago Canyon Road / Modjeska Grade Road*	0	683	27	0	0	0	0	355	0	24	0	1
9	Santiago Canyon Road / Saddle Crest*	0	683	58	0	0	0	37	364	0	28	0	28
10	Santiago Canyon Road / Ridgeline Road North*	21	594	0	141	0	8	0	297	133	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	600	47	0	0	0	11	260	0	16	0	8
12	Santiago Canyon Road / Live Oak Canyon Road*	0	511	182	0	0	0	90	189	0	65	0	123
13	El Toro Road / Ridgeline Road South*	122	665	0	24	0	71	0	249	12	0	0	0
14	El Toro Road / Valley Vista	0	786	115	0	0	0	22	328	0	46	0	11
15	El Toro Road / Cielo Entrada*	0	898	30	0	0	0	8	377	0	26	0	6
16	El Toro Road / Glenn Ranch Road	290	679	0	220	0	159	0	302	109	0	0	0
17	El Toro Road / Wandering Trails	0	903	44	0	0	0	27	452	0	22	0	20
18	El Toro Road / Painted Trails	0	932	119	0	0	0	18	453	0	69	0	13
19	El Toro Road / Marguerite Parkway	9	350	272	14	40	8	371	176	10	143	24	753
20	El Toro Road / Pheasant Creek	0	605	47	0	0	0	13	311	0	40	0	14
21	El Toro Road / Portola Parkway	255	386	540	223	1355	401	11	195	145	439	1101	45
22	SR-241 NB Ramps / Portola Parkway	198	0	119	261	1152	243	96	0	387	165	1224	95
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	173	640	0	0	0	0	0	549	108
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	708	0	67	0	176	0	566	0
26	SR-241 NB Ramps / Alton Parkway	255	0	164	211	433	304	163	0	138	74	547	118
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	745	108	0	0	0	36	348	0	61	0	21
29	El Toro Road / Saddleback Place*	0	1076	28	0	0	0	4	531	0	17	0	2
30	Jeffrey Road / SR-241 Northbound On-Ramp	437	128	0	0	0	0	0	76	0	0	0	16
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	566	0	0	0	208	29	46	0	0	0	0

Note: *Unsignalized Intersection

Figures 5-6 and **5-7** graphically show the LOS for all study area intersections for AM and PM peak hours, respectively. The following four intersections are forecast to operate deficiently (as defined in **Section 2.3**) under Year 2045 With Project (Current Configuration) scenario:

- 3. Santiago Canyon Road at SR-241/SR-261 Northbound Ramps (PM LOS F)
- 5. Santiago Canyon Road at Silverado Canyon Road (PM LOS E)
- 10. Santiago Canyon Road at Ridgeline Road North (PM LOS E)
- 15. Santiago Canyon Road at Cielo Entrada (AM LOS E)

In the No Project (Current MPAH) scenario there are 11 deficient locations while in the With Project (Current Configuration) scenario there are only four deficiencies. Although there are fewer northbound and southbound through lanes in the With Project (Current Configuration) scenario, the northbound and southbound traffic volumes are also lower. Most of the deficiencies are at unsignalized intersections where the critical delay is due to vehicles from the minor street approach suffering delays accessing the major street (in particular making left-turns) due to high volumes of traffic on the major street. Many of the minor street volumes are unchanged by the widening of SCR and ETR since they access residential developments and do not have through traffic. Therefore, using the HCM unsignalized intersection methodology which by convention looks at the worst delay by approach rather than the overall intersection delay, this finding is to be expected.

Table 5-9: Year 2045 With Project (Current Configuration) Weekday Intersection LOS

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 WITH PROJECT (CURRENT CONFIGURATION)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
1	Jamboree Road at Chapman Avenue	County	0.48	A	0.81	D	--	--	--	--	0.58	A	0.86	D	--	--	--	--
2	Santiago Canyon Road at SR-241/SR-261 Southbound Ramps	Caltrans/Orange	--	--	--	--	9.0	A	6.3	A	--	--	--	--	25.6	C	13.3	B
3	Santiago Canyon Road at SR-241 Northbound On-ramp/SR-261 Off-ramp	Caltrans/Orange	--	--	--	--	6.0	A	15.9	B	--	--	--	--	8.9	A	87.7	F
4	Santiago Canyon Road at SR-241 Northbound Off-ramp	Caltrans/Orange	--	--	--	--	5.2	A	10.1	B	--	--	--	--	6.2	A	13.6	B
5	Santiago Canyon Road at Silverado Canyon Road	County	--	--	--	--	21.1	C	31.0	D	--	--	--	--	26.3	D	37.9	E
6	Silverado Canyon Road at Blackstar Canyon Road	County	--	--	--	--	9.2	A	9.0	A	--	--	--	--	9.2	A	9.0	A
7	Santiago Canyon Road at Modjeska Canyon Road	County	--	--	--	--	13.6	B	16.1	C	--	--	--	--	15.9	C	17.4	C
8	Santiago Canyon Road at Modjeska Grade Road	County/Lake Forest	--	--	--	--	18.5	C	19.3	C	--	--	--	--	22.6	C	21.4	D
9	Santiago Canyon Road at Saddlecrest	County/Lake Forest	--	--	--	--	14.6	B	16.7	C	--	--	--	--	19.4	C	21.0	C
10	Santiago Canyon Road at Ridgeline Road North	County	--	--	--	--	17.5	C	35.5	E	--	--	--	--	22.1	C	45.5	E
11	Santiago Canyon Road at Crystal Canyon Road	County	--	--	--	--	15.2	C	18.8	C	--	--	--	--	17.2	C	19.1	C
12	Santiago Canyon Road at Live Oak Canyon Road	Lake Forest	--	--	--	--	18.3	C	16.7	C	--	--	--	--	22.9	C	19.6	C
13	El Toro Road at Ridgeline Road South	Lake Forest	0.46	A	0.42	A	--	--	--	--	0.46	A	0.46	A	--	--	--	--
14	El Toro Road at Valley Vista	County	0.55	A	0.53	A	--	--	--	--	0.62	B	0.58	A	--	--	--	--
15	El Toro Road at Cielo Entrada	County/Mission Viejo	--	--	--	--	37.0	E	24.1	C	--	--	--	--	39.2	E	27.8	D

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 WITH PROJECT (CURRENT CONFIGURATION)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
16	El Toro Road at Glenn Ranch Road	Mission Viejo	0.46	A	0.54	A	--	--	--	--	0.51	A	0.58	A	--	--	--	--
17	El Toro Road at Wandering Trails	Mission Viejo	0.36	A	0.54	A	--	--	--	--	0.38	A	0.61	B	--	--	--	--
18	El Toro Road at Painted Trails	Mission Viejo	0.40	A	0.34	A	--	--	--	--	0.46	A	0.38	A	--	--	--	--
19	El Toro Road at Marguerite Parkway	Mission Viejo/ Lake Forest	0.39	A	0.41	A	--	--	--	--	0.45	A	0.45	A	--	--	--	--
20	El Toro Road at Pheasant Creek	Lake Forest	0.24	A	0.19	A	--	--	--	--	0.30	A	0.19	A	--	--	--	--
21	El Toro Road at Portola Parkway	Lake Forest	0.59	A	0.61	B	--	--	--	--	0.67	B	0.63	B	--	--	--	--
22/23	Portola Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	11.4	B	11.0	B	--	--	--	--	26.2	C	12.0	B
24	Lake Forest Drive at SR-241 Northbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	3.0	A	3.1	A	--	--	--	--	4.8	A	3.1	A
25	Lake Forest Drive at SR-241 Southbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	5.9	A	5.7	A	--	--	--	--	6.6	A	5.7	A
26/27	Alton Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	10.8	B	10.9	B	--	--	--	--	20.0	C	11.9	B
28	El Toro Road at Saddleback Meadows	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	33.4	D	31.4	D
29	El Toro Road at Saddleback Place	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	25.1	D	32.2	D
30	Jeffrey Road at SR-241 Northbound On-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	6.0	A	7.3	A
31	Jeffrey Road at SR-241 Southbound Off-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	9.4	A	9.1	A

Note: *Unsignalized Intersection

¹ The ramp interchange pair operates as a Single-Point Urban Interchange (SPUI) and will be analyzed as a single location.

² Shaded cells denote deficient locations.

Figure 5-6: Year 2045 With Project (Current Configuration) Weekday (Tuesday to Thursday) Study Intersection AM Peak Hour LOS

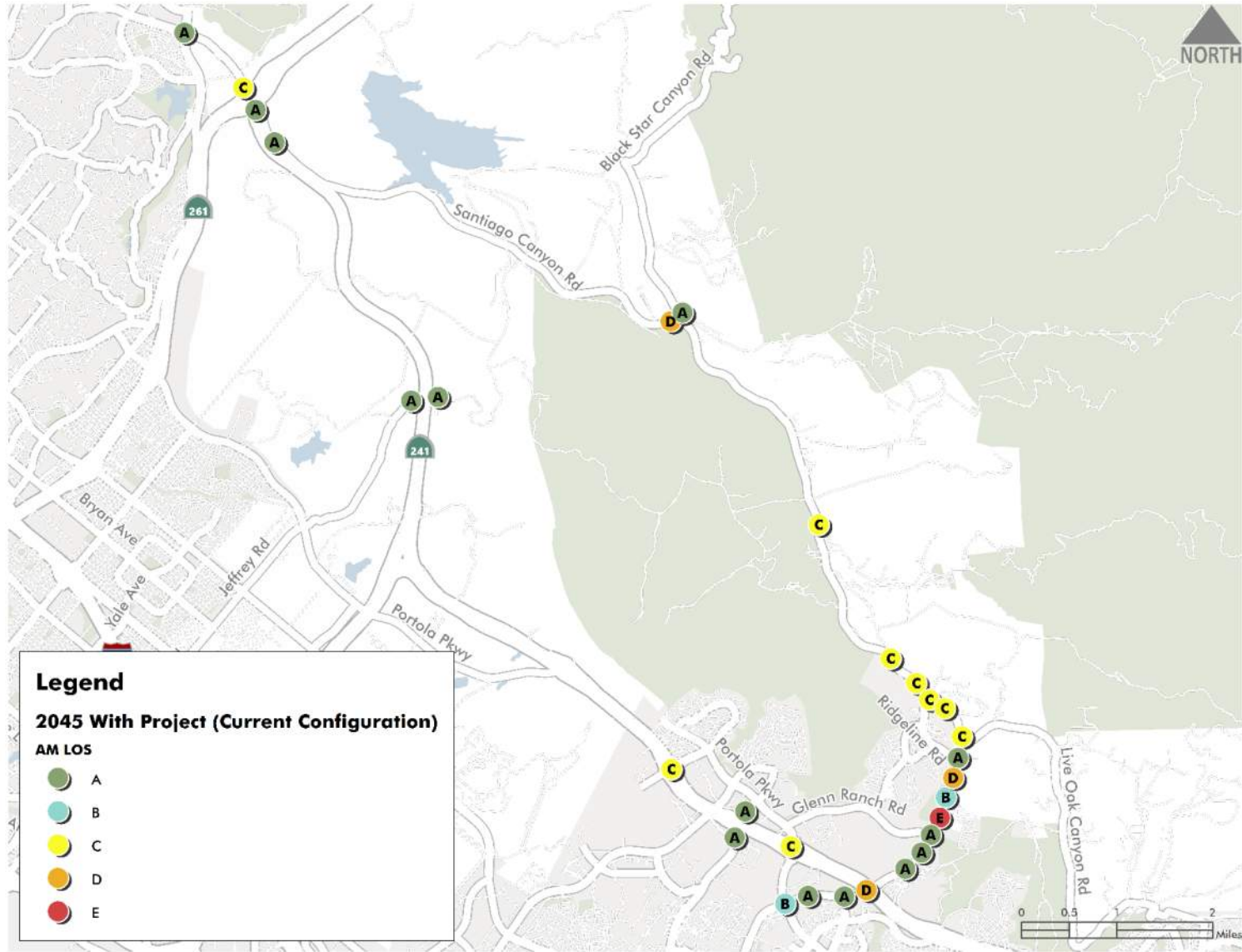
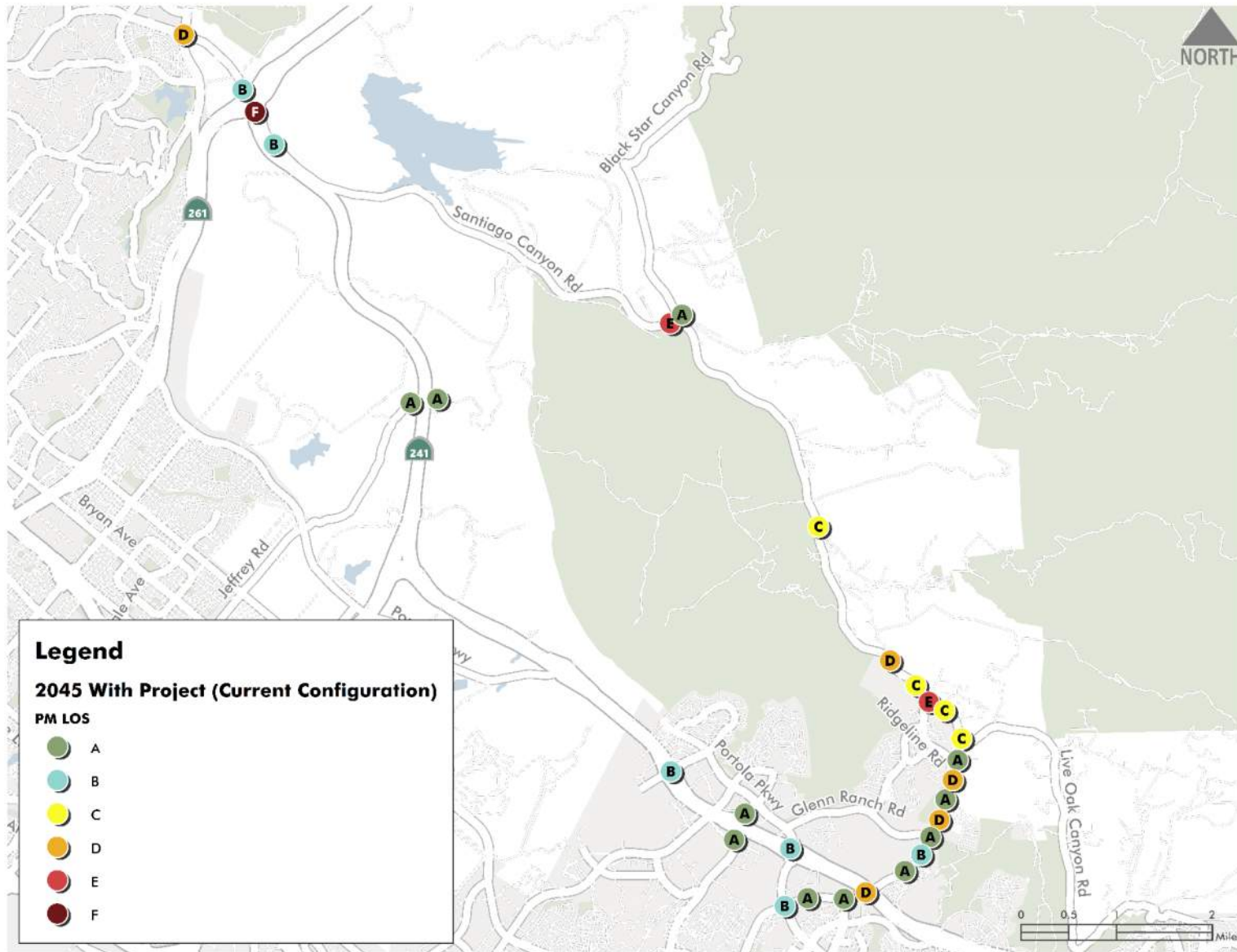


Figure 5-7: Year 2045 With Project (Current Configuration) Weekday (Tuesday to Thursday) Study Intersection PM Peak Hour LOS



5.3 Year 2045 With Project (Proposed Configuration) Scenario

This section presents the analysis results in the Cumulative Year 2045 With Project (Proposed Configuration) scenario.

As noted in Section 5.2 in the Current Configuration ETR remains as on-the-Ground Existing configuration. However, this configuration results in unacceptable LOS on ETR north of Glenn Ranch Road. Therefore, a revised (Proposed) configuration for ETR was identified. The Proposed Configuration assumes ETR to be classified as a four-lane Primary arterial from Portola Parkway to Live Oak Canyon road except for the portions where ETR is already a five-lane roadway in Existing conditions. An additional OCTAM model run was performed using the revised network coding representing the Proposed Configuration and the arterial analysis and intersection analysis was then performed.

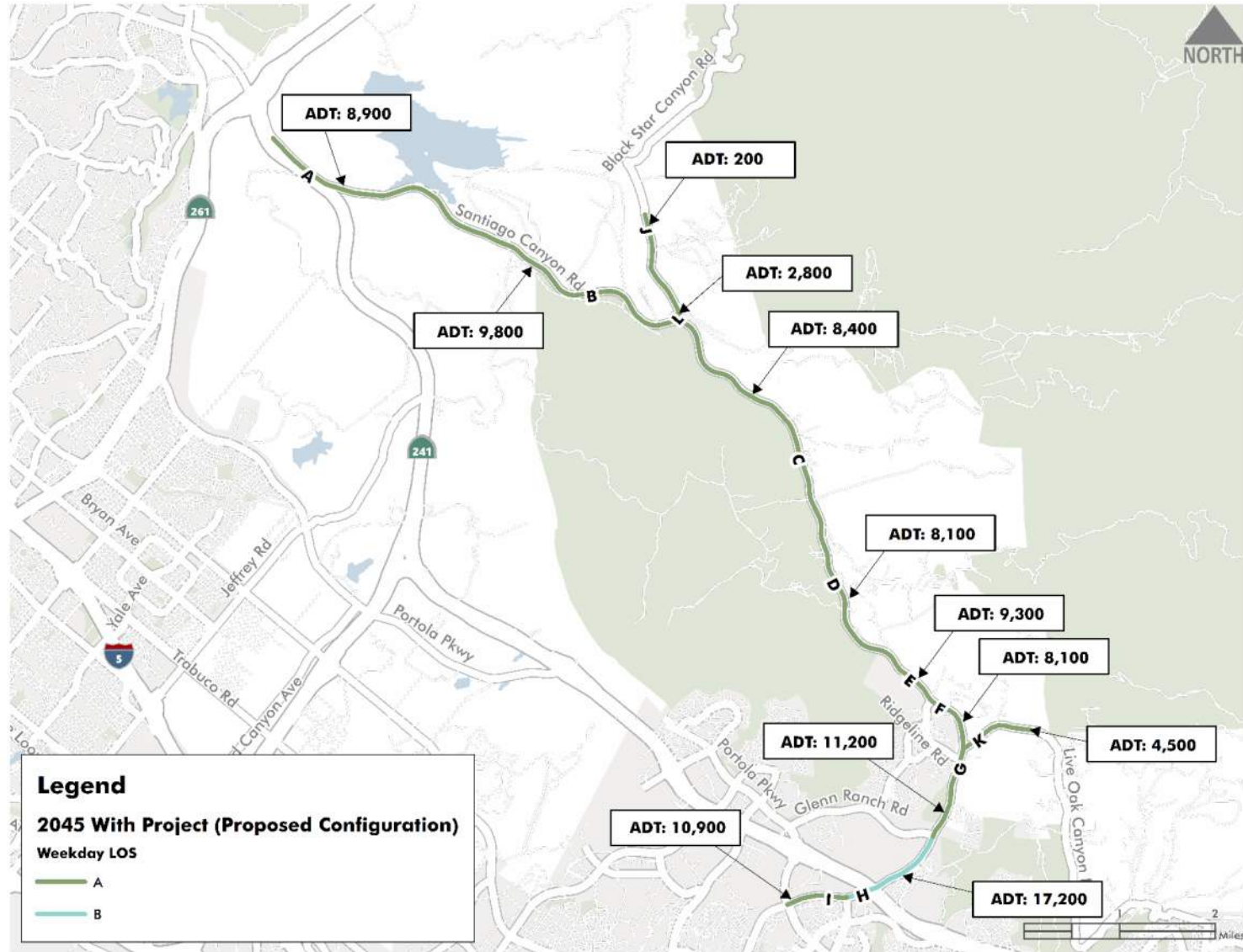
5.1.3 Arterial Analysis

Table 5-10 summarize the arterial roadway analysis results under Year 2045 With Project (Proposed Configuration) scenario for weekday (Tuesday to Thursday). All of the study roadway segments are projected to operate at acceptable LOS. **Figure 5-8** shows the ADT on the study arterial segments for the weekday Year 2045 With Project (Proposed Configuration) scenario.

Table 5-10: Year 2045 With Project (Proposed Configuration) Weekday Arterial Roadway Segment LOS

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	Existing					YEAR 2045 WITH PROJECT (PROPOSED CONFIGURATION)				
				Lanes	Capacity	ADT (Rounded)	V/C	LOS	Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	2U	26,800	9,300	0.35	A	2U	26,800	8,900	0.33	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	2U	26,800	8,900	0.33	A	2U	26,800	9,800	0.36	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	2U	26,800	7,100	0.26	A	2U	26,800	8,400	0.31	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	2U	26,800	6,700	0.25	A	2U	26,800	8,100	0.30	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	2U	26,800	7,800	0.29	A	2U	26,800	9,300	0.35	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	2U	26,800	7,300	0.27	A	2U	26,800	8,100	0.30	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	2U	12,500	9,400	0.75	C	4U	25,000	11,200	0.45	A
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	4U	25,000	13,600	0.54	A	4U	25,000	17,200	0.69	B
I	El Toro Road	Marguerite Parkway to Portola Parkway	Lake Forest	4D	37,500	12,600	0.34	A	4D	37,500	10,900	0.29	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	900	0.07	A	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	5,100	0.41	A	2U	12,500	4,500	0.36	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	4,600	0.37	A	2U	12,500	2,800	0.23	A

Figure 5-8: Year 2045 With Project (Proposed Configuration) Weekday Study Arterial Roadway Segment ADT LOS



While in practice it would be feasible to perform localized widening for the deficient segments only, it would be desirable not to transition from four lanes at Saddleback Place near SR-241 down to the existing three lane segment that operate at satisfactory levels of service and then widen back up four lanes at Cielo Entrada. It would also be difficult to recommend such localized improvements as part of an MPAH amendment when the Current Configuration designates all of ETR north of Portola Parkway as a six-lane roadway. An alternative proposed MPAH amendment to reduce ETR from a six-lane roadway to a higher capacity of either existing condition or a four-lane roadway between Portola Parkway and Live Oak Canyon Road would be a more conservative approach.

If these deficient segments were widened to a four-lane undivided highway, then the segments would all operate at satisfactory levels of service as shown in **Table 5-11**.

Table 5-11: Year 2045 With Project (Proposed Configuration) Weekday Arterial Roadway Mini-Segment LOS

Segment	Jurisdiction	Volume	Facility Type	Daily Capacity (veh/day)	V/C Ratio	LOS
Live Oak Canyon Road to Ridgeline South	County of Orange/ Lake Forest	8,600	4U	25,000	0.35	A
Ridgeline south to Saddleback Meadows		10,300	4U	25,000	0.41	A
Saddleback Meadows to Valley Vista Way		11,500	4U	25,000	0.46	A
Valley Vista Way to Cielo Entrada		13,200	4U	25,000	0.53	A

5.1.4 Intersection Analysis

Cumulative Year 2045 With Project (Proposed Configuration) intersection lane configurations for the study intersections were assumed to be the same as existing conditions with the exception of

- The four future new intersections (two on ETR and the two new Jeffrey Road at SR-241 ramps) and
- the additional new westbound through movement at intersection #2 Santiago Canyon Road /SR-241/SR-261 SB ramps
- Intersections associated with the ETR widening #12, ETR and Live Oak Canyon Road. #13 ETR and Ridgeline Road south, #14 ETR and Valley Vista, . #15 ETR and Cielo Entrada, #16 ETR and Glenn Ranch Road and #17 ETR and Wandering Trails

Table 5-12 and **Table 5-13** display the weekday turning movement volumes AM and PM peak hours, respectively. **Table 5-14** summarizes the ICU and HCM LOS for all study intersections for the Cumulative Year 2045 With Project (Proposed Configuration) scenario. Deficient locations are highlighted in red. Detailed ICU worksheets and Synchro HCM worksheets for all study intersections are included in **Appendix F** and **Appendix G**, respectively.

Table 5-12: Year 2045 With Project (Proposed Configuration) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) AM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	189	174	207	40	761	90	851	799	62	270	846	524
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	768	0	0	0	0	0	1448	520	64	1089	471
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	705	612	147	57	372	66	497	1057	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	517	0	413	0	13	0	498	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	436	30	0	0	0	37	472	0	54	0	107
6	Silverado Canyon Road / Blackstar Canyon Road*	19	48	0	1	0	15	0	143	1	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	420	1	0	0	0	19	509	0	18	0	31
8	Santiago Canyon Road / Modjeska Grade Road*	0	416	16	0	0	0	1	532	0	37	0	2
9	Santiago Canyon Road / Saddle Crest*	0	369	29	0	0	0	9	510	0	57	0	66
10	Santiago Canyon Road / Ridgeline Road North*	19	331	0	78	0	13	0	427	125	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	323	16	0	0	0	4	425	0	39	0	25
12	Santiago Canyon Road / Live Oak Canyon Road*	0	235	72	0	0	0	94	364	0	185	0	110
13	El Toro Road / Ridgeline Road South*	102	294	0	19	0	244	0	538	11	0	0	0
14	El Toro Road / Valley Vista	0	363	27	0	0	0	19	864	0	143	0	42
15	El Toro Road / Cielo Entrada*	0	376	12	0	0	0	14	969	0	48	0	16
16	El Toro Road / Glenn Ranch Road	213	277	0	116	0	327	0	740	256	0	0	0
17	El Toro Road / Wandering Trails	0	450	19	0	0	0	29	1054	0	64	0	47
18	El Toro Road / Painted Trails	0	433	56	0	0	0	14	1124	0	165	0	38
19	El Toro Road / Marguerite Parkway	2	169	190	5	9	5	874	461	6	256	27	359
20	El Toro Road / Pheasant Creek	0	316	20	0	0	0	7	728	0	90	0	18
21	El Toro Road / Portola Parkway	270	209	493	99	1065	380	42	538	229	471	1370	39
22	SR-241 NB Ramps / Portola Parkway	244	0	314	357	3288	358	124	0	305	177	1853	141
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	460	513	0	0	0	0	0	467	213
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	874	0	69	0	216	0	473	0
26	SR-241 NB Ramps / Alton Parkway	446	0	20	223	822	253	30	0	431	28	1719	91
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	397	32	0	0	0	11	885	0	94	0	31
29	El Toro Road / Saddleback Place*	0	517	9	0	0	0	1	1339	0	28	0	4
30	Jeffrey Road / SR-241 Northbound On-Ramp	30	53	0	0	0	0	0	162	0	0	0	30
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	83	0	0	0	703	26	136	0	0	0	0

Note: *Unsignalized Intersections

Table 5-13: Year 2045 With Project (Proposed Configuration) Intersection Turning Movement Counts Weekday (Tuesday to Thursday) PM Peak Hour

ID	INTERSECTION	NORTHBOUND			EASTBOUND			SOUTHBOUND			WESTBOUND		
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	Jamboree Road / Santiago Canyon/Chapman Avenue	299	1046	271	42	768	112	477	241	70	147	988	843
2	Santiago Canyon/SR-241/SR-261 SB Ramps	70	1857	0	0	0	0	0	1173	64	66	492	106
3	Santiago Canyon/SR-241 NB On-Ramp/SR-261 Off-Ramp	0	1645	1031	342	25	895	191	418	665	0	0	0
4	Santiago Canyon/SR-241 NB Off-Ramp	0	762	0	1086	0	35	0	392	0	0	0	0
5	Santiago Canyon/ Silverado Canyon Road*	0	626	35	0	0	0	141	355	0	41	0	79
6	Silverado Canyon Road / Blackstar Canyon Road*	27	146	0	2	0	35	0	90	7	0	0	0
7	Santiago Canyon Road / Modjeska Canyon Road*	0	664	10	0	0	0	29	334	0	14	0	19
8	Santiago Canyon Road / Modjeska Grade Road*	0	683	27	0	0	0	0	353	0	24	0	1
9	Santiago Canyon Road / Saddle Crest*	0	686	62	0	0	0	33	361	0	30	0	25
10	Santiago Canyon Road / Ridgeline Road North*	20	628	0	136	0	8	0	304	126	0	0	0
11	Santiago Canyon Road / Crystal Canyon Road*	0	632	48	0	0	0	10	267	0	17	0	8
12	Santiago Canyon Road / Live Oak Canyon Road*	0	561	189	0	0	0	86	198	0	65	0	119
13	El Toro Road / Ridgeline Road South*	126	735	0	17	0	74	0	256	8	0	0	0
14	El Toro Road / Valley Vista	0	943	116	0	0	0	21	337	0	44	0	11
15	El Toro Road / Cielo Entrada*	0	1054	31	0	0	0	7	385	0	26	0	6
16	El Toro Road / Glenn Ranch Road	277	751	0	302	0	166	0	295	121	0	0	0
17	El Toro Road / Wandering Trails	0	968	45	0	0	0	26	452	0	22	0	20
18	El Toro Road / Painted Trails	0	997	120	0	0	0	17	454	0	68	0	13
19	El Toro Road / Marguerite Parkway	8	363	269	14	39	8	374	176	10	144	24	801
20	El Toro Road / Pheasant Creek	0	616	47	0	0	0	13	311	0	40	0	14
21	El Toro Road / Portola Parkway	256	394	544	226	1351	401	11	195	144	438	1089	45
22	SR-241 NB Ramps / Portola Parkway	199	0	121	254	1138	242	97	0	388	167	1224	94
23	SR-241 SB Ramps / Portola Parkway	Single-Point Urban Interchange - Combined Volumes with ID 22 and 23											
24	SR-241 NB On-Ramp / Lake Forest Drive	0	0	0	173	640	0	0	0	0	0	549	108
25	SR-241 SB Off-Ramp / Lake Forest Drive	0	0	0	0	703	0	72	0	172	0	566	0
26	SR-241 NB Ramps / Alton Parkway	254	0	164	211	432	303	163	0	137	74	545	118
27	SR-241 SB Ramps / Alton Parkway	Single-Point Urban Interchange - Combined Volumes with ID 26 and 27											
28	El Toro Road / Saddleback Meadows*	0	872	108	0	0	0	36	358	0	61	0	21
29	El Toro Road / Saddleback Place*	0	1138	28	0	0	0	4	536	0	17	0	2
30	Jeffrey Road / SR-241 Northbound On-Ramp	437	128	0	0	0	0	0	76	0	0	0	16
31	Jeffrey Road / SR-241 Southbound Off-Ramp	0	566	0	0	0	208	29	46	0	0	0	0

Note: *Unsignalized Intersection

Figures 5-9 and **5-10** graphically show the LOS for all study area intersections for AM and PM peak hours, respectively. The following intersections are forecast to operate deficiently (as defined in **Section 2.3**) under Year 2045 With Project (Proposed Configuration) scenario:

- 5. Santiago Canyon Road at Silverado Canyon Road (PM LOS E)
- 10. Santiago Canyon Road at Ridgeline Road North (PM LOS E)

In the No Project (Current MPAH) scenario there are 11 deficient locations while in the With Project (Proposed Configuration) scenario there are only two (2) deficiencies. Although there are fewer northbound and southbound through lanes in the With Project (Proposed Configuration) scenario, compared to the No Project (Current MPAH) scenario the northbound and southbound traffic volumes are also lower. Most of the deficiencies are at unsignalized intersections where the critical delay is due to vehicles from the minor street approach suffering delays accessing the major street (in particular making left-turns) due to high volumes of traffic on the major street. Many of the minor street volumes are unchanged by the widening of SCR and ETR since they access residential developments and do not have through traffic. Therefore, using the HCM unsignalized intersection methodology which by convention looks at the worst delay by approach rather than the overall intersection delay, this finding is to be expected.

Table 5-14: Year 2045 With Project (Proposed Configuration) Weekday Intersection LOS

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 WITH PROJECT (PROPOSED CONFIGURATION)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
1	Jamboree Road at Chapman Avenue	County	0.48	A	0.81	D	--	--	--	--	0.58	A	0.87	D	--	--	--	--
2	Santiago Canyon Road at SR-241/SR-261 Southbound Ramps	Caltrans/Orange	--	--	--	--	9.0	A	6.3	A	--	--	--	--	27.7	C	13.6	B
3	Santiago Canyon Road at SR-241 Northbound On-ramp/SR-261 Off-ramp	Caltrans/Orange	--	--	--	--	6.0	A	15.9	B	--	--	--	--	8.3	A	37.3	D
4	Santiago Canyon Road at SR-241 Northbound Off-ramp	Caltrans/Orange	--	--	--	--	5.2	A	10.1	B	--	--	--	--	6.2	A	13.9	B
5	Santiago Canyon Road at Silverado Canyon Road	County	--	--	--	--	21.1	C	31.0	D	--	--	--	--	26.2	A	37.9	E
6	Silverado Canyon Road at Blackstar Canyon Road	County	--	--	--	--	9.2	A	9.0	A	--	--	--	--	9.2	A	9.0	A
7	Santiago Canyon Road at Modjeska Canyon Road	County	--	--	--	--	13.6	B	16.1	C	--	--	--	--	15.8	C	17.3	C
8	Santiago Canyon Road at Modjeska Grade Road	County/Lake Forest	--	--	--	--	18.5	C	19.3	C	--	--	--	--	22.5	C	21.3	C
9	Santiago Canyon Road at Saddlecrest	County/Lake Forest	--	--	--	--	14.6	B	16.7	C	--	--	--	--	19.4	C	21.5	C
10	Santiago Canyon Road at Ridgeline Road North	County	--	--	--	--	17.5	C	35.5	E	--	--	--	--	19.5	C	39.8	E
11	Santiago Canyon Road at Crystal Canyon Road	County	--	--	--	--	15.2	C	18.8	C	--	--	--	--	17.3	C	20.3	C
12	Santiago Canyon Road at Live Oak Canyon Road	Lake Forest	--	--	--	--	18.3	C	16.7	C	--	--	--	--	29.9	D	18.4	C
13	El Toro Road at Ridgeline Road South	Lake Forest	0.46	A	0.42	A	--	--	--	--	0.35	A	0.28	A	--	--	--	--
14	El Toro Road at Valley Vista	County	0.55	A	0.53	A	--	--	--	--	0.47	A	0.39	A	--	--	--	--
15	El Toro Road at Cielo Entrada	County/Mission Viejo	--	--	--	--	37.0	E	24.1	C	--	--	--	--	24.3	D	29.1	D
16	El Toro Road at Glenn Ranch Road	Mission Viejo	0.46	A	0.54	A	--	--	--	--	0.53	A	0.51	A	--	--	--	--

ID	STUDY INTERSECTION	Jurisdiction	Existing								YEAR 2045 WITH PROJECT (PROPOSED CONFIGURATION)							
			ICU				HCM				ICU				HCM			
			AM		PM		AM		PM		AM		PM		AM		PM	
			V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	V/C	LOS ²	Delay	LOS ²	Delay	LOS ²
17	El Toro Road at Wandering Trails	Mission Viejo	0.36	A	0.54	A	--	--	--	--	0.40	A	0.36	A	--	--	--	--
18	El Toro Road at Painted Trails	Mission Viejo	0.40	A	0.34	A	--	--	--	--	0.48	A	0.39	A	--	--	--	--
19	El Toro Road at Marguerite Parkway	Mission Viejo/ Lake Forest	0.39	A	0.41	A	--	--	--	--	0.46	A	0.48	A	--	--	--	--
20	El Toro Road at Pheasant Creek	Lake Forest	0.24	A	0.19	A	--	--	--	--	0.30	A	0.19	A	--	--	--	--
21	El Toro Road at Portola Parkway	Lake Forest	0.59	A	0.61	B	--	--	--	--	0.66	B	0.63	B	--	--	--	--
22/23	Portola Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	11.4	B	11.0	B	--	--	--	--	26.4	C	12.0	B
24	Lake Forest Drive at SR-241 Northbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	3.0	A	3.1	A	--	--	--	--	8.3	A	3.1	A
25	Lake Forest Drive at SR-241 Southbound On-Ramp	Caltrans/ Lake Forest	--	--	--	--	5.9	A	5.7	A	--	--	--	--	7.5	A	5.7	A
26/27	Alton Parkway at SR-241 Northbound & Southbound Ramps ¹	Caltrans/ Lake Forest	--	--	--	--	10.8	B	10.9	B	--	--	--	--	20.0	C	11.9	B
28	El Toro Road at Saddleback Meadows	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	23.1	C	34.2	D
29	El Toro Road at Saddleback Place	Mission Viejo	<i>Future Intersection</i>								--	--	--	--	19.4	C	26.6	D
30	Jeffrey Road at SR-241 Northbound On-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	6.0	A	7.3	A
31	Jeffrey Road at SR-241 Southbound Off-Ramp	Caltrans/ Irvine	<i>Future Intersection</i>								--	--	--	--	9.6	A	9.1	A

Note: *Unsignalized Intersection

¹ The ramp interchange pair operates as a Single-Point Urban Interchange (SPUI) and will be analyzed as a single location.

² Shaded cells denote deficient locations.

Figure 5-9: Year 2045 With Project (Proposed Configuration) Weekday (Tuesday to Thursday) Study Intersection AM Peak Hour LOS

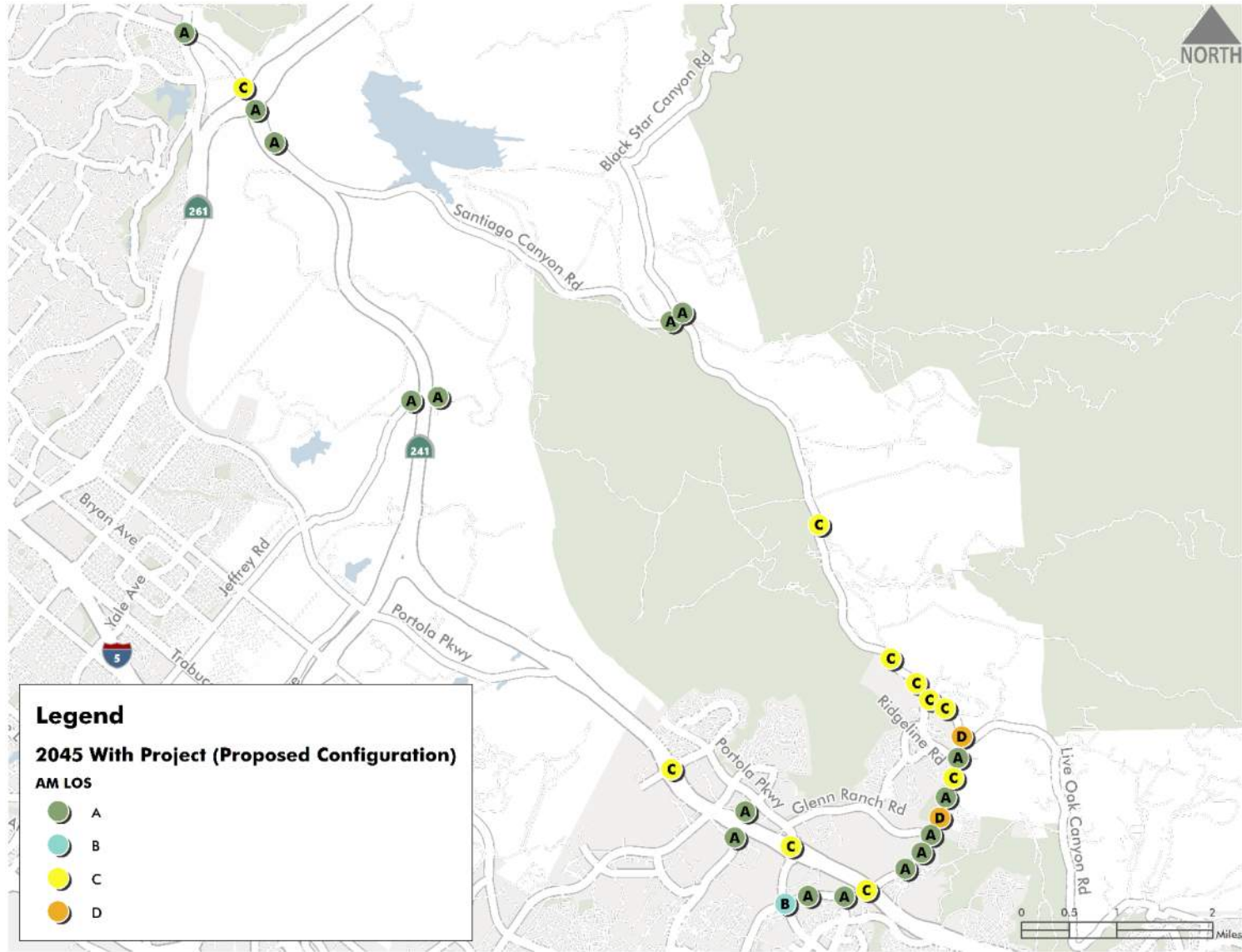
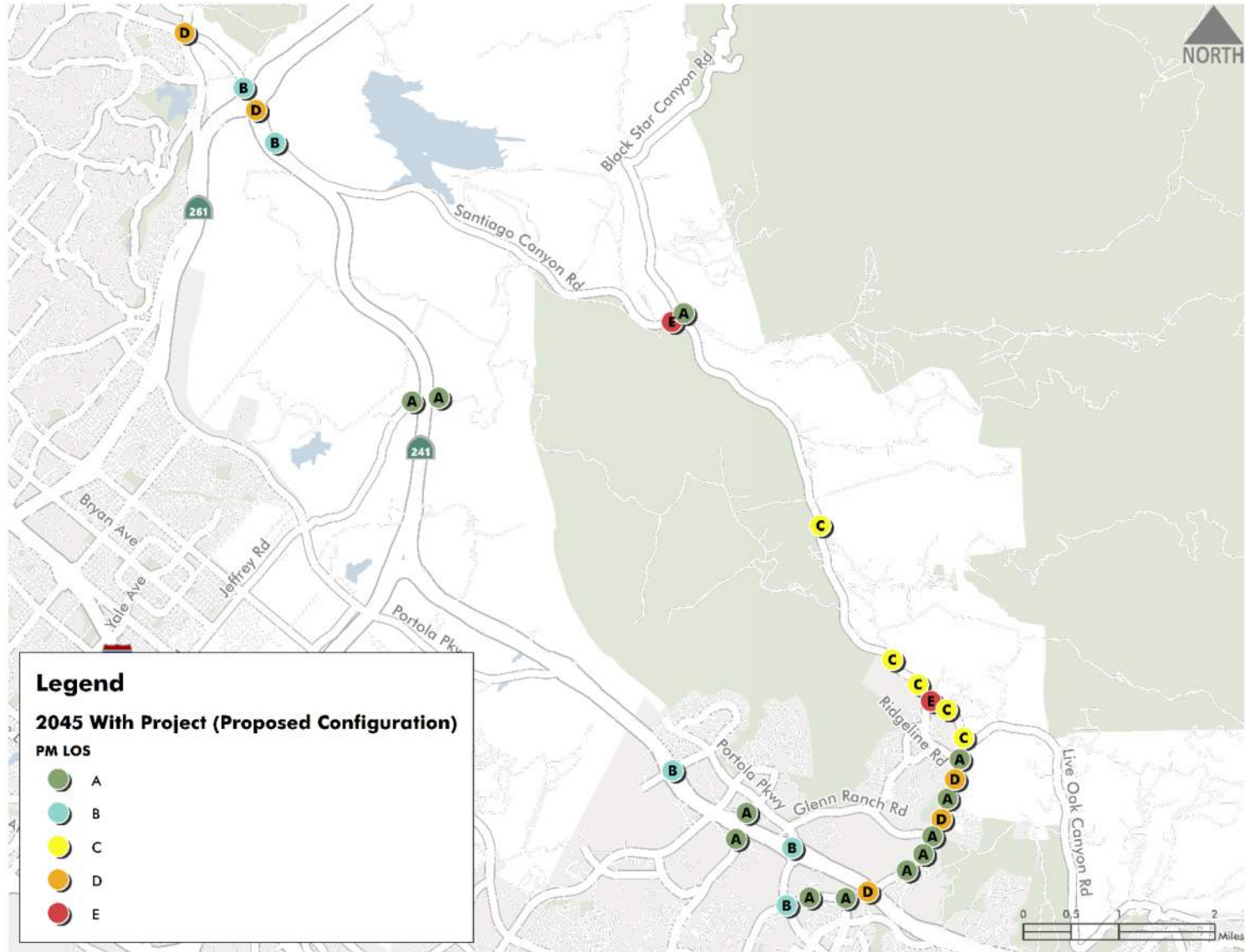


Figure 5-10: Year 2045 With Project (Proposed Configuration) Weekday (Tuesday to Thursday) Study Intersection PM Peak Hour LOS



5.3 Year 2045 Sensitivity Test – Portola Parkway Gap Closure

The City of Lake Forest raised the issue that one of the assumed improvements in the OCTAM MPAH highway network was the Portola Gap Closure between the western boundary of the City of Lake Forest to the City of Irvine boundary at SR-241, and that this could affect traffic volumes on ETR. While it is possible that this connection may never be built, it is still an assumed MPAH improvement and needs to be included in the No Project and With Project highway networks.

Nonetheless a sensitivity test was performed whereby the Portola Gap closure was removed from the OCTAM highway network and volumes were compared to the result with the Portola Gap closure assumed. The results are shown in **Appendix H** and indicate that the effect of the gap closure is minimal in the study corridor and changes volumes on ETR by less than 1% in both the No Project and the With Project scenarios .

6 IMPACT AND MITIGATION SUMMARY

This section summarizes the traffic operation analysis results for the study areas comparing the No Project (Current MPAH), With Project (Current Configuration), and With Project (Proposed Configuration) scenarios. Traffic operation deficiencies and Project impacts are identified based on criteria discussed in **Section 2**. Measures to mitigate adverse project-related impacts will be recommended where required.

6.1 Arterial Segment Summary

Arterial roadway LOS analysis was performed for twelve (12) arterial roadway segments. **Table 6-1** summarizes the V/C ratios and LOS results for the roadway segments within the study area between No Project (Current MPAH) and With Project (Current Configuration) scenarios.

Under 2045 With Project (Current Configuration) scenario, the roadway segment of El Toro Road between Live Oak Canyon Road to Glenn Ranch Road is projected to operate at LOS D. As stated in **Section 2.3.4**, and in the *County of Orange Traffic Implementation Manual* the desired performance is LOS C for arterial links with the intent of maintaining LOS D through intersections. The east side of this segment is located in the County of Orange while the west side is the City of Lake Forest, so the segment is deficient by County standard but not by City of Lake Forest Standards.

Table 6-1: Arterial Roadway Segment LOS Summary

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	YEAR 2045 NO PROJECT (CURRENT MPAH)					YEAR 2045 WITH PROJECT (CURRENT CONFIGURATION)				
				Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS	Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	4D	37,500	11,700	0.31	A	2U	26,800	8,700	0.32	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	4D	37,500	13,200	0.35	A	2U	26,800	9,500	0.35	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	4D	37,500	12,100	0.32	A	2U	26,800	8,100	0.30	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	4D	37,500	11,800	0.31	A	2U	26,800	7,800	0.29	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	4D	37,500	12,800	0.34	A	2U	26,800	9,000	0.34	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	4D	37,500	11,300	0.30	A	2U	26,800	7,800	0.29	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	6D	56,300	13,800	0.25	A	2U	12,500	10,300	0.83	D
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	6D	56,300	19,400	0.34	A	4U	25,000	16,800	0.67	B
I	El Toro Road	Marguerite Parkway to Portola Parkway	Lake Forest	6D	56,300	10,400	0.18	A	4D	37,500	10,900	0.29	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	200	0.02	A	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	4,600	0.37	A	2U	12,500	4,500	0.36	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	2,800	0.23	A	2U	12,500	2,800	0.23	A

As noted in **Section 5** and shown in **Table 6-2** when the segment between Live Oak Canyon Road and Glenn ranch road is broken into smaller segments, certain subsegments operate at LOS E or F.

Table 6-2: Year 2045 With Project (Current Configuration) Weekday Arterial Roadway Mini-Segment LOS

Segment	Jurisdiction	Volume	Facility Type	Daily Capacity (veh/day)	Arterial Roadway V/C Ratio	Arterial Roadway LOS
Live Oak Canyon Road to Ridgeline South	County of Orange/ Lake Forest	8,600	2U	12,500	0.69	B
Ridgeline South to Saddleback Meadows		10,300	2U	12,500	0.83	D
Saddleback Meadows to Valley Vista Way		11,500	2U	12,500	0.92	E
Valley Vista Way to Cielo Entrada		13,200	2U	12,500	1.06	F

If these deficient segments were widened to a four-lane undivided highway, then the segments would all operate at satisfactory levels of service as shown in **Table 6-3**.

Table 6-3: Year 2045 With Project Arterial Roadway Mini-Segment LOS with Localized widening

Segment	Jurisdiction	Volume	Facility Type	Daily Capacity (veh/day)	V/C Ratio	LOS
Live Oak Canyon Road to Ridgeline South	County / Lake Forest	8,600	4U	25,000	0.35	A
Ridgeline south to Saddleback Meadows		10,300	4U	25,000	0.41	A
Saddleback Meadows to Valley Vista Way		11,500	4U	25,000	0.46	A
Valley Vista Way to Cielo Entrada		13,200	4U	25,000	0.53	A

Table 6-3 summarizes the V/C ratios and LOS results for the roadway segments within the study area between No Project (Current MPAH) and With Project (Proposed Configuration) scenarios.

Under 2045 With Project (Current Configuration) scenario, the roadway segments are projected to operate at acceptable LOS, despite the fact the segments between Live Oak Canyon Road to Portola Parkway were reduced from six lanes to four lanes. Therefore, no mitigation is required.

Table 6-3: Arterial Roadway Segment LOS Summary

ID	ARTERIAL ROADWAY	SEGMENT LIMITS	JURISDICTION	YEAR 2045 NO PROJECT (CURRENT MPAH)					YEAR 2045 WITH PROJECT (PROPOSED CONFIGURATION)				
				Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS	Lanes	Capacity	Post-Processed ADT (Rounded)	V/C	LOS
A	Santiago Canyon Road	SR-241 NB Off-Ramp to Irvine Lake	County	4D	37,500	11,700	0.31	A	2U	26,800	8,900	0.33	A
B	Santiago Canyon Road	Irvine Lake to Silverado Canyon Road	County	4D	37,500	13,200	0.35	A	2U	26,800	9,800	0.36	A
C	Santiago Canyon Road	Silverado Canyon Road to Modjeska Canyon Road	County	4D	37,500	12,100	0.32	A	2U	26,800	8,400	0.31	A
D	Santiago Canyon Road	Modjeska Canyon Road to Modjeska Grade Road	County	4D	37,500	11,800	0.31	A	2U	26,800	8,100	0.30	A
E	Santiago Canyon Road	Modjeska Grade Road to Ridgeline Road North	County	4D	37,500	12,800	0.34	A	2U	26,800	9,300	0.35	A
F	Santiago Canyon Road	Ridgeline Road North to Live Oak Canyon Road	County	4D	37,500	11,300	0.30	A	2U	26,800	8,100	0.30	A
G	El Toro Road	Live Oak Canyon Road to Glenn Ranch Road	County / Lake Forest / Mission Viejo	6D	56,300	13,800	0.25	A	4U	25,000	11,200	0.45	A
H	El Toro Road	Glenn Ranch Road to Marguerite Parkway	Mission Viejo	6D	56,300	19,400	0.34	A	4U	25,000	17,200	0.69	B
I	El Toro Road	Marguerite Parkway to Portola Parkway	Lake Forest	6D	56,300	10,400	0.18	A	4D	37,500	10,900	0.29	A
J	Blackstar Canyon Road	Silverado Canyon Road to County-Controlled Gate	County	2U	12,500	200	0.02	A	2U	12,500	200	0.02	A
K	Live Oak Canyon Road	El Toro Road to East of Cooks Corner	County	2U	12,500	4,600	0.37	A	2U	12,500	4,500	0.36	A
L	Silverado Canyon Road	Santiago Canyon Road to Blackstar Canyon Road	County	2U	12,500	2,800	0.23	A	2U	12,500	2,800	0.23	A

6.2 Intersection Summary

Intersection LOS analysis was performed for thirty-one (31) study area intersections. **Table 6-4** and **Table 6-5** compare the HCM and ICU LOS results, respectively, for intersections within the study area between No Project (Current MPAH) and With Project (Current Configuration) scenarios.

Under 2045 With Project (Current MPAH Configuration) scenario, the Project is forecast to result in no significant impact at the thirty-one (31) study intersections and no mitigation will be required.

Table 6-4: Intersection HCM LOS Summary

ID	INTERSECTION	JURISDICTION	2045 NO PROJECT (CURRENT MPAH)				2045 WITH PROJECT (CURRENT CONFIGURATION)				SIGNIFICANT IMPACT?	
			AM		PM		AM		PM			
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM
2	Santiago Canyon Road/SR-241 & SR-261 SB Ramps	Caltrans/Orange	26.8	C	14.7	B	25.6	C	13.3	B	No	No
3	Santiago Canyon Road/SR-241 NB On-Ramp & SR-261 Off-Ramp	Caltrans/Orange	13.4	B	92.7	F	8.9	A	87.7	F	No	No
4	Santiago Canyon Road/SR-241 NB Off-Ramp	Caltrans/County	6.2	A	14.2	B	6.2	A	13.6	B	No	No
5	Santiago Canyon Road/Silverado Canyon Road*	County	145.5	F	67.9	F	26.3	D	37.9	E	No	No
6	Silverado Canyon Road/Blackstar Canyon Road*	County	9.2	A	9.0	A	9.2	A	9.0	A	No	No
7	Santiago Canyon Road/Modjeska Canyon Road*	County	41.6	E	19.2	C	15.9	C	17.4	C	No	No
8	Santiago Canyon Road/Modjeska Grade Road*	County/Lake Forest	95.4	F	26.6	D	22.6	C	21.4	D	No	No
9	Santiago Canyon Road/Saddlecrest*	County/Lake Forest	110.2	F	26.2	D	19.4	C	21.0	C	No	No
10	Santiago Canyon Road/Ridgeline Road North*	County	134.3	F	65.9	F	22.1	C	45.5	E	No	No
11	Santiago Canyon Road/Crystal Canyon Road*	County	60.2	F	25.2	D	17.2	C	19.1	C	No	No
12	Santiago Canyon Road/Live Oak Canyon Road*	Lake Forest	176.5	F	35.4	E	22.9	C	19.6	C	No	No
15	El Toro Road/Cielo Entrada*	County/Mission Viejo	50.6	F	25.3	D	39.2	E	27.8	D	No	No
22/23	Portola Parkway/SR-241 Ramps	Caltrans/Lake Forest	25.6	C	12.1	B	26.2	C	12.0	B	No	No
24	Lake Forest Drive/SR-241 NB On-Ramp	Caltrans/Lake Forest	6.6	A	3.1	A	4.8	A	3.1	A	No	No
25	Lake Forest Drive/SR-241 SB Off-Ramp	Caltrans/Lake Forest	7.4	A	5.8	A	6.6	A	5.7	A	No	No
26/27	Alton Parkway/SR-241 Ramps	Caltrans/Lake Forest	18.7	B	11.9	B	20.0	C	11.9	B	No	No
28	El Toro Road/Saddleback Meadows*	Mission Viejo	53.6	F	29.2	D	33.4	D	31.4	D	No	No
29	El Toro Road/Saddleback Place*	Mission Viejo	38.6	E	31.1	D	25.1	D	32.2	D	No	No
30	Jeffrey Road/SR-241 NB On-Ramp	Caltrans/Irvine	6.1	A	7.4	A	6.0	A	7.3	A	No	No
31	Jeffrey Road/SR-241 SB Off-Ramp	Caltrans/Irvine	9.9	A	9.0	A	9.4	A	9.1	A	No	No

Note: *Unsignalized Intersection

Table 6-5: Intersection ICU LOS Summary

ID	INTERSECTION	Jurisdiction	2045 NO PROJECT (CURRENT MPAH)				2045 WITH PROJECT (CURRENT CONFIGURATION)				CHANGE IN V/C		SIGNIFICANT IMPACT?	
			AM		PM		AM		PM		AM	PM	AM	PM
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS				
1	Jamboree Road/Santiago Canyon	Orange	0.60	A	0.87	D	0.58	A	0.86	D	(0.02)	(0.01)	No	No
13	El Toro Road/Ridgeline Road South	Lake Forest	0.40	A	0.29	A	0.46	A	0.46	A	0.06	0.17	No	No
14	El Toro Road/Valley Vista	Orange	0.42	A	0.31	A	0.62	B	0.58	A	0.20	0.27	No	No
16	El Toro Road/Glenn Ranch Road	Mission Viejo	0.48	A	0.46	A	0.51	A	0.58	A	0.03	0.12	No	No
17	El Toro Road/Wandering Trails	Mission Viejo	0.29	A	0.28	A	0.38	A	0.61	B	0.08	0.33	No	No
18	El Toro Road/Painted Trials	Mission Viejo	0.36	A	0.31	A	0.46	A	0.38	A	0.10	0.06	No	No
19	El Toro Road/Marguerite Parkway	Mission Viejo	0.46	A	0.46	A	0.45	A	0.45	A	(0.01)	(0.01)	No	No
20	El Toro Road/Pheasant Creek	Lake Forest	0.19	A	0.19	A	0.30	A	0.19	A	0.11	0.00	No	No
21	El Toro Road/Portola Parkway	Lake Forest	0.65	B	0.63	B	0.67	B	0.63	B	0.02	0.00	No	No

Lastly, **Table 6-6** and **Table 6-7** compare the HCM and ICU LOS results, respectively, for intersections within the study area between No Project (Current MPAH) and With Project (Proposed Configuration) scenarios.

Under 2045 With Project (Proposed Configuration) scenario, the Project is forecast to result in no significant impact at the thirty-one (31) study intersections and no mitigation will be required.

Table 6-6: Intersection HCM LOS Summary

ID	INTERSECTION	JURISDICTION	2045 NO PROJECT (CURRENT MPAH)				2045 WITH PROJECT (PROPOSED CONFIGURATION)				SIGNIFICANT IMPACT?	
			AM		PM		AM		PM			
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	AM	PM
2	Santiago Canyon Road/SR-241 & SR-261 SB Ramps	Caltrans/Orange	26.8	C	14.7	B	27.7	C	13.6	B	No	No
3	Santiago Canyon Road/SR-241 NB On-Ramp & SR-261 Off-Ramp	Caltrans/Orange	13.4	B	92.7	F	8.3	A	37.3	D	No	No
4	Santiago Canyon Road/SR-241 NB Off-Ramp	Caltrans/County	6.2	A	14.2	B	6.2	A	13.9	B	No	No
5	Santiago Canyon Road/Silverado Canyon Road*	County	145.5	F	67.9	F	26.2	A	37.9	E	No	No
6	Silverado Canyon Road/Blackstar Canyon Road*	County	9.2	A	9.0	A	9.2	A	9.0	A	No	No
7	Santiago Canyon Road/Modjeska Canyon Road*	County	41.6	E	19.2	C	15.8	C	17.3	C	No	No
8	Santiago Canyon Road/Modjeska Grade Road*	County/Lake Forest	95.4	F	26.6	D	22.5	C	21.3	C	No	No
9	Santiago Canyon Road/Saddlecrest*	County/Lake Forest	110.2	F	26.2	D	19.4	C	21.5	C	No	No
10	Santiago Canyon Road/Ridgeline Road North*	County	134.3	F	65.9	F	19.5	C	39.8	E	No	No
11	Santiago Canyon Road/Crystal Canyon Road*	County	60.2	F	25.2	D	17.3	C	20.3	C	No	No
12	Santiago Canyon Road/Live Oak Canyon Road*	Lake Forest	176.5	F	35.4	E	29.9	D	18.4	C	No	No
15	El Toro Road/Cielo Entrada*	County/Mission Viejo	50.6	F	25.3	D	25.3	D	29.1	D	No	No
22/23	Portola Parkway/SR-241 Ramps	Caltrans/Lake Forest	25.6	C	12.1	B	26.4	C	12.0	B	No	No
24	Lake Forest Drive/SR-241 NB On-Ramp	Caltrans/Lake Forest	6.6	A	3.1	A	8.3	A	3.1	A	No	No
25	Lake Forest Drive/SR-241 SB Off-Ramp	Caltrans/Lake Forest	7.4	A	5.8	A	7.5	A	5.7	A	No	No
26/27	Alton Parkway/SR-241 Ramps	Caltrans/Lake Forest	18.7	B	11.9	B	20.0	C	11.9	B	No	No
28	El Toro Road/Saddleback Meadows*	Mission Viejo	53.6	F	29.2	D	23.1	C	34.2	D	No	No
29	El Toro Road/Saddleback Place*	Mission Viejo	38.6	E	31.1	D	19.4	C	26.6	D	No	No
30	Jeffrey Road/SR-241 NB On-Ramp	Caltrans/Irvine	6.1	A	7.4	A	6.0	A	7.3	A	No	No
31	Jeffrey Road/SR-241 SB Off-Ramp	Caltrans/Irvine	9.9	A	9.0	A	9.6	A	9.1	A	No	No

Note: *Unsignalized Intersection

Table 6-7: Intersection ICU LOS Summary

ID	INTERSECTION	Jurisdiction	2045 NO PROJECT (CURRENT MPAH)				2045 WITH PROJECT (PROPOSED CONFIGURATION)				CHANGE IN V/C		SIGNIFICANT IMPACT?	
			AM		PM		AM		PM		AM	PM	AM	PM
			V/C	LOS	V/C	LOS	V/C	LOS	V/C	LOS				
1	Jamboree Road/Santiago Canyon	Orange	0.60	A	0.87	D	0.58	A	0.87	D	(0.02)	0.00	No	No
13	El Toro Road/Ridgeline Road South	Lake Forest	0.40	A	0.29	A	0.35	A	0.28	A	(0.05)	(0.01)	No	No
14	El Toro Road/Valley Vista	Orange	0.42	A	0.31	A	0.47	A	0.39	A	0.05	0.08	No	No
16	El Toro Road/Glenn Ranch Road	Mission Viejo	0.48	A	0.46	A	0.53	A	0.51	A	0.05	0.05	No	No
17	El Toro Road/Wandering Trails	Mission Viejo	0.29	A	0.28	A	0.40	A	0.36	A	0.11	0.08	No	No
18	El Toro Road/Painted Trials	Mission Viejo	0.36	A	0.31	A	0.48	A	0.39	A	0.12	0.08	No	No
19	El Toro Road/Marguerite Parkway	Mission Viejo	0.46	A	0.46	A	0.46	A	0.48	A	0.00	0.02	No	No
20	El Toro Road/Pheasant Creek	Lake Forest	0.19	A	0.19	A	0.30	A	0.19	A	0.11	0.00	No	No
21	El Toro Road/Portola Parkway	Lake Forest	0.65	B	0.63	B	0.66	B	0.63	B	0.01	0.00	No	No

7 EL TORO ROAD/SANTIAGO CANYON ROAD AT LIVE OAK CANYON - INTERSECTION TRAFFIC CONTROL

The City of Lake Forest has identified traffic control at the intersection of Santiago Canyon Road/El Toro Road and Live Oak Canyon Road as a study issue. The intersection can experience fairly high levels of traffic especially during the weekends with the adjacent Cooks Corner restaurant/bar being a popular weekend destination. The City of Lake Forest performed signal warrant analysis in 2018 which indicated this intersection previously met signal warrants #1,#2,#3 and #8 (as described below). An updated signal warrant analysis was performed to determine if signalization is still justified. A new traffic signal at this location is included in the City of Lake Forest's 2019 Traffic Signal Master Plan.

The intersection of Santiago Canyon Road/El Toro Road at Live Oak Canyon Road is currently a T-intersection with Live Oak Canyon Road Tee-ing into El Toro Road/ Santiago Canyon Road. Santiago Canyon Road has no intersection control at this junction. The location is within the City of Lake Forest. The area is semi-rural. Santiago Canyon road is approximately 42 feet wide and is classified as a north-south primary arterial roadway. It accommodates one 12-foot lane and 6-foot bicycle lanes with a 3-foot buffer in each direction. Opposing directions are separated by a double yellow stripe. At the intersection with Live Oak Canyon Road, there is a dedicated southbound turn lane. There is no curb or gutter; the asphalt edge abuts the adjacent soil. The posted speed limit is 50 mph however, the 85th percentile speed is 57 mph north of the intersection as of June 2023. The annual collision rate north of Live Oak Canyon Road is 86 per million vehicle miles for the 10-year period from June 2013 to June 2023. There are no marked crosswalks at the intersection.

The name of this road changes to El Toro Road south of Live Oak Canyon Road. In the section from Live Oak Canyon Road to Valley Vista, there are no painted class II bicycle lanes. The nearest intersection approximately 600 feet to the south of the Live Oak Canyon Road is a signalized T-intersection with Ridgeline Road which goes northwest. A class I bicycle facility begins south of the Ridgeline Road intersection. This results in a gap of approximately 600 feet without any bicycle facilities. The cross section of El Toro Road varies, but in the section from Live Oak Canyon Road to Valley Vista it is typically approximately 44 feet wide with one lane in each direction, edge stripes and a yellow striped median. A northbound/eastbound left turn lane is provided for the intersection with Ridgeline Road. Curb and gutter and sidewalk exists on the southbound/westbound side south of Ridgeline Road. Shoulder widths vary but are generally 4 to 8 feet on both sides.

Live Oak Canyon Road is classified as a major collector. It is approximately 34 feet wide with one 12-foot lane in each direction. The paved shoulder is approximately 4 feet wide on each side. There is a double yellow line for the center 2-foot median with rumble strips and a white outside stripe delineating the edge of travel way. The west end of Live Oak Canyon Road terminates with a stop sign at Santiago Canyon Road/El Toro Road. There is no curb or gutter; the asphalt edge abuts the adjacent soil. Approximately 400 feet to the south of Live Oak Canyon Road is a driveway to the Com-Power Corporation on the west side of El Toro Road. There is the potential for a fourth leg at the intersection to access the Com-Power site if the site were to be redeveloped. This parcel is zoned Canyon Commercial. The zoning limits it to the following uses: 1) retail, wholesale nursery (5000 sf), 2) child-care facility or veterinary office (7000 sf), 3) research, testing and development laboratory (7000 sf), or 4) public/private utility buildings and structures. The fourth leg of the intersection would likely be a condition of development if it were to take place.

Cook's Corner is on the northeast corner of the intersection. This restaurant/bar is popular on weekends. Parking at Cook's is a heavy mix of motorcycles and vehicles. As the few dedicated parking spots fill quickly, parking then continues along Live Oak Canyon Road.

The southeast corner of the intersection is currently vacant land. It is currently owned by the same owner as the Com-Power site on the west side of the road. This land is zoned as open space.

Significant numbers of bicycles use Santiago Canyon Road/El Toro Road. Low levels of pedestrians are present.

7.1 Traffic Signal Warrants

The following signal warrant analysis was conducted in accordance with the criteria established in the *California Manual on Uniform Traffic Control Devices* (CA MUTCD 2014) to determine if any conditions exist at this intersection that may support/justify the installation of a traffic signal. The traffic signal warrants in the *CA MUTCD 2014* specify the minimum conditions which must be met before installation of a traffic signal should be considered. If any of the warrants are met, it does not mean that signals should or must be installed. The decision to install traffic signals should be based upon engineering judgement indicating that the traffic signals will improve safety and/or operation of the intersection. The investigation of the need for a traffic control signal shall include analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions. The *CA MUTCD 2014* specifies nine (9) different warrants (conditions) of which at least one must be met in order to consider/justify traffic signals at an intersection. Each of the nine traffic signal warrants were reviewed to determine its applicability at the intersection.

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume – Not applicable at this location.
- Warrant 5, School Crossing – Not applicable at this location.
- Warrant 6, Coordinated Signal System – Not applicable at this location.
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Grade Crossing – Not applicable at this location.

Out of the nine warrants, only four were analyzed. Some of the warrants do not apply to this location (**Warrant 5, School Crossing**, **Warrant 6 coordinated Signal System** and **Warrant 9, Intersection Near a Grade Crossing**). **Warrant 1, Eight-Hour Vehicular Volume** was not considered since eight-hour intersection turning movement counts were not collected and **Warrant 4, Pedestrian Volume** is only applicable to high-volume pedestrian crossing which is not the case at this location therefore not considered. The warrant analysis is detailed below. Detailed Traffic Signal Warrant Sheets are included in **Appendix I**.

- **Warrant 2, Four-Hour Vehicular Volume** – This warrant is intended to be applied where the volume of intersecting traffic is the principal reason. The total volume on both major street approaches and the higher-volume minor street approach must fall above the applicable curve on Figure 4C-1 for at least four hours.
If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-2 may be used in place of Figure 4C-1.
- **Warrant 3, Peak Hour Vehicular Volume** – This warrant is for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor street traffic suffers excessive delay when entering or crossing the major street. The warrant is satisfied if the criteria in either of the two categories are met:
 - **Part A** - If all three of the following conditions exist for the same 1 hour:
 - 1. The total stopped time delay experienced by the traffic on the minor-street approach (one direction only) controlled by a STOP sign equal or exceeds: 4 vehicle-hours for a one-lane approach, or 5 vehicles-hours for a two-lane approach; and
 - 2. The volume on the same minor-street approach equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and
 - 3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

- **Part B** - The total volume on both major street approaches and the higher-volume minor street approach must fall above the applicable curve on Figure 4C-3 for the same 1 hour (any four consecutive 15-minute periods) of the day.

If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-4 may be used in place of Figure 4C-3 to satisfy the criteria in the second category of the Standard.

- **Warrant 7, Crash Experience Warrant** – This warrant is intended for applications where the severity and frequency of crashes are the principal reason to consider installing a traffic control signal. This warrant is satisfied if all of the following criteria are met:
 - **Part A** - Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
 - **Part B** - Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
 - **Part C** - Warrant 1: Condition A or Warrant 1: Condition B or Warrant 4 satisfies 80% factor.
- **Warrant 8, Roadway Network** – This warrant is intended to encourage concentration and organization of traffic flow on a roadway network. This warrant is satisfied if all of the following criteria are met:
 - **Part 1** – The common intersection of two or more major routes meets one or both of the following criteria:
 - **Part A.** The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or
 - **Part B.** The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).
 - **Part 2** – A major route as used in this signal warrant shall have at least one of the following characteristics:
 - **Part A.** It is part of the street or highway system that serves as the principal roadway network for through traffic flow.
 - **Part B.** It includes rural or suburban highways outside, entering, or traversing a city.
 - **Part C.** It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.

7.2 Traffic Signal Warrant Analysis

- **Warrant 2, Four-Hour Vehicular Volume** - The speed limit along Santiago Canyon Road is 55 miles per hour and 50 miles per hour along El Toro Road; therefore, Figure 4C-2 was used. The Existing Year volumes were plotted above the appropriate line curve for both AM and PM peak hours; therefore, Warrant 2 is met. The Future Year 2045 volumes were not considered. Refer to **Appendix I** for a detailed illustration of the warrant.
- **Warrant 3, Peak Hour** – The speed limit along Santiago Canyon Road is 55 miles per hour and 50 miles per hour along El Toro Road; therefore, Figure 4C-4 was used. For all scenarios, Existing Year, Year 2045 No Project (Current MPAH), Year 2045 With Project (Current Configuration), and Year 2045 With Project (Proposed Configuration), the volumes were plotted above the appropriate line curve for both AM and PM peak hours. As a result, Santiago Canyon Road/El Toro Road and Live Oak canyon Road satisfy Part B of Warrant 3; therefore, Warrant 3 is met. **Appendix I** shows an illustration of the warrant.
- **Warrant 7, Crash Experience Warrant** – Iteris obtained historical collision data from the County of Orange collision system and the Statewide Integrated Traffic Records System (SWITRS). The County of Orange provided a comprehensive 10-year traffic collision history database, and a 5-year traffic collision history was obtained

from the SWITRS website. Between June 19, 2013, and June 19, 2023, there were two crashes reported at Santiago Canyon Road and Live Oak Canyon Road in both 2021. However, it must be noted that the incidents were not at or near the intersection. There were no fatalities. The crash type includes fixed object. Warrant 7 requires five or more reported crashes. Based on the collision data, the minimum number of crashes did not occur; therefore, Warrant 7 is not met.

- Warrant 8, Roadway Network** – According to the OCTA Master Plan of Arterial Highways, Santiago Canyon Road is a primary arterial and El Toro Road is a major highway. However, the current roadway configurations fall short of the ultimate configuration. Live Oak Canyon Road is not a major route. Therefore, Santiago Canyon Road/El Toro Road and Live Oak Canyon Road do not serve as a common intersection of two major routes; therefore, Part 1 of Warrant 8 is not met. Since both Part 1 and Part 2 need to be met, warrant 8 is not met.

7.3 Summary of Findings

The findings of this Traffic Signal Warrant Analysis, which include Existing and Future Year Volumes (No Project (Current MPAH), With Project (Current Configuration), and With Project (Proposed Configuration)) are summarized in **Table 7-1**.

Table 7-1: Traffic Signal Warrant Analysis Results

Warrant	Description	Analysis Result
1	Eight-Hour Vehicular Volume	Not Tested
2	Four-Hour Vehicular Volume	Warrant Met
3	Peak Hour	Warrant Met
4	Pedestrian Volume	N/A
5	School Crossing	N/A
6	Coordinated Signal System	N/A
7	Crash Experience	Warrant Not Met
8	Roadway Network	Warrant Not Met
9	Intersection Near a Grade Crossing	N/A

As a result, Santiago Canyon Road/El Toro Road and Live Oak Canyon is warranted for an installation of a traffic signal under Existing Year, Year 2045 No Project (Current MPAH), Year 2045 With Project (Current Configuration), and Year 2045 With Project (Proposed Configuration) scenarios.

7.4 Roundabout Analysis

As an alternative to a traffic signal the County and City of Lake Forest requested consideration of the potential for a roundabout for traffic control at the intersection.

A roundabout would typically result in slowing traffic, keeping traffic continuously moving, less severe collisions, fewer overall collisions, less electricity cost, and less expensive maintenance costs than for a traffic signal. Since traffic continuously moves through a roundabout, delays are also reduced resulting in a decrease in fuel consumption and air pollution. The central island provides an opportunity for low height landscaping.

The site appears to be physically suited for a roundabout as it is generally flat and there is no extreme visibility or topographical concerns. Given the posted speed limit of 55 mph, a stopping sight distance of 495 feet would be necessary. The existing horizontal and vertical alignment of the roadways provides this distance. Considering the 85th percentile speed of 60 mph, a distance of 570 feet would be necessary. This sight distance is also met.

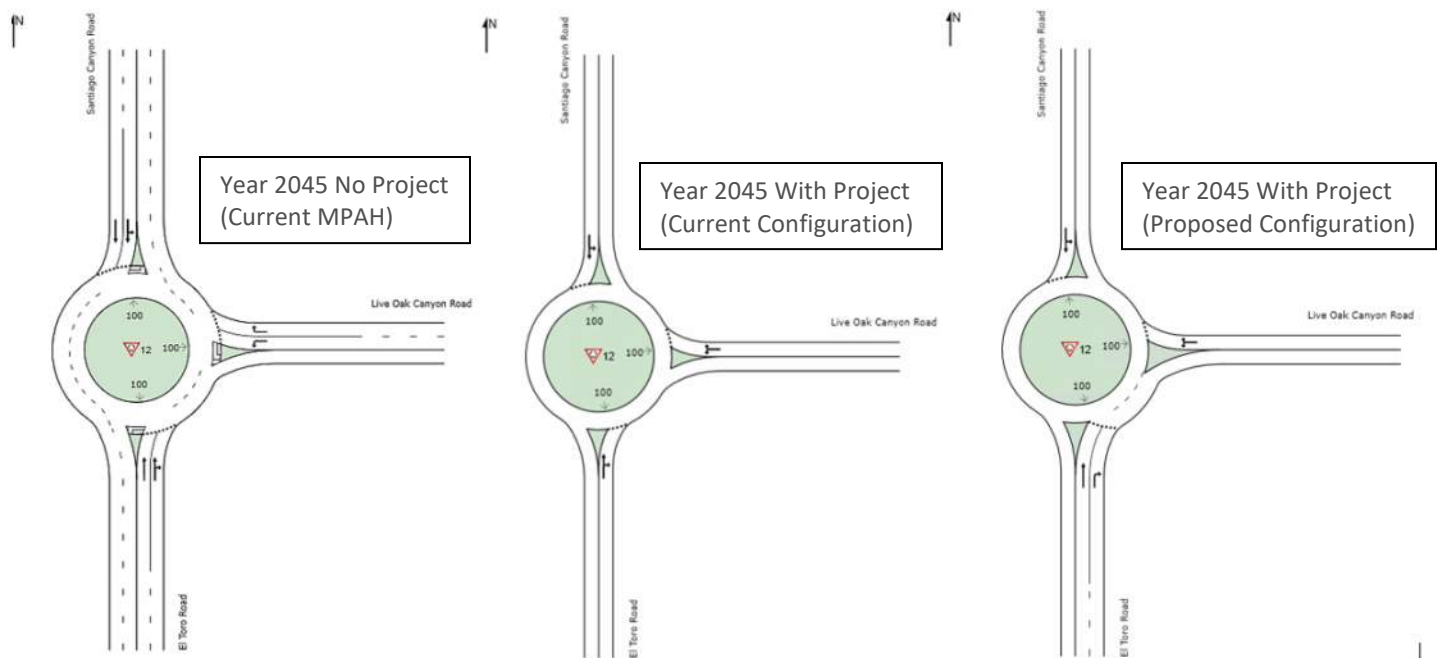
A roundabout could likely be constructed here with the acquisition of property on the east side of Santiago Canyon Road, south of Live Oak Canyon Road. This would be the likely property to select to avoid impact to Cook’s Corner

restaurant and bar on the north side of Live Oak Canyon and given the power lines and the existing development on the west side of Santiago Canyon Road. The amount of right of way needed would depend upon the inscribed circle diameter of the roundabout which is dependent upon the type of vehicles allowed to use it along with the number of lanes for the roundabout. According to the intersection analysis using SIDRA software, it appears a one-lane roundabout would be sufficient. Given that, the inscribed circle diameter would range between 105 to 150 feet to accommodate the California legal design vehicle and between 130 to 180 feet to accommodate the Surface Transportation Assistance Act (STAA) design vehicle. Truck volumes appear to be low, however the type of design vehicle needs to be determined.

7.5 Roundabout Analysis Configurations

The assumed roundabout configurations for Future Year 2045 No Project (Current MPAH) and With Project (Current Configuration and Proposed Configuration) conditions are shown in **Figure 7-1**. For No Project (Current MPAH) a four-lane roundabout was assumed while With Project (Current Configuration and Proposed Configuration) a two-lane roundabout was assumed.

Figure 7-1: Year 2045 Roundabout Lane Configurations



Traffic volume forecasts at Santiago Canyon Road/El Toro Road and Live Oak Canyon Road were prepared through the use of Orange County Traffic Analysis Model (OCTAM) and noted in **Section 4**.

7.6 Traffic Operations Analysis

The proposed roundabout intersections were assessed using SIDRA Intersection 9 software, utilizing the *HCM 6th Edition* methodology. **Table 7-2**, **Table 7-3**, and **Table 7-4** summarize the LOS results for the weekday during AM and PM peak hours for Year 2045 No Project (Current MPAH), With Project (Current Configuration), and With Project (Proposed Configuration), respectively. The future roundabout intersections are forecast to operate at LOS A during both peak hours under Year 2045 No Project (Current MPAH), With Project (Current Configuration), and With Project (Proposed Configuration), respectively. Detailed Sidra output sheets are provided in **Appendix J**.

Table 7-2: Year 2045 No Project (Current MPAH) Intersection LOS

ID	INTERSECTION LOCATION	CONTROL	2045 NO PROJECT (CURRENT MPAH)				
			AM PEAK HOUR		PM PEAK HOUR		DEFICIENT?
			DELAY	LOS	DELAY	LOS	(YES/NO)
12	Santiago Canyon Road/El Toro Road and Live Oak Canyon Road	Roundabout	7.1	A	5.8	A	No

Table 7-3: Year 2045 With Project (Current Configuration) Intersection LOS

ID	INTERSECTION LOCATION	CONTROL	2045 WITH PROJECT (CURRENT CONFIGURATION)				
			AM PEAK HOUR		PM PEAK HOUR		DEFICIENT?
			DELAY	LOS	DELAY	LOS	(YES/NO)
12	Santiago Canyon Road/El Toro Road and Live Oak Canyon Road	Roundabout	6.4	A	8.8	A	No

Table 7-4: Year 2045 With Project (Proposed Configuration) Intersection LOS

ID	INTERSECTION LOCATION	CONTROL	2045 WITH PROJECT (PROPOSED CONFIGURATION)				
			AM PEAK HOUR		PM PEAK HOUR		DEFICIENT?
			DELAY	LOS	DELAY	LOS	(YES/NO)
12	Santiago Canyon Road/El Toro Road and Live Oak Canyon Road	Roundabout	6.6	A	6.7	A	No

A fourth leg of the roundabout was not studied; however, it is likely that an acceptable level of service would result. Depending on the future site development, it may result in an additional lane needed within the roundabout. This could be a phase 2 construction if deemed necessary at that time.

Since there are no nearby roundabouts, introducing one at this location would be a “surprise” to motorists that have long used the T-intersection. Extensive outreach would be suggested to gain public acceptance of the new configuration. The public would likely need to understand the justification for the change. Potential issues would need to be explored prior to responding to the public. In particular, the effect on the Cook’s Corner restaurant and bar would need to be examined. An alternative manner of parking and/or entry/exit will likely be needed to ensure the roundabout will operate as planned. Site changes to the parking and edge conditions along this northeast corner would be needed which would add some cost to the implementation of the roundabout.

Public agency sources have stated that sometimes minor property damage only collisions are often not recorded which could account for missing data. It is understood that roundabouts improve the severity of collisions by lowering speed and reducing the conflicting movements which result in the most damage. As a result, roundabouts typically have fewer collisions and less severe collisions than do typical signalized intersections. The entry speed of a single lane roundabout is 25 mph, which would help in lowering overall speeds through the area.

Because these roadways have high bicycle usage, a study of how to provide for the cyclists through the roundabout would be needed. Bicycles can be accommodated in a number of ways including 1) providing a Class 1 trail on the edges of the roadway, 2) by increasing the inscribed circle diameter and providing a Class 2 lane within the inscribed circle itself or 3) by transitioning Class 2 into Class three to share with vehicles. Because the roundabout requires motorists to reduce their speed, bicyclists would likely also need to reduce their speeds. Roundabouts are favorable to bicyclists in that they can generally continue movement rather than stopping as they would at a traffic signal.

In summary a roundabout appears to be a feasible alternative to a traffic signal provided certain design considerations are met and public outreach is performed and provides positive feedback.

8 SPEED/COLLISION DATA

8.1 Speed Data

A speed survey was conducted in June 2023 by the County of Orange along Santiago Canyon Road from north of Irvine Lake to north of Crystal Canyon Road. The survey sheets are provided in **Appendix K**. The posted speed limit along the roadway is 55 miles per hour (mph). The speed survey results show that the 50th percentile speed along Santiago Canyon Road ranges from 52 to 56 mph, which is under or slightly over the posted speed limit. The 85th percentile speed for the roadway shows that the speed ranges from 57 to 62 mph, which is notably over the posted speed limit. The observed 85th percentile speed by segment as shown in **Figure 8-1**.

8.2 Collision data

Two sources for data for the collision analysis along Santiago Canyon Road were used: The Orange County Traffic Engineering Department dataset and Statewide Integrated Traffic Records System (SWITRS). The County's data timeframe ranged 10 years from June 2013 to June 2023 (273 recorded collisions) and the SWITRS' data timeframe ranges five years from 2018 to 2022 (146 recorded collisions). The raw collision data is provided in **Appendix L**. These collision data were used to calculate the annual rate of injury, fatal, and property damage only collisions by segment. The annual rates were calculated by calculating the annual VMT of study area segments A to F, dividing the number of collisions by the annual VMT and number of years of the data timeframe, and normalizing the rate to collision per 100 million VMT. The calculation results are shown in **Table 8-1-** and **Table 8-2**.

The collision annual rates were compared with different national and state sources such as the Federal Highway Administration (FHWA) California State Highway Safety Report 2021, National Transportation Research Nonprofit (TRIP), and California Office of Traffic Safety (OTS) for fatal and injury collisions. The comparison results show that the County dataset and SWITRS' annual collision rates along Santiago Canyon Road were higher than the annual rates from FHWA and TRIP but similar to the annual rates from OTS as shown in **Table 8-3** and **Table 8-4**.

The FHWA data is only available for State Highways and is not broken down by functional classification. The comparison metric would therefore mainly consist of freeway collisions rather than other comparable rural highways so is not a particularly good comparison. Also, the FHWA injury collision rate is for serious injury only not all injuries so again is not an apples-to-apples comparison and therefore not an ideal comparison.

<https://www.fhwa.dot.gov/tpm/reporting/state/safety.cfm?state=California>

A better comparison is the fatality rates for all State of California's non-interstate rural roads which is 2.62 per 100M VMT. The US National average is 2.17 fatalities per 100M VMT. The County's collision data shows 3.64 fatalities per 100 M VMT and the SWITRS data indicates 5.54 fatalities per 100M VMT both of which are significantly higher than the State average for rural highways.

<https://tripnet.org/reports/rural-connections-california-news-release-10-13-2022/>

A significant number of collisions involve motorcycles and bicyclists. Of 273 records from the County data source 32 collisions (12%) involved cyclists and 56 (21%) involved motorcycles meaning a third of all reported collisions involve a bicycle or motorcycle. The percentage of bicycle and motorcycle collisions is higher than might be expected based on the mode split percentages alone. **Table 3-12 above** shows up to 8% bicycle and 16% motorcycle mode split on a Sunday but very little bicycle or motorcycle traffic during weekdays. The relatively high number of weekend bicycles and motorcycles likely accounts for part of the higher than State average fatality rate on the corridor.

Finally, a calculation was made based on the California Office of Traffic Safety which calculates total fatal and injury collisions by County. In 2020 there were 12,798 reported fatal and injury collisions reported in Orange County.

https://www.ots.ca.gov/media-and-research/crash-rankings-results/?wpv_view_count=1327&wpv-wpcf-year=2020&wpv-wpcf-city_county=Orange+County&wpv_filter_submit=Submit

For this comparison SCR performs reasonably well in that it is around the average for Orange County roadways as a whole.

Figure 8-1: 85th Percentile Speed

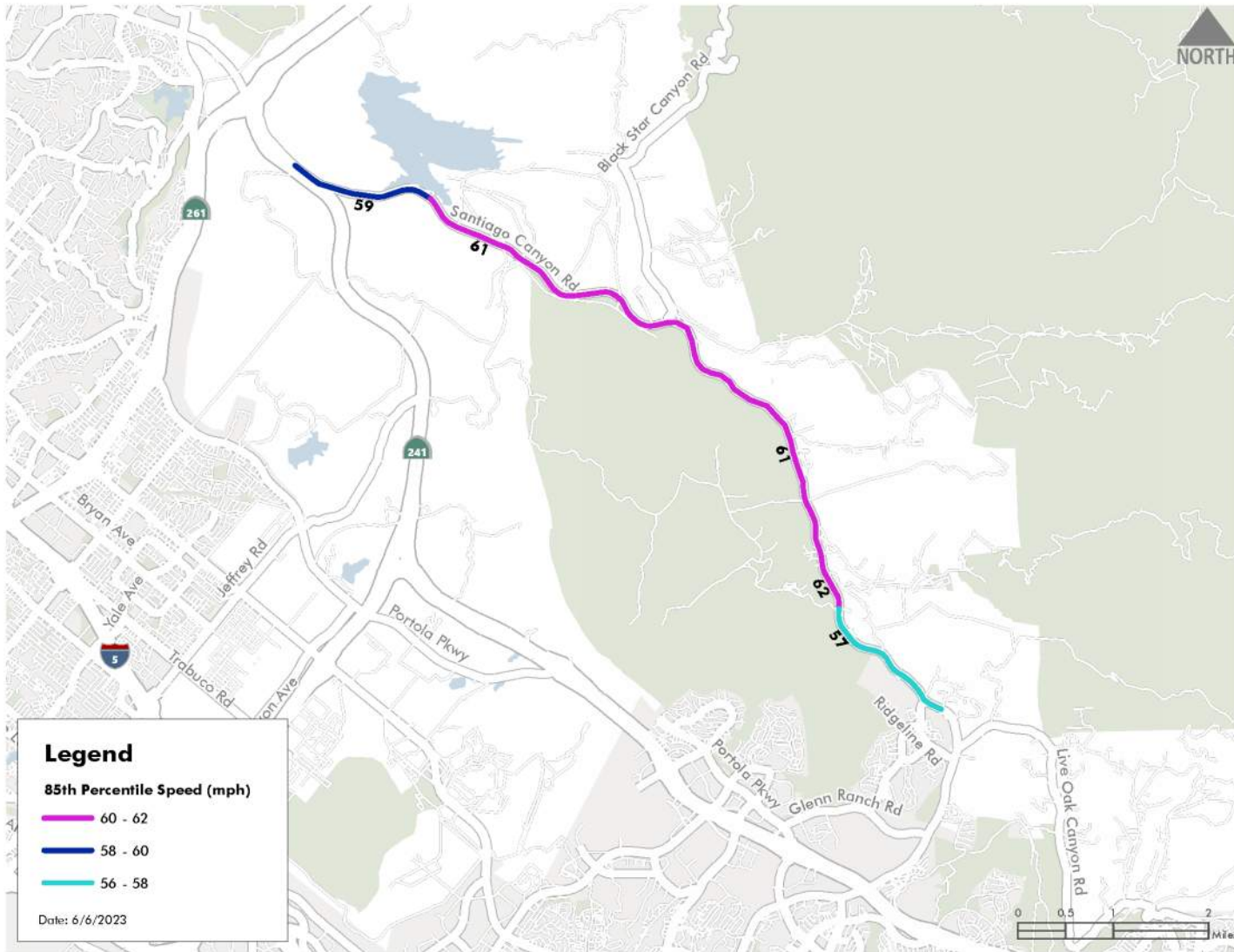


Table 8-1: County of Orange Collision Data on SCR – 10 Years 2013-2022

ID	Segment Name	ADT	Length (miles)	Annual VMT	Injury		Fatal		Property Damage Only		Total	
					Number of Collisions	Annual Rate	Number of Collisions	Annual Rate	Number of Collisions	Annual Rate	Number of Collisions	Annual Rate
A	From SR-241 NB Off-Ramp to Irvine Lake	9,336	1.91	6,247,089	28	45	3	5	23	37	54	86
B	From Irvine Lake to Silverado Canyon Rd	9,111	3.04	9,692,258	42	43	5	5	41	42	88	91
C	From Silverado Canyon Rd to Modjeska Canyon Rd	8,182	2.85	8,155,448	44	54	2	2	20	25	66	81
D	From Modjeska Canyon Rd to Modjeska Grade Rd	7,991	1.73	4,830,870	15	31	1	2	10	21	26	54
E	From Modjeska Grade Rd to Ridgeline Rd North	8,646	0.60	1,824,705	12	66	1	5	7	38	20	110
F	From Ridgeline Road North to Live Oak Canyon Rd	7,496	0.66	1,742,057	11	63	0	0	4	23	15	86
Total		50,762	11	32,492,428	152	47	12	4	105	32.3	269	83

Table 8-2: SWITRS Collision Data on SCR– 5 year 2018-2022

3	Segment Name	ADT	Length (miles)	Annual VMT	Injury		Fatal		Property Damage Only		Total	
					# Collisions	Annual Rate	# Collisions	Annual Rate	# Collisions	Annual Rate	# Collisions	Annual Rate
A	From SR-241 NB Off-Ramp to Irvine Lake	9,336	1.91	6,247,089	13	42	1	3	11	18	25	40
B	From Irvine Lake to Silverado Canyon Rd	9,111	3.04	9,692,258	25	52	5	10	23	24	53	55
C	From Silverado Canyon Rd to Modjeska Canyon Rd	8,182	2.85	8,155,448	31	76	2	5	11	13	44	54
D	From Modjeska Canyon Rd to Modjeska Grade Rd	7,991	1.73	4,830,870	5	21	1	4	4	8	10	21
E	From Modjeska Grade R to Ridgeline Rd North	8,646	0.60	1,824,705	6	66	0	0	0	0	6	33
F	From Ridgeline Road North to Live Oak Canyon Rd	7,496	0.66	1,742,057	5	57	0	0	2	11	7	40
Total		50,762	11	32,492,428	85	52	52	7	51	39	145	112

Table 8-3: County of Orange Ten-Year Collision Data

Source	Source Area	Collision Type	Santiago Canyon Annual Rate (normalized by 100 Mil VMT)	Source Rate (per 100 Mil VMT)	Santiago vs. Source % Difference
<u>FHWA</u>	State of California	Fatal	3.69	1.20	207%
<u>FHWA</u>	State of California	Injury	46.78	4.90	855%
<u>TRIP 2022</u>	State of California	Fatal	3.69	2.62	41%
<u>California Office of Traffic Safety 2020</u>	Orange County	Fatal and Injury	50.47	53.82	-6%

Table 8-4: SWITRS Five-Year Collision Data

Source	Source Area	Collision Type	Santiago Canyon Annual Rate (normalized by 100 Mil VMT)	Source Rate (per 100 Mil VMT)	Santiago vs. Source % Difference
<u>FHWA</u>	State of California	Fatal	5.54	1.20	360%
<u>FHWA</u>	State of California	Injury	52.32	4.90	969%
<u>TRIP 2022</u>	State of California	Fatal	5.54	2.62	111%
<u>California Office of Traffic Safety 2020</u>	Orange County	Fatal and Injury	57.86	53.82	7%

Figure 8-2: STC/ETR Total Collision Rate

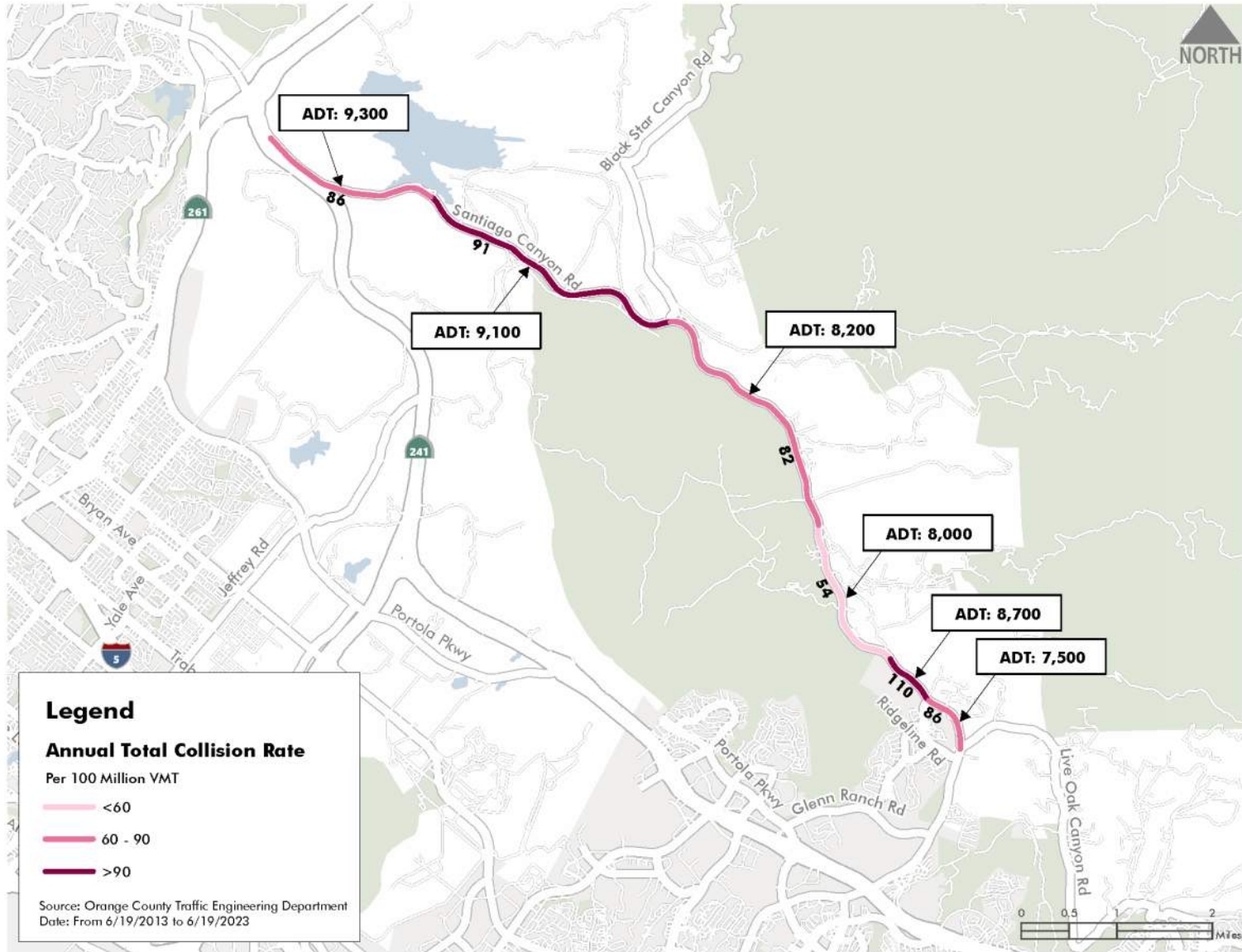
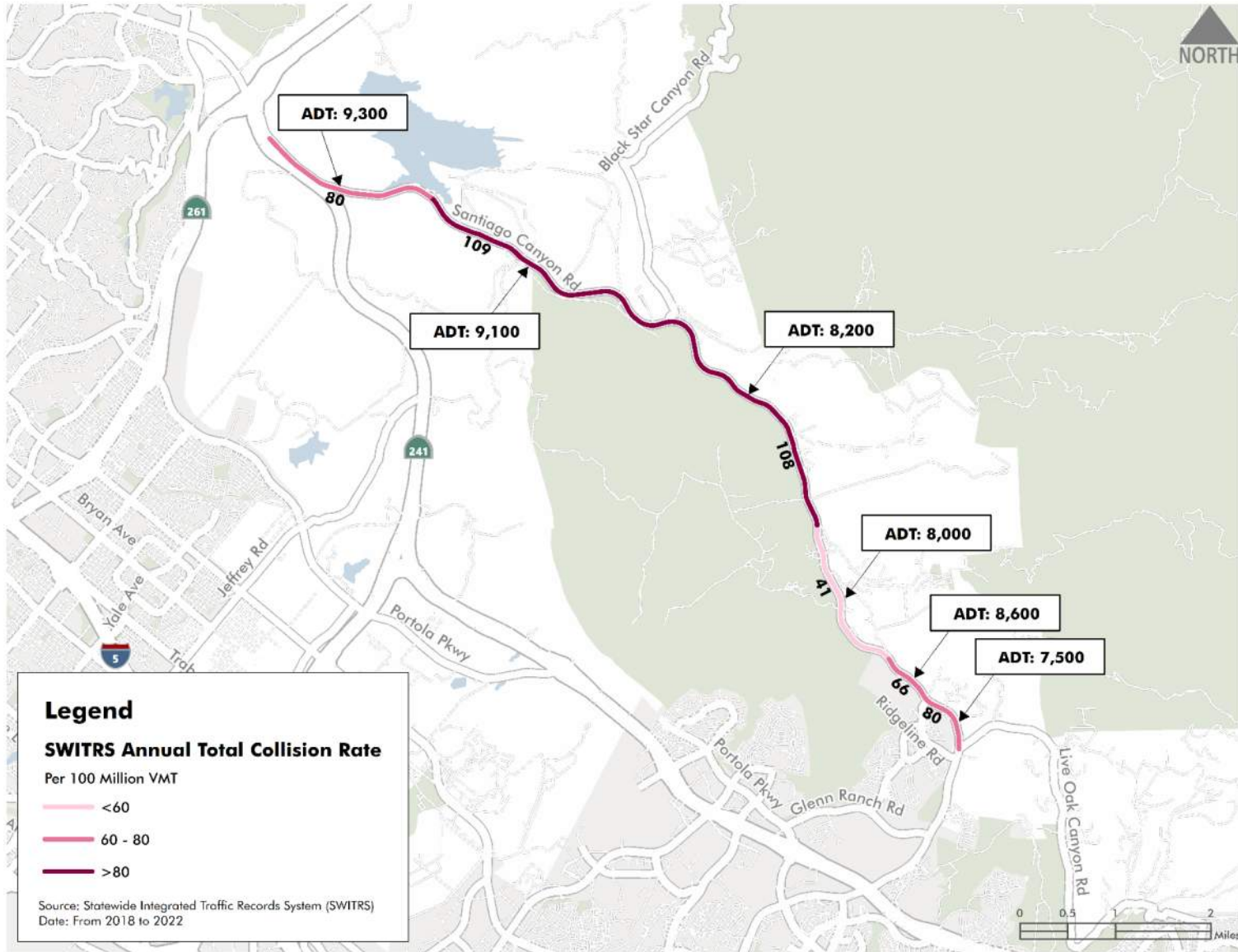


Figure 8-3: STC/ETR SWITRS Total Collision Rate



8.3 Traffic Calming

Since the observed 85% percentile speeds are somewhat higher than the 55-mph posted speed limit and the calculated relatively high rate of fatal and injury collisions on SCR (especially for bicycles and motorcycles) additional traffic calming measures throughout the corridor might be appropriate. Remedial measures could include:

1. In locations of multiple lanes, lane reduction (road diet) could be made.
2. Increased use of solar radar speeds signs telling drivers their speeds and warning them if they are exceeding the speed limit.
3. Use of rumble strips, either on the centerline or shoulder edges or both.
4. More signs for “share the Road” with bicycles.
5. Green paint at the intersections to highlight bicycle usage.
6. Roundabout intersections to break up uninterrupted flow of traffic. Candidate locations might include Silverado Canyon Road and Modjeska Canyon Road.
7. Landscaping along the roadway edges (not large trees) or develop a center median in some areas that have the width and provide landscaping. Would give the effect of a narrower roadway and drivers typically go slower the narrower the roadway.
8. Park a police vehicle at various places along the corridor, particularly on weekends. This has been observed to reduce speeds even if drivers often know the vehicle is likely usually empty.

Public outreach to ascertain public feedback and communicate the pros and cons of traffic calming should be performed prior to measures being implemented.

9 VEHICLE MILES TRAVELLED (VMT)

OCTA's MPAH assessment guidelines do not include a requirement for analysis of Vehicle Miles Travelled (VMT) for MPAH amendment studies. However, for CEQA purposes Transportation projects are required to assess the VMT impacts of any new facilities. The proposed MPAH amendments being assessed in this study actually remove capacity from the future roadway network. The State of California's Office of Planning and Research (OPR) SB 743 Guidelines state (page 23):

'Reducing roadway capacity (for example, by removing or repurposing motor vehicle travel lanes) will generally reduce VMT and therefore is presumed to cause a less-than-significant impact on transportation. Generally, no transportation analysis is needed for such projects.'

Therefore, the three proposed MPAH amendments can be considered less than significant under CEQA. Also, the OPRs Technical Guidelines state that transportation projects which increase capacity have the potential to generate induced demand which should be studied and mitigated as necessary. However, no induced travel demand analysis is required for the following types of transportation projects:

- *Roadway shoulder enhancements to provide "breakdown space," dedicated space for use only by transit vehicles, to provide bicycle access, or to otherwise improve safety, but which will not be used as automobile vehicle travel lanes.*
- *The addition of an auxiliary lane of less than one mile in length is designed to improve roadway safety.*
- *Installation, removal, or reconfiguration of traffic lanes that are not for through traffic, such as left, right, and U-turn pockets, two-way left turn lanes, or emergency breakdown lanes that are not utilized as through lanes.*
- *Addition of roadway capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit*
- *Addition of passing lanes, truck climbing lanes, or truck brake-check lanes in rural areas that do not increase overall vehicle capacity along the corridor.*
- *Installation of roundabouts or traffic circles*
- *Reduction in number of through lanes*

Since the proposed MPAH amendments reduce the number of through lanes the proposed amendments can be considered screened out for CEQA purposes.

10 BICYCLE LANES

10.1 Santiago Canyon Road – SR 241/SR 261 to Live Oak Canyon Road

Santiago Canyon Road includes Class II bicycle lanes throughout the section from Live Oak Canyon Road northerly to the northbound SR 241 off-ramp to Santiago Canyon Road, a 10.2-mile segment. The bicycle lanes are 6 feet wide and generally separated from the travel lanes by a buffer ranging from 1.5 to 3 feet. The County requested a review of the potential for implementation of Class I or Class IV bicycle lanes in this segment. The majority of this roadway is two-lanes, however, there are some locations with three lanes for a turning pocket or two lanes in one direction and one lane in the other or a merging lane and a short section near Haul Road with four lanes comprising two through lanes and two merging lanes.

Typically, Class I bike path accommodate two lanes in each direction. One lane in each direction is accommodated most easily by a separation from the existing highway using a separate one-way path and providing it in both directions. The separation is recommended at 5 feet or more. A one lane bike path is a minimum of 5 feet, preferably wider. Per the County of Orange Highway Design Manual, a two-way Class I bike path is typically 10 feet wide, with 2-foot wide graded areas adjacent from the edge of pavement to the hinge point. If a deviation is allowed for widths less than 10 feet, a 3-foot wide graded area from the edge of pavement to the hinge point should be provided. Therefore, if bike paths were provided on each side of the highway, approximately an additional 10 feet would be needed or if one two-lane bike path were provided on one side it would be approximately 14 feet wide.

Right of way maps were not provided, however, the right of way is indicated without dimension on the signing and striping plans dated November 2018. Reviewing the right of way lines as indicated on these plans shows that most of this segment has adequate right of way to implement the bike path concept. There are pinch points at Falcon Street, at Silverado Canyon Road, at Hicks Haul Road, and from the SR 241 off-ramp to Santiago Canyon Road to approximately 1500 feet south, with a few other locations. Most of this segment has power poles located along the east edge of roadway. There are also areas of fairly steep slopes and thick vegetation. Other utilities may exist although a utility research investigation was not performed. The overall review of the area appears that a Class I or Class IV bike path would be feasible throughout most of the segment, however, it comes with some potentially significant costs to relocate power poles, provide retaining walls, clear vegetation, etc.

10.2 El Toro Road – Live Oak Canyon Road to Portola Parkway

El Toro Road between Portola Parkway to Live Oak Canyon Road does not include bicycle lanes. The Aliso Creek Bikeway Class I trail generally parallels the west side of El Toro Road from south of Portola Parkway to approximately 850 feet south of the intersection with Ridgeline Road. On the east side of El Toro Road, the Class I trail begins just south of Ridgeline Road generally paralleling El Toro Road for approximately 1250' until there is a bike trail undercrossing where it joins the trail on the west side of El Toro Road. On the east side trail, south of the undercrossing, the trail continues as an unpaved hiking and riding trail. There is a gap of approximately 600 feet along El Toro Road from Live Oak Canyon Road to Ridgeline Road where there are no bike facilities.

From field review, it does not appear there is adequate existing paved width to implement the striping for Class II bike lanes given the current roadway configuration. Should El Toro road be widened to a four-lane primary Arterial in the future then bicycle lanes could be considered as part of that design.

In the meantime, the provision of on-street bicycle lanes on El Toro Road could result in fewer cyclists using the Aliso Creek Bikeway which is safer for cyclists due to lack of conflicts with vehicles. The signage for accessing this bike trail in the southbound direction is currently limited and there is no striping to encourage usage of the trail as an alternative to El Toro Road, as shown in **Figure 10.1**. The curb cut to access the trail is not very long or visible to bicycle riders traveling at speed. In addition, while there is a striped buffer on the roadway on this segment of El Toro Road, it is not denoted as a bike lane as the bike lane ends just short of Cooks Corner. That gap in the bike lane

could be closed and better striping and curb cuts at the access to the Aliso Creek trail provided to encourage southbound bicycle traffic to use the Class I bike lanes rather than El Toro Road.

Figure 10.1- Southbound access to Class I Bike Trail from El Toro Road



Encouraging use of the Aliso Creek trail in the northbound direction might be more challenging since northbound riders on the east side of El Toro Road would need to cross over to the west side of the road to access the bike trail. The use of additional signing and striping could be used to encourage bicycles to access the trail at existing access locations. For example, cyclists heading west on Margarite Parkway signing and striping could be provided to encourage riders to make a left-turn onto El Toro Road then an immediate right-turn to access the trail at the existing driveway south of Saddleback Church, instead of making a right-turn onto El Toro Road.

Another possibility would be a new access to the Aliso Creek trail at Pheasant Creek. This could include adding a crosswalk on the south side of the intersection and/or striping a green bike box along with a dedicated left-turn bike signal phase. The access would also improve access to the Aliso Creek trail to residents of Pheasant Creek since the current crosswalk north of Pheasant Creek does not have direct pedestrian-friendly access to the trail.

11 FINDINGS AND RECOMMENDATIONS

- Santiago Canyon Road** – The proposed MPAH amendment of downgrading Santiago Canyon Road from a future four-lane Primary arterial to a two-lane divided collector with a center-turn lane will not cause the daily level of service in the corridor to fall below acceptable levels in 2045 based on LOS analysis. Furthermore, there would be no intersection impacts due to the amendment. The number of intersections operating at unacceptable levels of service would actually reduce due to a reduction in delay to and from side street traffic making left-turns due to reduced volume of opposing traffic. The proposed MAPH amendment would therefore be appropriate.
- El Toro Road** – The Existing width of El Toro Road varies significantly between Portola Parkway and Live Oak Canyon Road gradually reducing in width from five lanes at the south to two lanes in the north. The northern section, south of Cooks Corner, is currently a two-lane undivided highway. Daily arterial level of service analysis results indicate that some of the northerly segments of the road way would operate at unacceptable level of service in 2045. However, these deficient segments would operate at acceptable levels of service with the roadway widened to a four -lane Primary Arterial. El Toro Road could therefore be downgraded from a future six-lane Major Arterial to a four-lane Primary Arterial north of Pheasant Creek and maintaining the existing condition of five lanes between Portola Parkway and Pheasant Creek.
- Blackstar Canyon Road** – This proposed extension of Blackstar Canyon is currently a rough fire road only accessible to a small number of residents, hikers, and bicyclists. The current MPAH extension of the road would pave the section from the existing locked gate to the Orange County line on Main Divide Road (an off-road truck trail) in the Cleveland National Forest. Riverside County previously had a corresponding road that would have met Blackstar Canyon Road at using an alignment up the current Skyline Drive trail. However, this road was deleted from the Riverside County highway plan a number of years ago. Furthermore in 2020 the City of Corona purchased around 300 acres of land adjacent to Skyline Drive and Main Divide Road to preserve in perpetuity as an open space preserve. <https://www.coronaca.gov/Home/Components/News/News/6264/17> Therefore, a Blackstar Canyon Road extension would essentially be a "road to nowhere" with only nominal traffic volumes. It would also likely have significant environmental impacts within the Cleveland National Forest. The extension would also disturb the site of the Shosone Blackstar Indian Village site: California Historical Landmark (No 217) the site of a Native American Massacre in 1831. Given the lack of connectivity, negligible potential future traffic volumes and the severe environmental and cultural impacts of the roadway extension, it is recommended that the Blackstar Canyon Road extension be removed from the MPAH.
- El Toro Road/Santiago Canyon Road/Live Oak Canyon Road Intersection Traffic Control** - This intersection previously met signal warrants in 2018 and continues to meet warrants using 2023 data. The signal is assumed in the 2019 City of Lake Forest Traffic Signal Master Plan. An initial assessment suggests that the intersection could be a potential site for a roundabout as an alternative to a traffic signal subject to certain design and public outreach criteria being met. Further study would be necessary to make a recommendation.
- Speed and Collision Analysis** – Santiago Canyon Road experiences 85th percentile speeds above the 55-mph speed limit and has a higher-than-average fatality and injury collision rate than the State average for rural roads. Part of the reason for the high fatality rates is the relatively high number of collisions involving bicycles and motorcycles. As such additional traffic calming measures could be undertaken following public outreach.

6. **Vehicle Miles Traveled** - Since all three of the proposed MPAH amendments reduce roadway capacity compared to the currently approved future configurations in the No Project (Current MPAH), CEQA VMT analysis is not necessary, and the proposed amendments can be screened out of VMT analysis requirements.

7. **Bicycle Lanes** - On Santiago Canyon Road the implementation of a Class I bike path or Class IV bike lanes would be feasible. However, there are physical constraints which would entail significant construction costs. For example, grading, relocation of power poles, provision of retaining walls, vegetation clearance, etc. On El Toro Road Class II on-street bicycle lanes would require significant widening of the existing roadway at substantial cost and would duplicate the existing Class I Aliso Creek bike trail. Should El Toro Road ultimately be widened to four lanes that would provide the opportunity to incorporate bike lanes in the future design. Until that time, an alternative approach would be to encourage cyclists to use the existing Class I Aliso Creek bike trail rather than El Toro Road. In the southbound direction measures could include closing the missing bike lane between Cooks Corner and the Aliso Creek trail and improving signing and striping. In the northbound direction signing and striping potential could be explored to encourage the safe crossing from the east side to the west side of El Toro Road to access the bike trail.



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1700 Carnegie Avenue, Suite 100
Santa Ana, CA 92705

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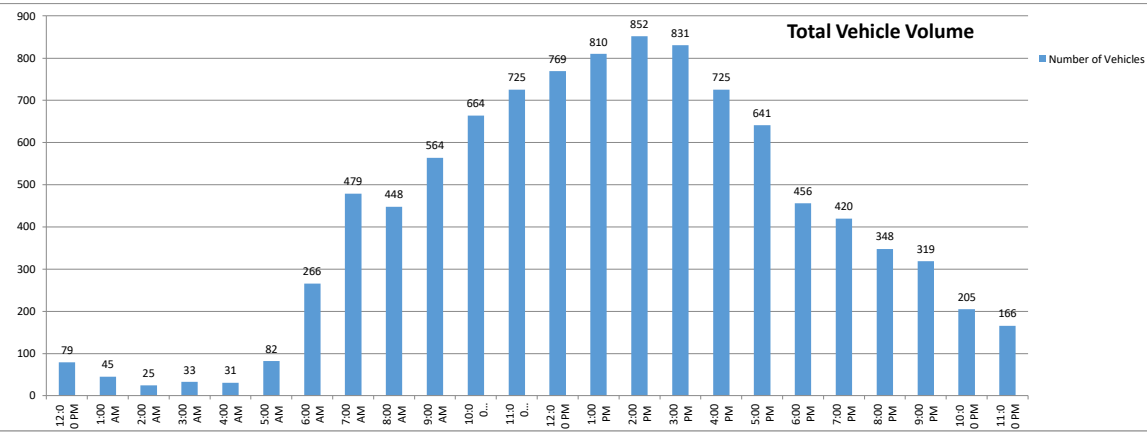
Appendix A

ADT Counts

Daily Traffic Counts by Segment, Day of Week and Source								
ID	Roadway	From	To	Jurisdiction	Iteis	County Of Orange	City of Lake Forest	
Average Weekday								
A	Santiago Canyon Road	241 Off-Ramp	Irvine Lake Entrance	County of Orange	9,499	Weekday ADT Counts Not Available	Weekday ADT Counts Not Available	
B	Santiago Canyon Road	Irvine Lake Entrance	Silverado Canyon Road	County of Orange	9,052			
C	Santiago Canyon Road	Silverado Canyon Road	Modjeska Canyon Road	County of Orange	8,074			
D	Santiago Canyon Road	Modjeska Canyon Road	Modjeska Grade Road	County of Orange	7,884			
E	Santiago Canyon Road	Modjeska Grade Road	Ridgeline Road North	County of Orange/ City of Lake Forest	8,566			
F	Santiago Canyon Road	Ridgeline Road North	Live Oak Canyon Road	County of Orange/ City of Lake Forest	7,455			
G	El Toro Road	Live Oak Canyon Road	Glen Ranch Road	County of Orange/Lake Forest/Mission	9,925			
H	El Toro Road	Glen Ranch Road	Marguerite Parkway	City of Mission Viejo	15,131			
I	El Toro Road	Marguerite Parkway	Portola Parkway	City of Lake Forest	10,159			
J	Blackstar Canyon Road	Silverado Canyon Road	County-Controlled Gate	County of Orange	278			
K	Live Oak Canyon	El Toro Road	East of Cooks Corner	County of Orange/City of Lake Forest	3,262			
L	Silverado Canyon Road	Santiago Canyon Road	Blackstar Canyon Road	County of Orange	2,905			
ID	Roadway	From	To	Jurisdiction	Iteis	County Of Orange	City of Lake Forest	
Average Tuesday to Thursday								
A	Santiago Canyon Road	241 Off-Ramp	Irvine Lake Entrance	County of Orange	9,336	7,456	Not Available	
B	Santiago Canyon Road	Irvine Lake Entrance	Silverado Canyon Road	County of Orange	9,111	7,383		
C	Santiago Canyon Road	Silverado Canyon Road	Modjeska Canyon Road	County of Orange	8,182	6,811		
D	Santiago Canyon Road	Modjeska Canyon Road	Modjeska Grade Road	County of Orange	7,991	6,386		
E	Santiago Canyon Road	Modjeska Grade Road	Ridgeline Road North	County of Orange/ City of Lake Forest	8,646	Not Available		8,942
F	Santiago Canyon Road	Ridgeline Road North	Live Oak Canyon Road	County of Orange/ City of Lake Forest	7,496	5,793		Not Available
G	El Toro Road	Live Oak Canyon Road	Glen Ranch Road	County of Orange/Lake Forest/Mission	9,935	Not Available		11,880
H	El Toro Road	Glen Ranch Road	Marguerite Parkway	City of Mission Viejo	15,100			12,809
I	El Toro Road	Marguerite Parkway	Portola Parkway	City of Lake Forest	10,079			12,164
J	Blackstar Canyon Road	Silverado Canyon Road	County-Controlled Gate	County of Orange	244	658		Not Available
K	Live Oak Canyon	El Toro Road	East of Cooks Corner	County of Orange/City of Lake Forest	3,193	2,985		
L	Silverado Canyon Road	Santiago Canyon Road	Blackstar Canyon Road	County of Orange	2,839	3,032		
Average Weekend								
A	Santiago Canyon Road	241 Off-Ramp	Irvine Lake Entrance	County of Orange	9,273	Weekend ADT Counts Not Available	Weekend ADT Counts Not Available	
B	Santiago Canyon Road	Irvine Lake Entrance	Silverado Canyon Road	County of Orange	8,944			
C	Santiago Canyon Road	Silverado Canyon Road	Modjeska Canyon Road	County of Orange	7,108			
D	Santiago Canyon Road	Modjeska Canyon Road	Modjeska Grade Road	County of Orange	6,696			
E	Santiago Canyon Road	Modjeska Grade Road	Ridgeline Road North	County of Orange/ City of Lake Forest	7,752			
F	Santiago Canyon Road	Ridgeline Road North	Live Oak Canyon Road	County of Orange/ City of Lake Forest	7,264			
G	El Toro Road	Live Oak Canyon Road	Glen Ranch Road	County of Orange/Lake Forest/Mission	9,396			
H	El Toro Road	Glen Ranch Road	Marguerite Parkway	City of Mission Viejo	13,562			
I	El Toro Road	Marguerite Parkway	Portola Parkway	City of Lake Forest	10,399			
J	Blackstar Canyon Road	Silverado Canyon Road	County-Controlled Gate	County of Orange	862			
K	Live Oak Canyon	El Toro Road	East of Cooks Corner	County of Orange/City of Lake Forest	5,074			
L	Silverado Canyon Road	Santiago Canyon Road	Blackstar Canyon Road	County of Orange	4,573			

24 Hour Volume Plot
Santiago Canyon
ADT Segment A Santiago Canyon from SR-241 NB off ramp to Irvine Lake
 Saturday 4/29/2023

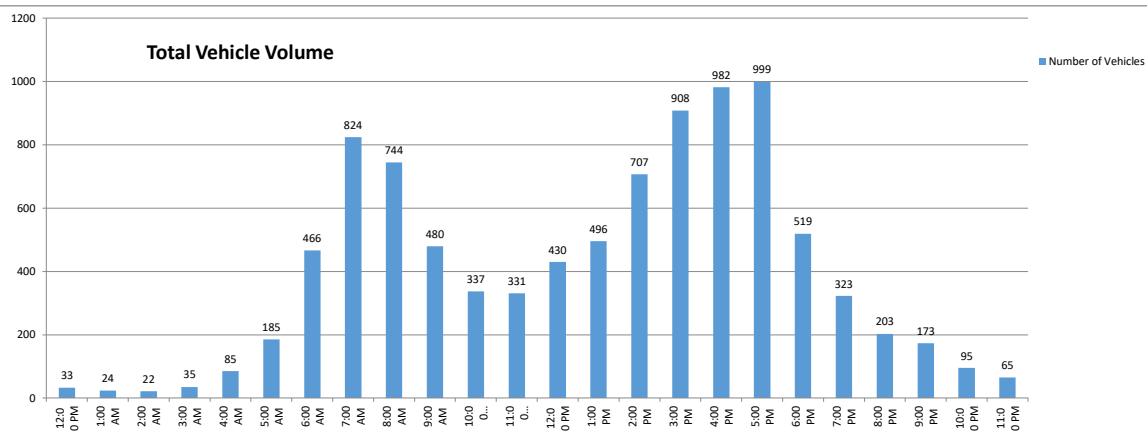
Start Time	Volume
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1:00 AM	45
2:00 AM	25
3:00 AM	33
4:00 AM	31
5:00 AM	82
6:00 AM	266
7:00 AM	479
8:00 AM	448
9:00 AM	564
10:00 AM	664
11:00 AM	725
12:00 PM	769
1:00 PM	810
2:00 PM	852
3:00 PM	831
4:00 PM	725
5:00 PM	641
6:00 PM	456
7:00 PM	420
8:00 PM	348
9:00 PM	319
10:00 PM	205
11:00 PM	166
Total	9983



Volumes represent the combined totals for both directions

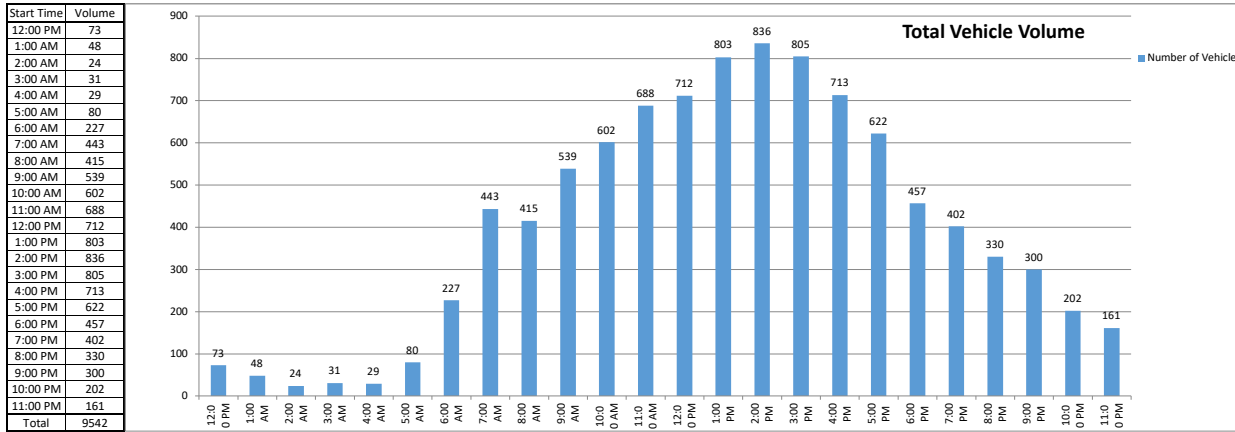
24 Hour Volume Plot
Santiago Canyon
ADT Segment A Santiago Canyon Road from SR-241 NB off ramp to Irvine Lake
 Wednesday 5/3/2023

Start Time	Volume
12:00 PM	33
1:00 AM	24
2:00 AM	22
3:00 AM	35
4:00 AM	85
5:00 AM	185
6:00 AM	466
7:00 AM	824
8:00 AM	744
9:00 AM	480
10:00 AM	337
11:00 AM	331
12:00 PM	430
1:00 PM	496
2:00 PM	707
3:00 PM	908
4:00 PM	982
5:00 PM	999
6:00 PM	519
7:00 PM	323
8:00 PM	203
9:00 PM	173
10:00 PM	95
11:00 PM	65
Total	9466



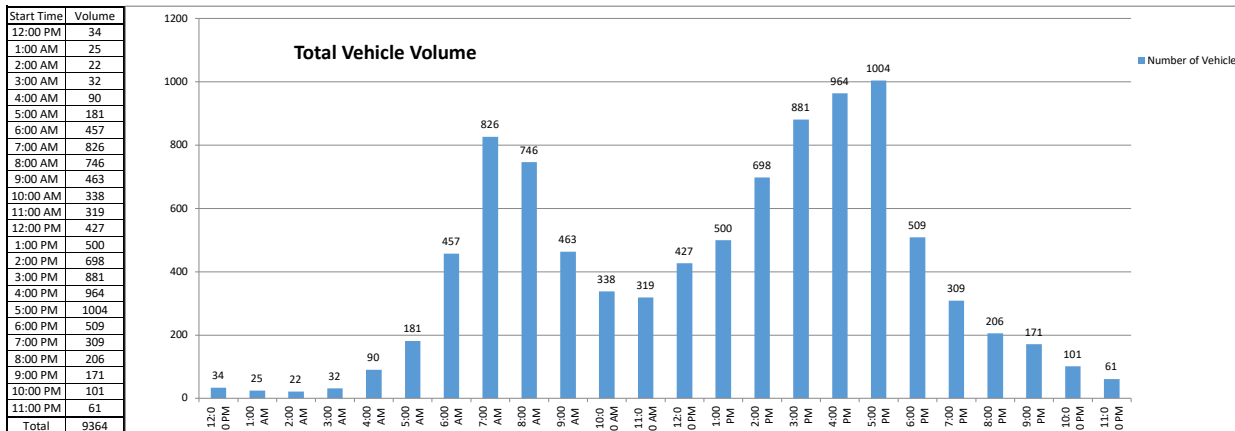
Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment B Santiago Canyon Road from Irvine Lake to Silverado Canyon Road
 Saturday 4/29/2023



Volumes represent the combined totals for both directions

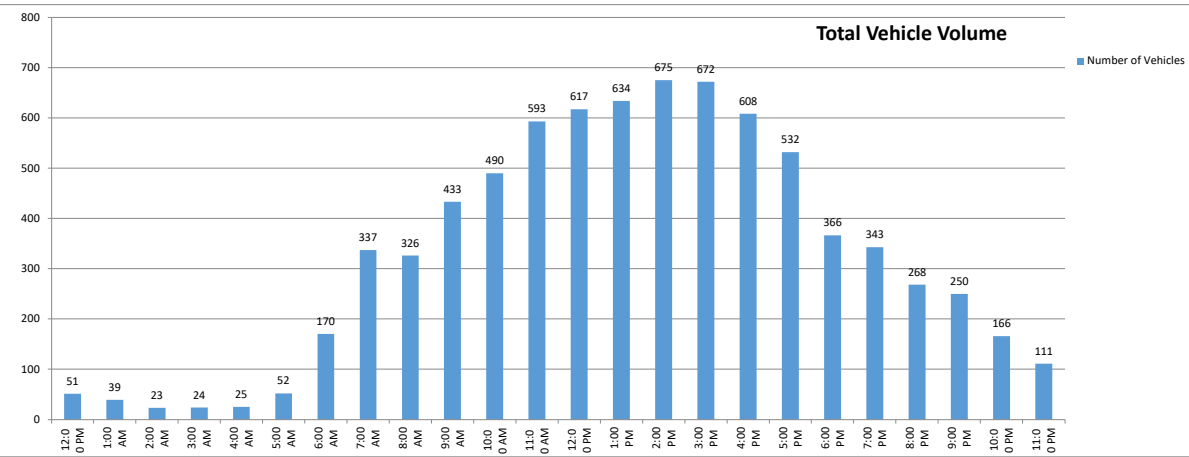
24 Hour Volume Plot
Santiago Canyon
ADT Segment B Santiago Canyon Road from Irvine Lake to Silverado Canyon Road
 Wednesday 5/3/2023



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment C Santiago Canyon Road from Silverado Canyon Road to Modjeska Canyon Road
 Saturday 4/29/2023

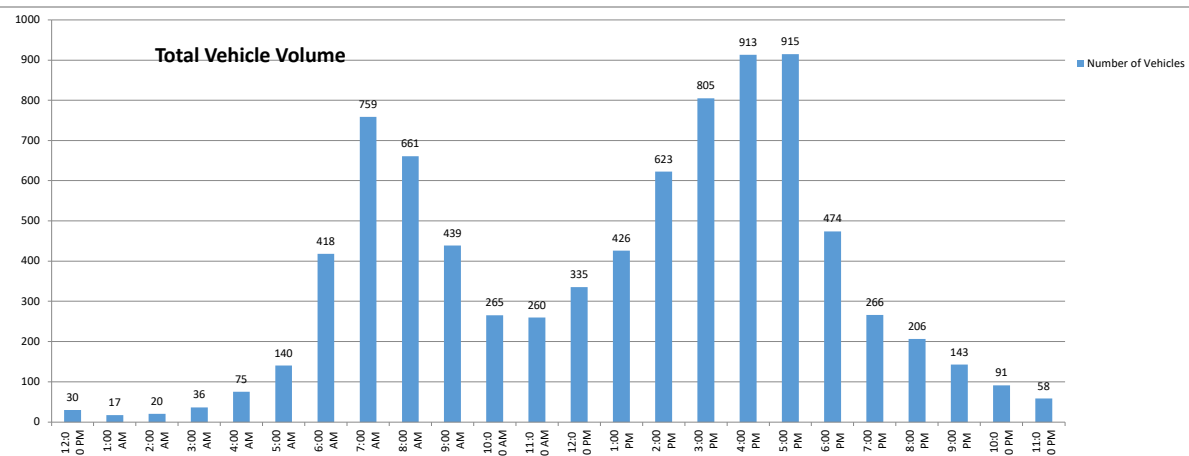
Start Time	Volume
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1:00 AM	39
2:00 AM	23
3:00 AM	24
4:00 AM	25
5:00 AM	52
6:00 AM	170
7:00 AM	337
8:00 AM	326
9:00 AM	433
10:00 AM	490
11:00 AM	593
12:00 PM	617
1:00 PM	634
2:00 PM	675
3:00 PM	672
4:00 PM	608
5:00 PM	532
6:00 PM	366
7:00 PM	343
8:00 PM	268
9:00 PM	250
10:00 PM	166
11:00 PM	111
Total	7805



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment C Santiago Canyon Road from Silverado Canyon Road to Modjeska Canyon Road
 Wednesday 5/3/2023

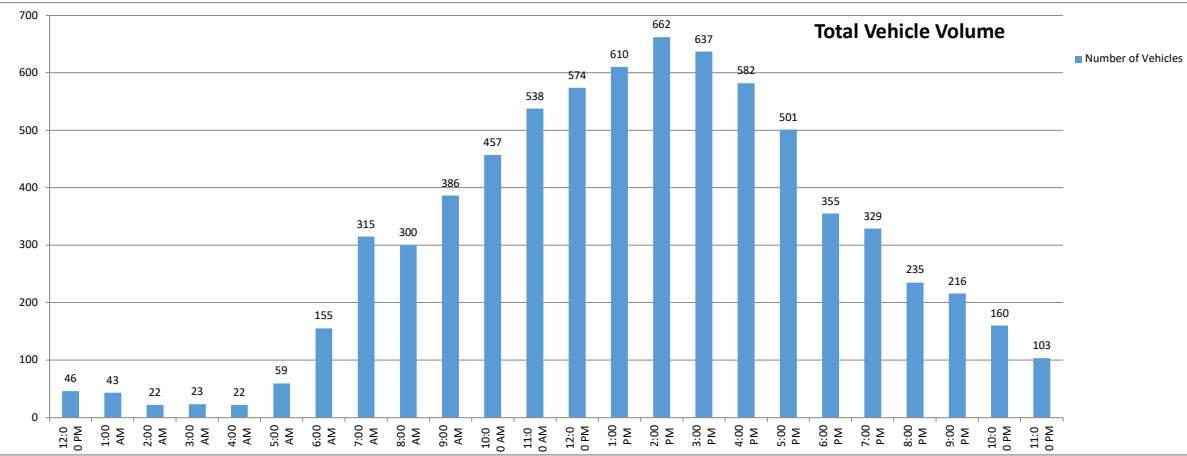
Start Time	Volume
12:00 PM	30
1:00 AM	17
2:00 AM	20
3:00 AM	36
4:00 AM	75
5:00 AM	140
6:00 AM	418
7:00 AM	759
8:00 AM	661
9:00 AM	439
10:00 AM	265
11:00 AM	260
12:00 PM	335
1:00 PM	426
2:00 PM	623
3:00 PM	805
4:00 PM	913
5:00 PM	915
6:00 PM	474
7:00 PM	266
8:00 PM	206
9:00 PM	143
10:00 PM	91
11:00 PM	58
Total	8375



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADTD Santiago Canyon Road from Modjeska Canyon Road to Modjeska Grade Road
 4/29/2023

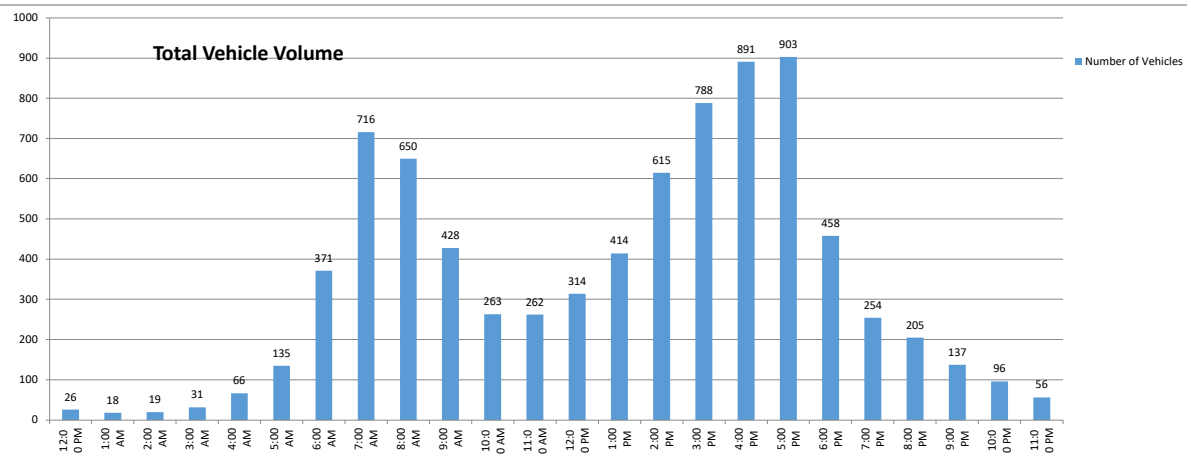
Start Time	Volume
12:00 PM	46
1:00 AM	43
2:00 AM	22
3:00 AM	23
4:00 AM	22
5:00 AM	59
6:00 AM	155
7:00 AM	315
8:00 AM	300
9:00 AM	386
10:00 AM	457
11:00 AM	538
12:00 PM	574
1:00 PM	610
2:00 PM	662
3:00 PM	637
4:00 PM	582
5:00 PM	501
6:00 PM	355
7:00 PM	329
8:00 PM	235
9:00 PM	216
10:00 PM	160
11:00 PM	103
Total	7330



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment D Santiago Canyon Road from Modjeska Canyon Road to Modjeska Grade Road
 Wednesday 5/3/2023

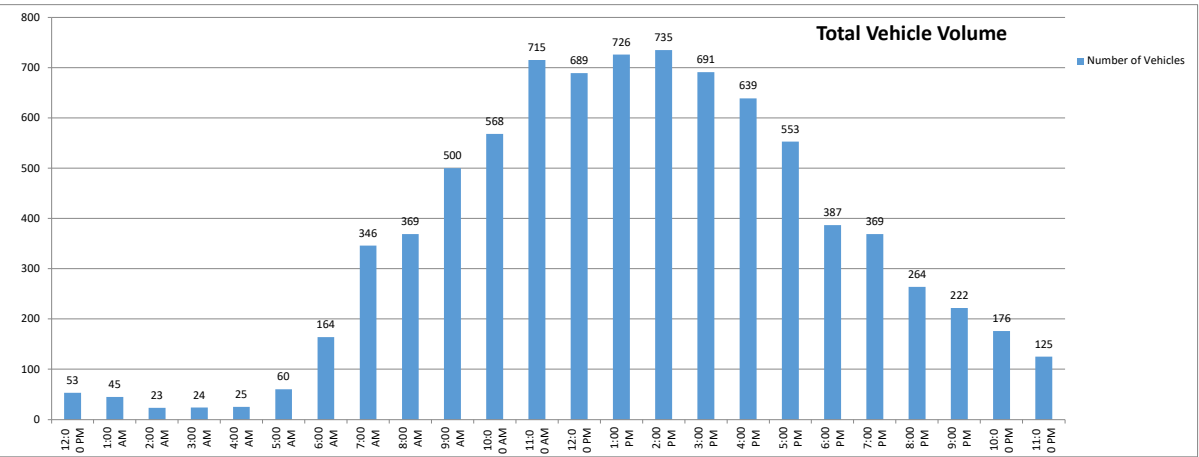
Start Time	Volume
12:00 PM	26
1:00 AM	18
2:00 AM	19
3:00 AM	31
4:00 AM	66
5:00 AM	135
6:00 AM	371
7:00 AM	716
8:00 AM	650
9:00 AM	428
10:00 AM	263
11:00 AM	262
12:00 PM	314
1:00 PM	414
2:00 PM	615
3:00 PM	788
4:00 PM	891
5:00 PM	903
6:00 PM	458
7:00 PM	254
8:00 PM	205
9:00 PM	137
10:00 PM	96
11:00 PM	56
Total	8116



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment E Santiago Canyon Road from Modjeska Grade Road to Ridgeline Road North
 Saturday 4/29/2023

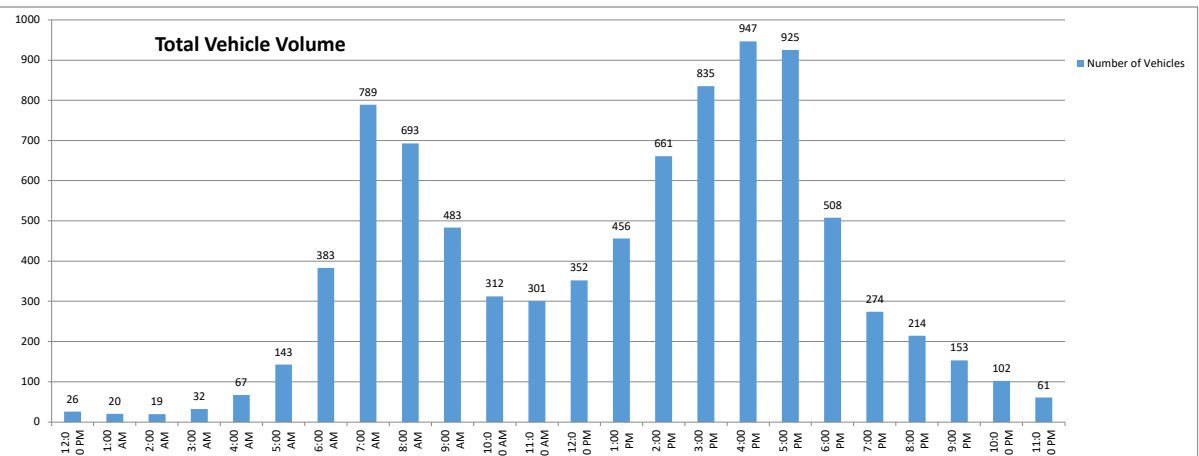
Start Time	Volume
12:00 PM	53
1:00 AM	45
2:00 AM	23
3:00 AM	24
4:00 AM	25
5:00 AM	60
6:00 AM	164
7:00 AM	346
8:00 AM	369
9:00 AM	500
10:00 AM	568
11:00 AM	715
12:00 PM	689
1:00 PM	726
2:00 PM	735
3:00 PM	691
4:00 PM	639
5:00 PM	553
6:00 PM	387
7:00 PM	369
8:00 PM	264
9:00 PM	222
10:00 PM	176
11:00 PM	125
Total	8468



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment E Santiago Canyon Road from Modjeska Grade Road to Ridgeline Road North
 Wednesday 5/3/2023

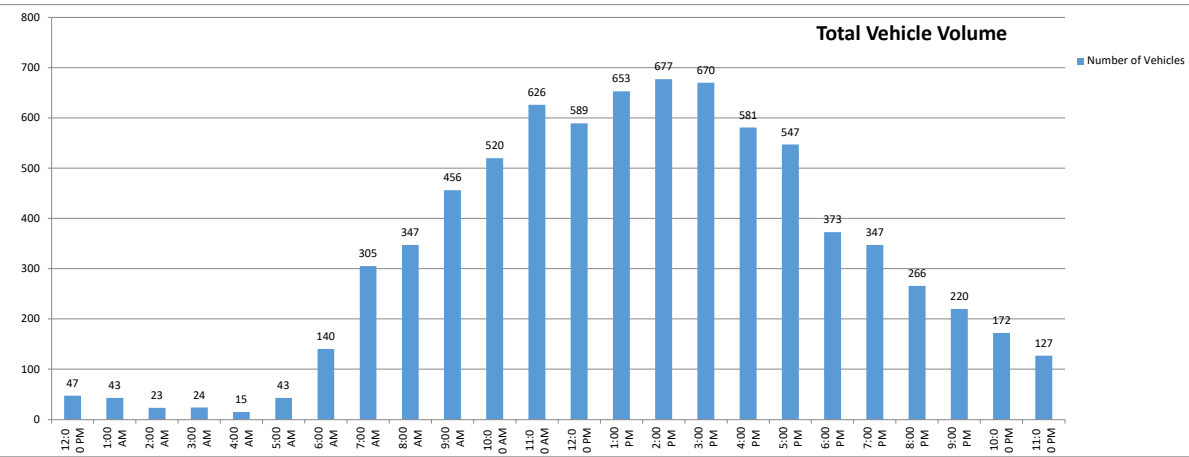
Start Time	Volume
12:00 PM	26
1:00 AM	20
2:00 AM	19
3:00 AM	32
4:00 AM	67
5:00 AM	143
6:00 AM	383
7:00 AM	789
8:00 AM	693
9:00 AM	483
10:00 AM	312
11:00 AM	301
12:00 PM	352
1:00 PM	456
2:00 PM	661
3:00 PM	835
4:00 PM	947
5:00 PM	925
6:00 PM	508
7:00 PM	274
8:00 PM	214
9:00 PM	153
10:00 PM	102
11:00 PM	61
Total	8756



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment F Santiago Canyon Road from Ridgeline Road North to Live Oak Canyon Road
 Saturday 4/29/2023

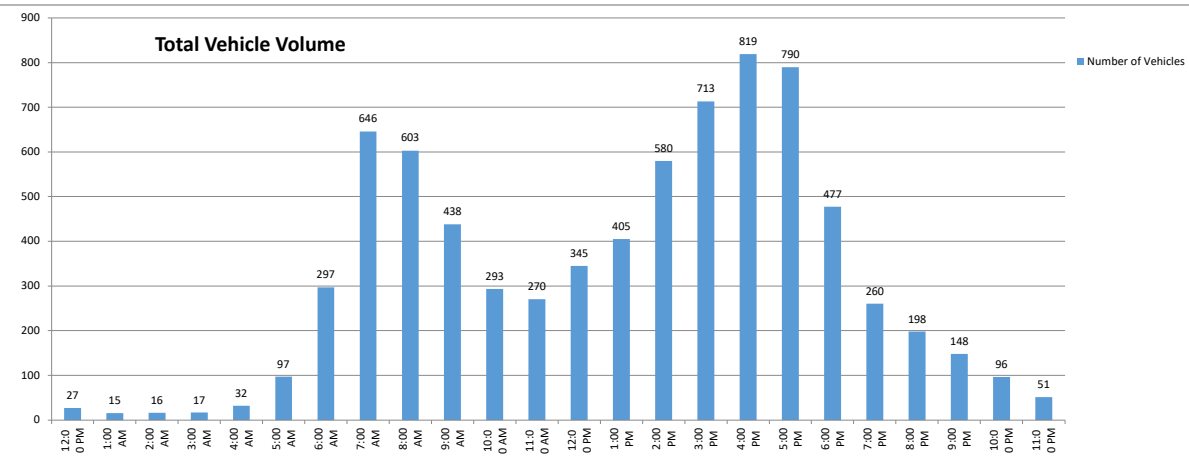
Start Time	Volume
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1:00 AM	43
2:00 AM	23
3:00 AM	24
4:00 AM	15
5:00 AM	43
6:00 AM	140
7:00 AM	305
8:00 AM	347
9:00 AM	456
10:00 AM	520
11:00 AM	626
12:00 PM	589
1:00 PM	653
2:00 PM	677
3:00 PM	670
4:00 PM	581
5:00 PM	547
6:00 PM	373
7:00 PM	347
8:00 PM	266
9:00 PM	220
10:00 PM	172
11:00 PM	127
Total	7811



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment F Santiago Canyon Road from Ridgeline Road North to Live Oak Canyon Road
 Wednesday 5/3/2023

Start Time	Volume
12:00 PM	27
1:00 AM	15
2:00 AM	16
3:00 AM	17
4:00 AM	32
5:00 AM	97
6:00 AM	297
7:00 AM	646
8:00 AM	603
9:00 AM	438
10:00 AM	293
11:00 AM	270
12:00 PM	345
1:00 PM	405
2:00 PM	580
3:00 PM	713
4:00 PM	819
5:00 PM	790
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9:00 PM	148
10:00 PM	96
11:00 PM	51
Total	7633

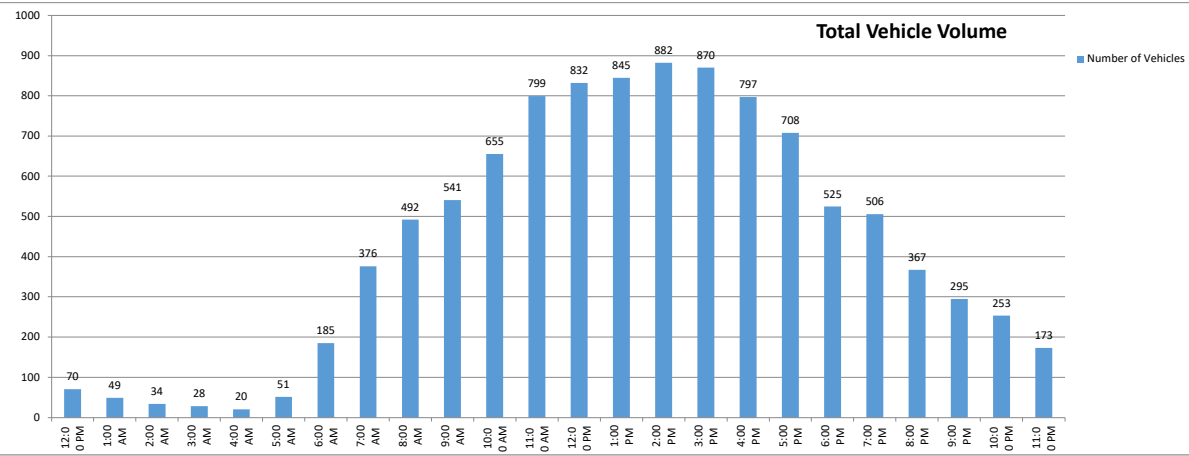


Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon
ADT Segment G El Toro Road from Live Oak Canyon Road to Glen Ranch Road
 Saturday 4/29/2023

Start Time	Volume
12:00 PM	70
1:00 AM	49
2:00 AM	34
3:00 AM	28
4:00 AM	20
5:00 AM	51
6:00 AM	185
7:00 AM	376
8:00 AM	492
9:00 AM	541
10:00 AM	655
11:00 AM	799
12:00 PM	832
1:00 PM	845
2:00 PM	882
3:00 PM	870
4:00 PM	797
5:00 PM	708
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9:00 PM	295
10:00 PM	253
11:00 PM	173
Total	10353

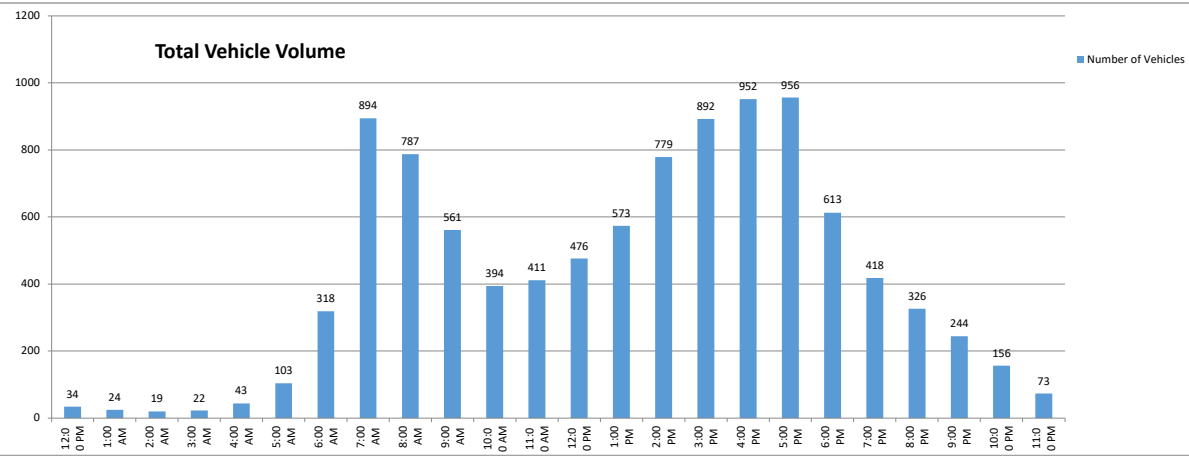


Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon
ADT Segment G El Toro Road from Live Oak Canyon Road to Glen Ranch Road
 Wednesday 5/3/2023

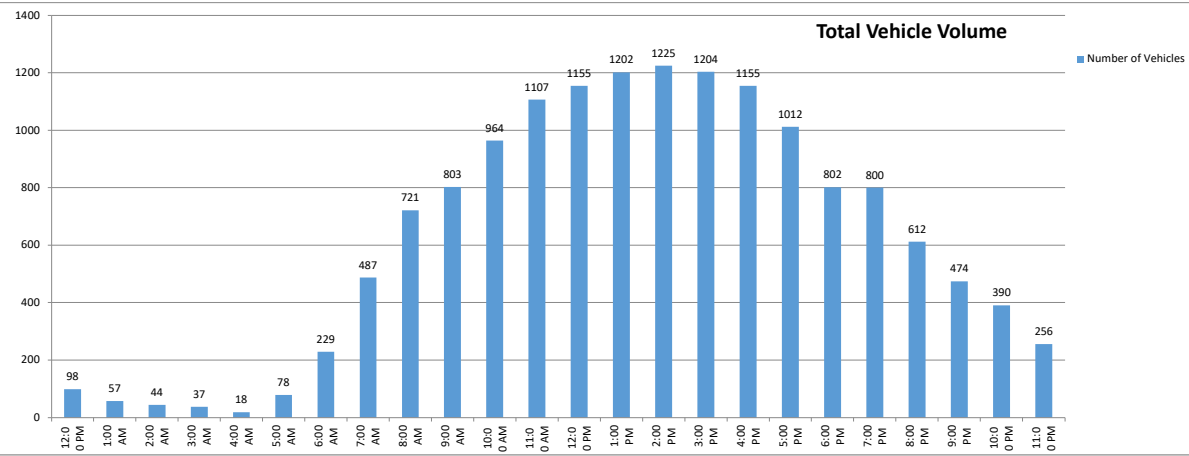
Start Time	Volume
12:00 PM	34
1:00 AM	24
2:00 AM	19
3:00 AM	22
4:00 AM	43
5:00 AM	103
6:00 AM	318
7:00 AM	894
8:00 AM	787
9:00 AM	561
10:00 AM	394
11:00 AM	411
12:00 PM	476
1:00 PM	573
2:00 PM	779
3:00 PM	892
4:00 PM	952
5:00 PM	956
6:00 PM	613
7:00 PM	418
8:00 PM	326
9:00 PM	244
10:00 PM	156
11:00 PM	73
Total	10068



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
 ADT Segment H El Toro Road from Glen Ranch Road to Marguerite Parkway
 Saturday - 4/29/2023

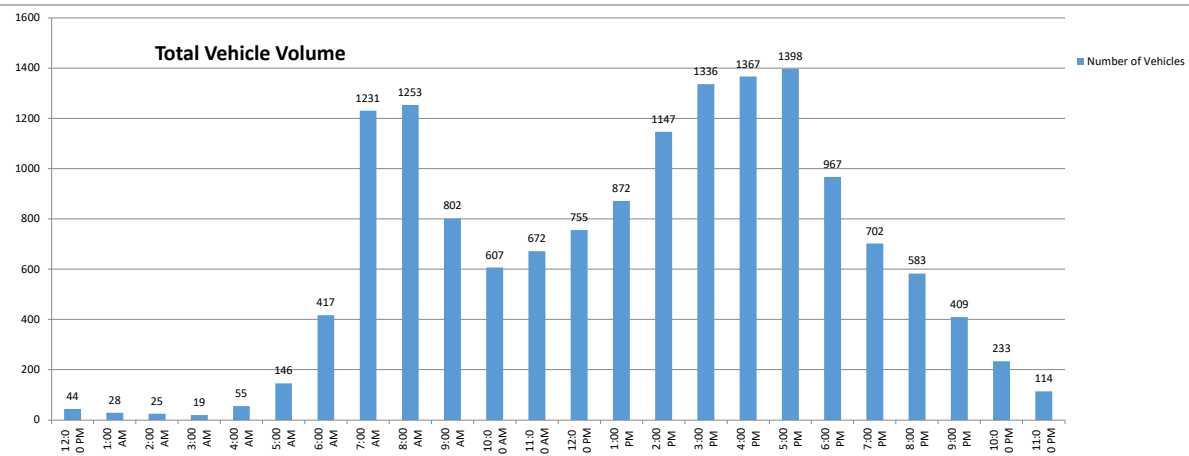
Start Time	Volume
12:00 PM	98
1:00 AM	57
2:00 AM	44
3:00 AM	37
4:00 AM	18
5:00 AM	78
6:00 AM	229
7:00 AM	487
8:00 AM	721
9:00 AM	803
10:00 AM	964
11:00 AM	1107
12:00 PM	1155
1:00 PM	1202
2:00 PM	1225
3:00 PM	1204
4:00 PM	1155
5:00 PM	1012
6:00 PM	802
7:00 PM	800
8:00 PM	612
9:00 PM	474
10:00 PM	390
11:00 PM	256
Total	14930



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
 ADT Segment H El Toro Road from Glen Ranch Road to Marguerite Parkway
 Wednesday 5/3/2023

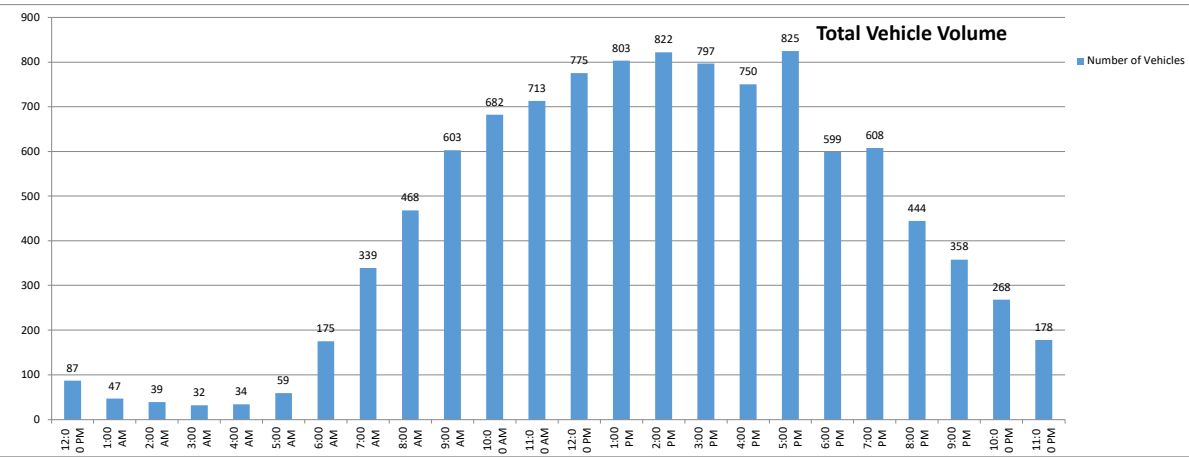
Start Time	Volume
12:00 PM	44
1:00 AM	28
2:00 AM	25
3:00 AM	19
4:00 AM	55
5:00 AM	146
6:00 AM	417
7:00 AM	1231
8:00 AM	1253
9:00 AM	802
10:00 AM	607
11:00 AM	672
12:00 PM	755
1:00 PM	872
2:00 PM	1147
3:00 PM	1336
4:00 PM	1367
5:00 PM	1398
6:00 PM	967
7:00 PM	702
8:00 PM	583
9:00 PM	409
10:00 PM	233
11:00 PM	114
Total	15182



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADTI El Toro Road from Marguerite Parkway to Portola Parkway
 4/29/2023

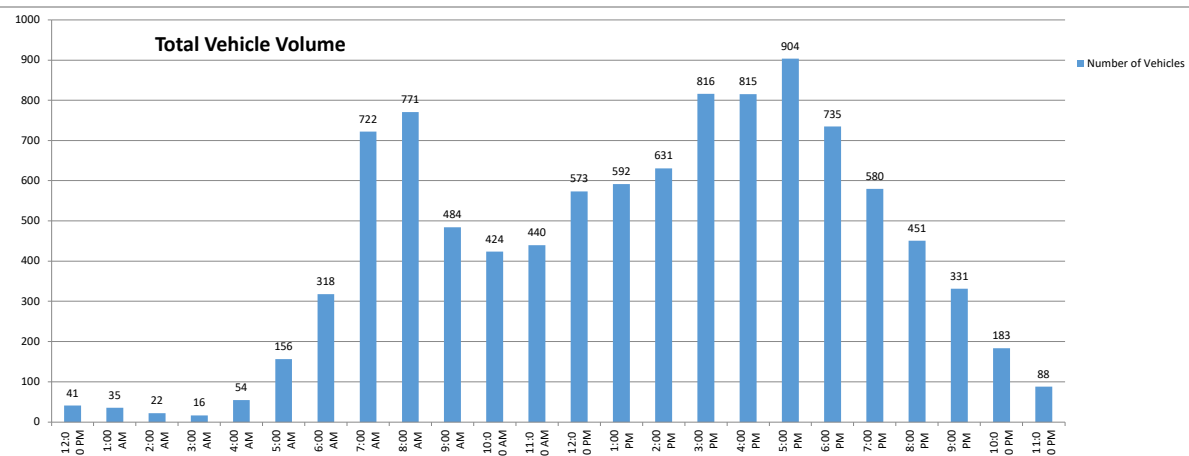
Start Time	Volume
12:00 PM	87
1:00 AM	47
2:00 AM	39
3:00 AM	32
4:00 AM	34
5:00 AM	59
6:00 AM	175
7:00 AM	339
8:00 AM	468
9:00 AM	603
10:00 AM	682
11:00 AM	713
12:00 PM	775
1:00 PM	803
2:00 PM	822
3:00 PM	797
4:00 PM	750
5:00 PM	825
6:00 PM	599
7:00 PM	608
8:00 PM	444
9:00 PM	358
10:00 PM	268
11:00 PM	178
Total	10505



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADTI El Toro Road from Marguerite Parkway to Portola Parkway
 5/3/2023

Start Time	Volume
12:00 PM	41
1:00 AM	35
2:00 AM	22
3:00 AM	16
4:00 AM	54
5:00 AM	156
6:00 AM	318
7:00 AM	722
8:00 AM	771
9:00 AM	484
10:00 AM	424
11:00 AM	440
12:00 PM	573
1:00 PM	592
2:00 PM	631
3:00 PM	816
4:00 PM	815
5:00 PM	904
6:00 PM	735
7:00 PM	580
8:00 PM	451
9:00 PM	331
10:00 PM	183
11:00 PM	88
Total	10182



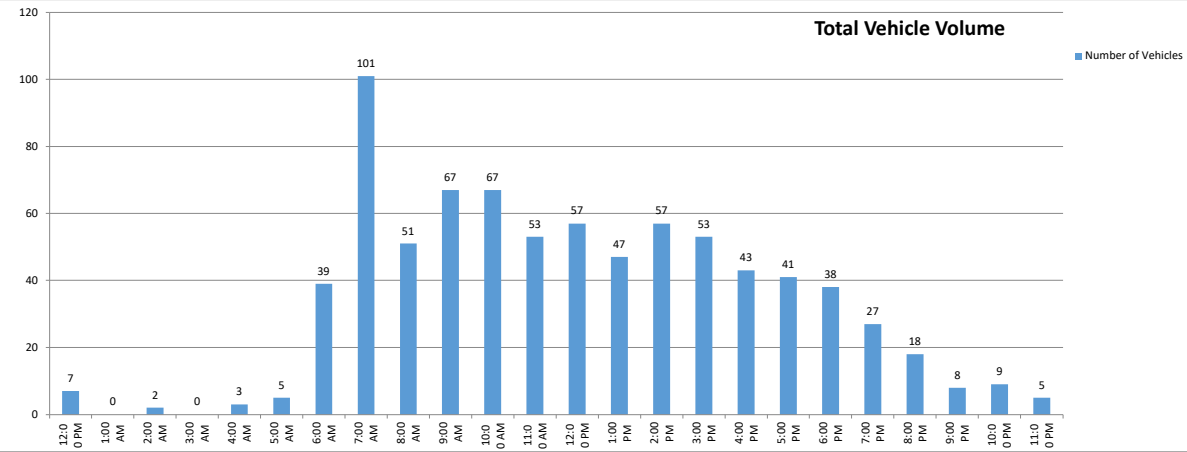
Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon

ADT Segment J Blackstar Canyon Road from Silverado Canyon Road to County-controlled gate
Saturday 4/29/2023

Start Time	Volume
12:00 PM	7
1:00 AM	0
2:00 AM	2
3:00 AM	0
4:00 AM	3
5:00 AM	5
6:00 AM	39
7:00 AM	101
8:00 AM	51
9:00 AM	67
10:00 AM	67
11:00 AM	53
12:00 PM	57
1:00 PM	47
2:00 PM	57
3:00 PM	53
4:00 PM	43
5:00 PM	41
6:00 PM	38
7:00 PM	27
8:00 PM	18
9:00 PM	8
10:00 PM	9
11:00 PM	5
Total	798



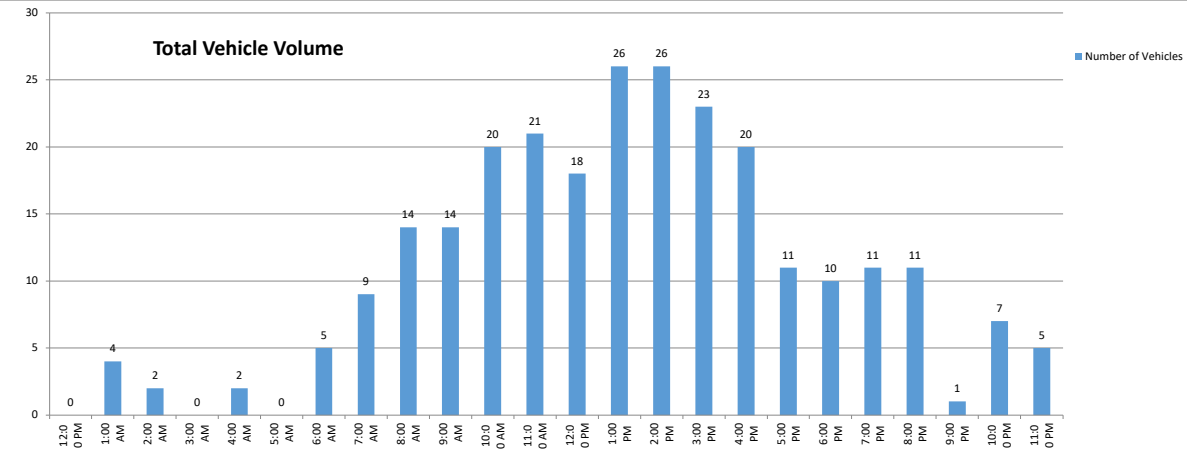
Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon

ADTJ Segment J Blackstar Canyon Road from Silverado Canyon Road to County-controlled gate
5/3/2023

Start Time	Volume
12:00 PM	0
1:00 AM	4
2:00 AM	2
3:00 AM	0
4:00 AM	2
5:00 AM	0
6:00 AM	5
7:00 AM	9
8:00 AM	14
9:00 AM	14
10:00 AM	20
11:00 AM	21
12:00 PM	18
1:00 PM	26
2:00 PM	26
3:00 PM	23
4:00 PM	20
5:00 PM	11
6:00 PM	10
7:00 PM	11
8:00 PM	11
9:00 PM	1
10:00 PM	7
11:00 PM	5
Total	260

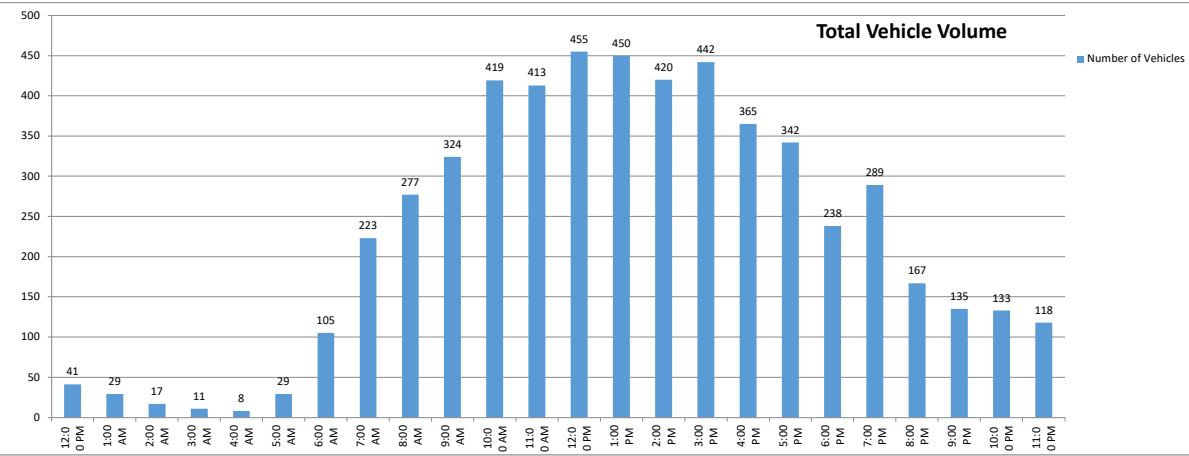


Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon
ADT Segment K Live Oak Canyon Road from El Toro Road to East of Cooks Corner
 Saturday 4/29/2023

Start Time	Volume
12:00 PM	41
1:00 AM	29
2:00 AM	17
3:00 AM	11
4:00 AM	8
5:00 AM	29
6:00 AM	105
7:00 AM	223
8:00 AM	277
9:00 AM	324
10:00 AM	419
11:00 AM	413
12:00 PM	455
1:00 PM	450
2:00 PM	420
3:00 PM	442
4:00 PM	365
5:00 PM	342
6:00 PM	238
7:00 PM	289
8:00 PM	167
9:00 PM	135
10:00 PM	133
11:00 PM	118
Total	5450

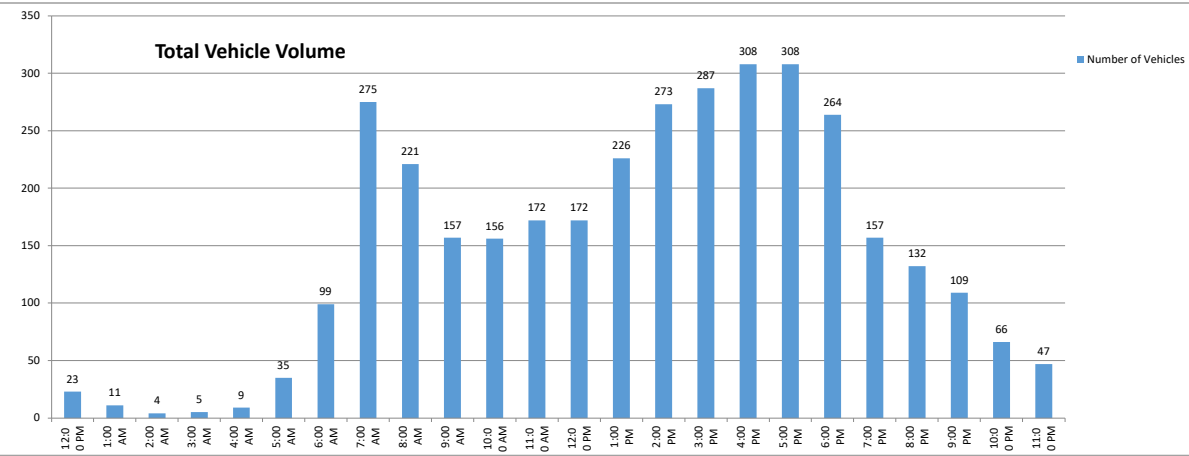


Volumes represent the combined totals for both directions

24 Hour Volume Plot

Santiago Canyon
ADT Segment K Live Oak Canyon Road from El Toro Road to East of Cooks Corner
 Wednesday 5/3/2023

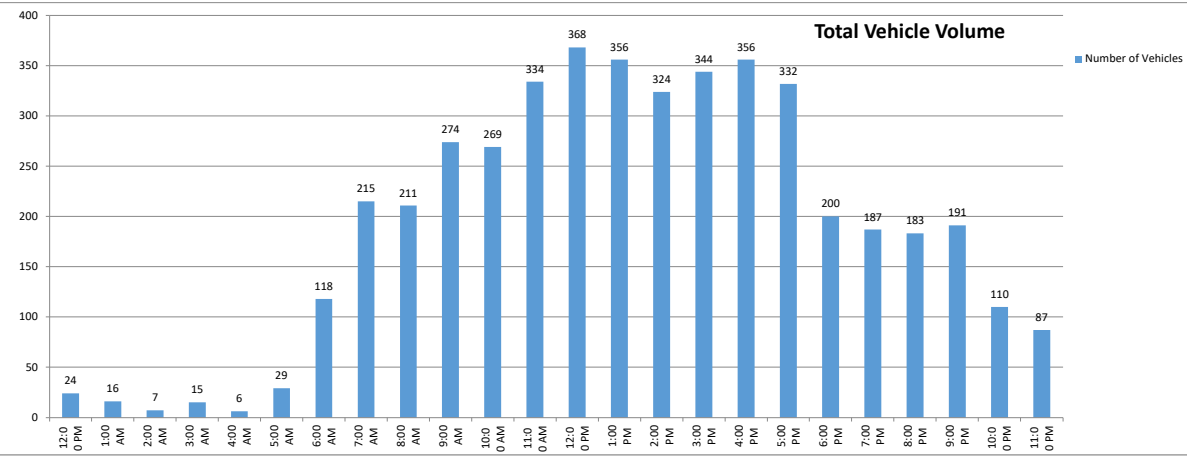
Start Time	Volume
12:00 PM	23
1:00 AM	11
2:00 AM	4
3:00 AM	5
4:00 AM	9
5:00 AM	35
6:00 AM	99
7:00 AM	275
8:00 AM	221
9:00 AM	157
10:00 AM	156
11:00 AM	172
12:00 PM	172
1:00 PM	226
2:00 PM	273
3:00 PM	287
4:00 PM	308
5:00 PM	308
6:00 PM	264
7:00 PM	157
8:00 PM	132
9:00 PM	109
10:00 PM	66
11:00 PM	47
Total	3516



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADTL Silverado Canyon Road from Santiago Canyon Road to Blackstar Canyon Rd
 4/29/2023

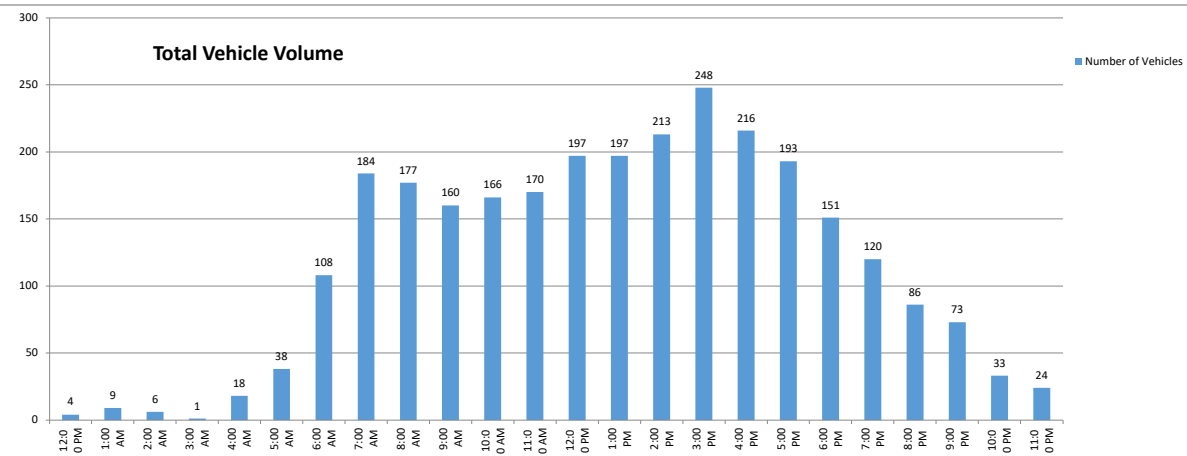
Start Time	Volume
12:00 PM	24
1:00 AM	16
2:00 AM	7
3:00 AM	15
4:00 AM	6
5:00 AM	29
6:00 AM	118
7:00 AM	215
8:00 AM	211
9:00 AM	274
10:00 AM	269
11:00 AM	334
12:00 PM	368
1:00 PM	356
2:00 PM	324
3:00 PM	344
4:00 PM	356
5:00 PM	332
6:00 PM	200
7:00 PM	187
8:00 PM	183
9:00 PM	191
10:00 PM	110
11:00 PM	87
Total	4556



Volumes represent the combined totals for both directions

24 Hour Volume Plot
Santiago Canyon
ADT Segment L Silverado Canyon Road from Santiago Canyon Road to Blackstar Canyon Rd
 Wednesday 5/3/2023

Start Time	Volume
12:00 PM	4
1:00 AM	9
2:00 AM	6
3:00 AM	1
4:00 AM	18
5:00 AM	38
6:00 AM	108
7:00 AM	184
8:00 AM	177
9:00 AM	160
10:00 AM	166
11:00 AM	170
12:00 PM	197
1:00 PM	197
2:00 PM	213
3:00 PM	248
4:00 PM	216
5:00 PM	193
6:00 PM	151
7:00 PM	120
8:00 PM	86
9:00 PM	73
10:00 PM	33
11:00 PM	24
Total	2792



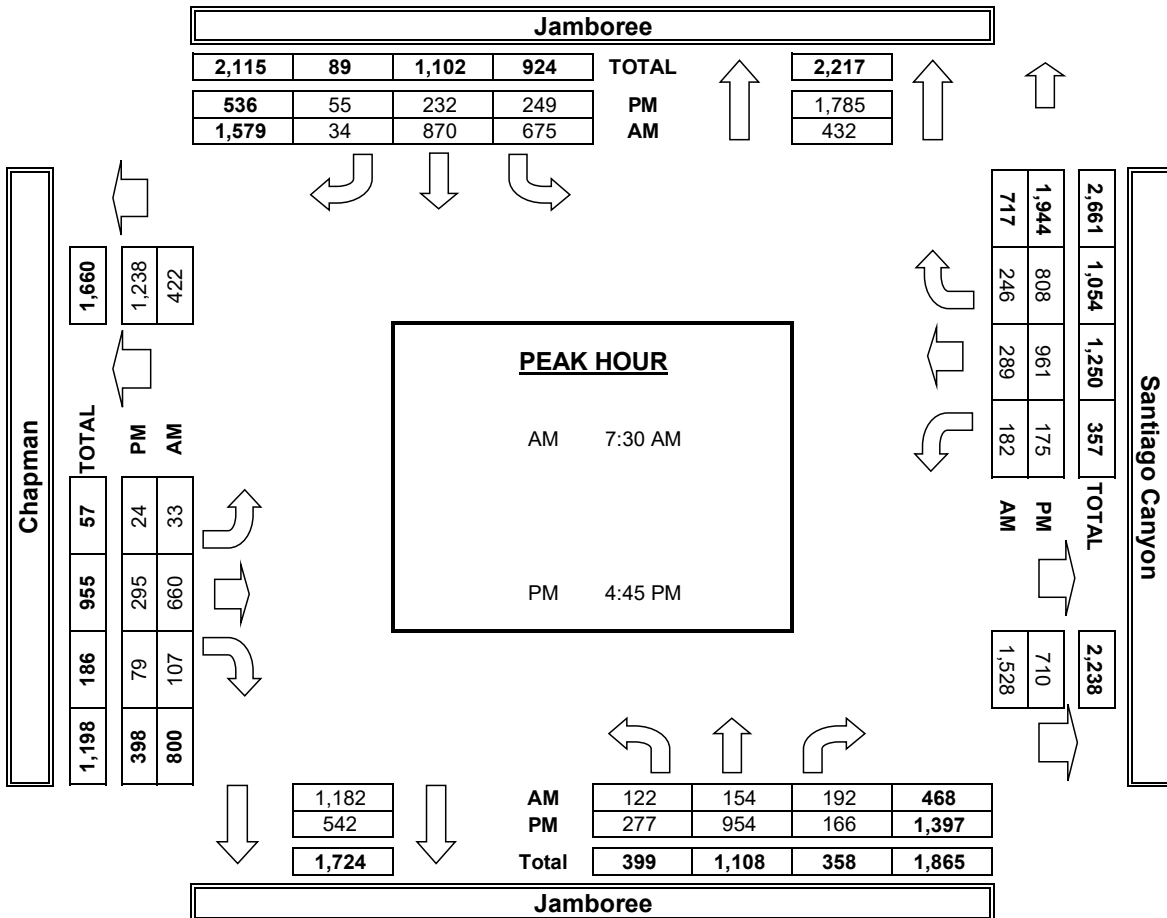
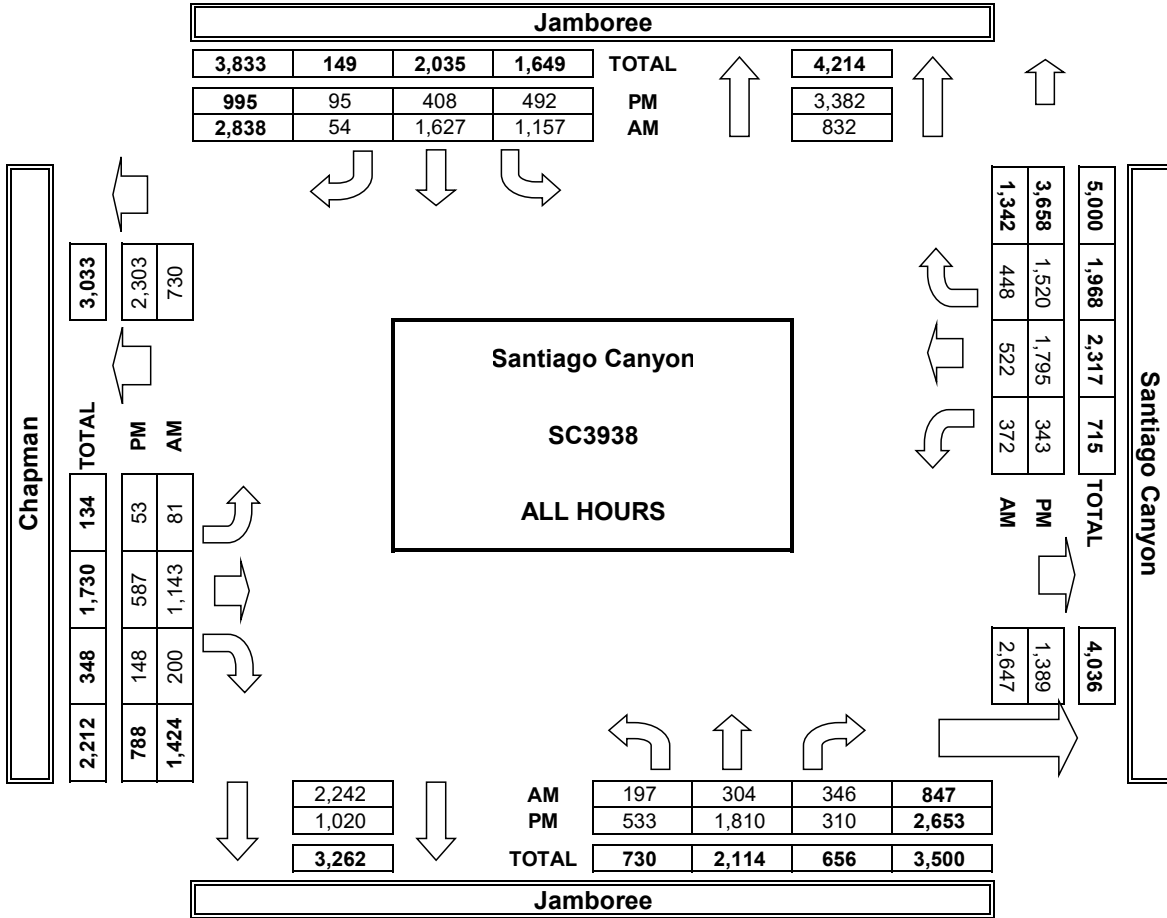
Volumes represent the combined totals for both directions



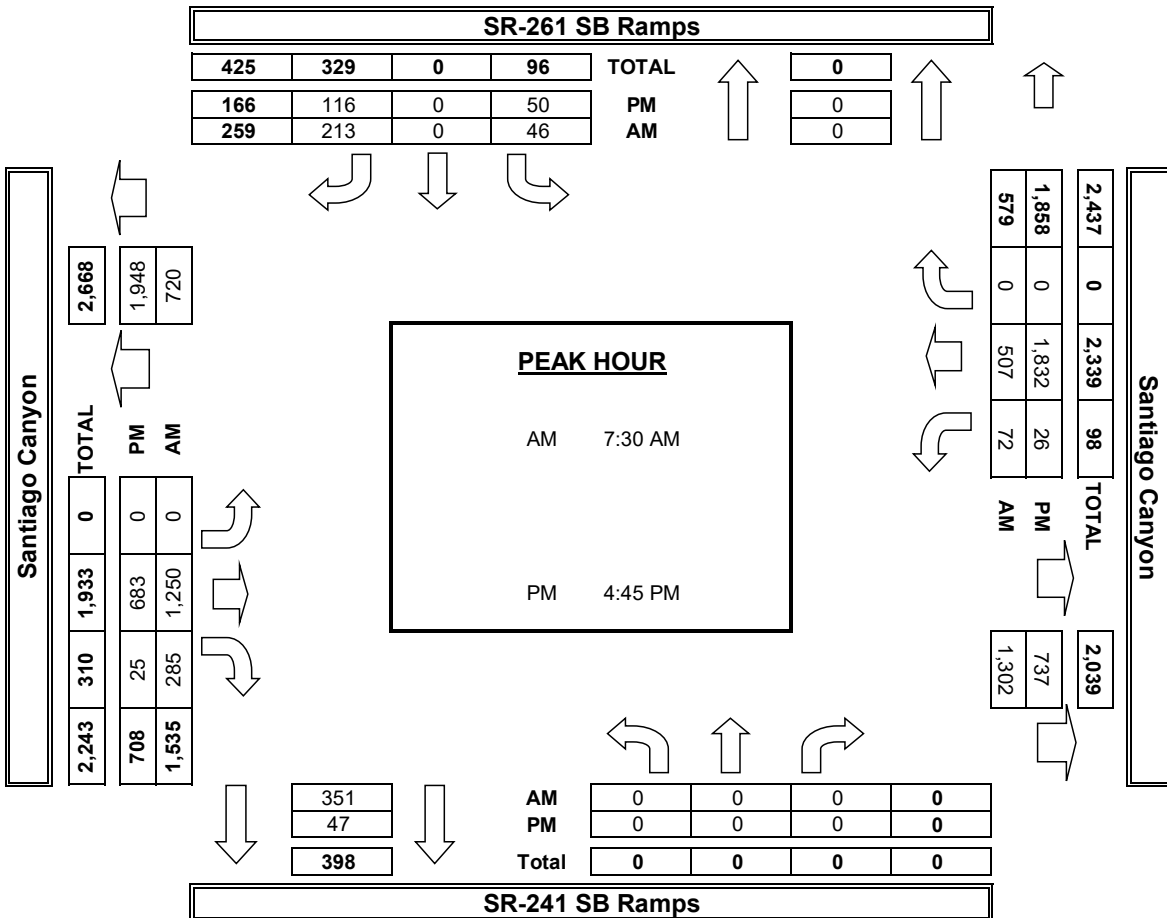
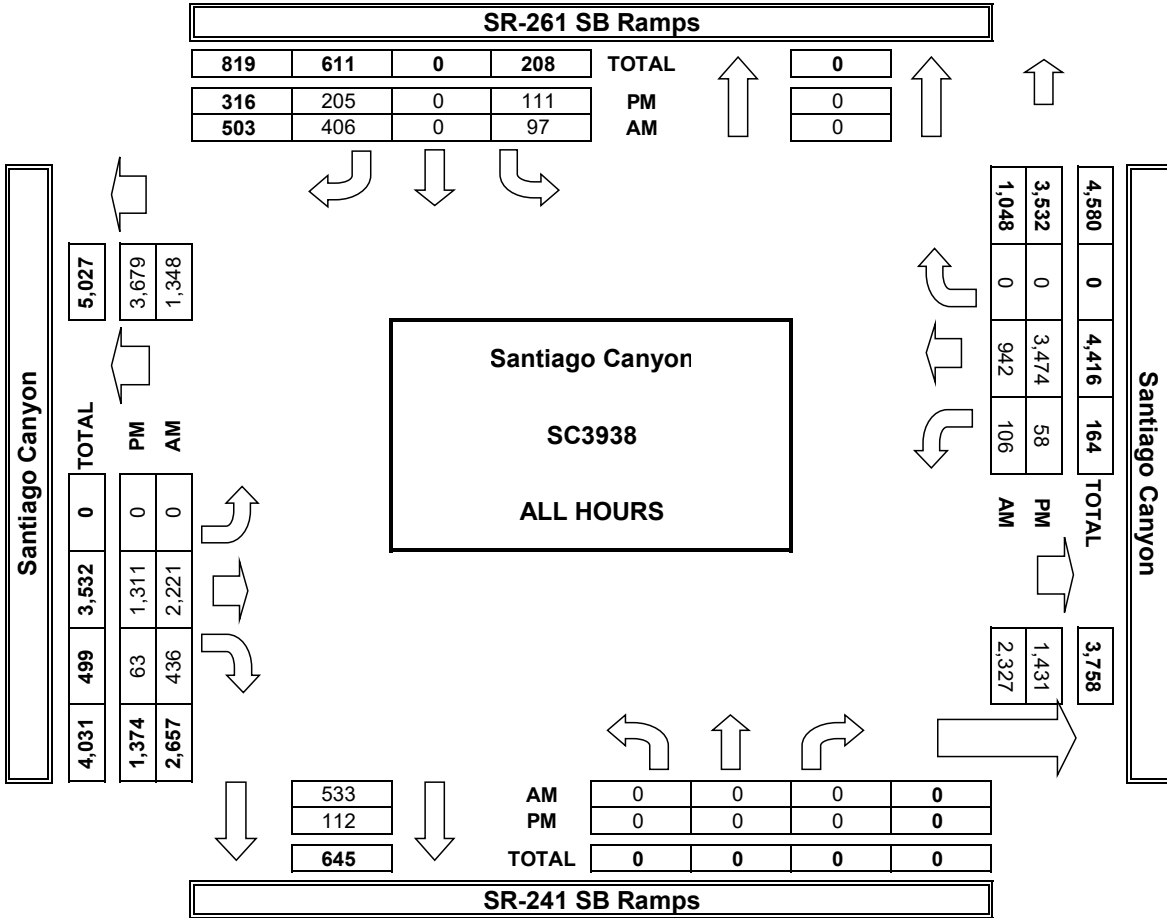
Appendix B

Weekday Intersection Turning Movement Counts

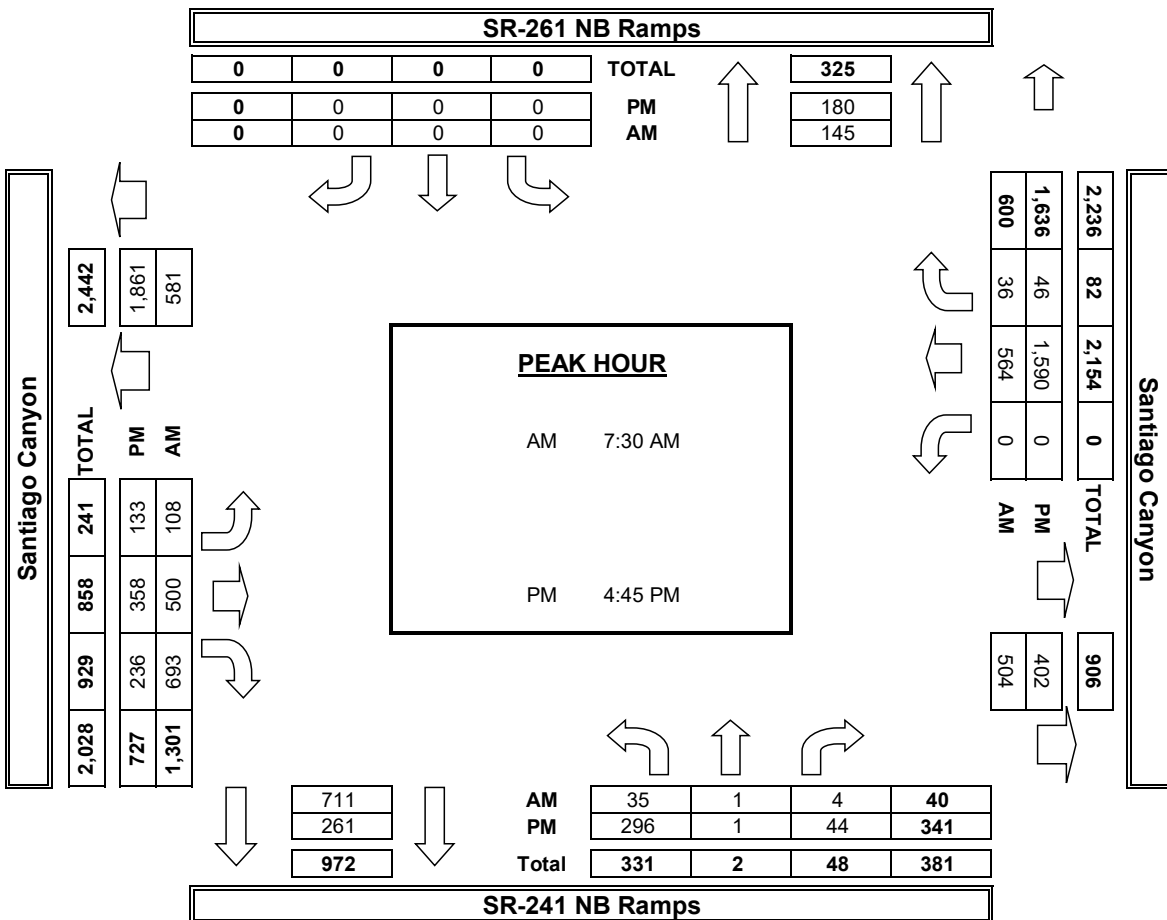
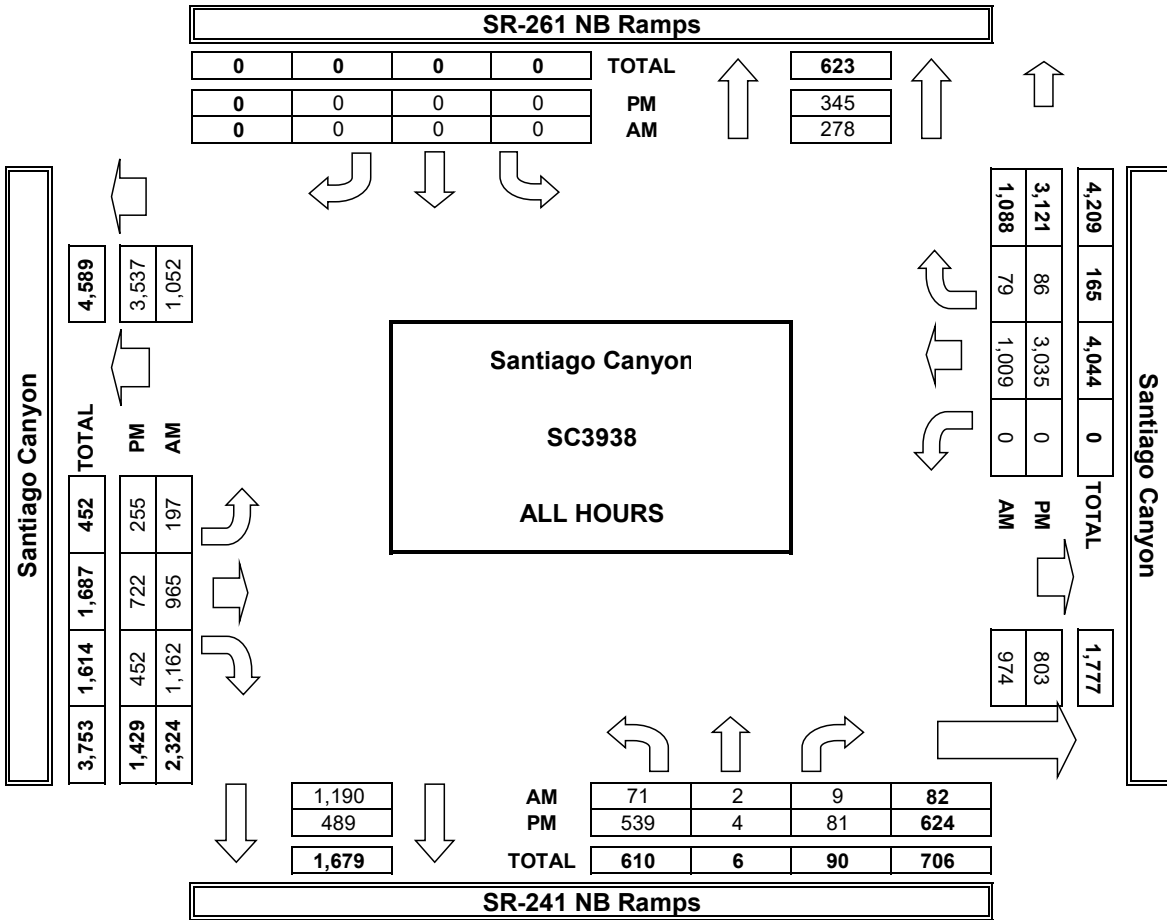
AimTD LLC
TURNING MOVEMENT COUNTS



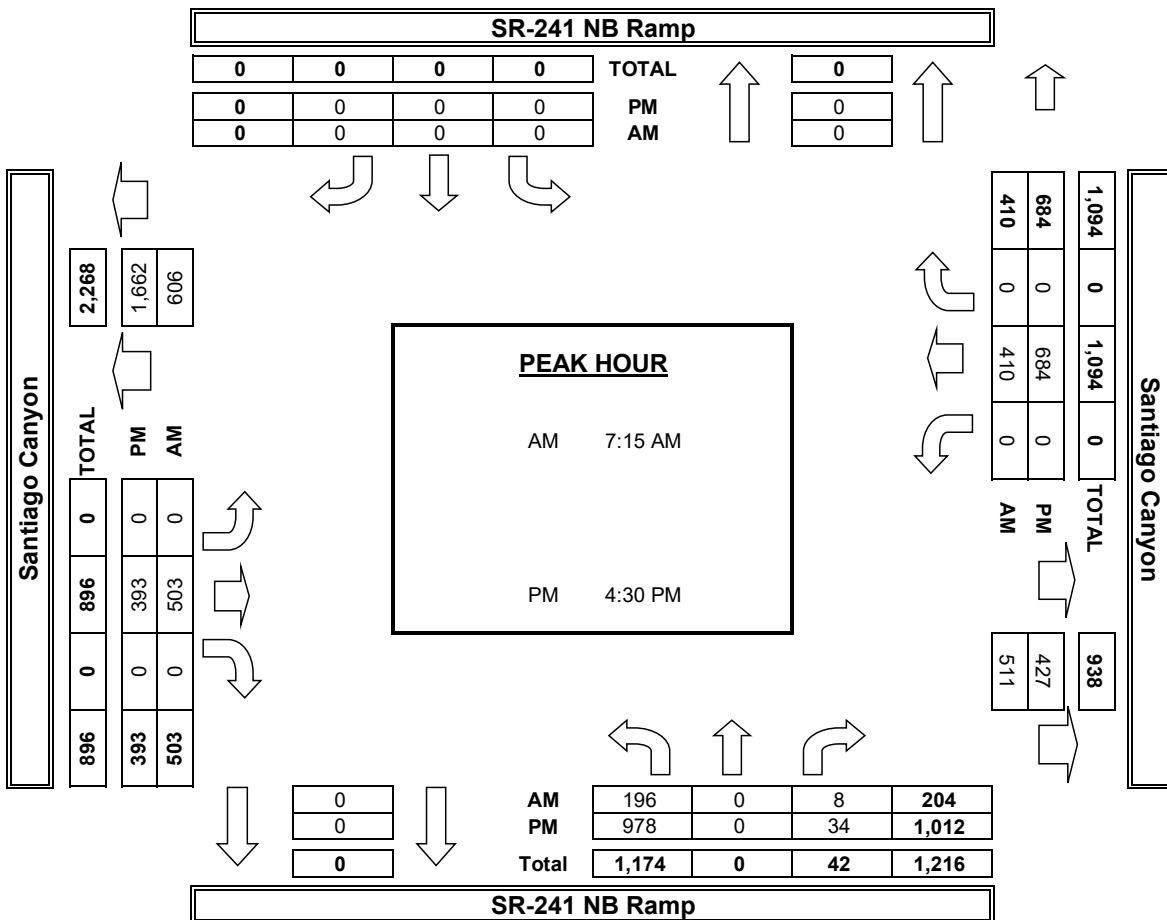
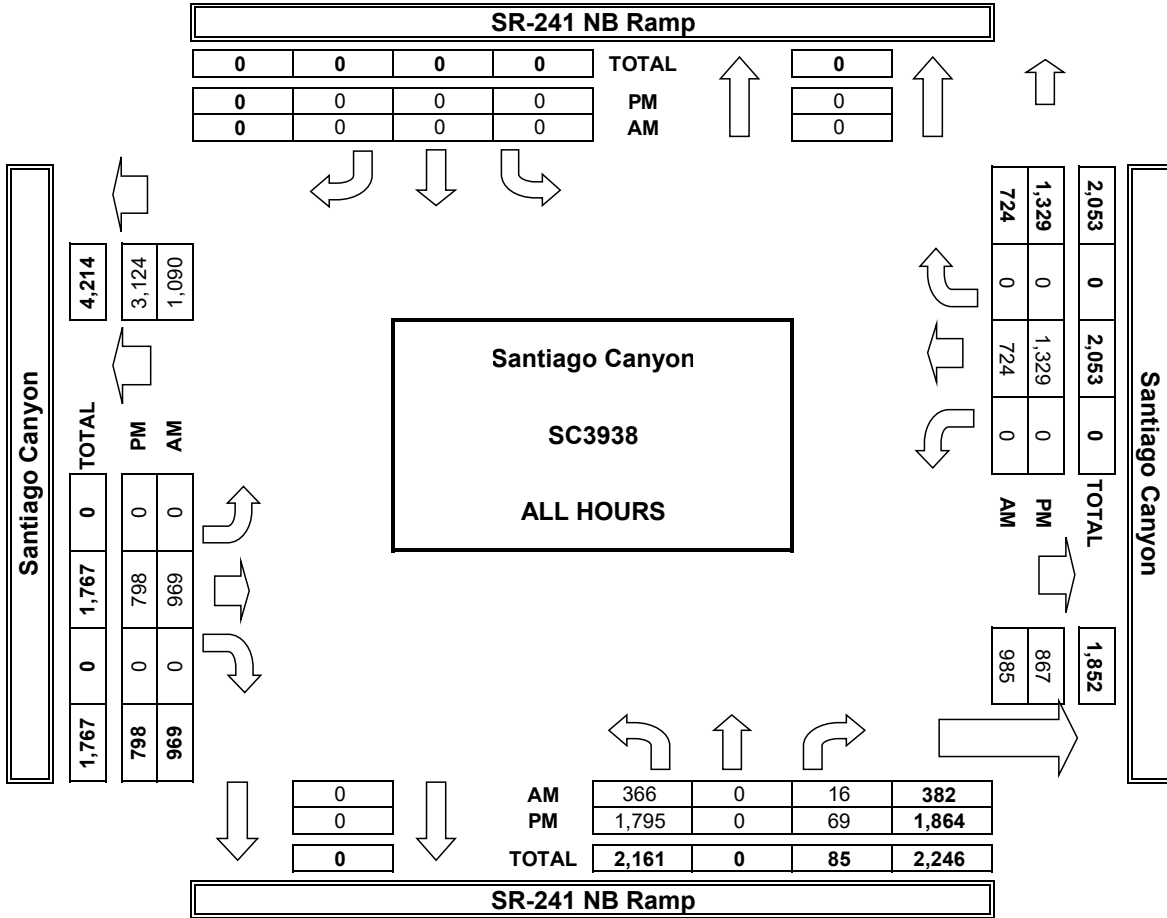
AimTD LLC
TURNING MOVEMENT COUNTS



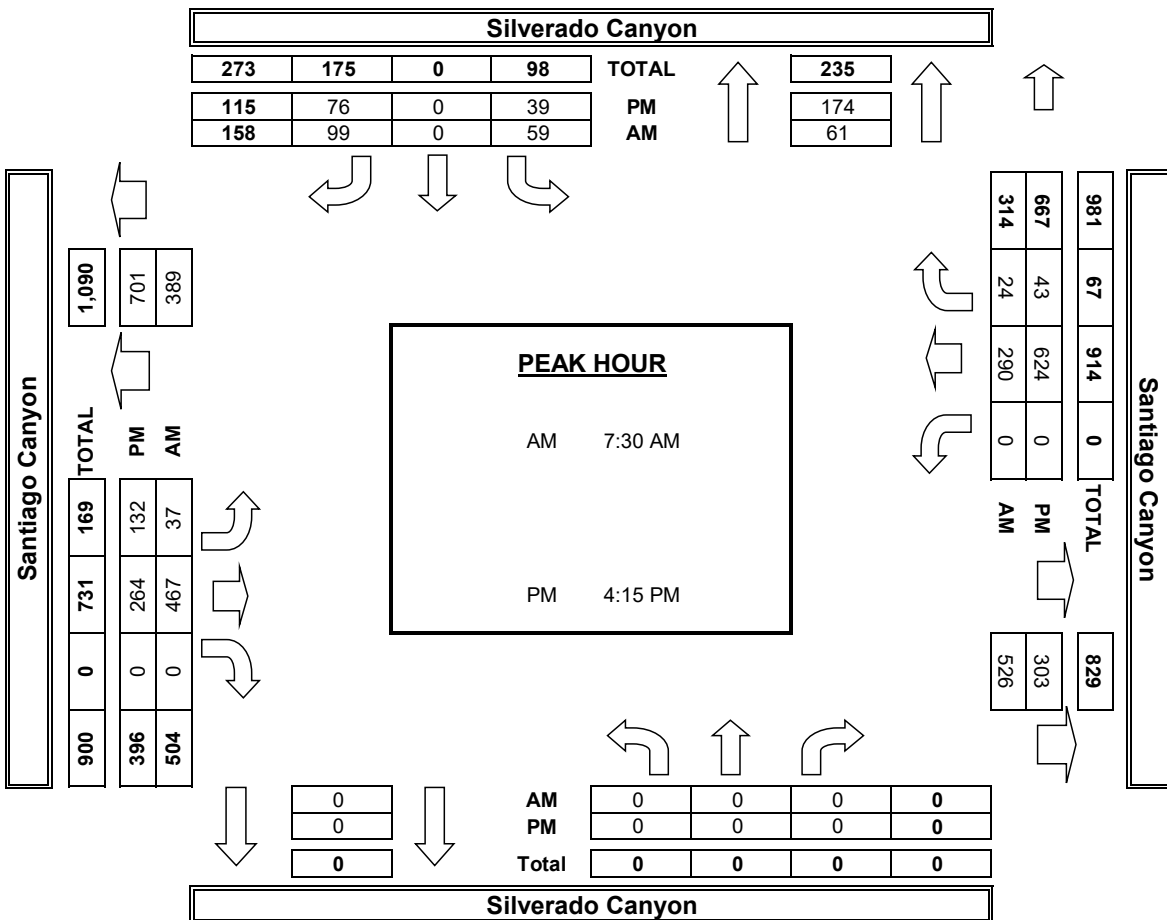
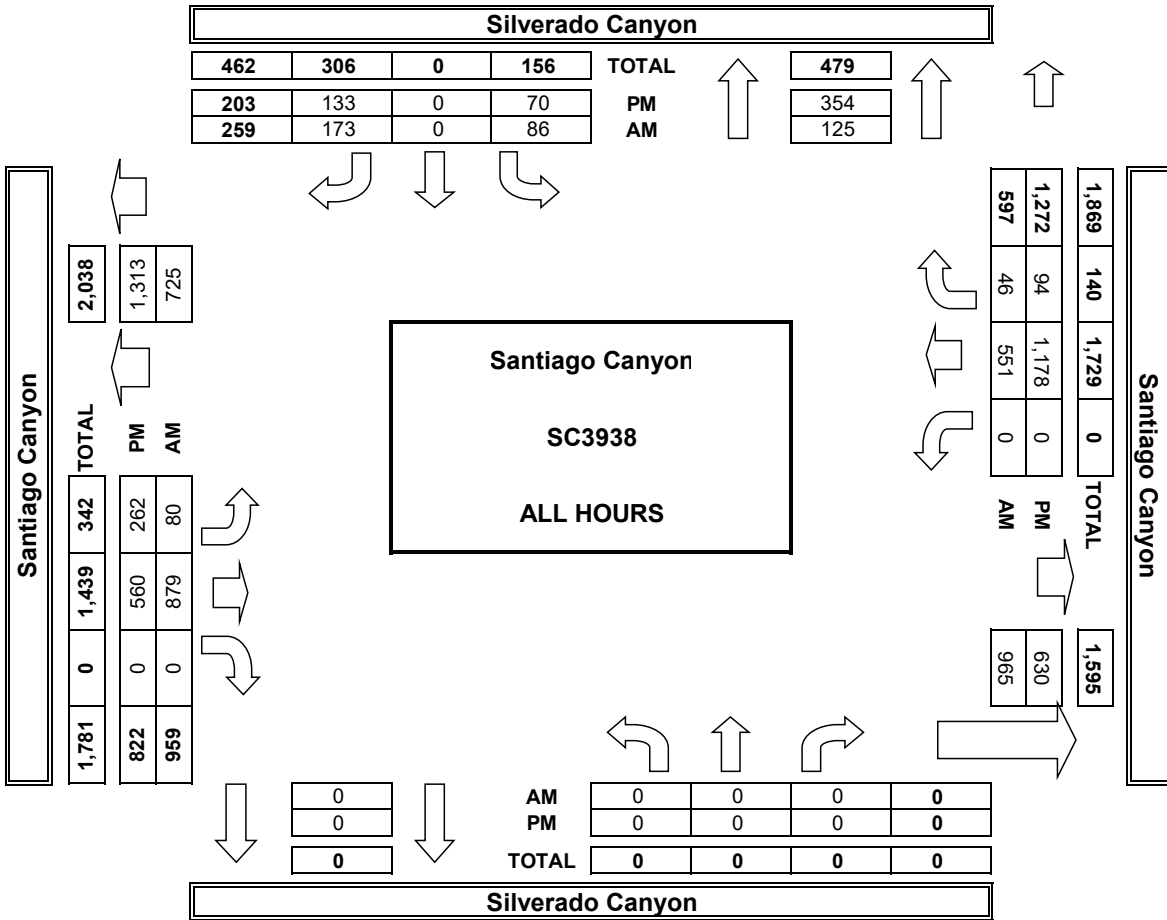
AimTD LLC
TURNING MOVEMENT COUNTS



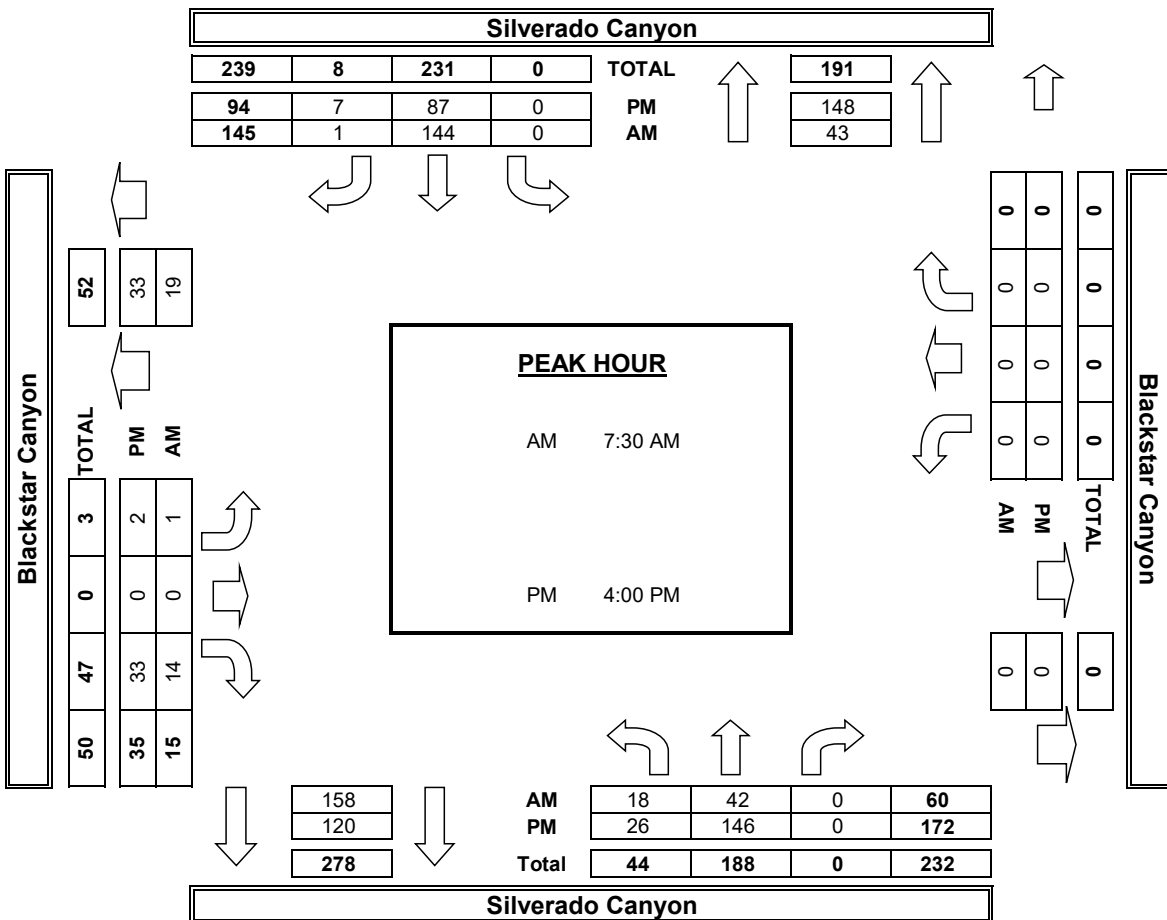
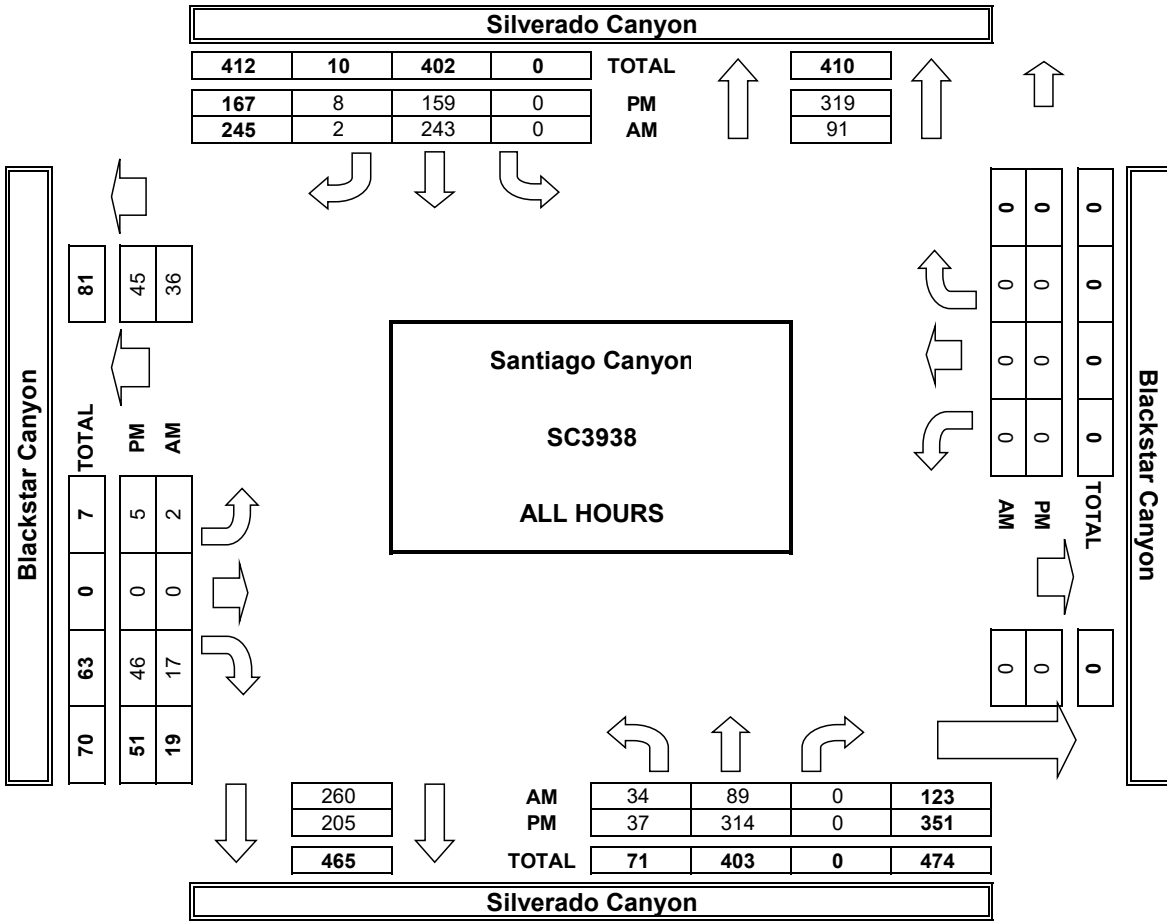
AimTD LLC
TURNING MOVEMENT COUNTS



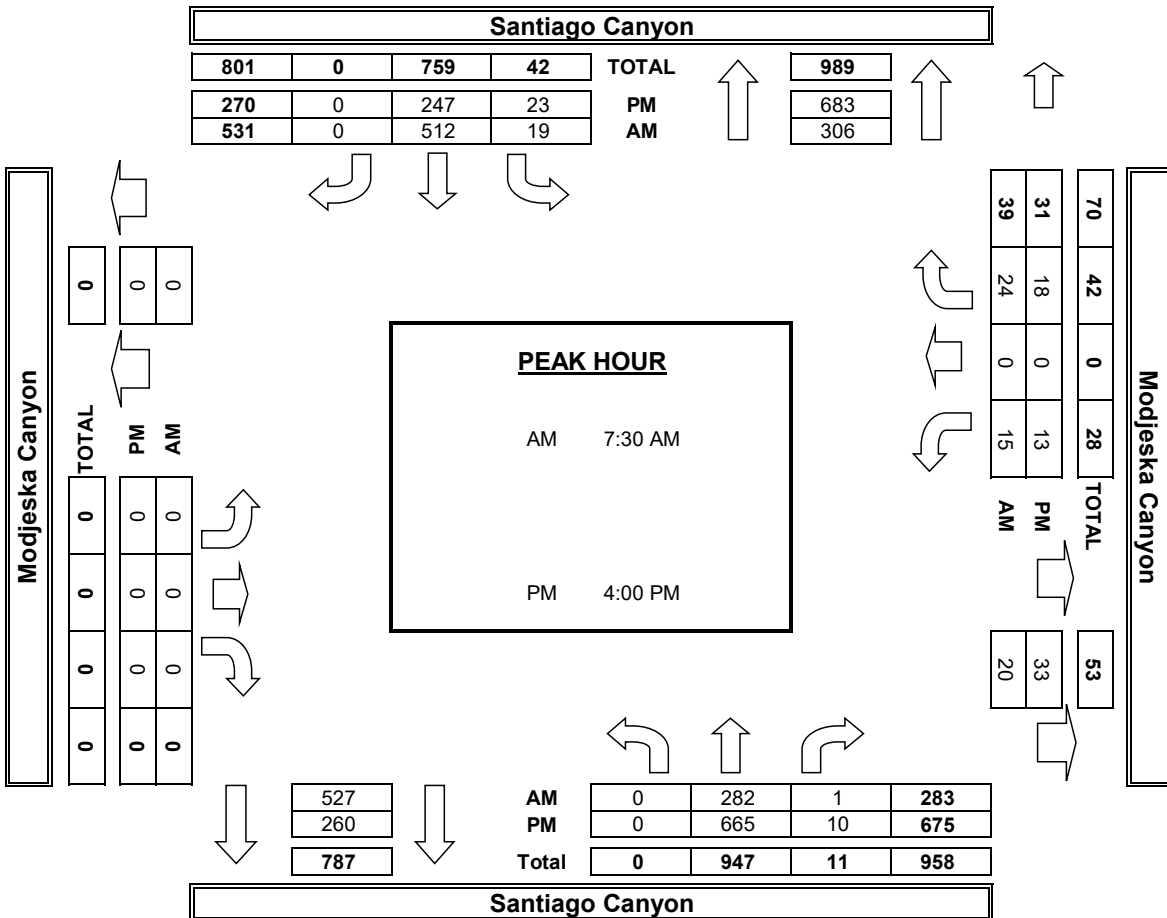
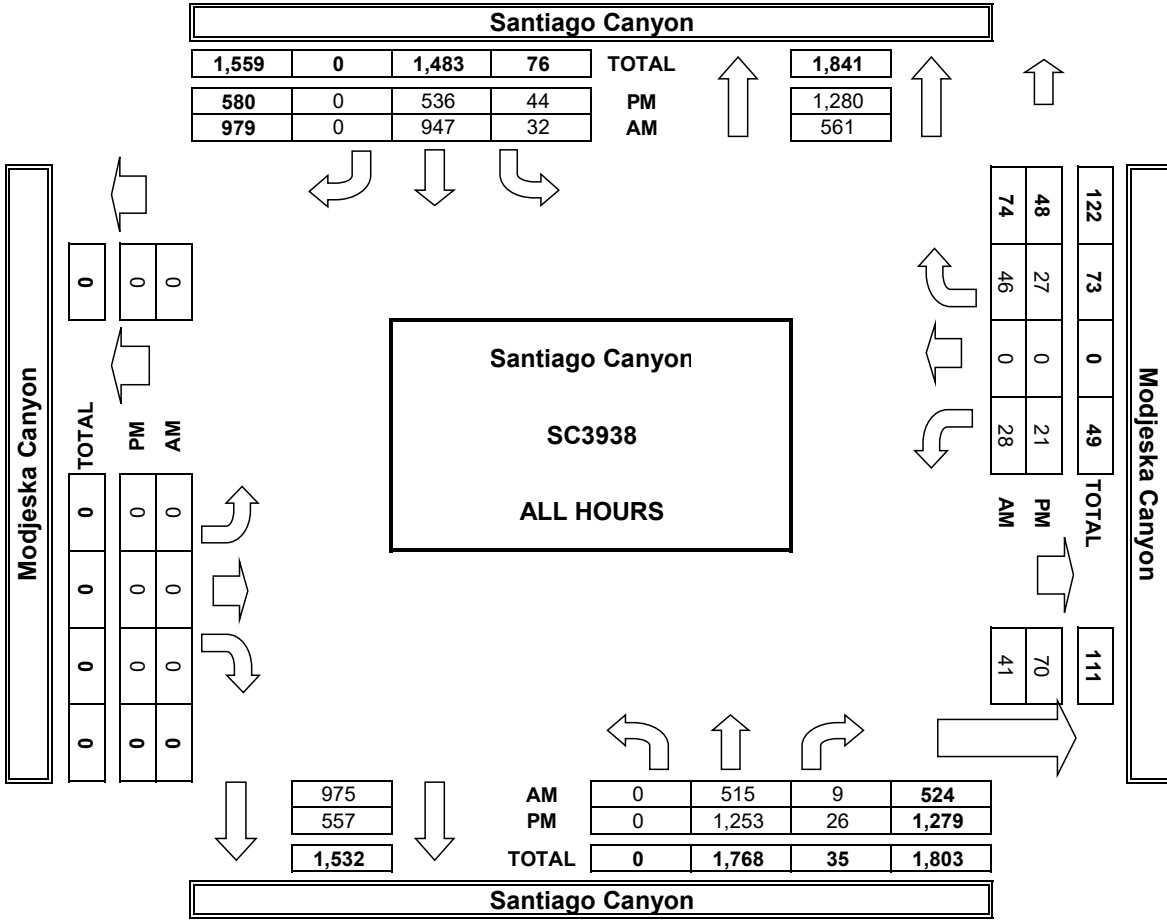
AimTD LLC
TURNING MOVEMENT COUNTS



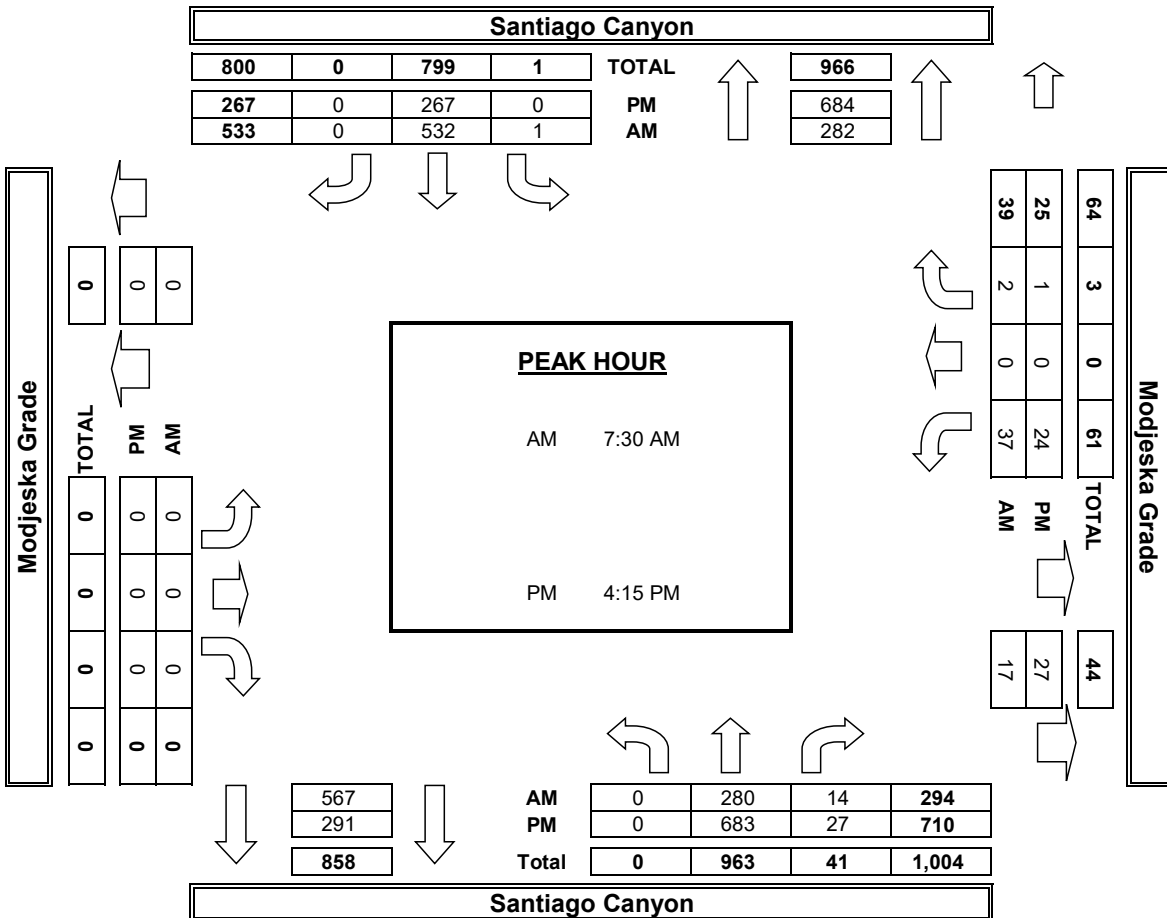
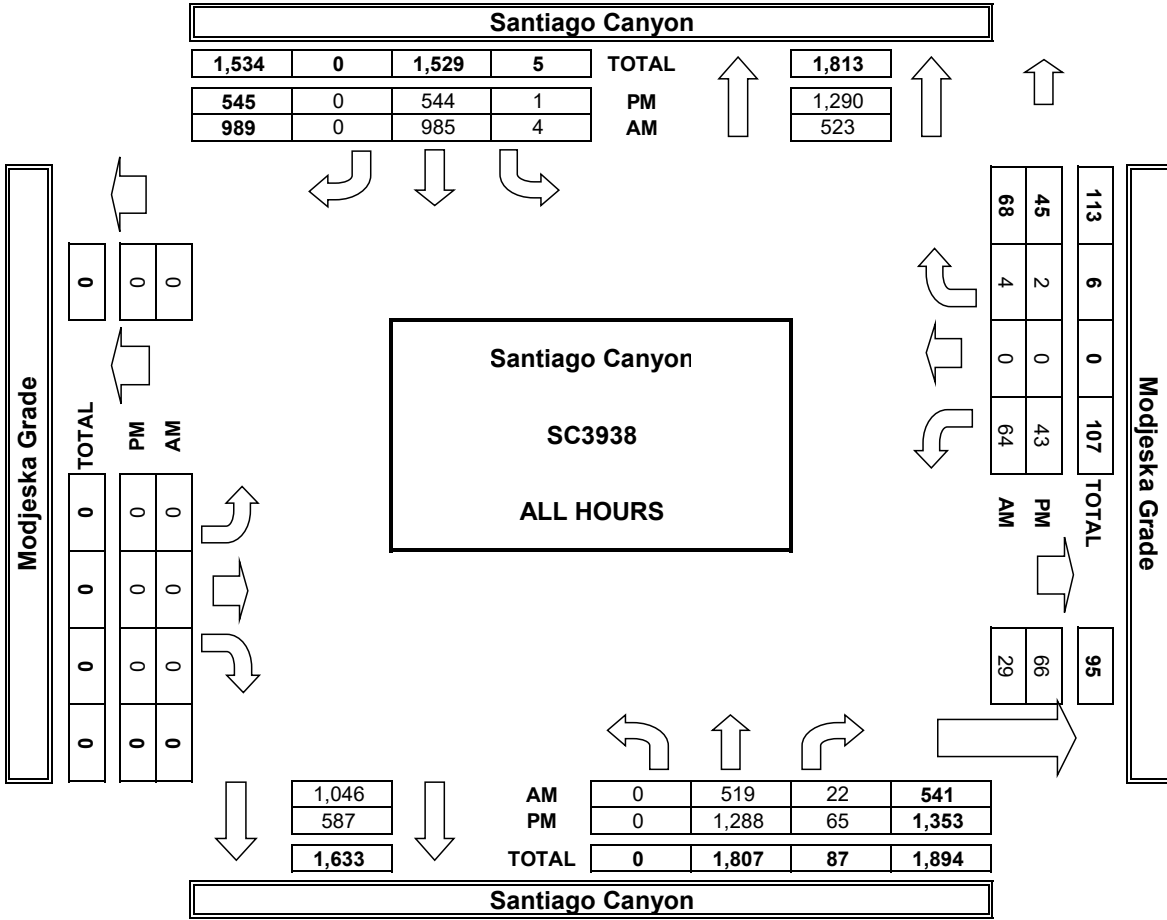
AimTD LLC
TURNING MOVEMENT COUNTS



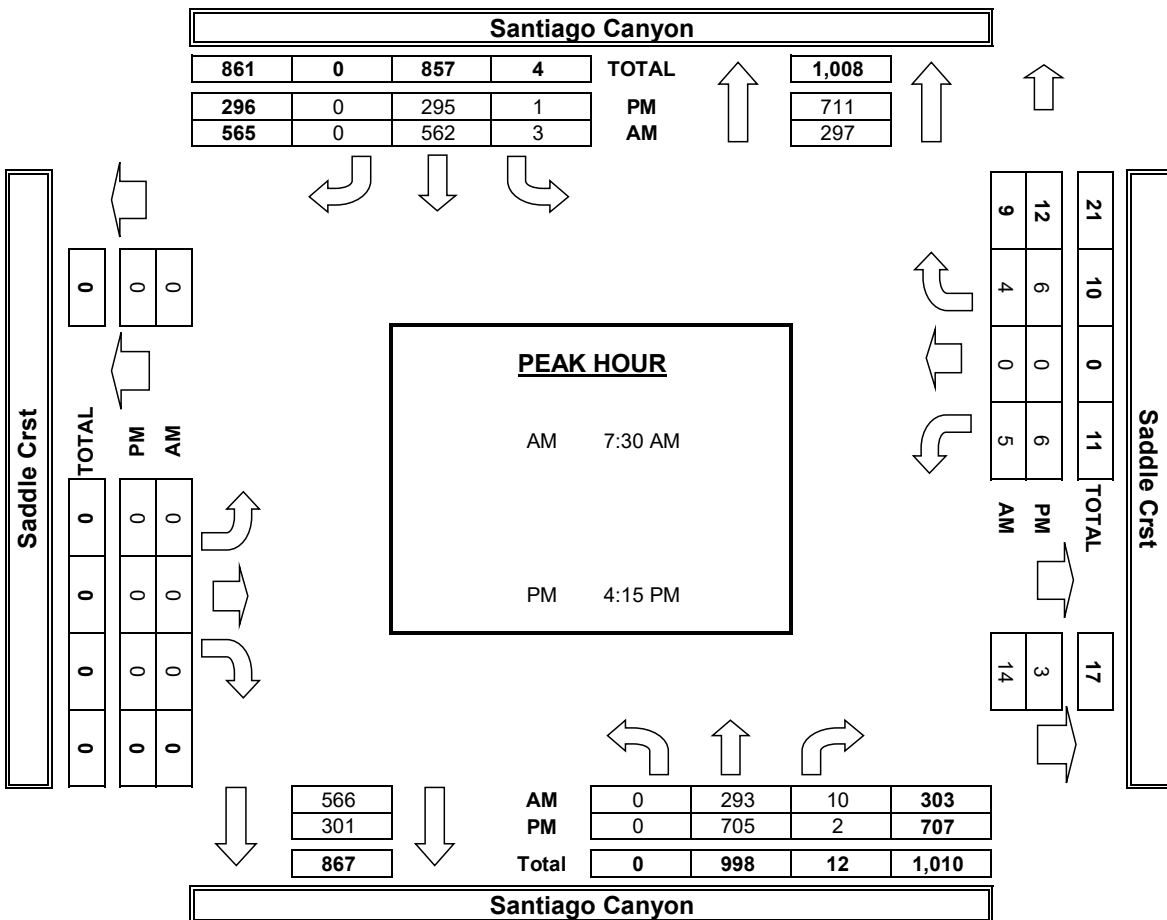
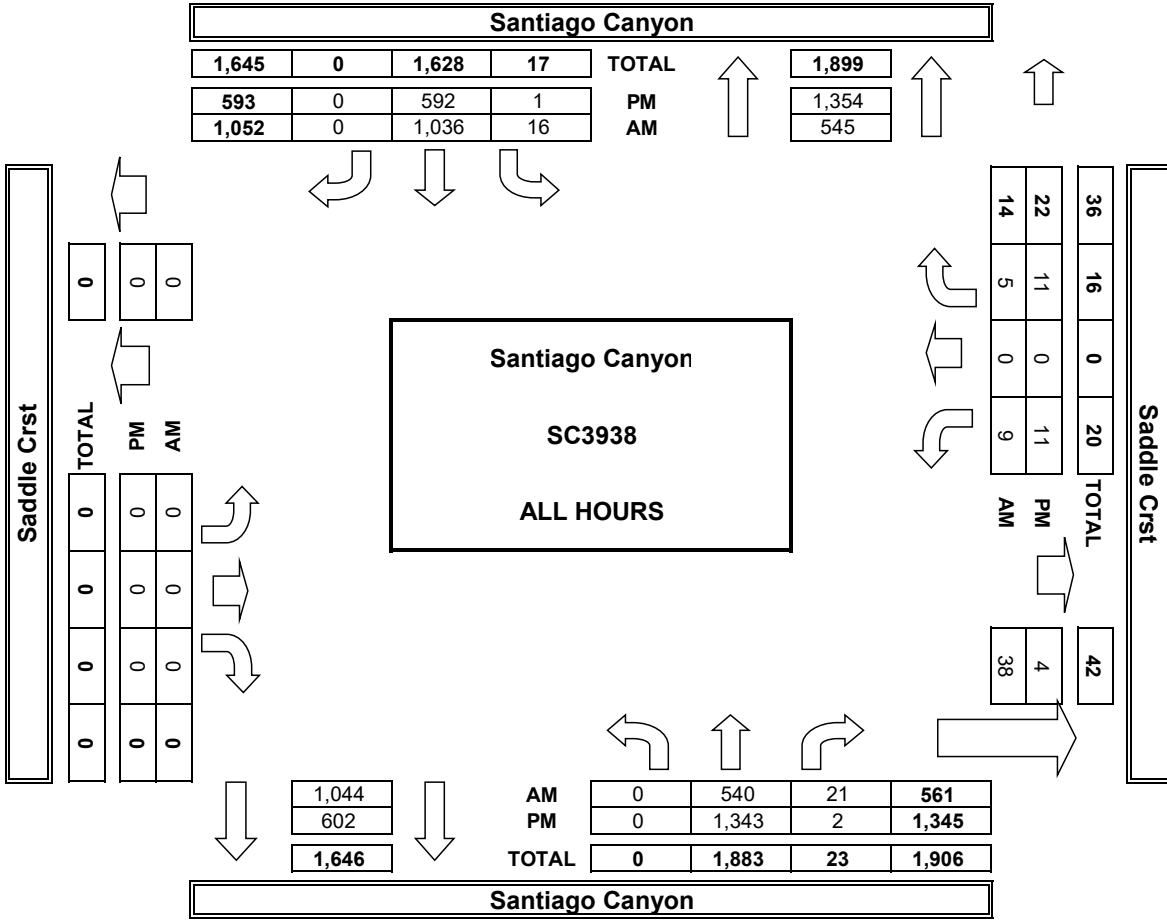
AimTD LLC
TURNING MOVEMENT COUNTS



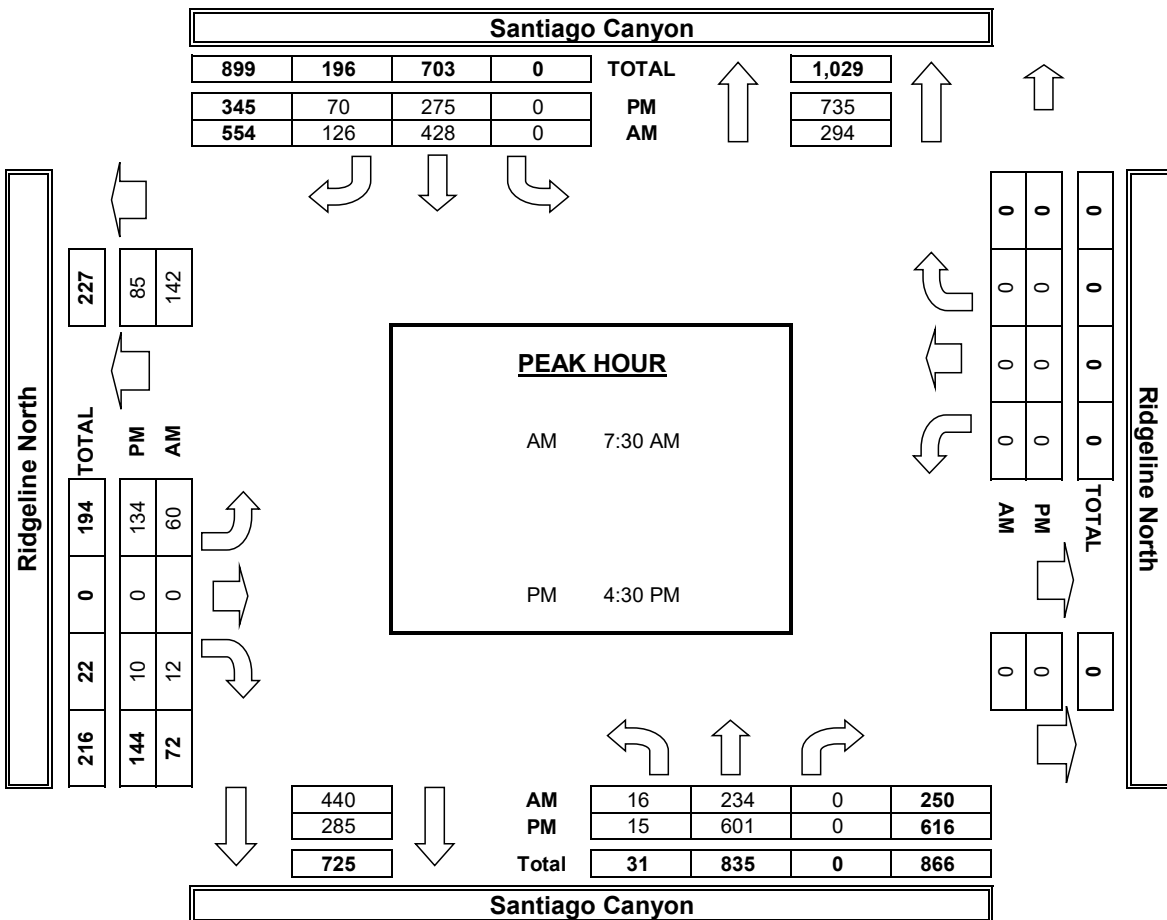
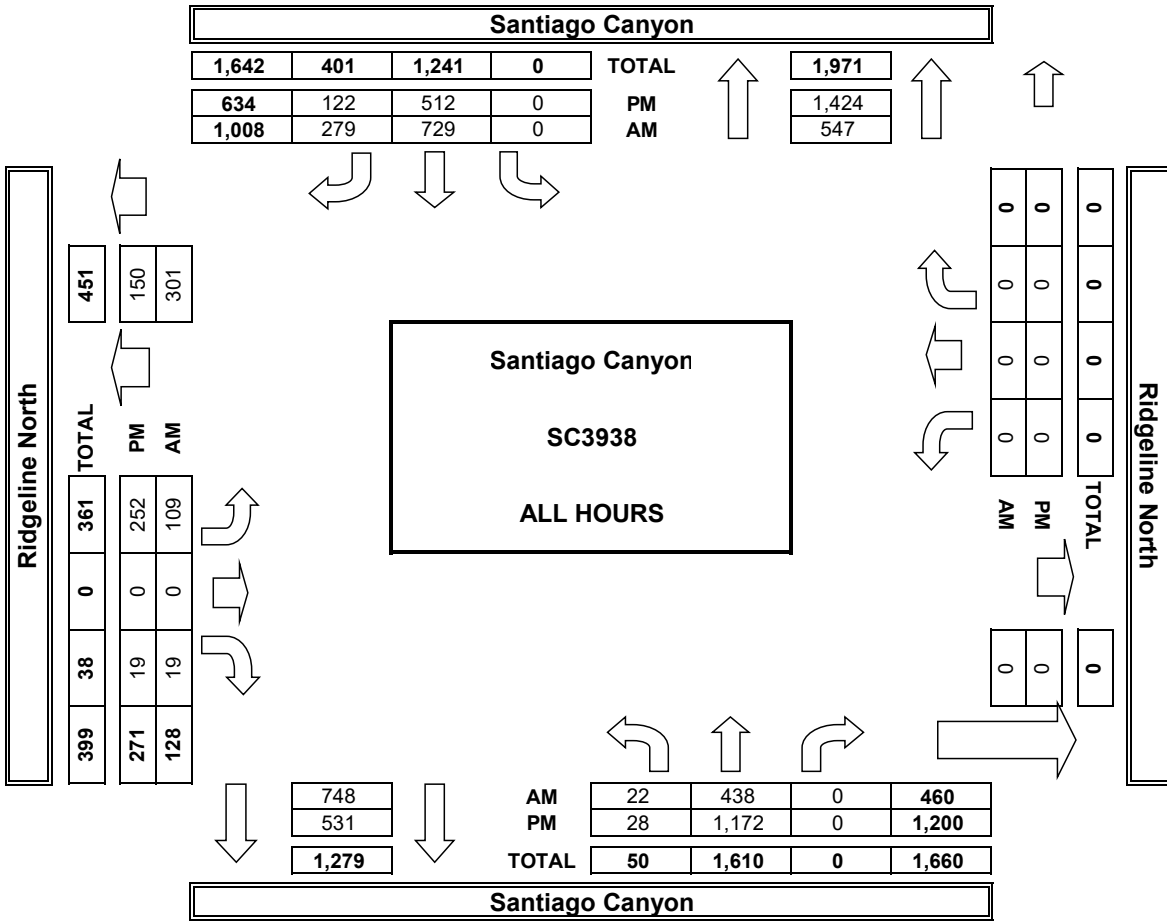
AimTD LLC
TURNING MOVEMENT COUNTS



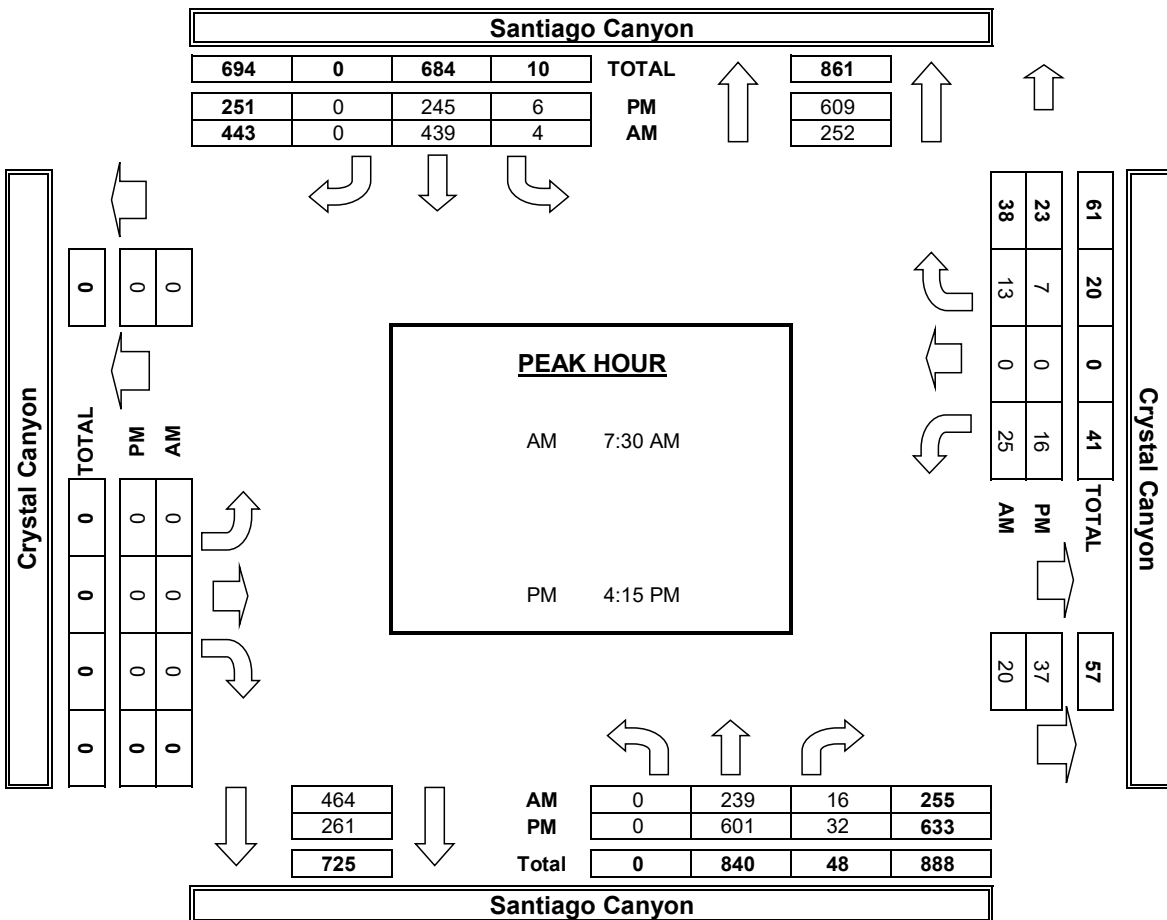
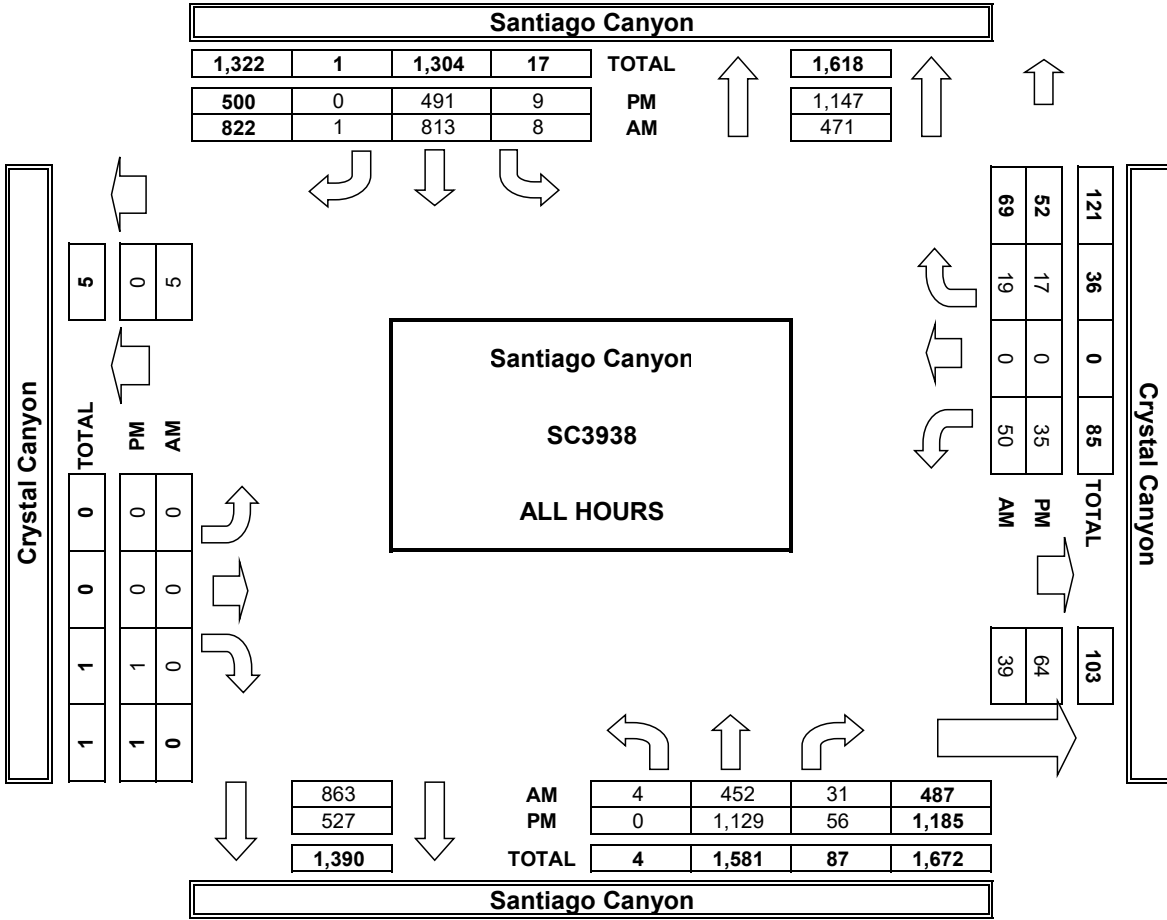
AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



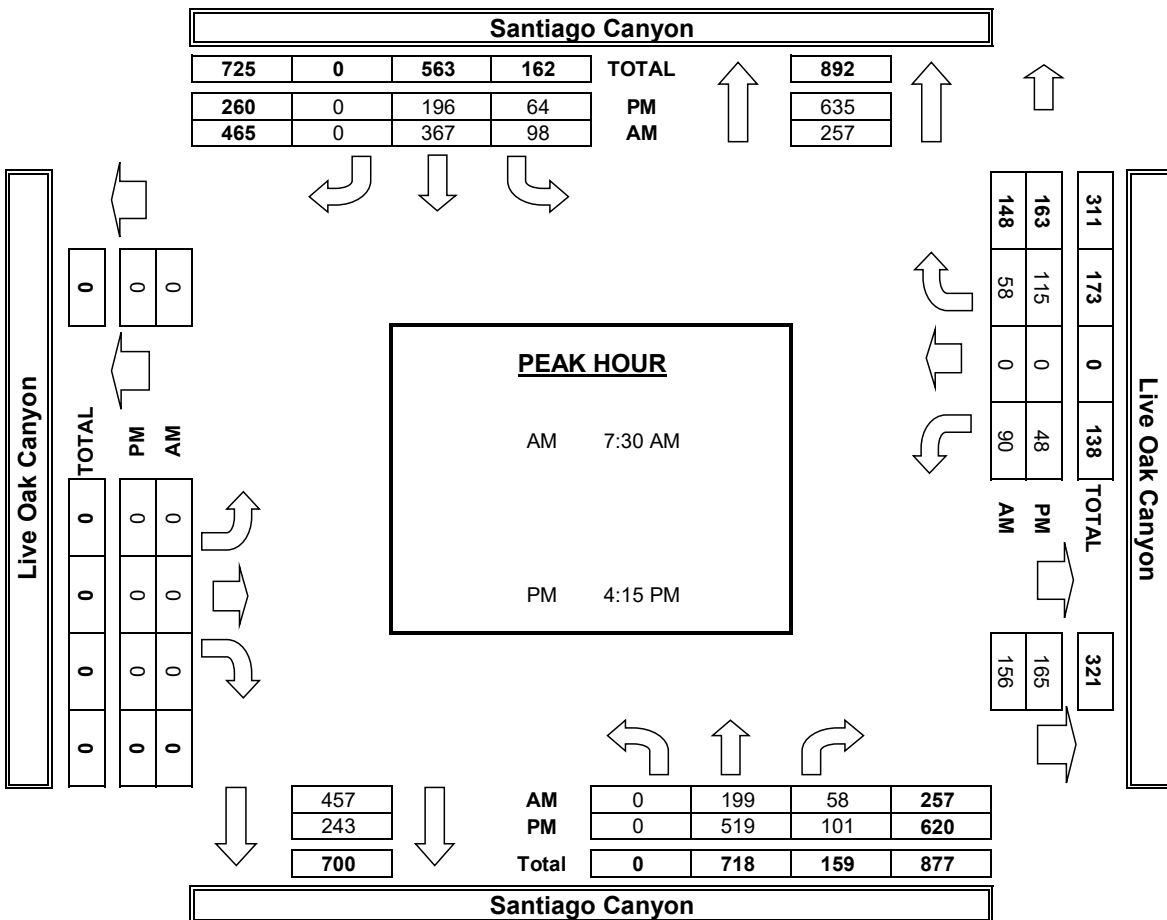
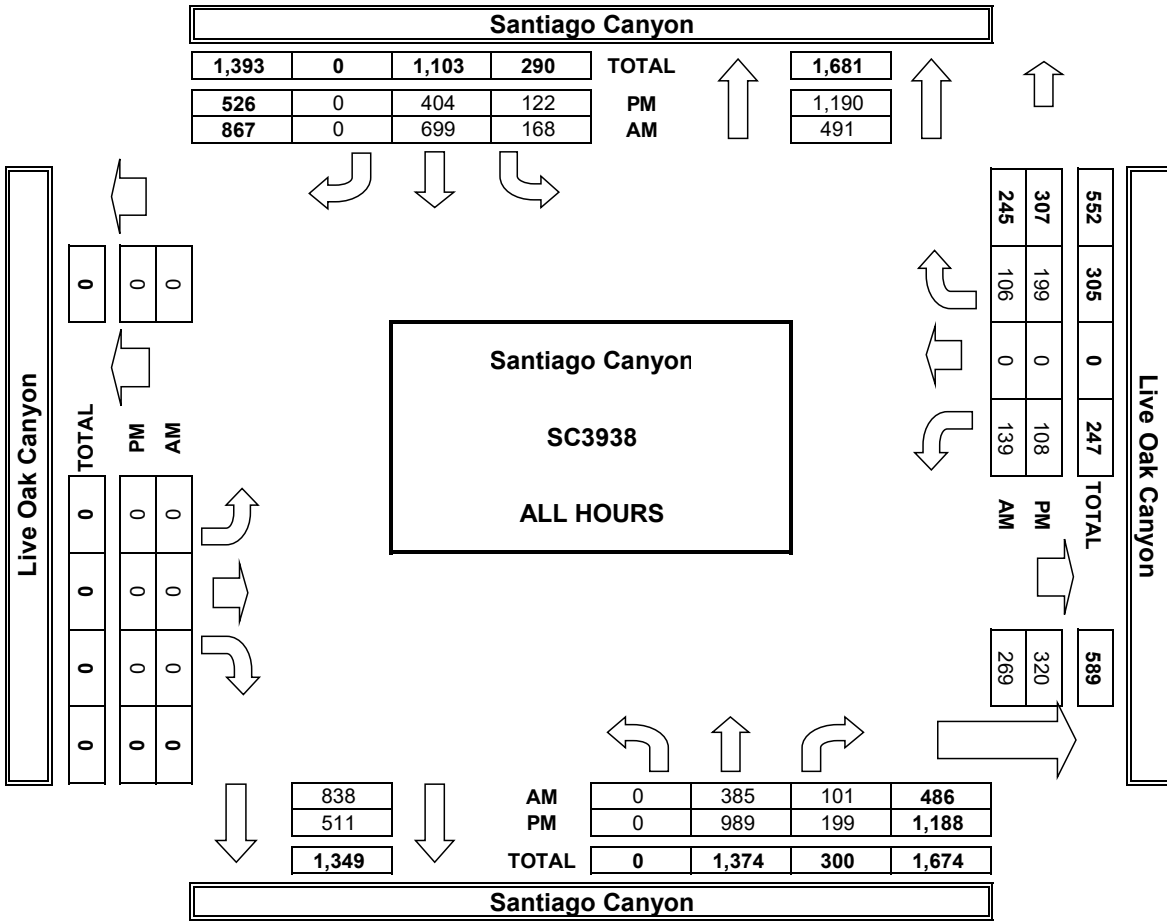
Santiago Canyon
SC3938
ALL HOURS

PEAK HOUR

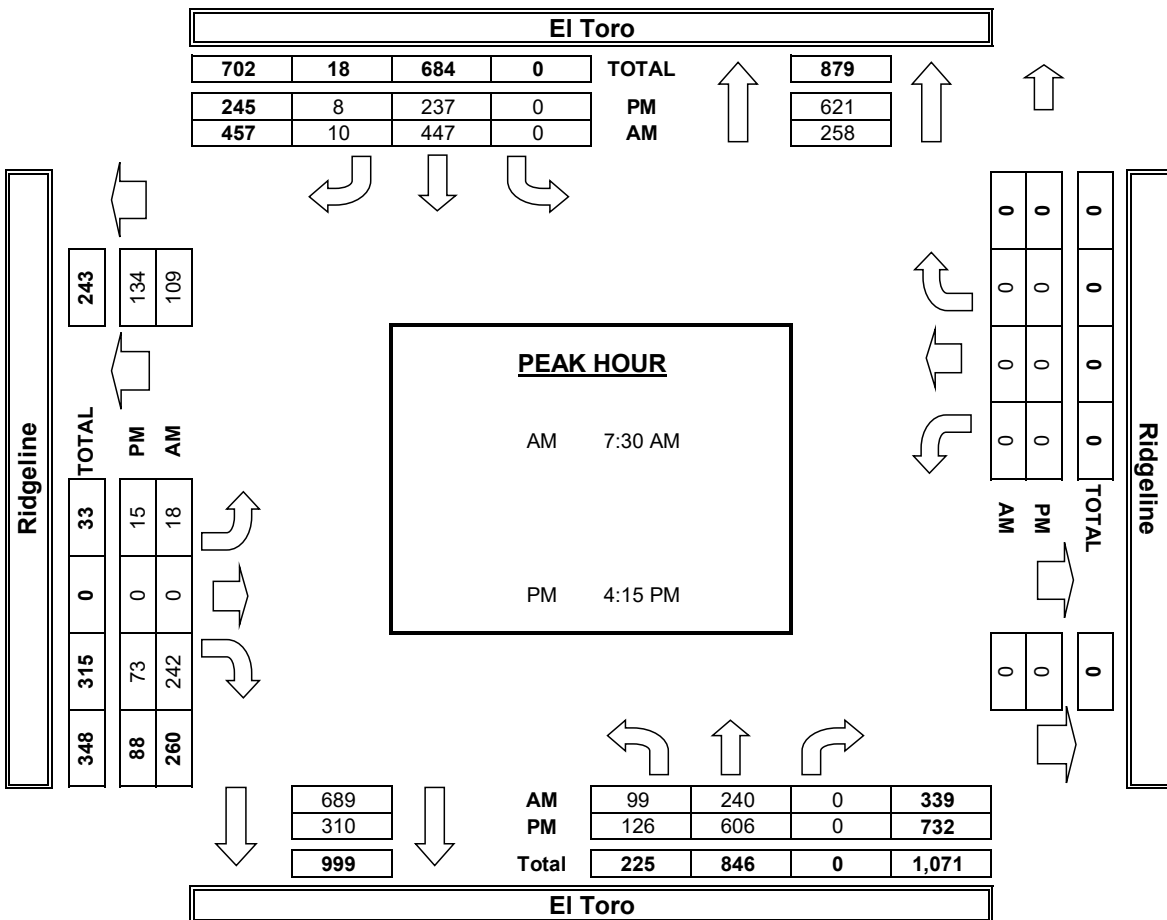
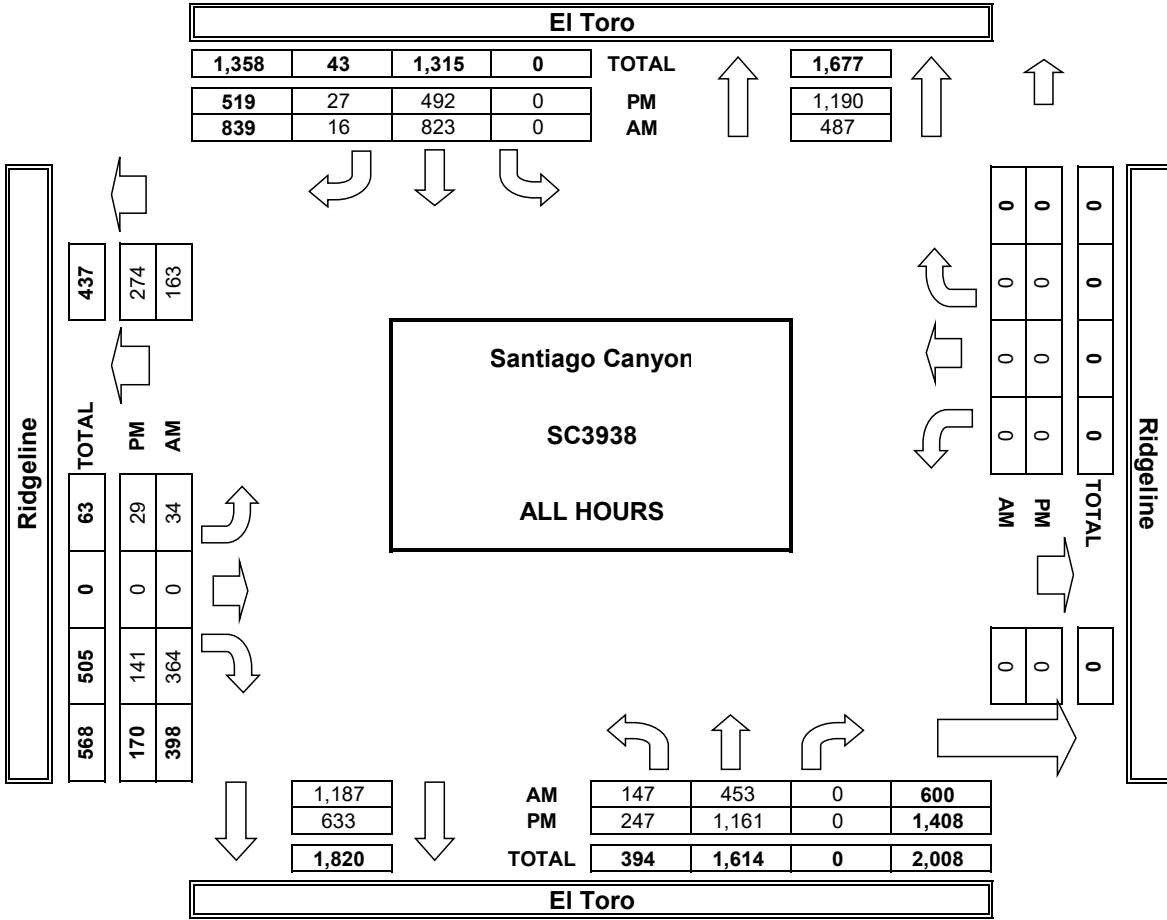
AM 7:30 AM

PM 4:15 PM

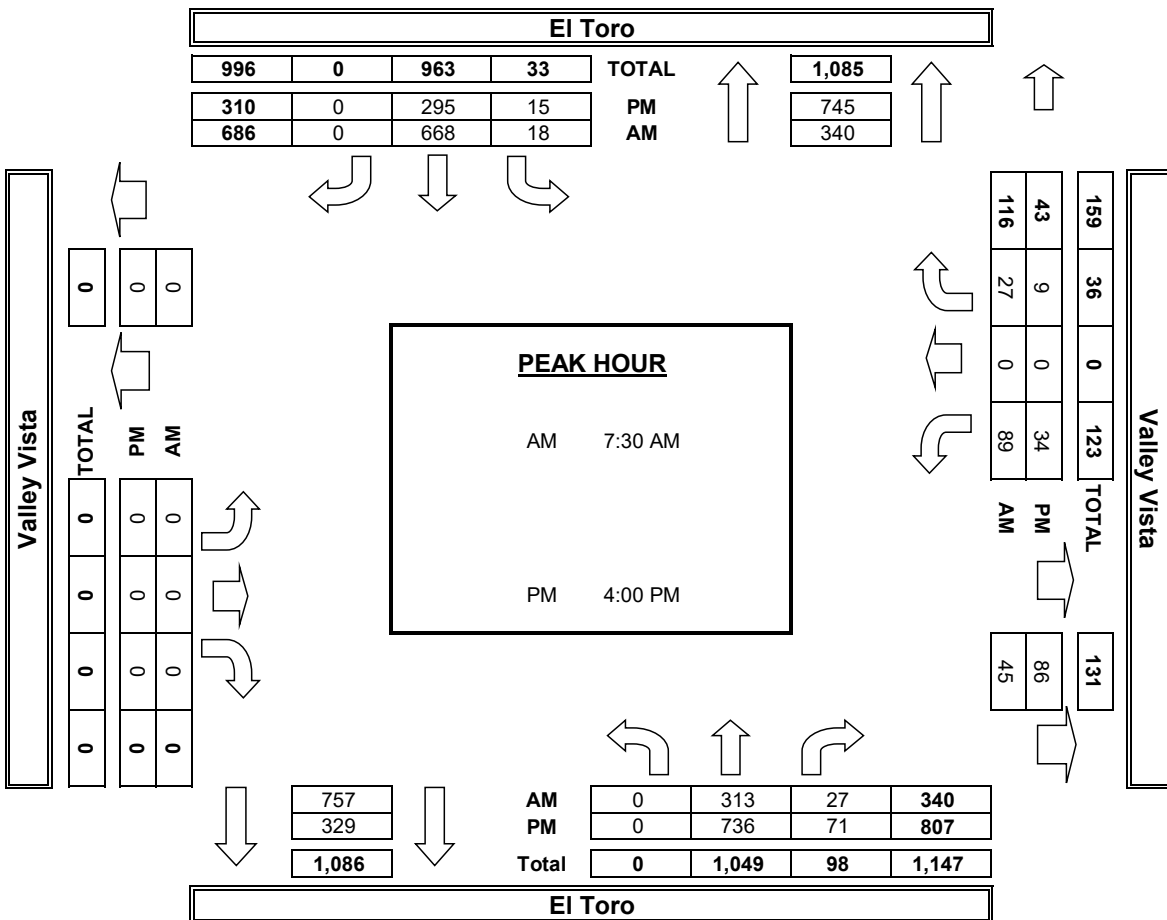
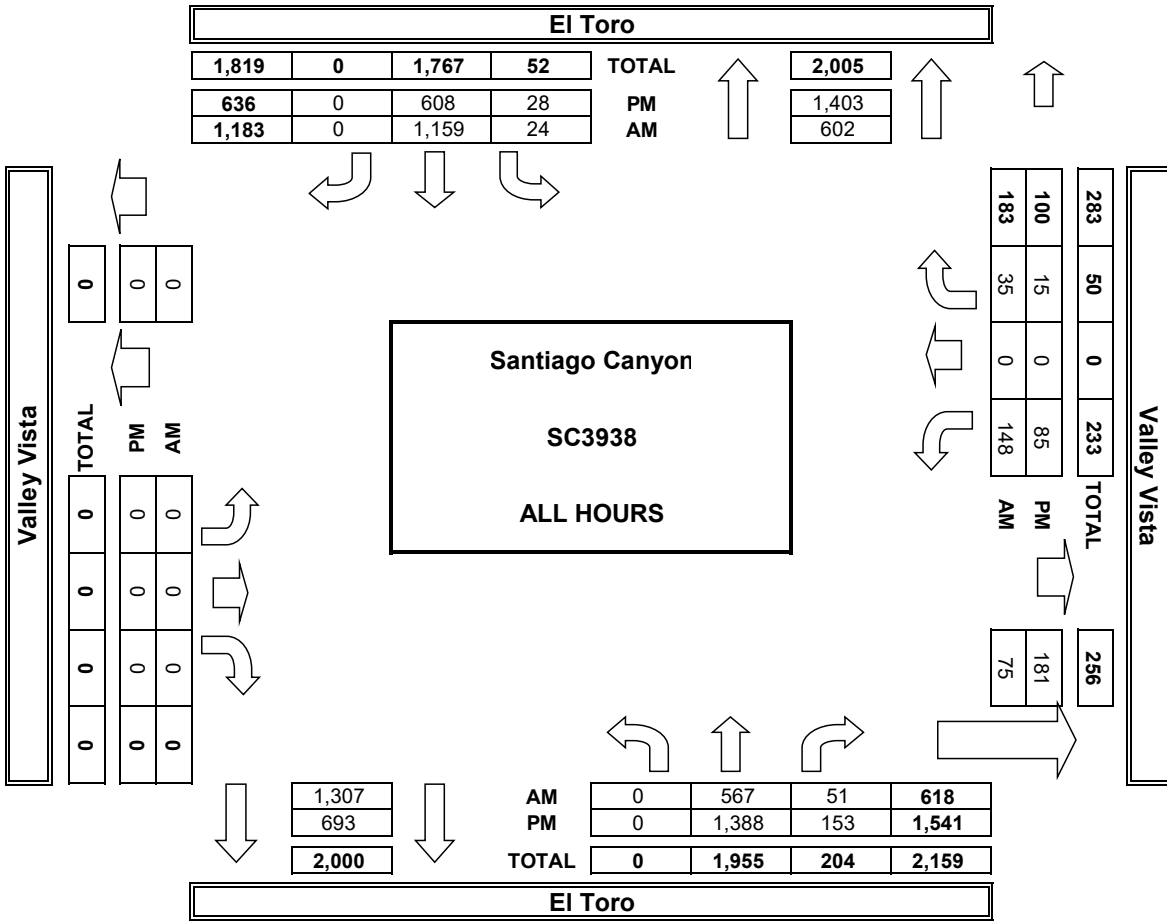
AimTD LLC
TURNING MOVEMENT COUNTS



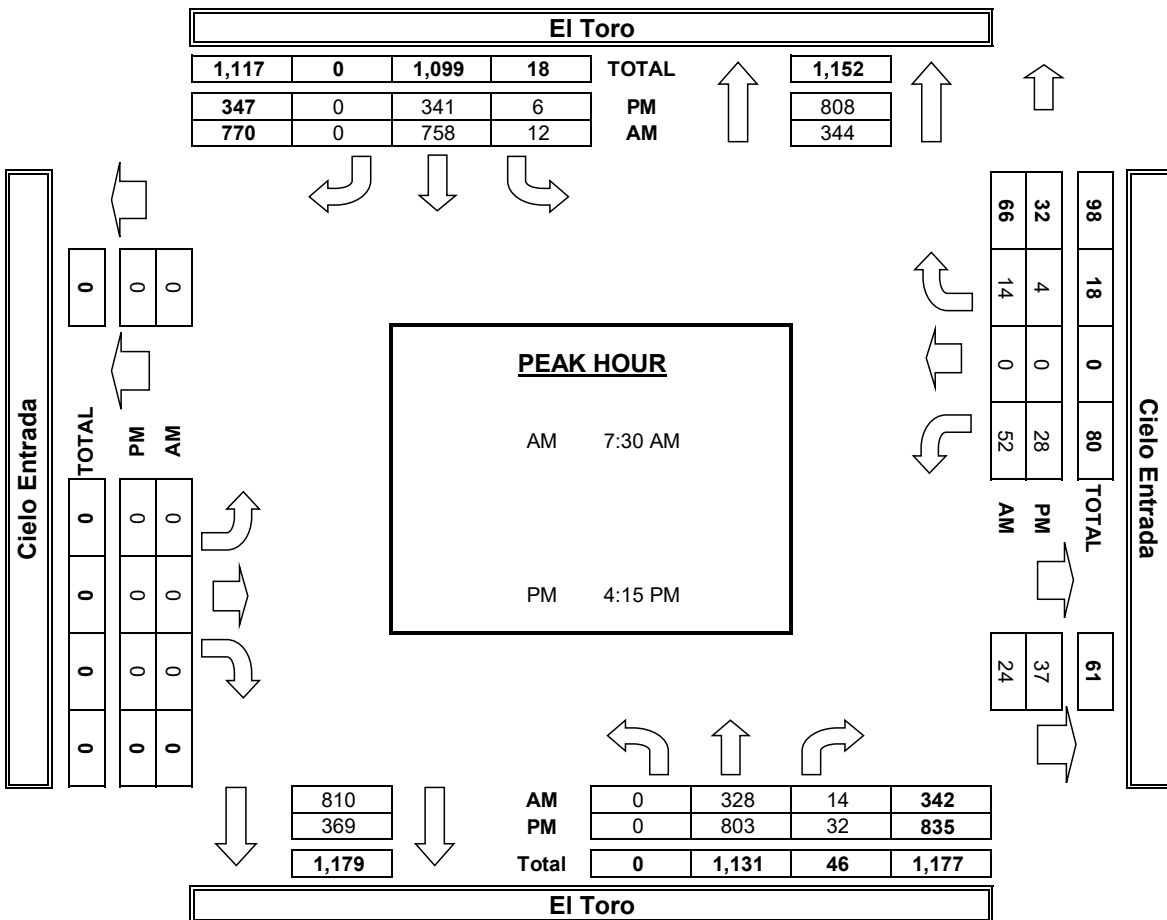
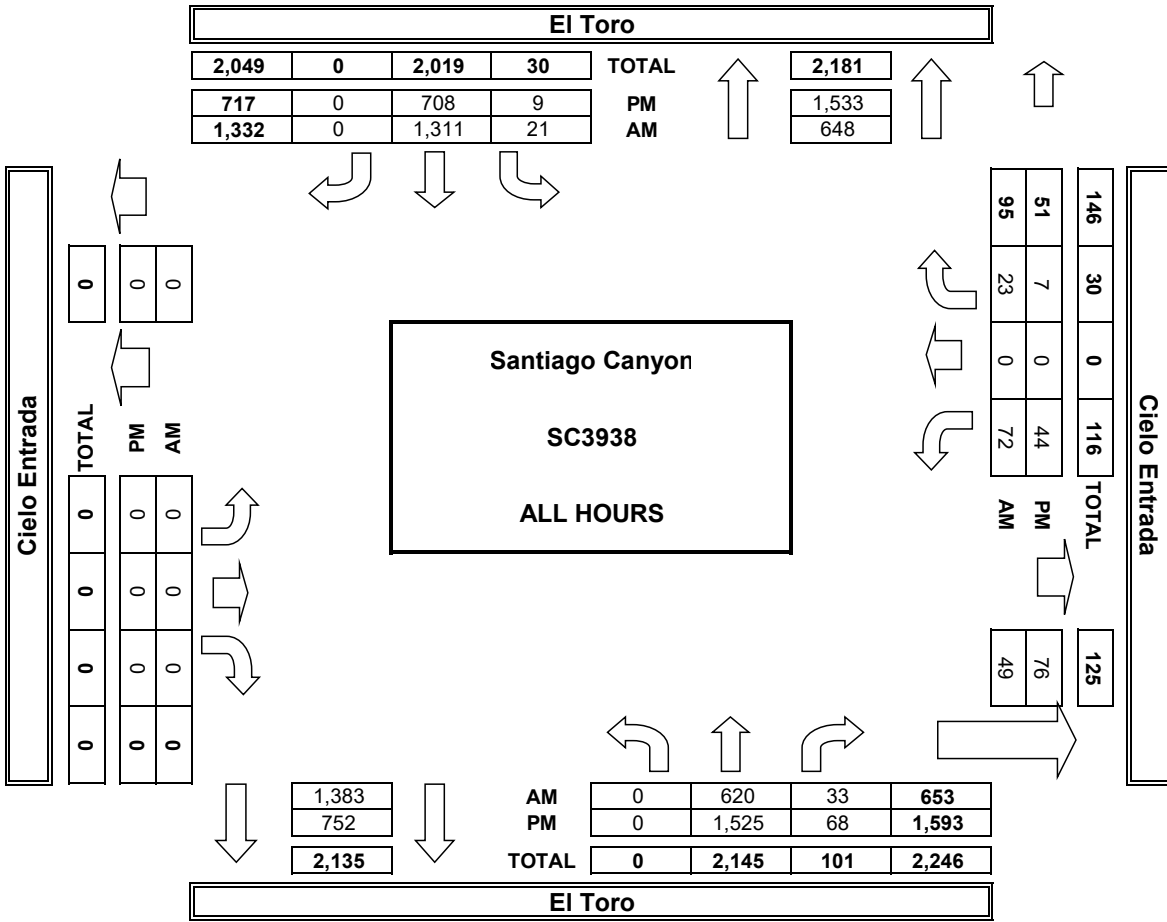
AimTD LLC
TURNING MOVEMENT COUNTS



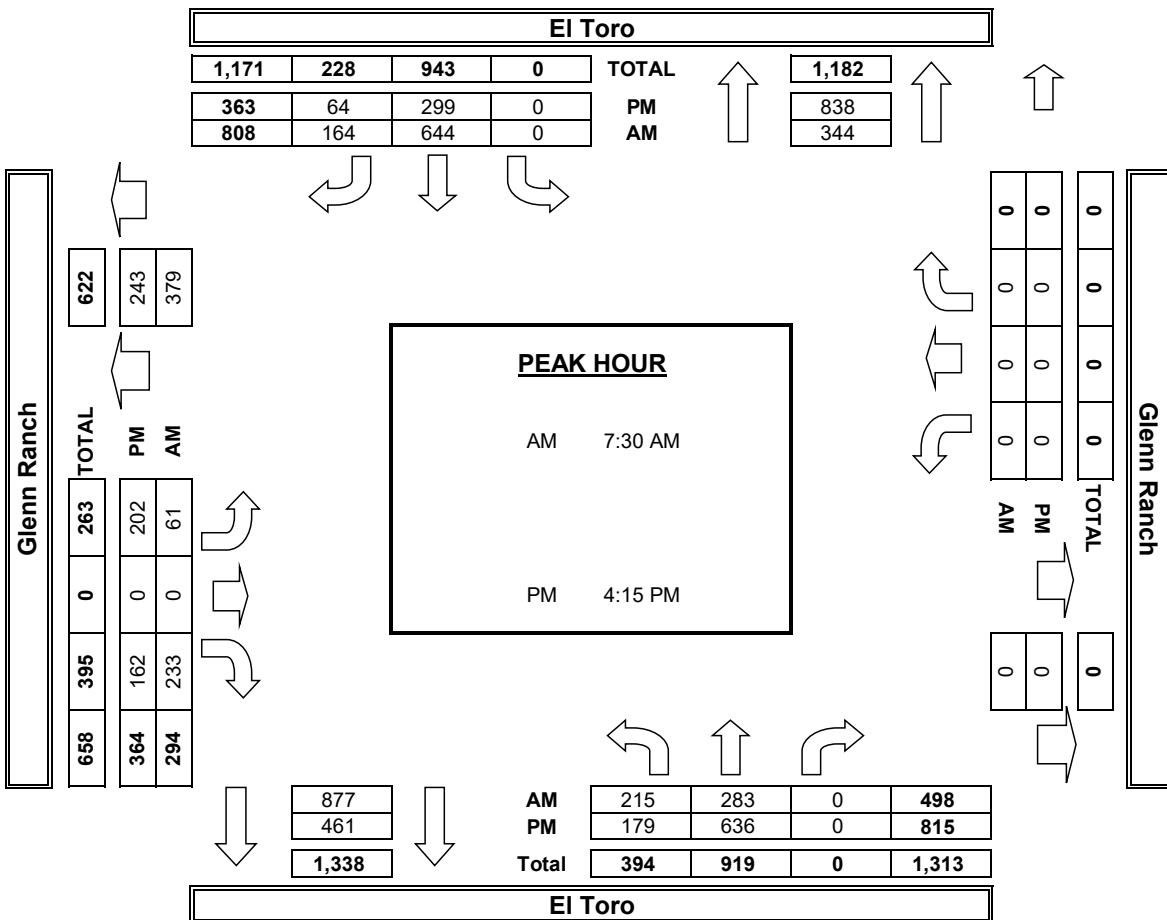
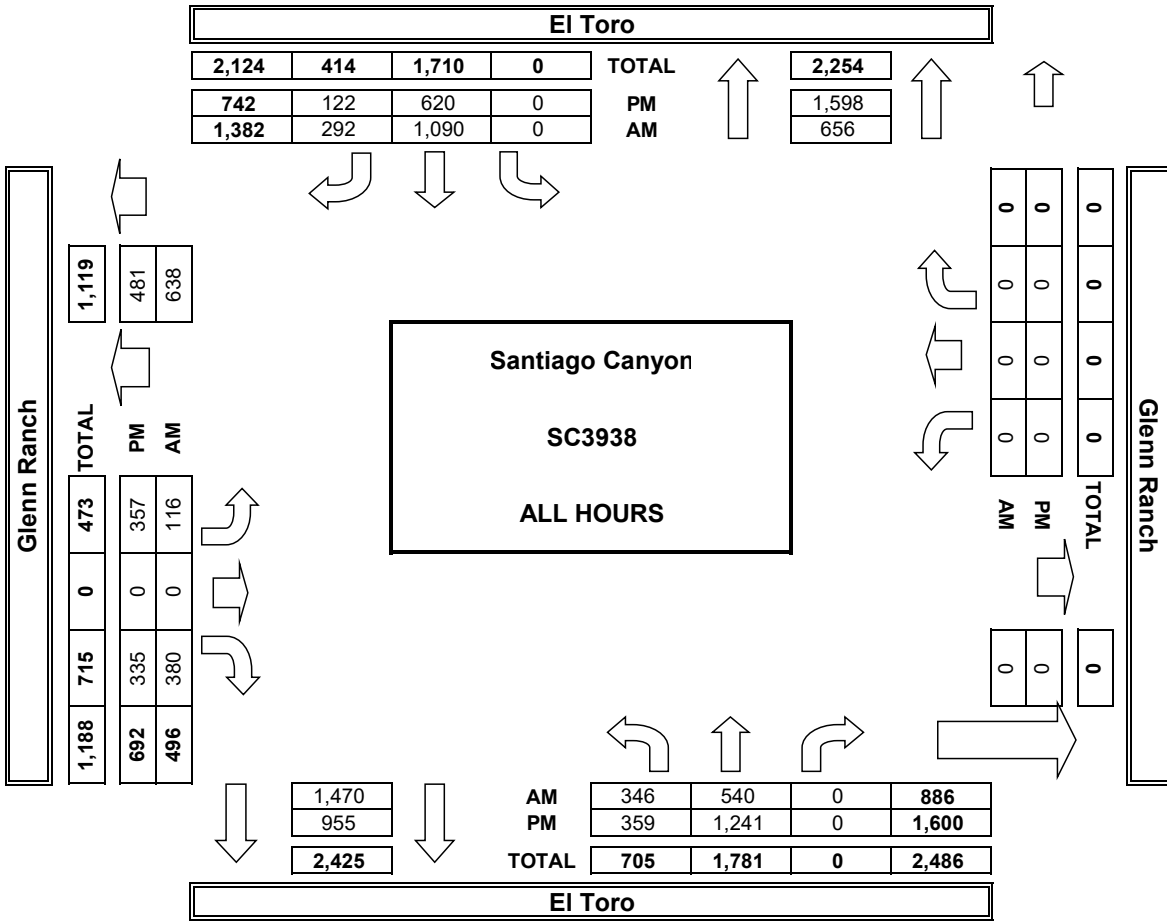
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TURNING MOVEMENT COUNTS



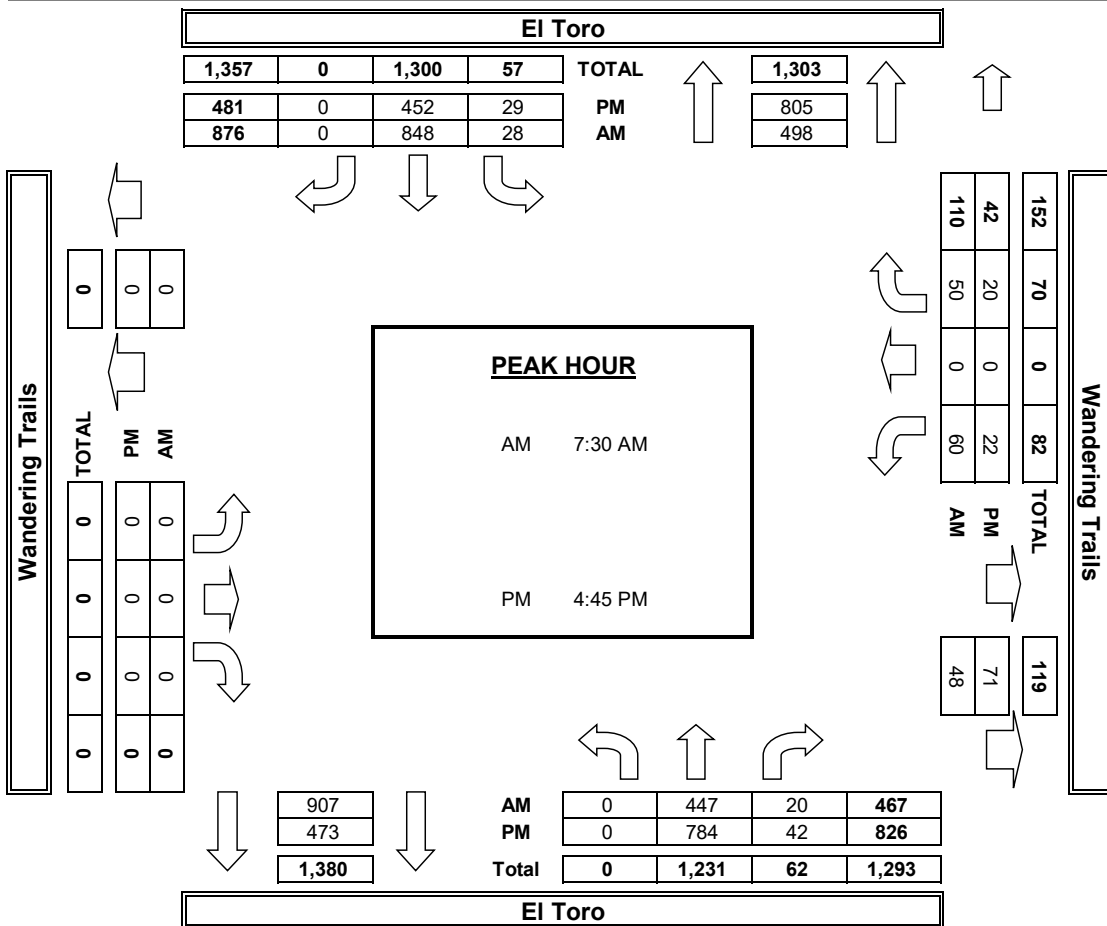
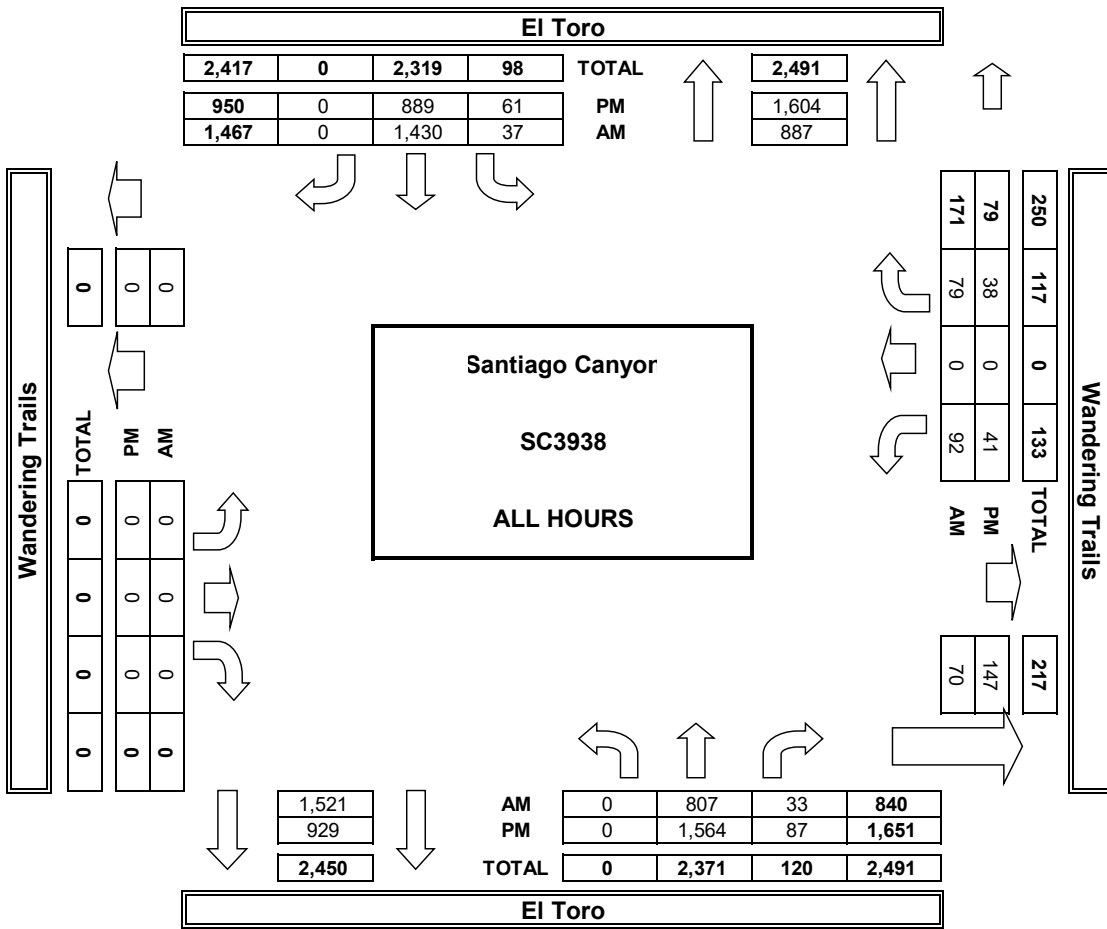
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TURNING MOVEMENT COUNTS



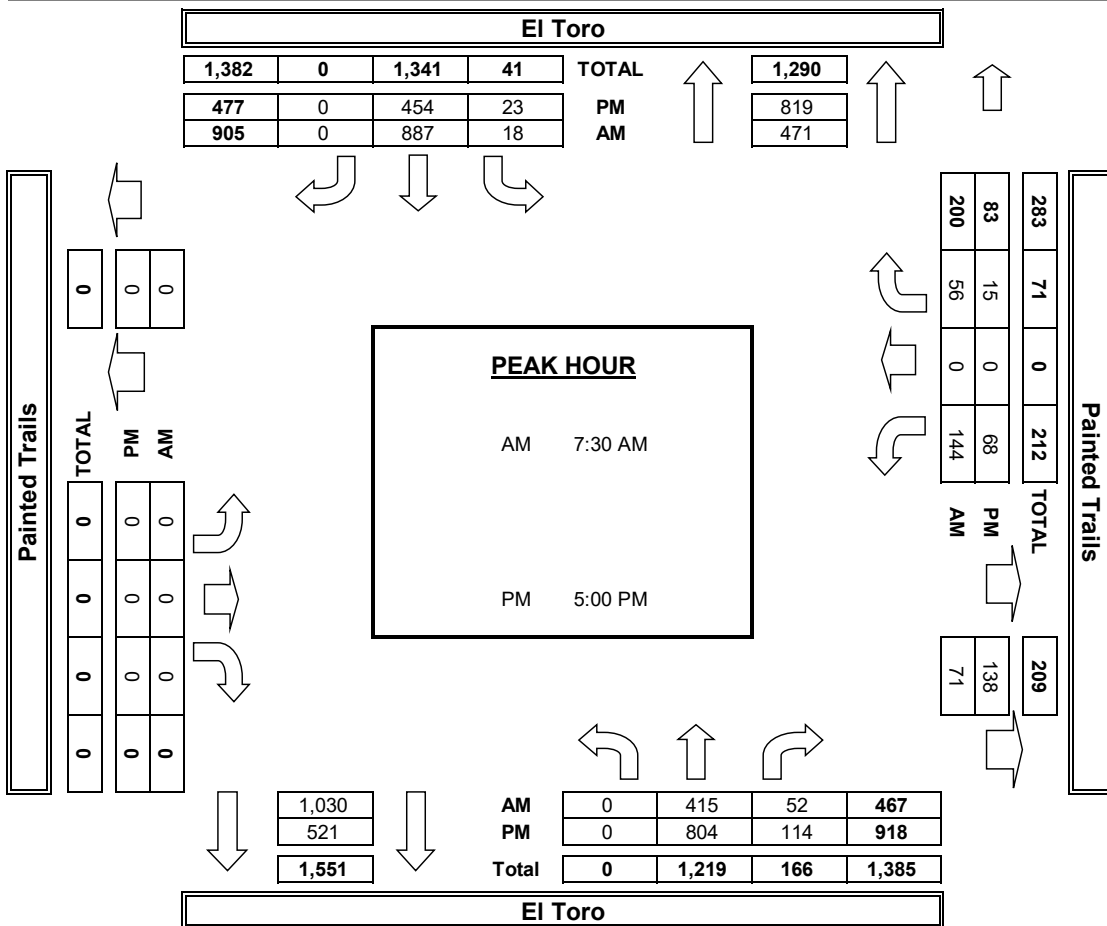
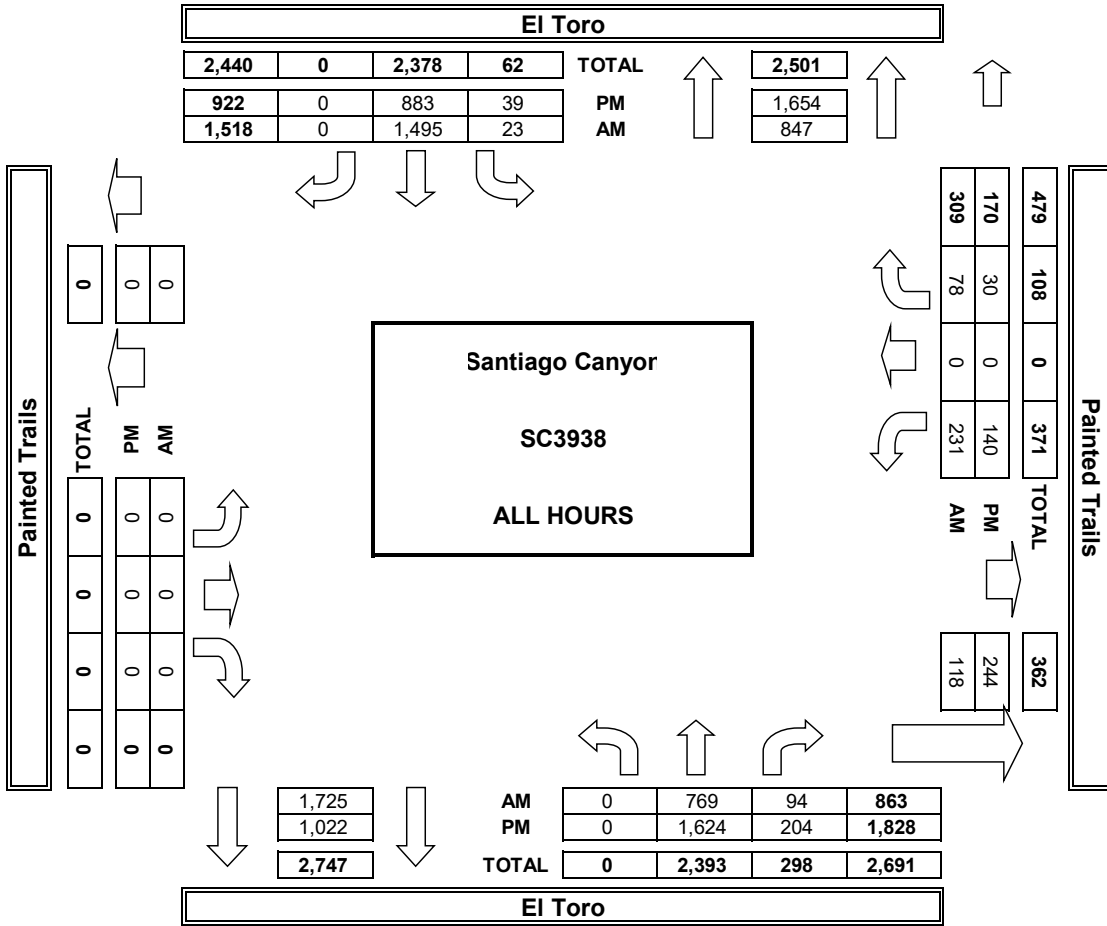
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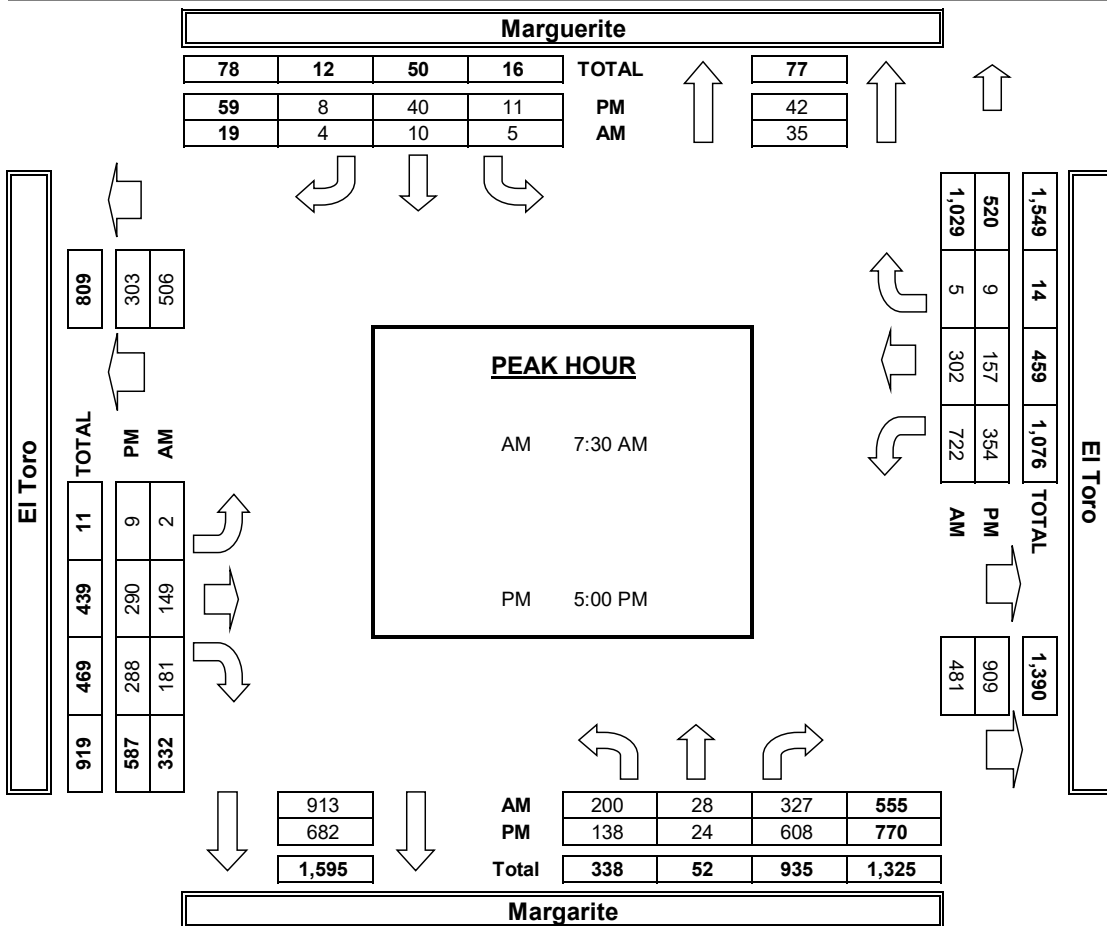
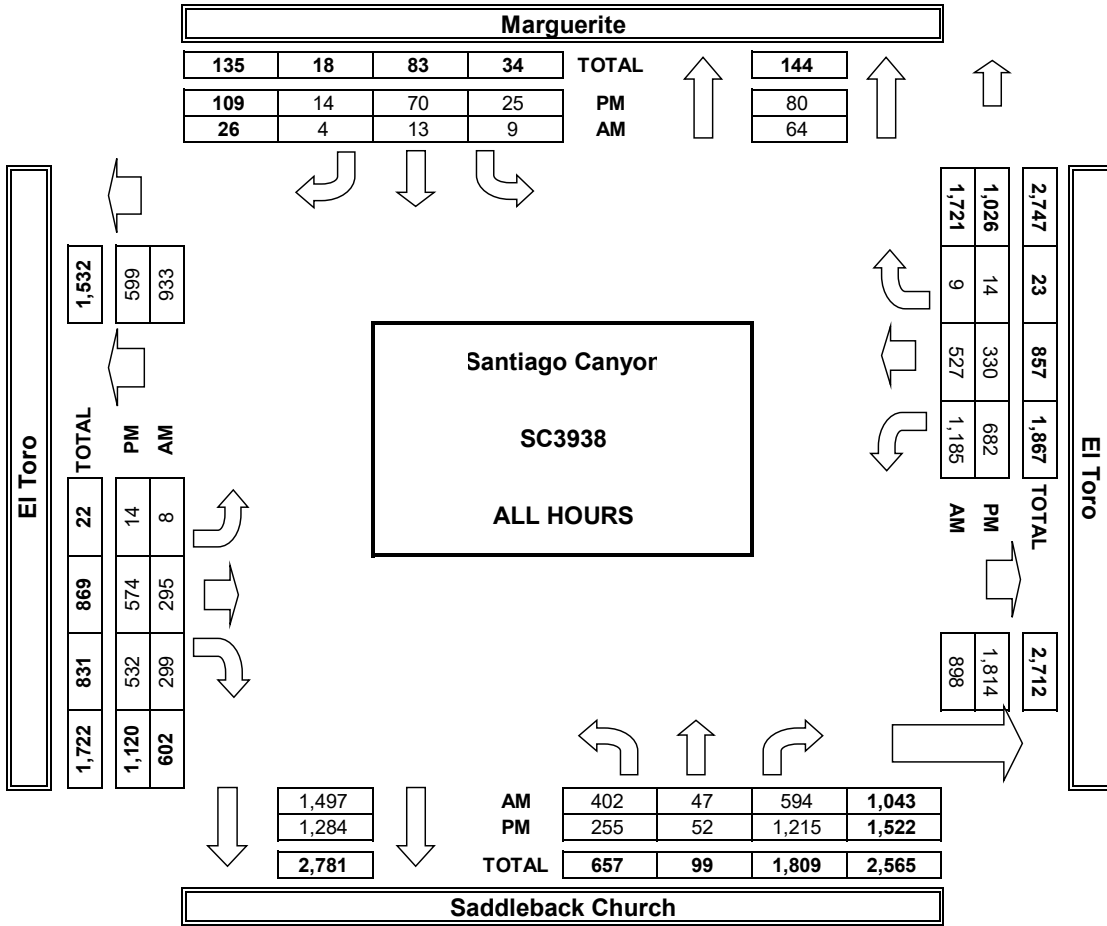
AimTD LLC
TURNING MOVEMENT COUNTS



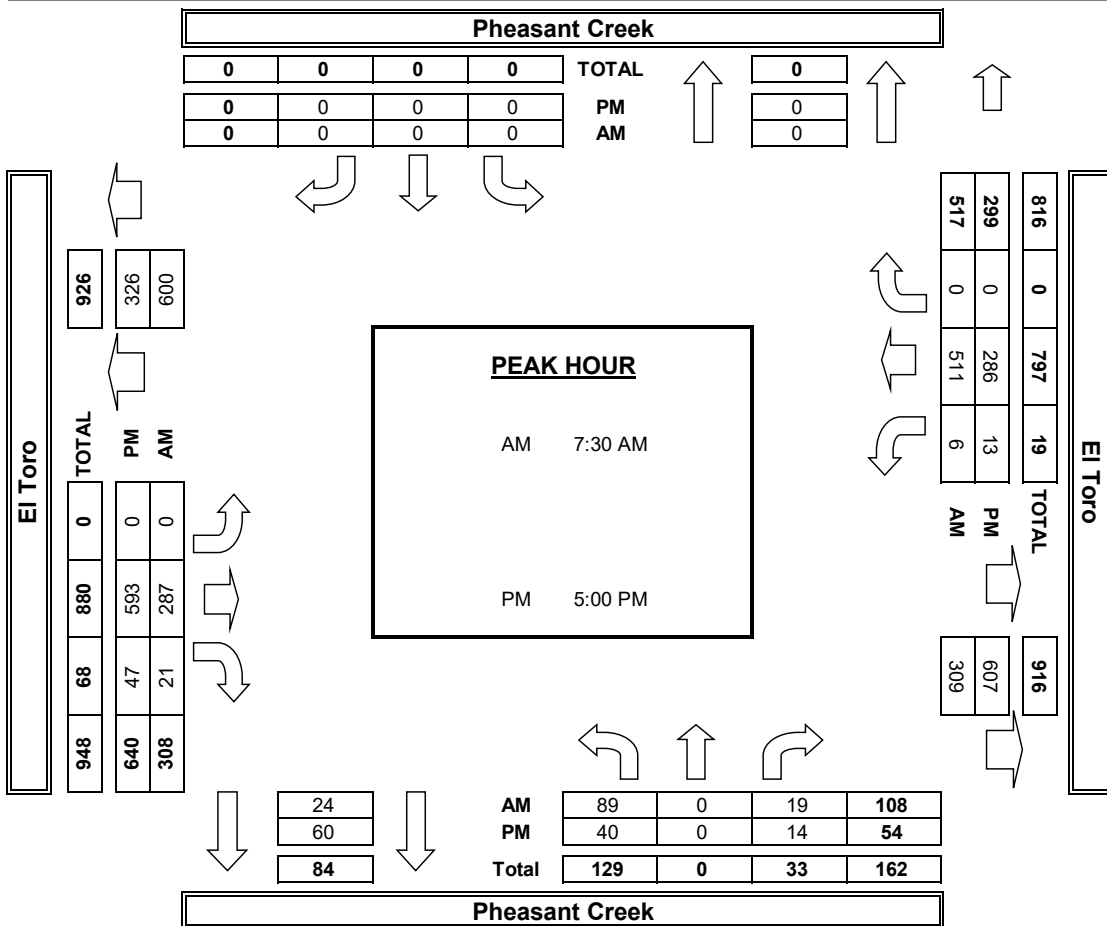
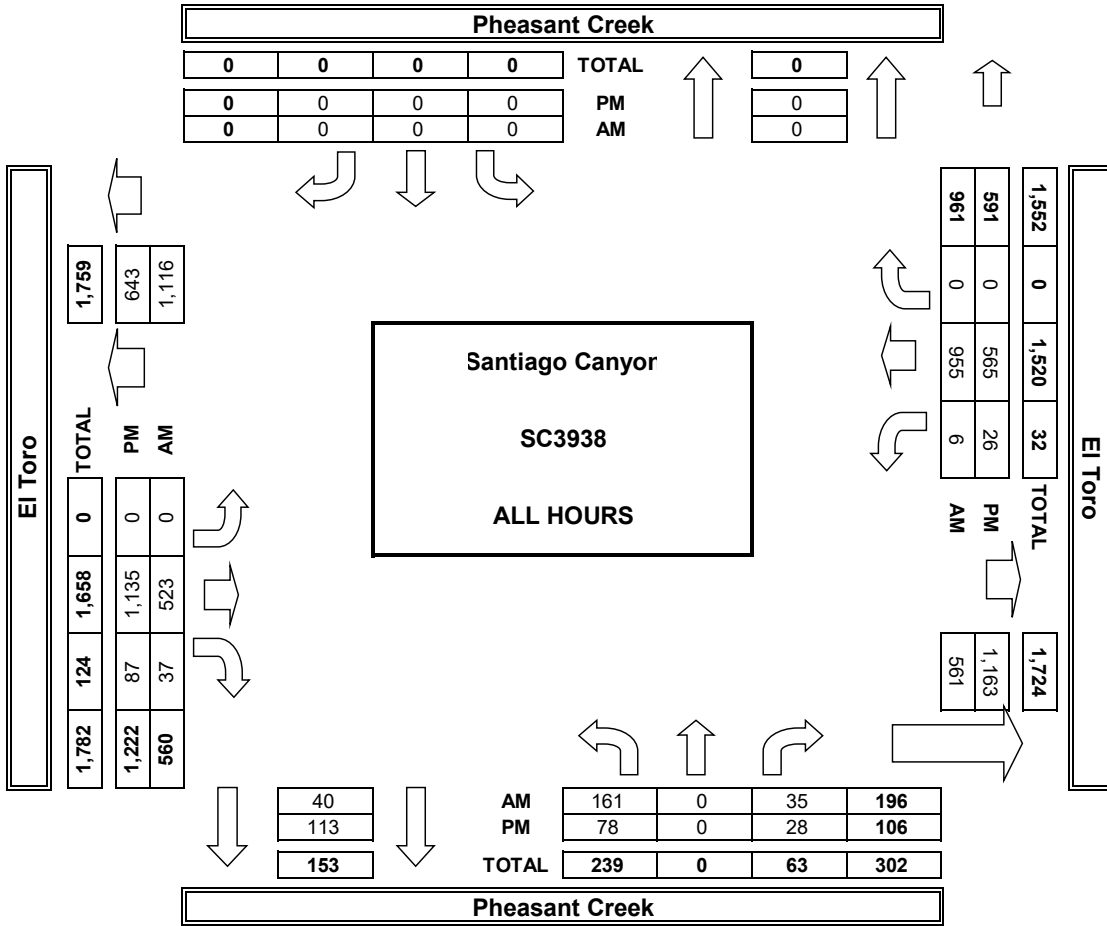
AimTD LLC
TURNING MOVEMENT COUNTS



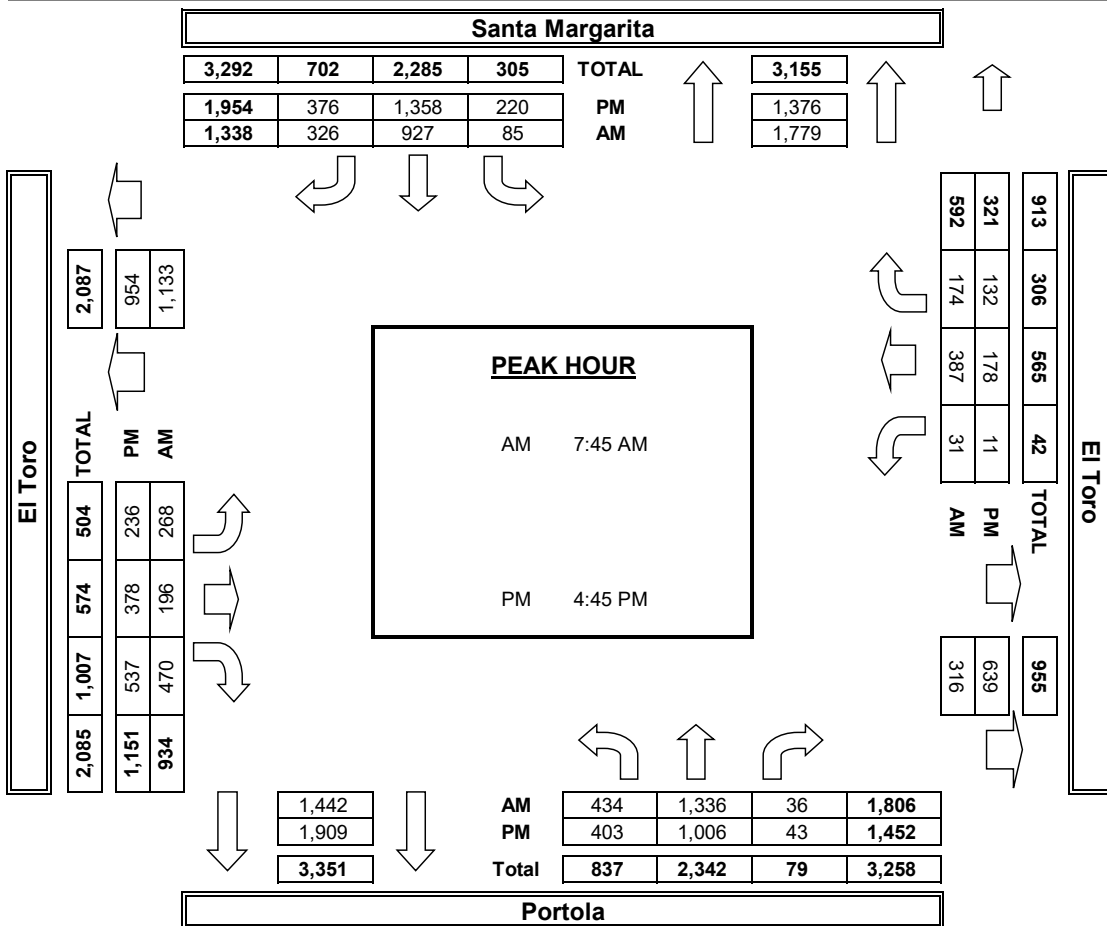
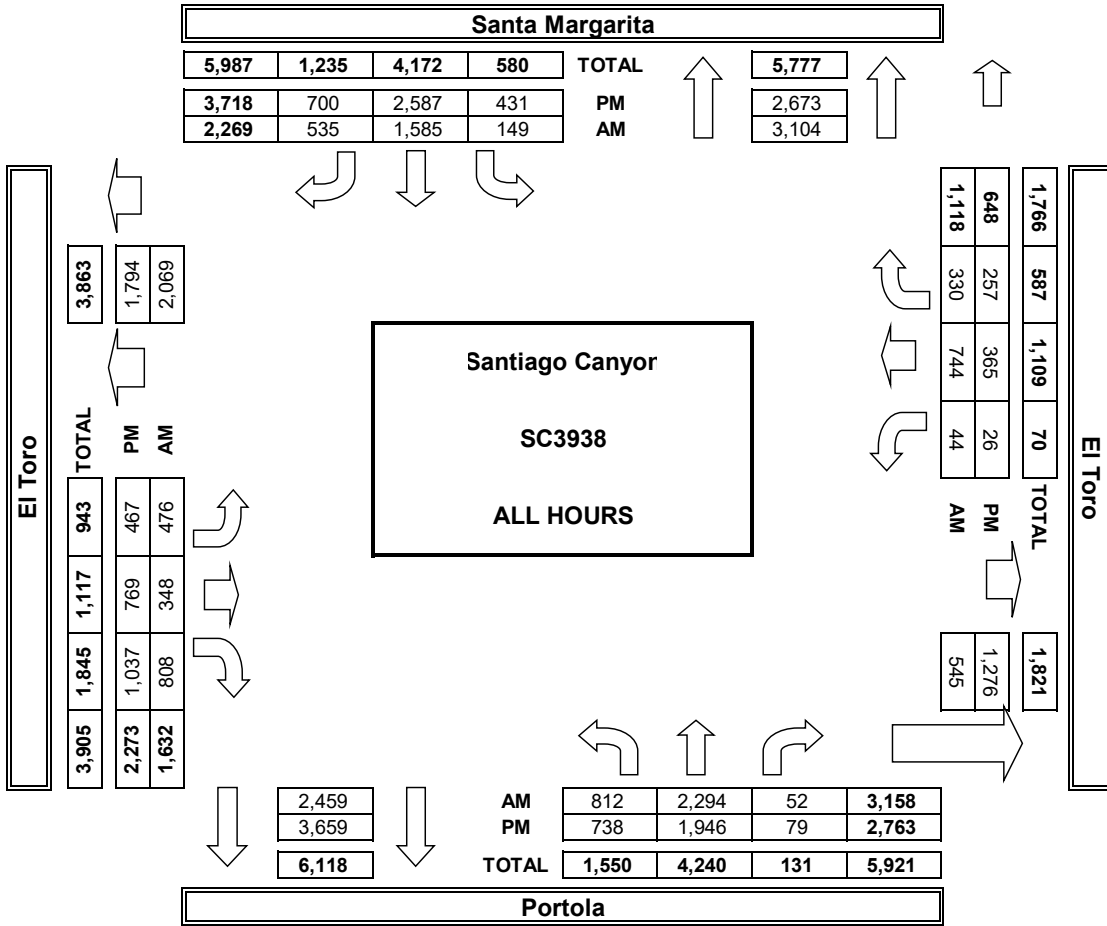
AimTD LLC
TURNING MOVEMENT COUNTS



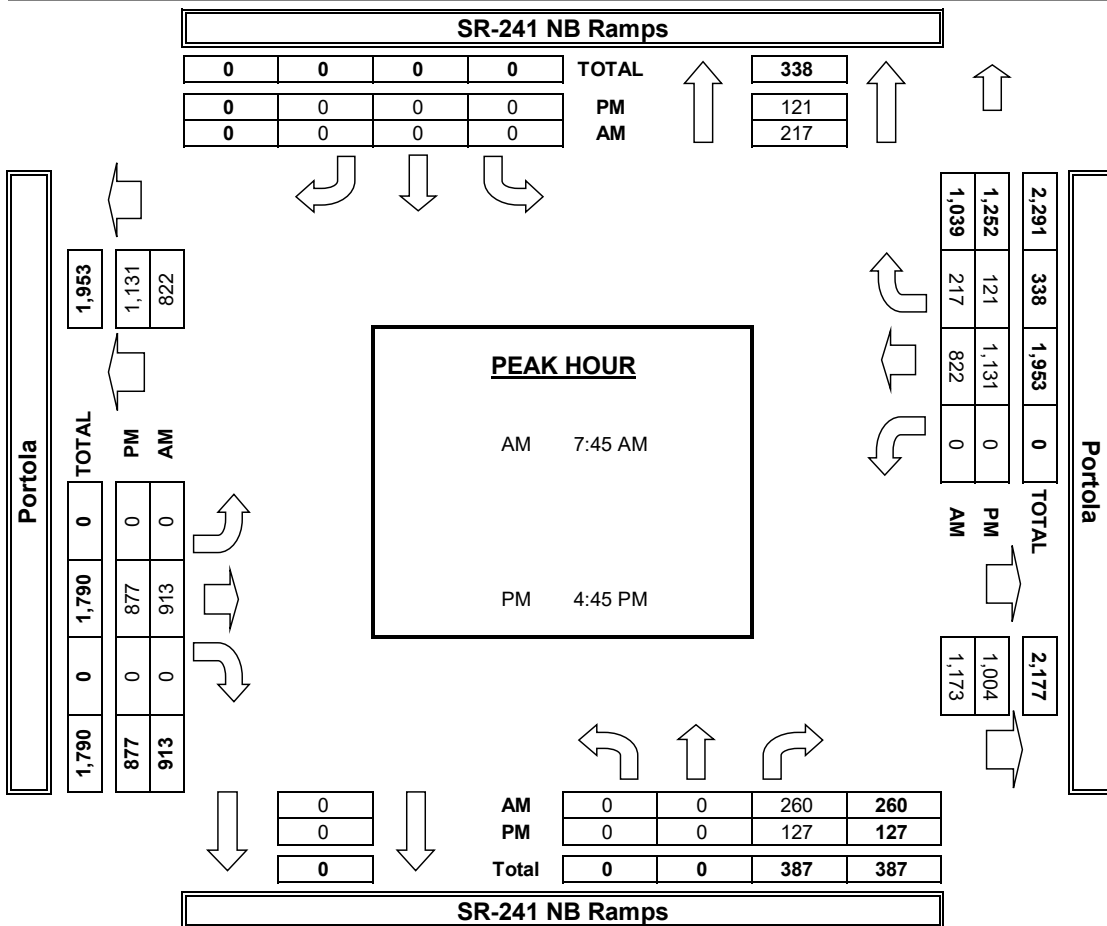
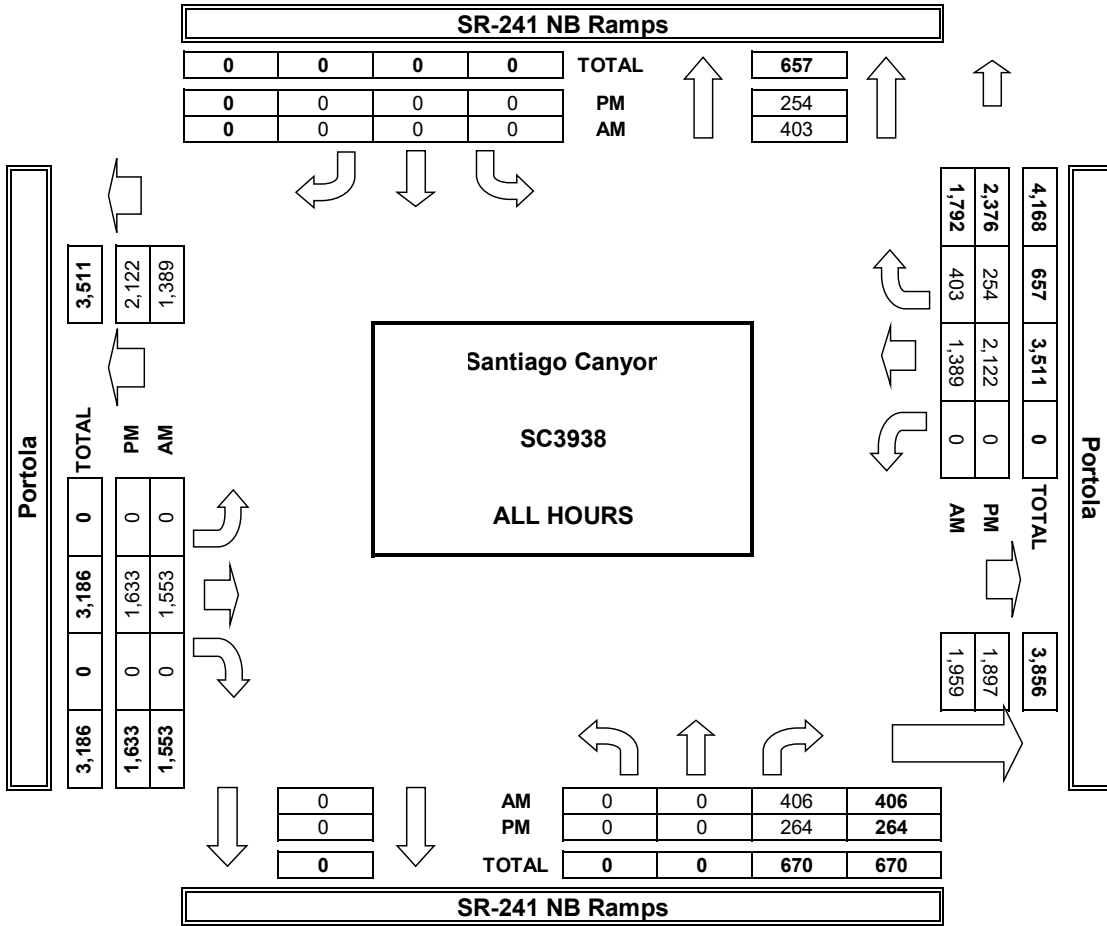
AimTD LLC
TURNING MOVEMENT COUNTS



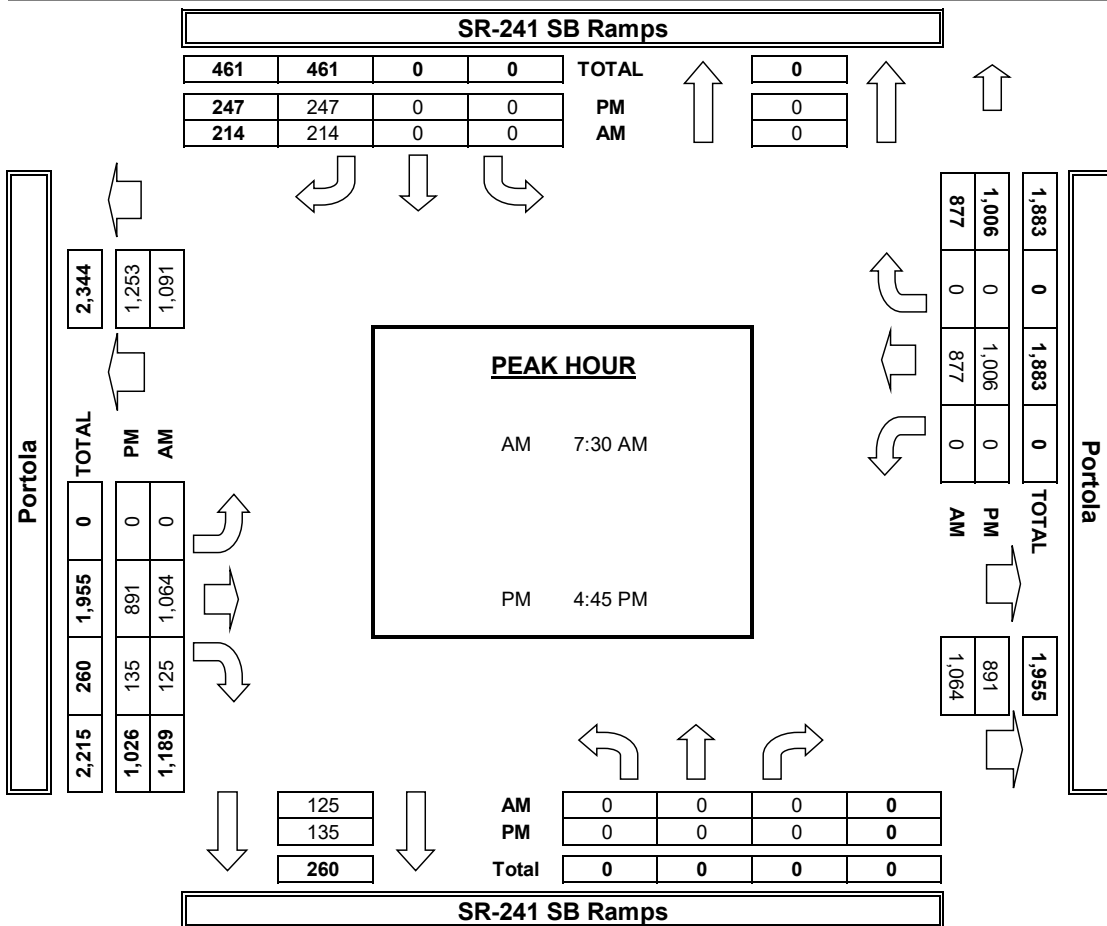
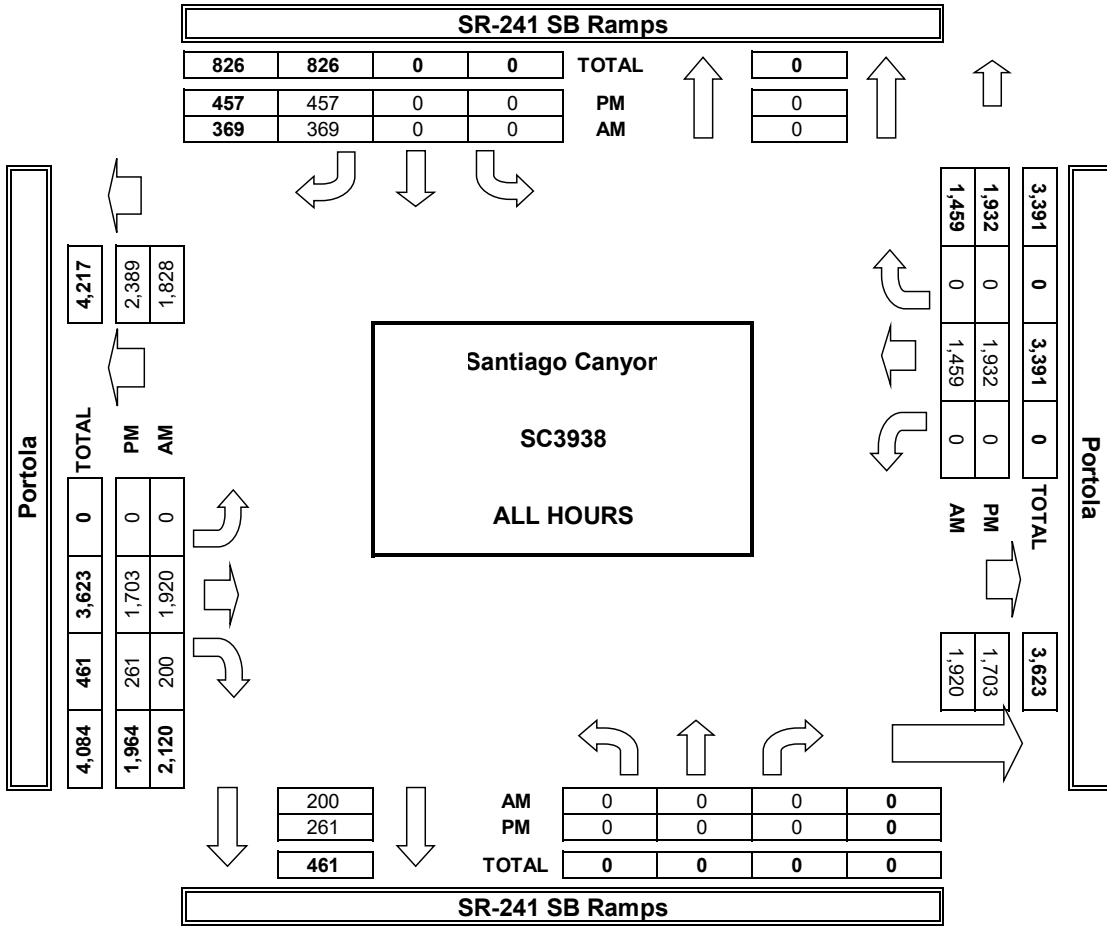
AimTD LLC
TURNING MOVEMENT COUNTS



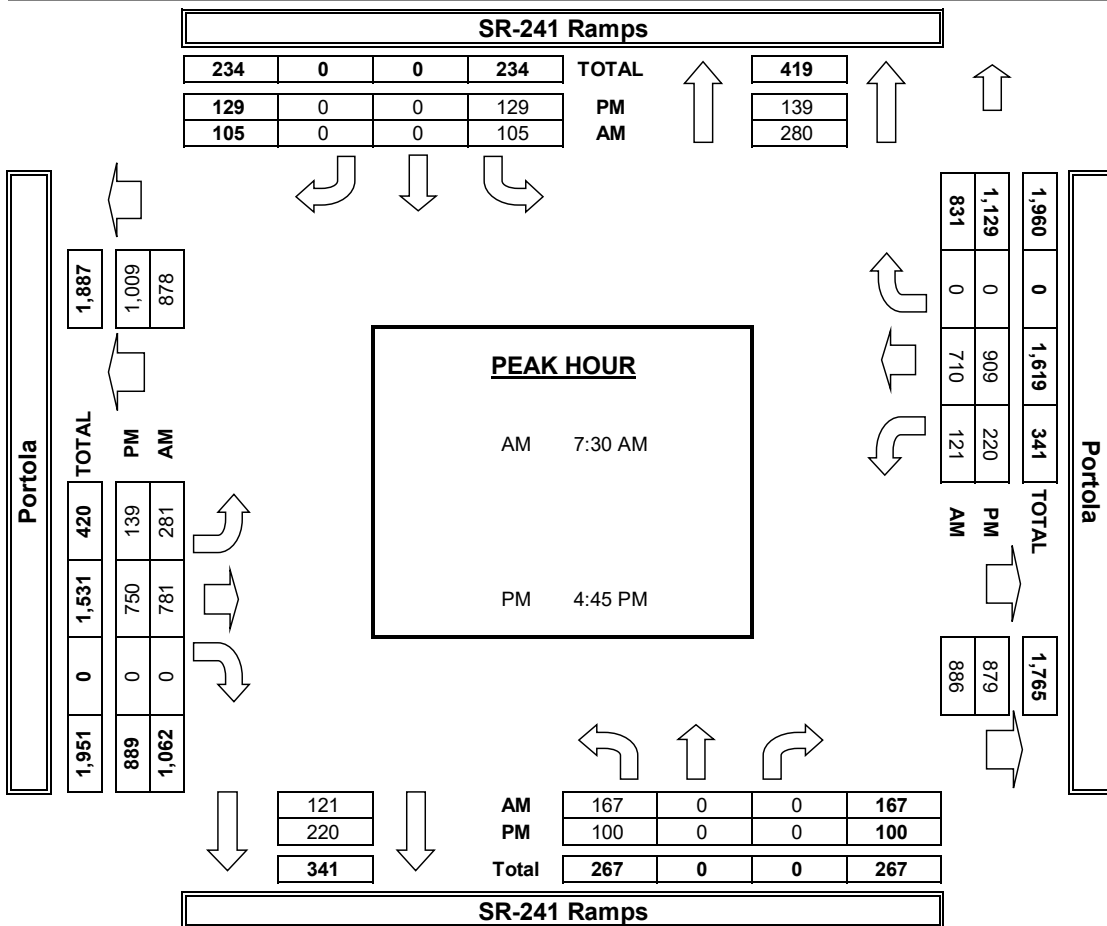
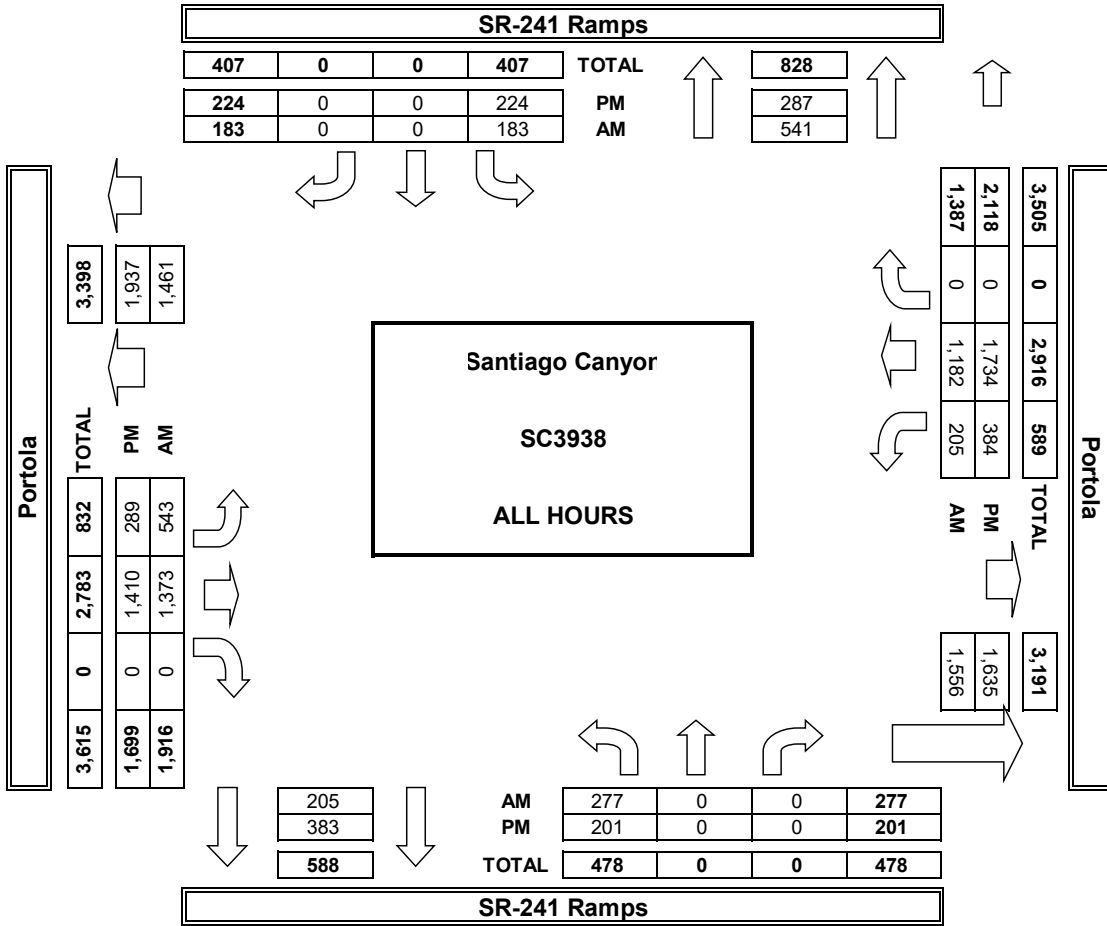
AimTD LLC
TURNING MOVEMENT COUNTS



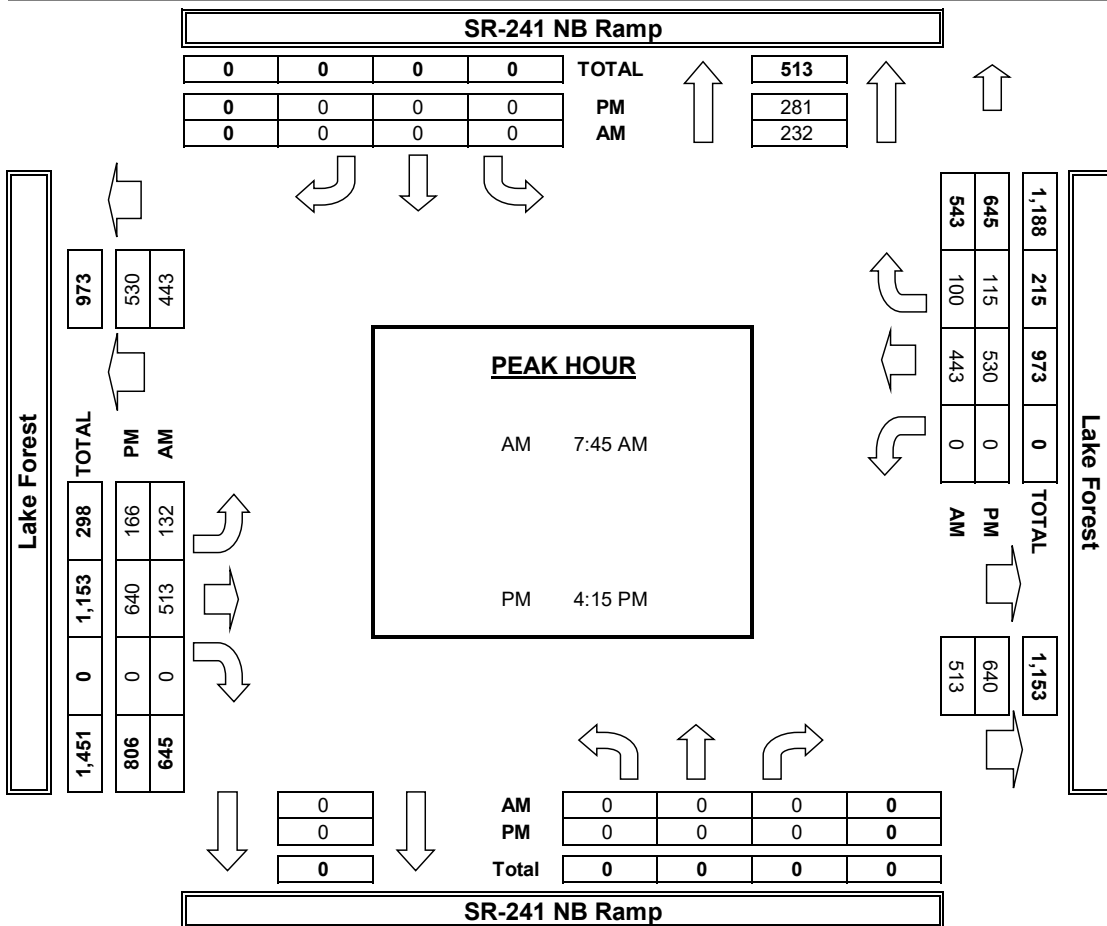
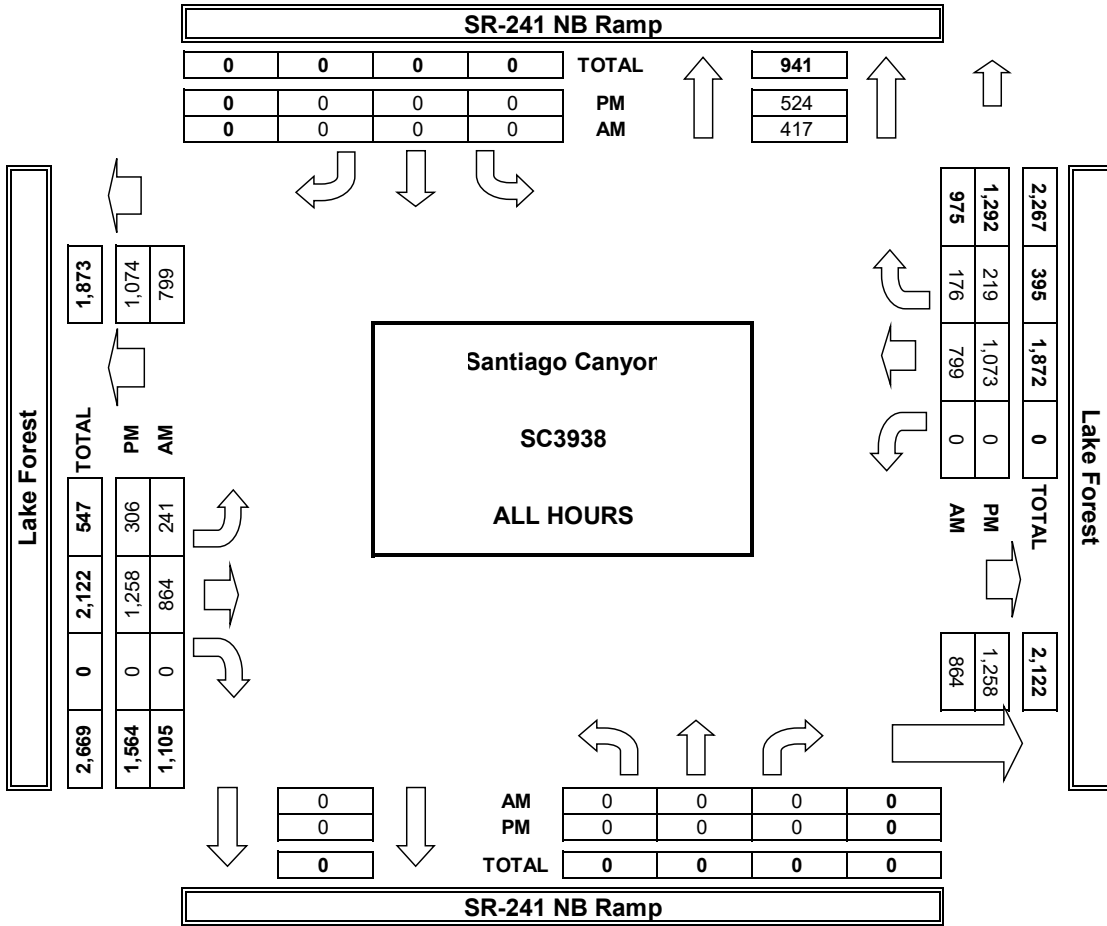
AimTD LLC
TURNING MOVEMENT COUNTS



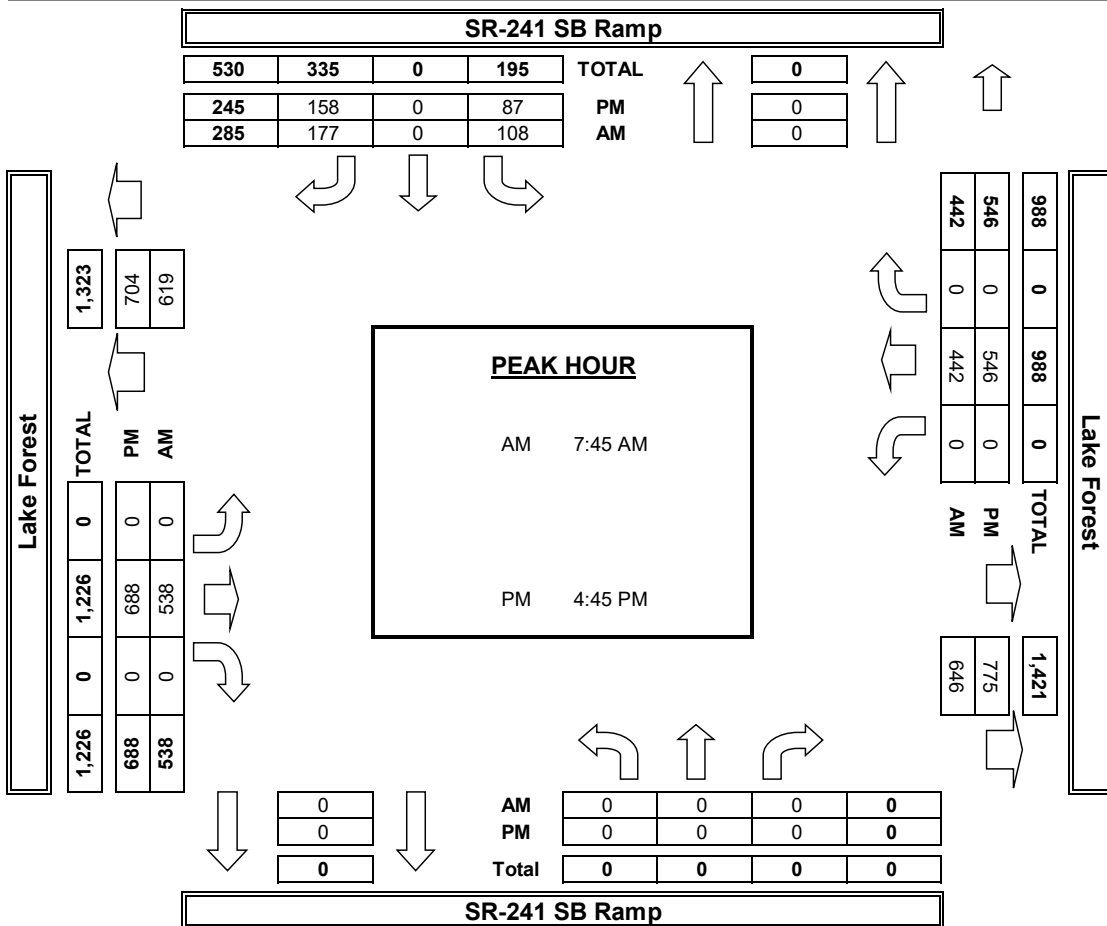
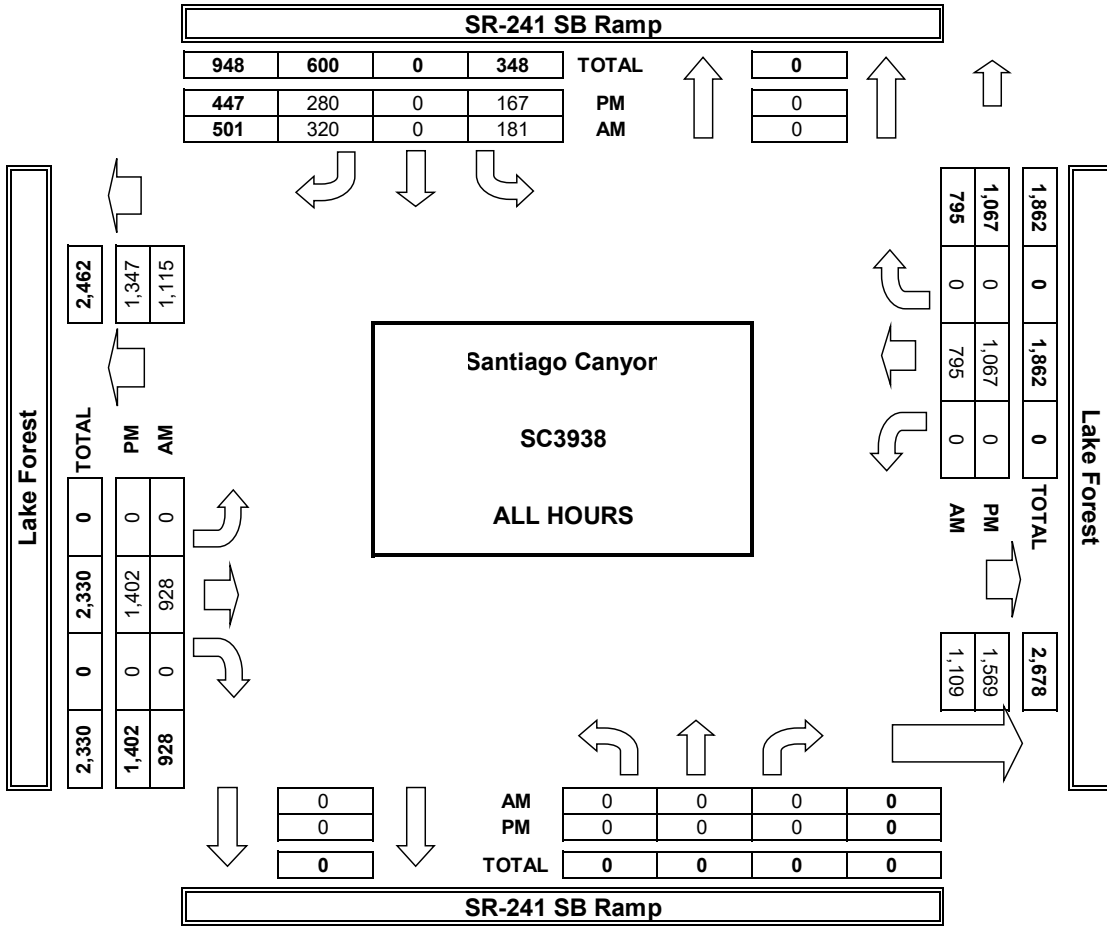
AimTD LLC
TURNING MOVEMENT COUNTS



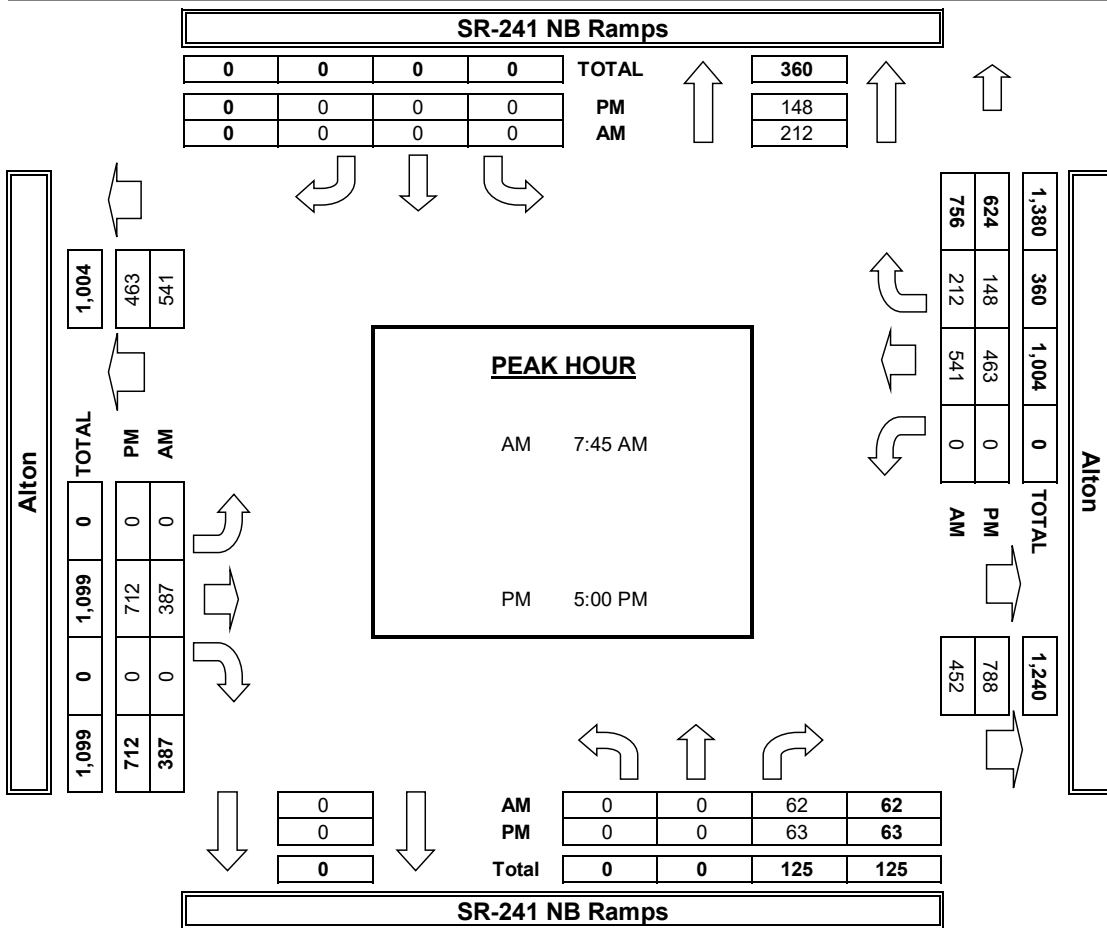
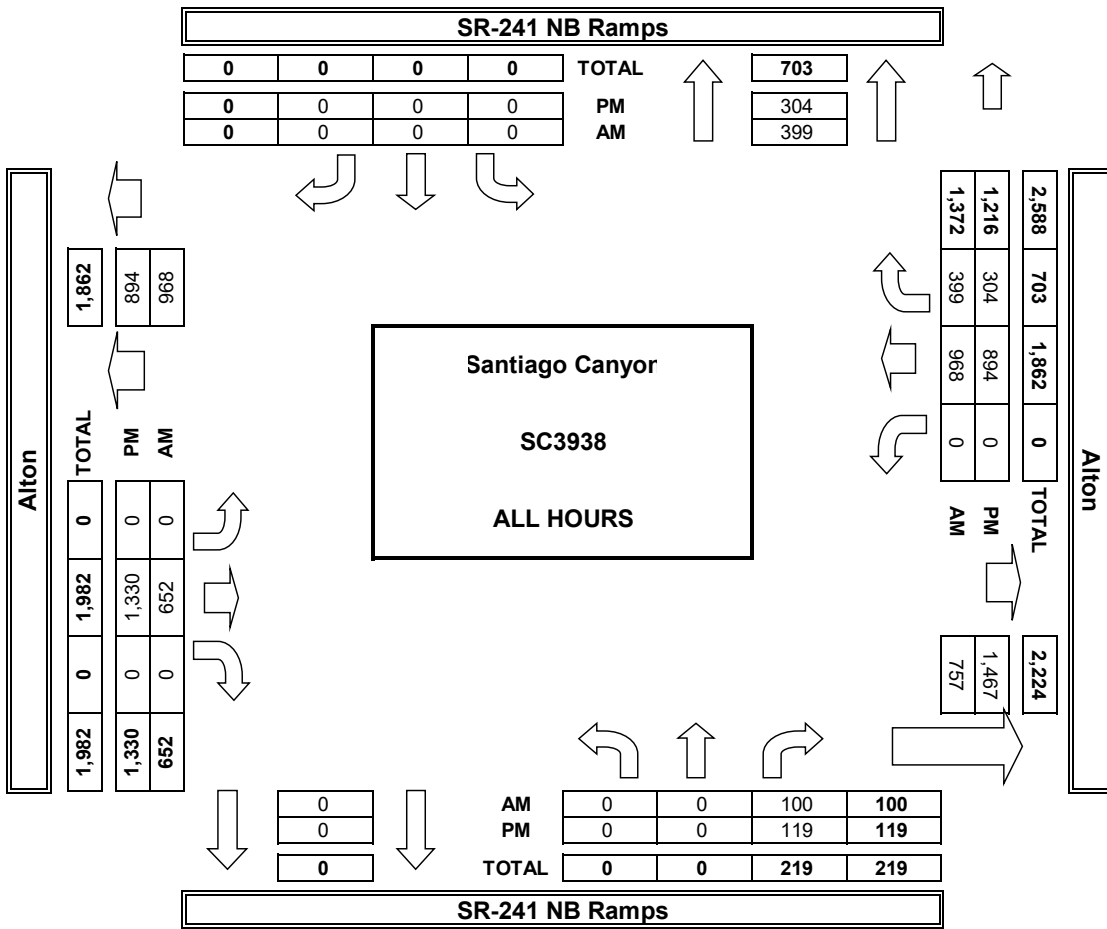
AimTD LLC
TURNING MOVEMENT COUNTS



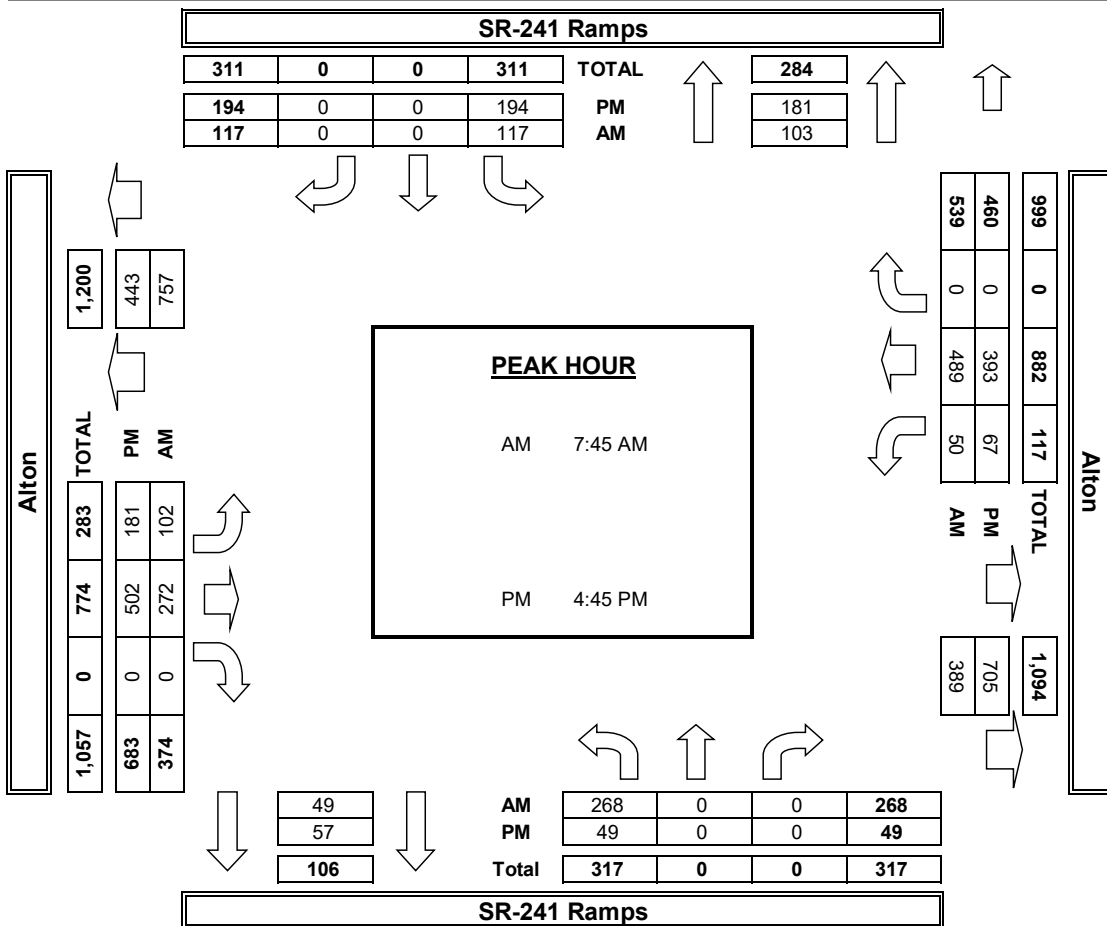
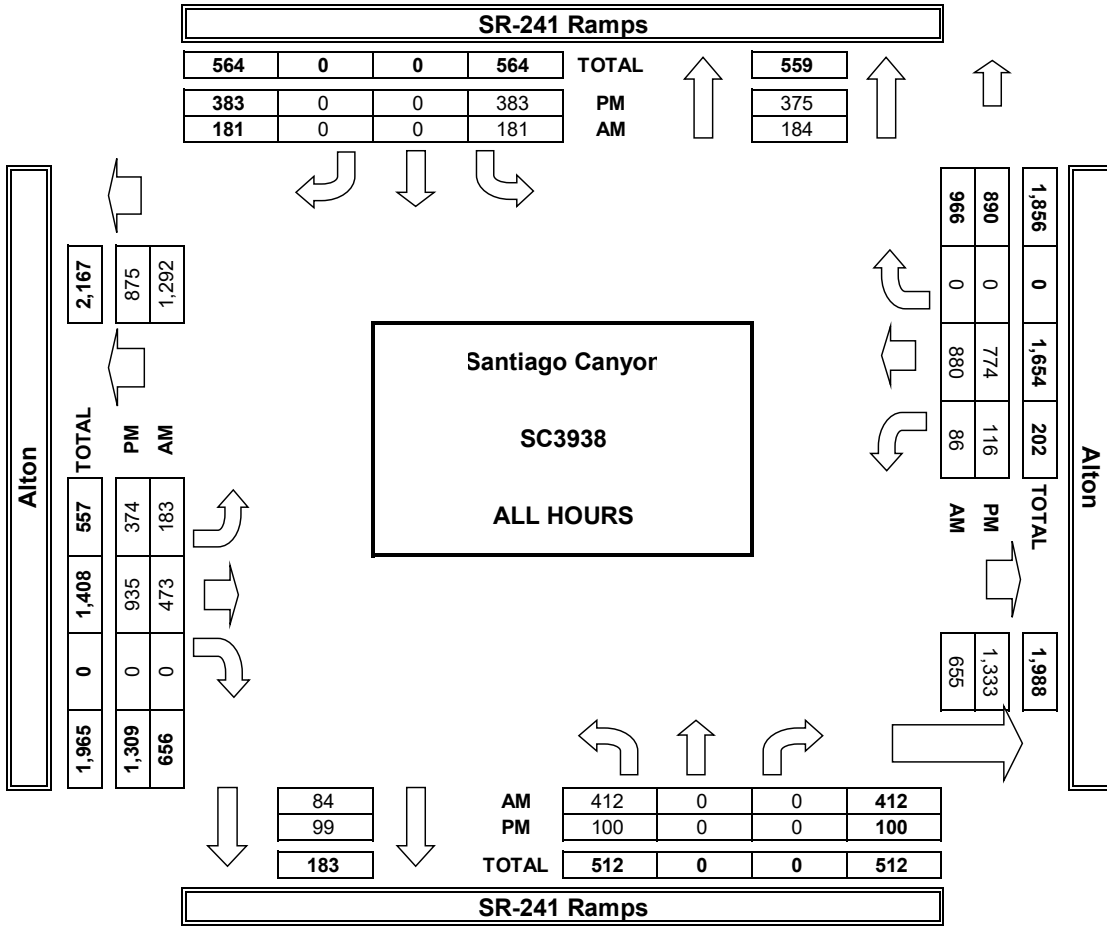
AimTD LLC
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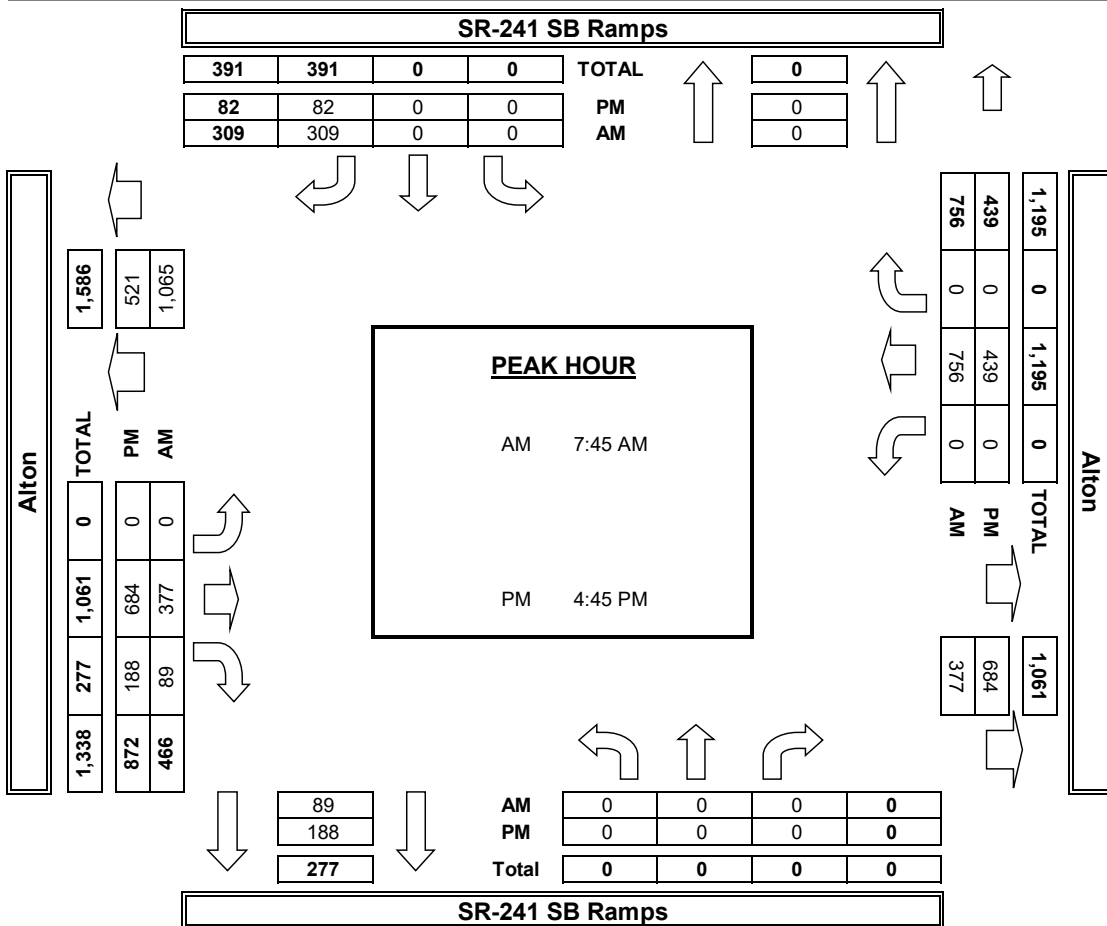
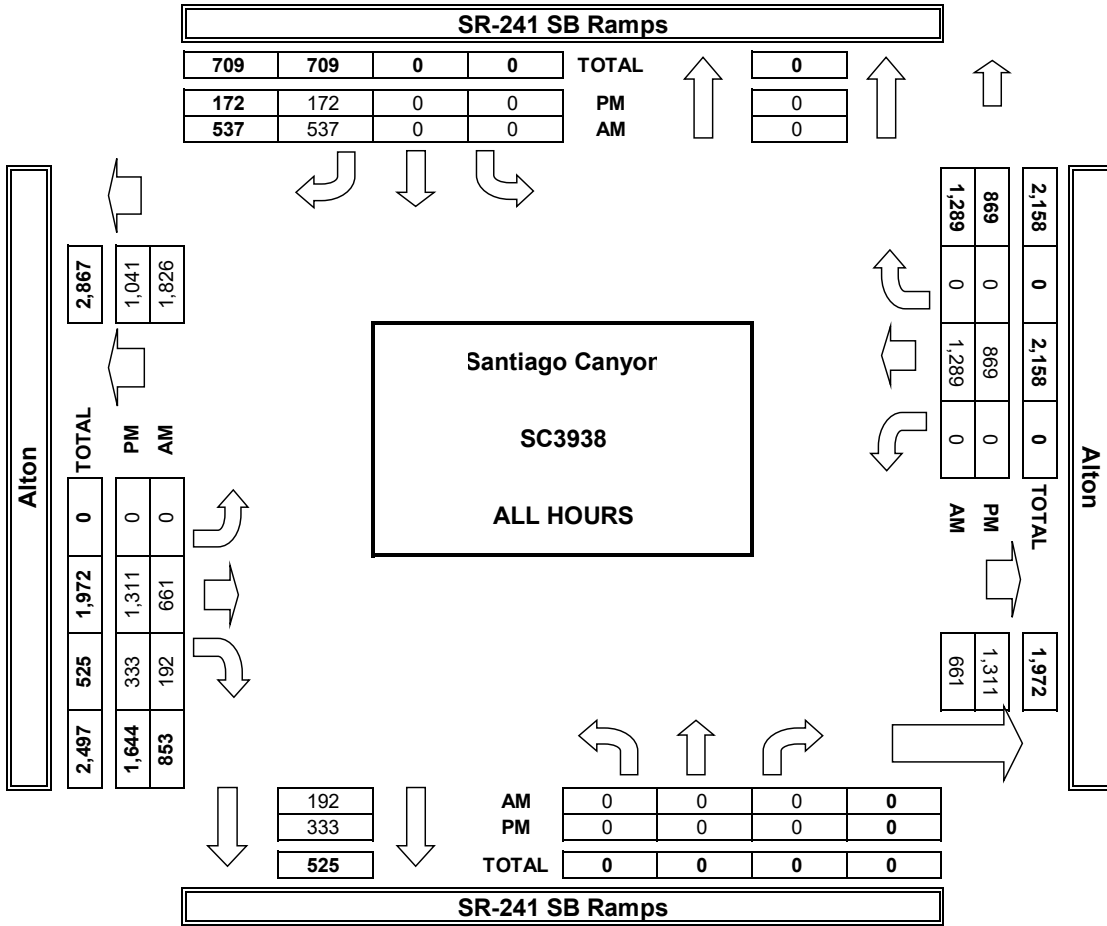
AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS

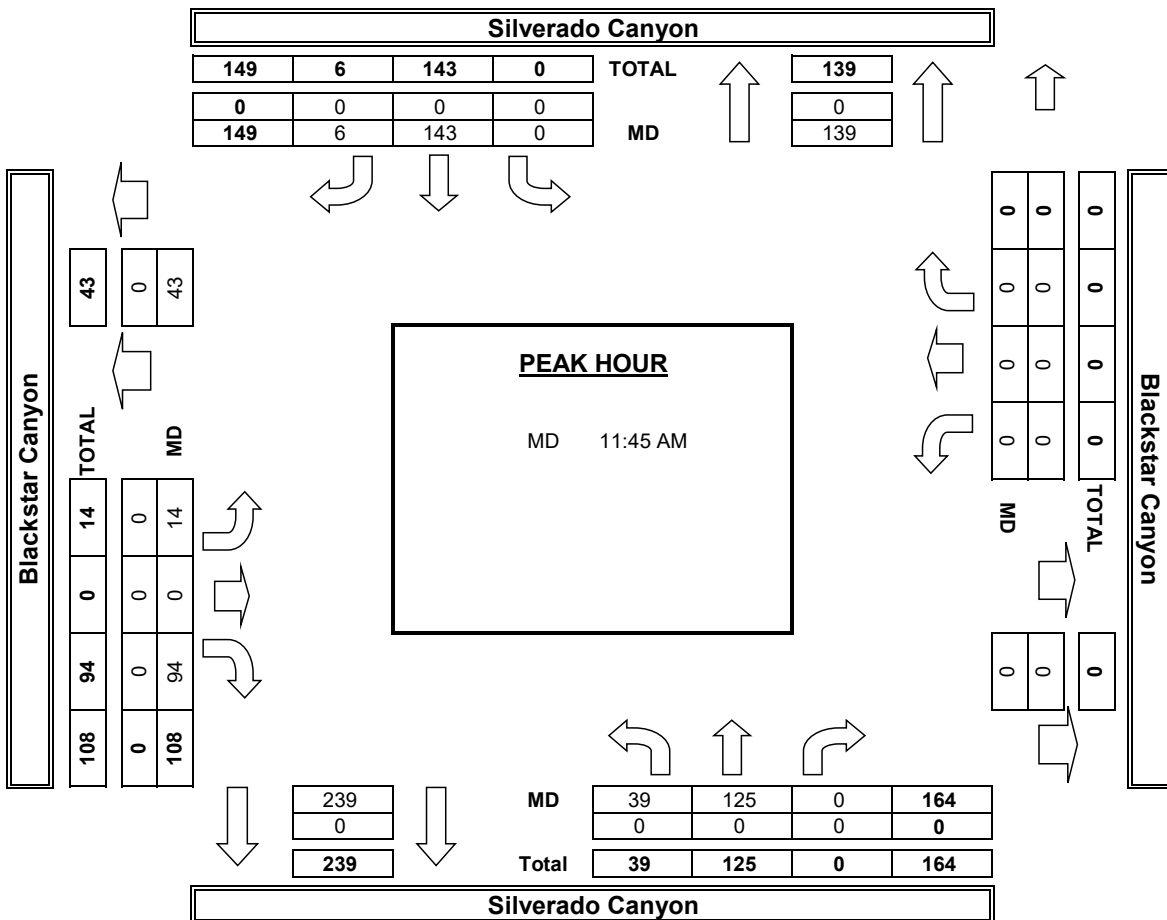
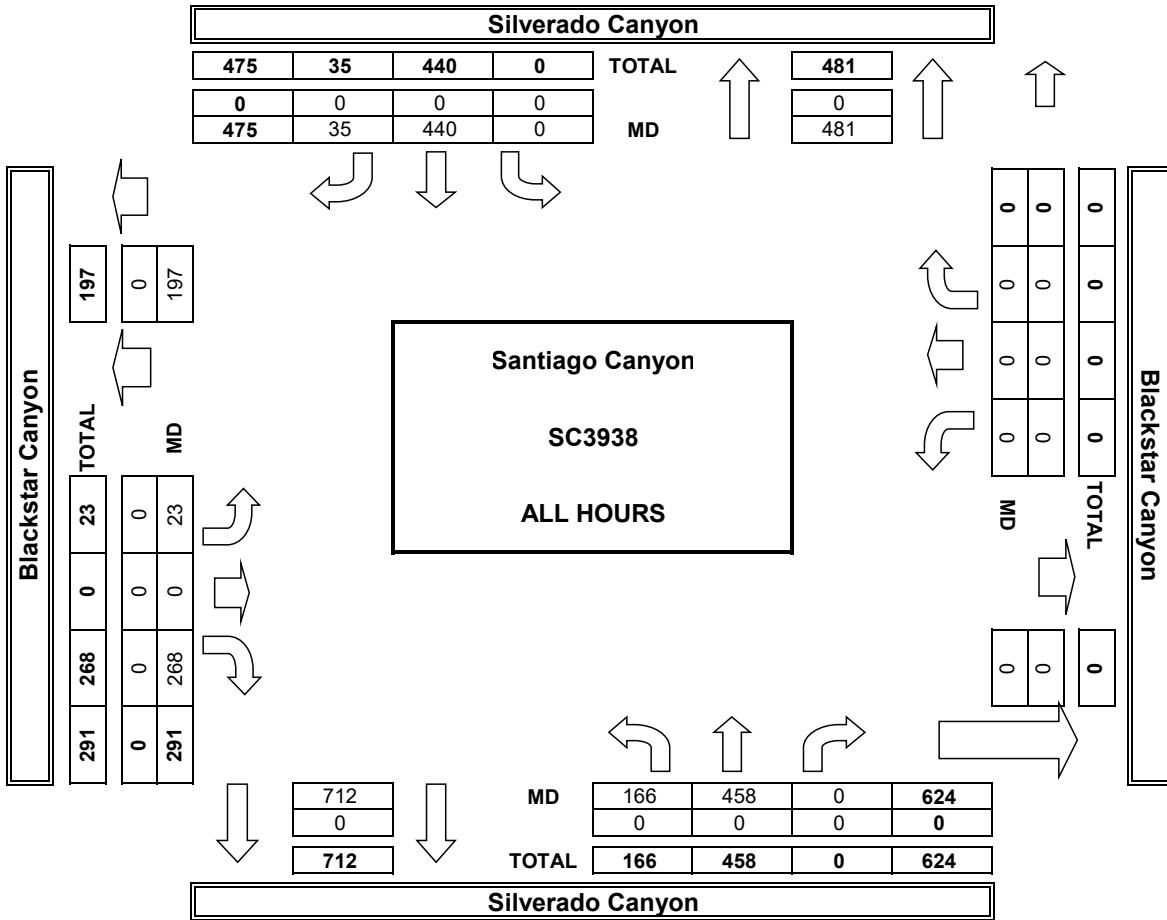




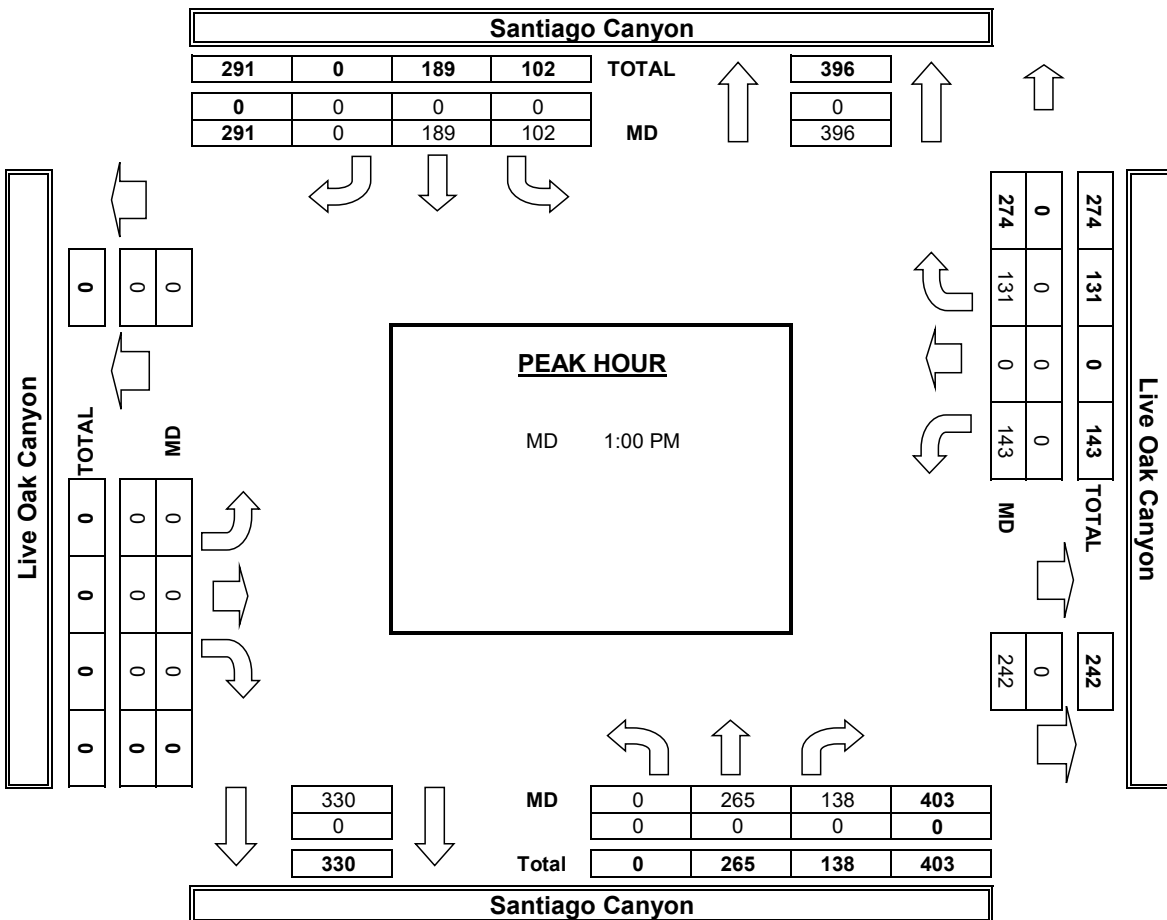
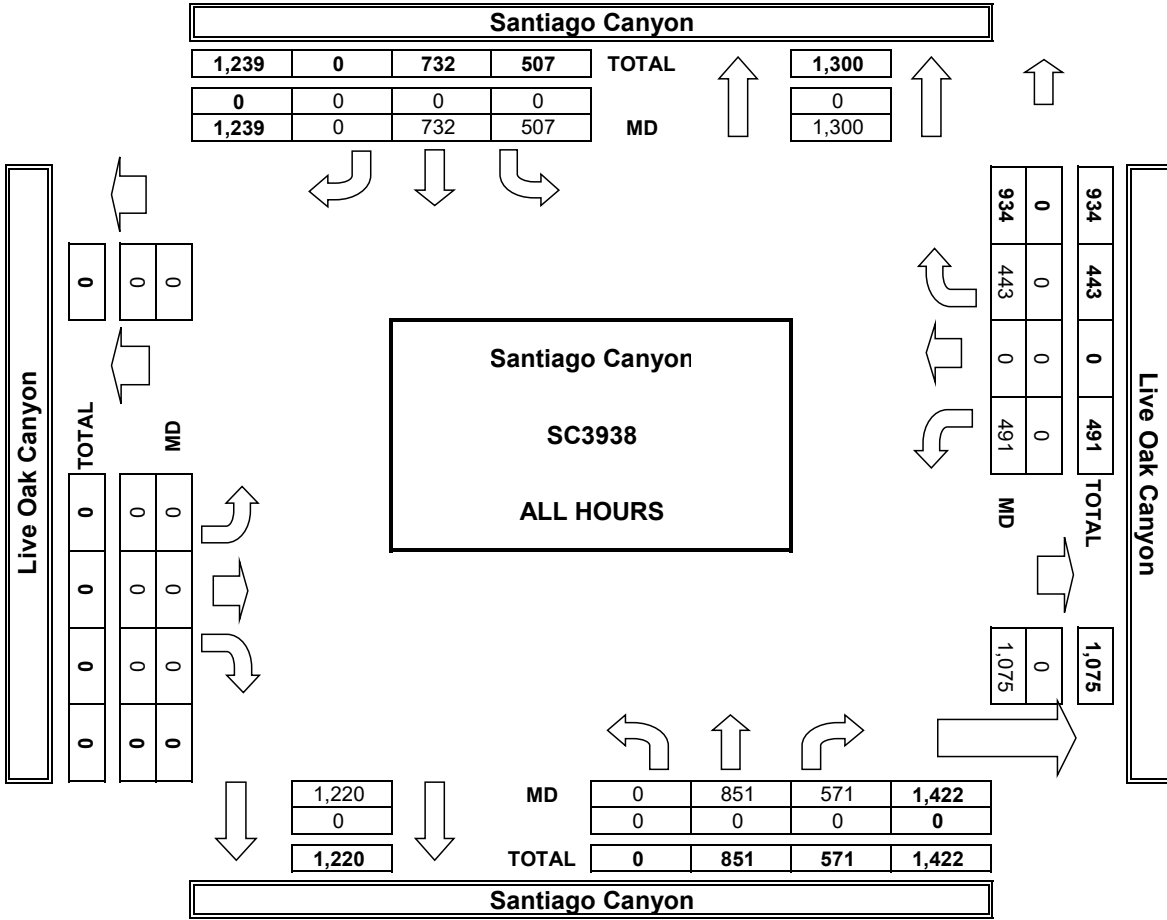
Appendix C

Weekend Intersection Turning Movement Counts

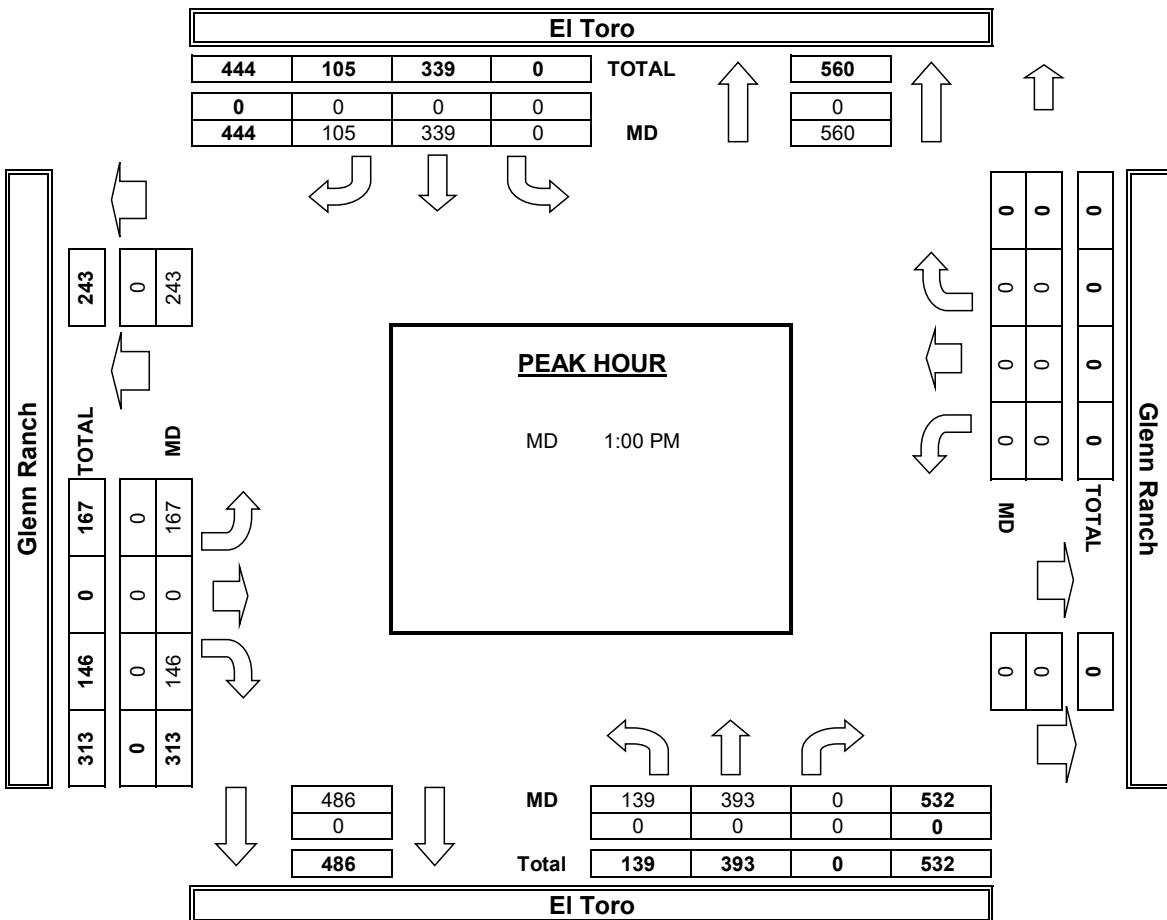
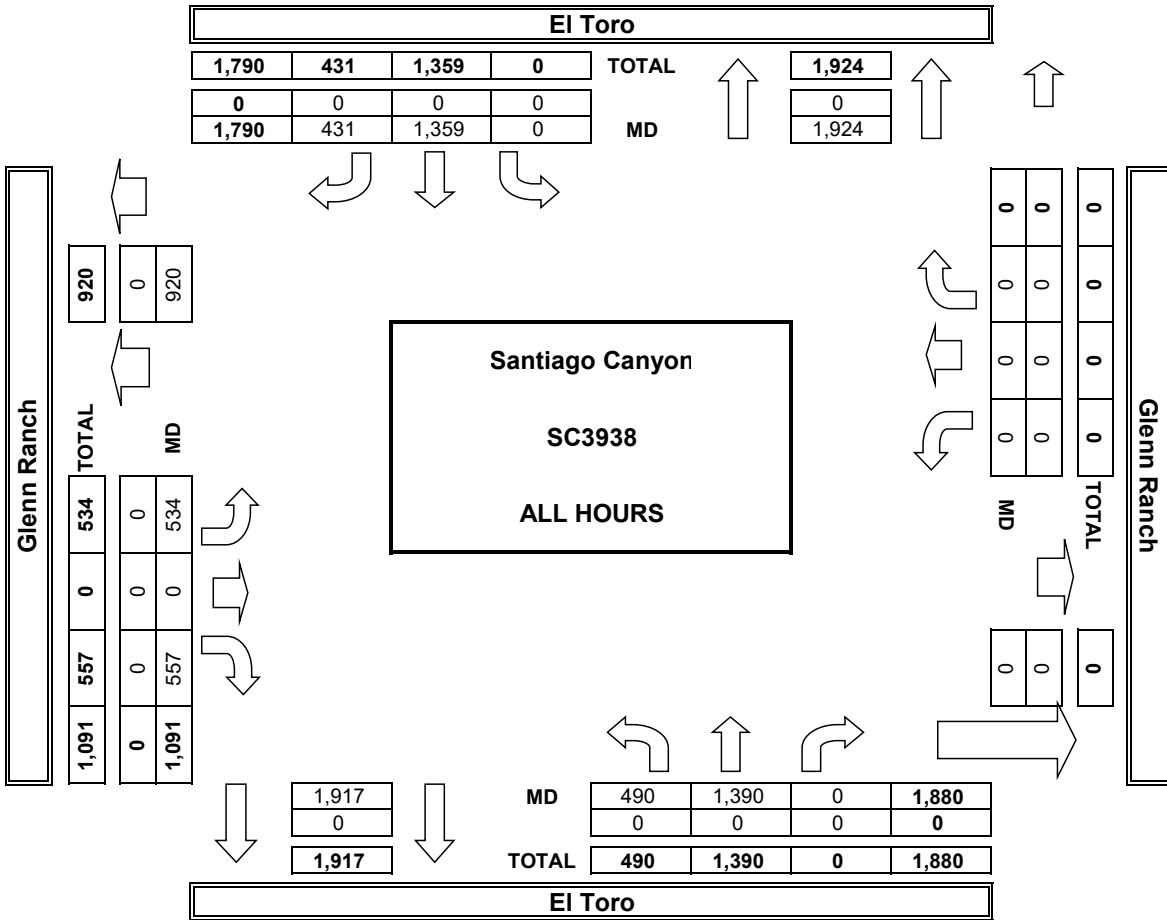
AimTD LLC
TURNING MOVEMENT COUNTS



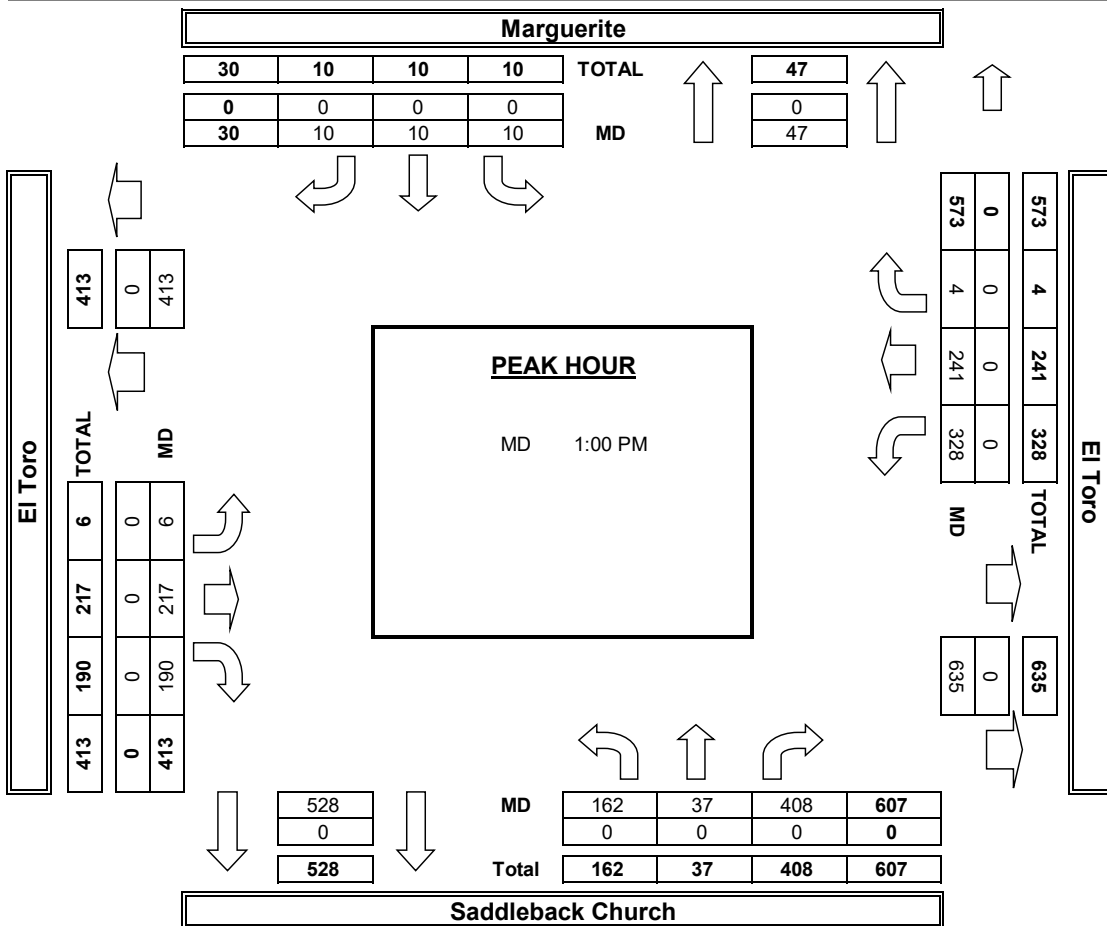
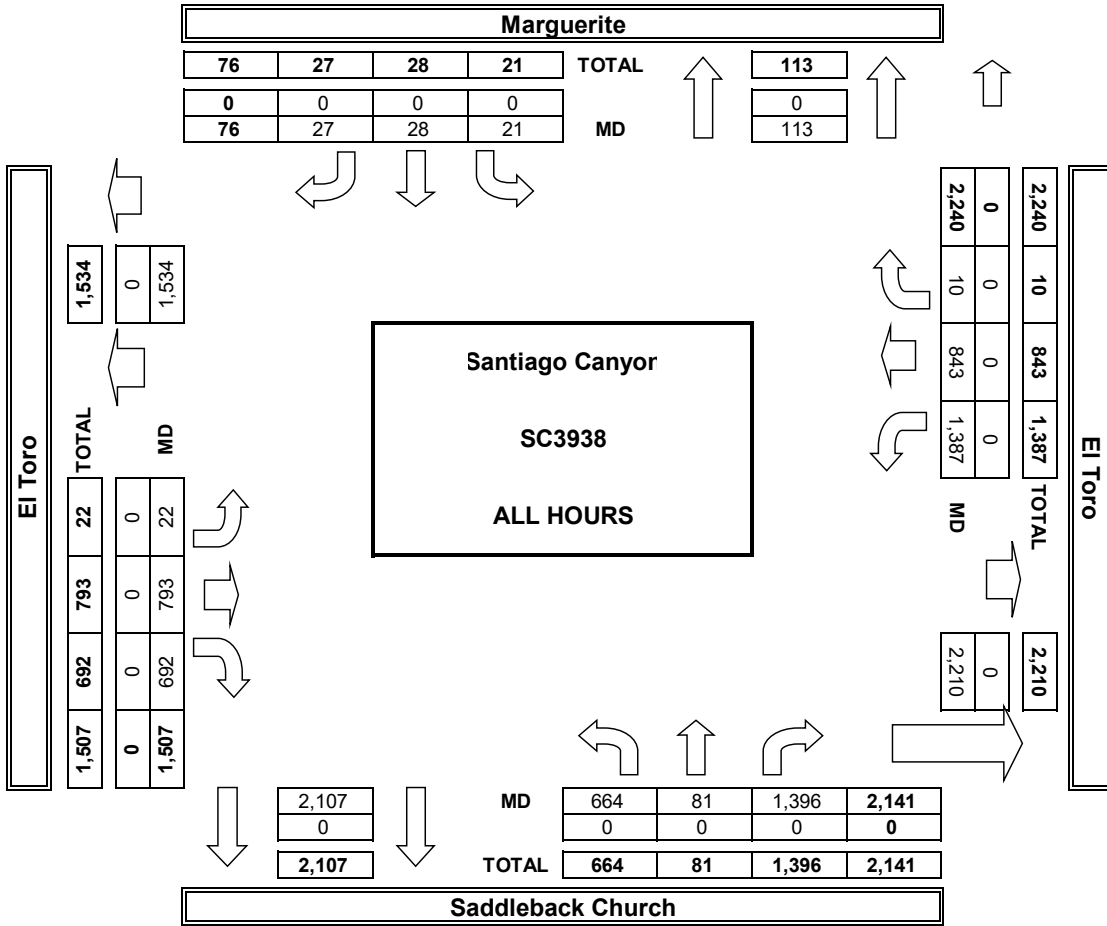
AimTD LLC
TURNING MOVEMENT COUNTS



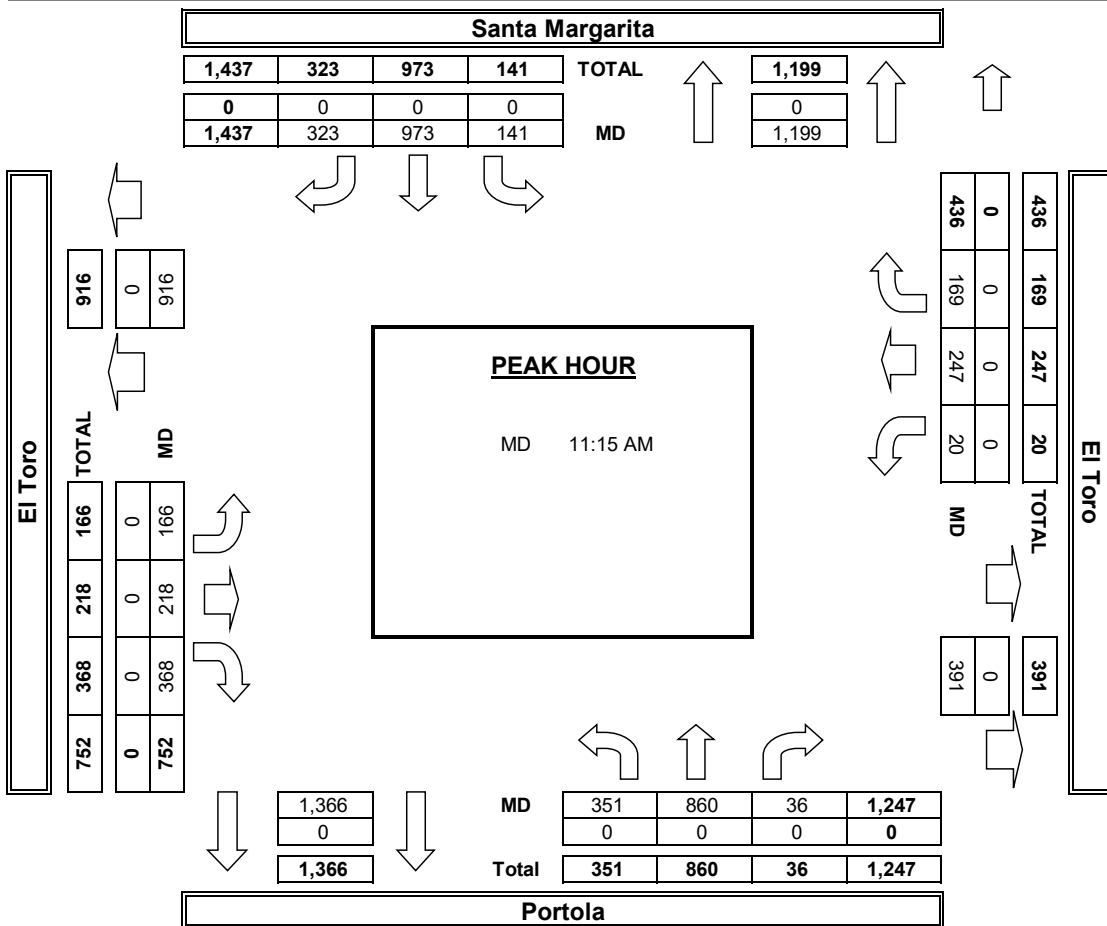
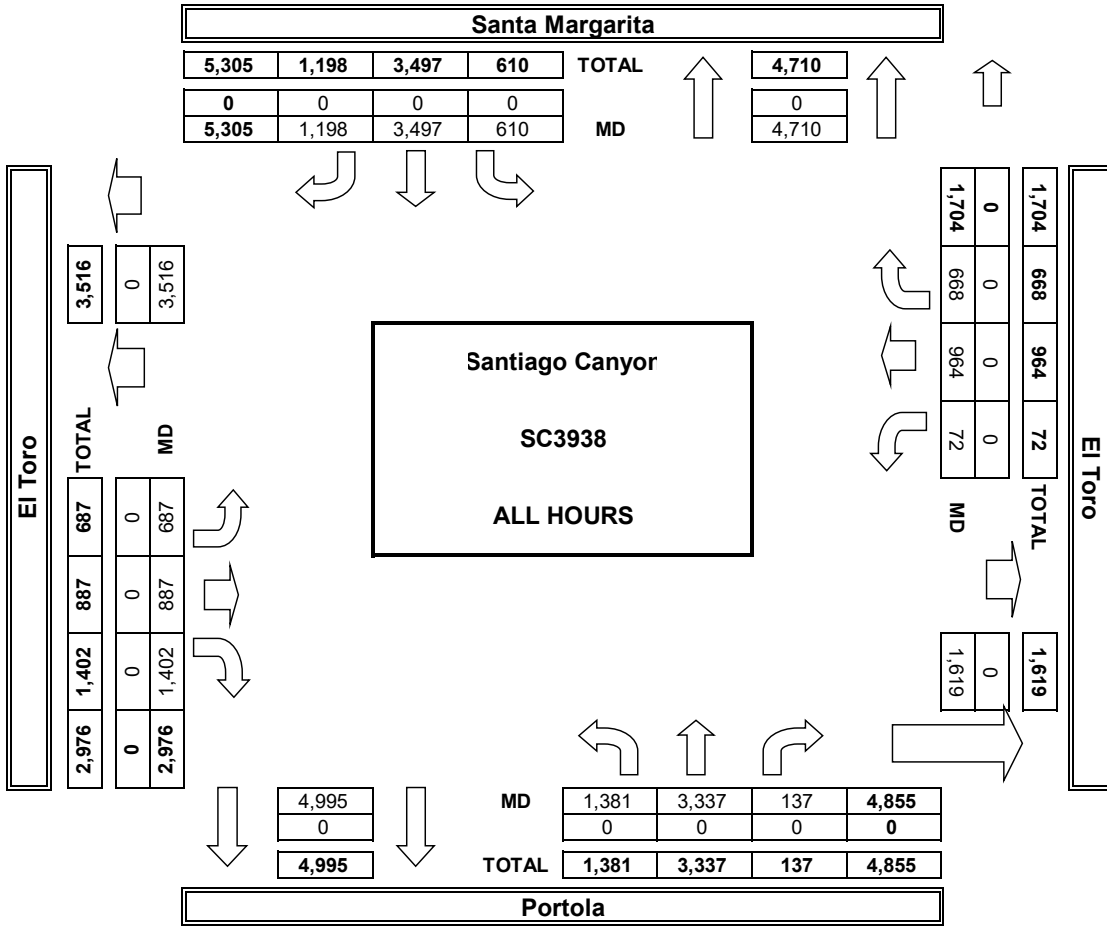
AimTD LLC
TURNING MOVEMENT COUNTS



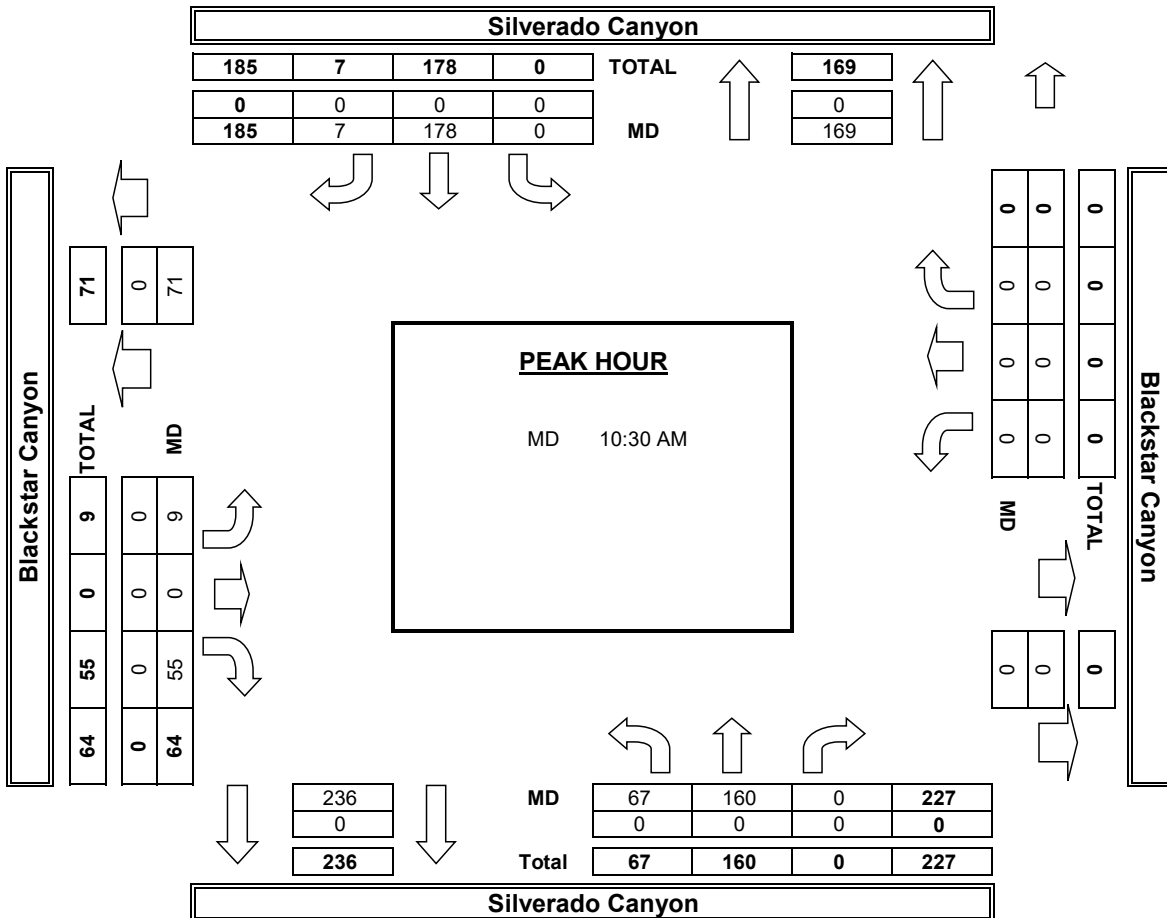
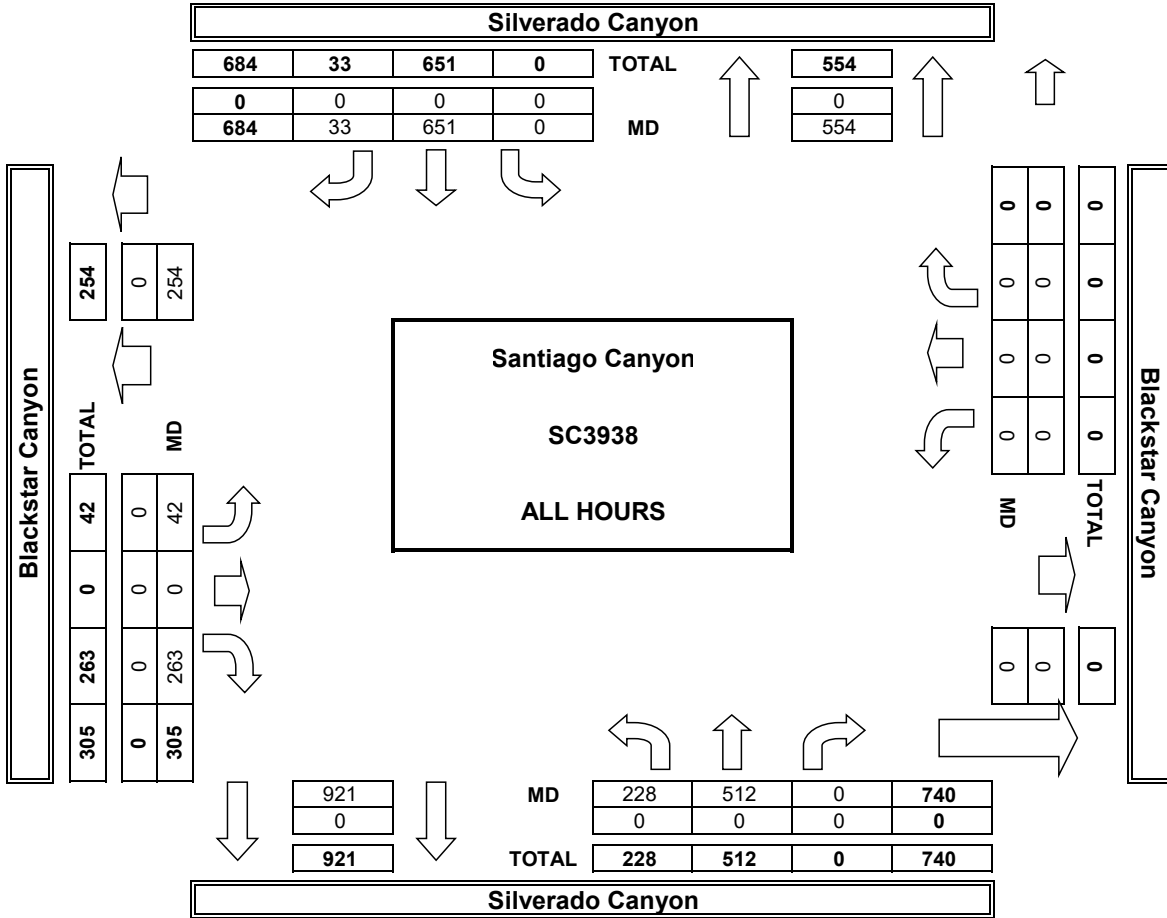
AimTD LLC
TURNING MOVEMENT COUNTS



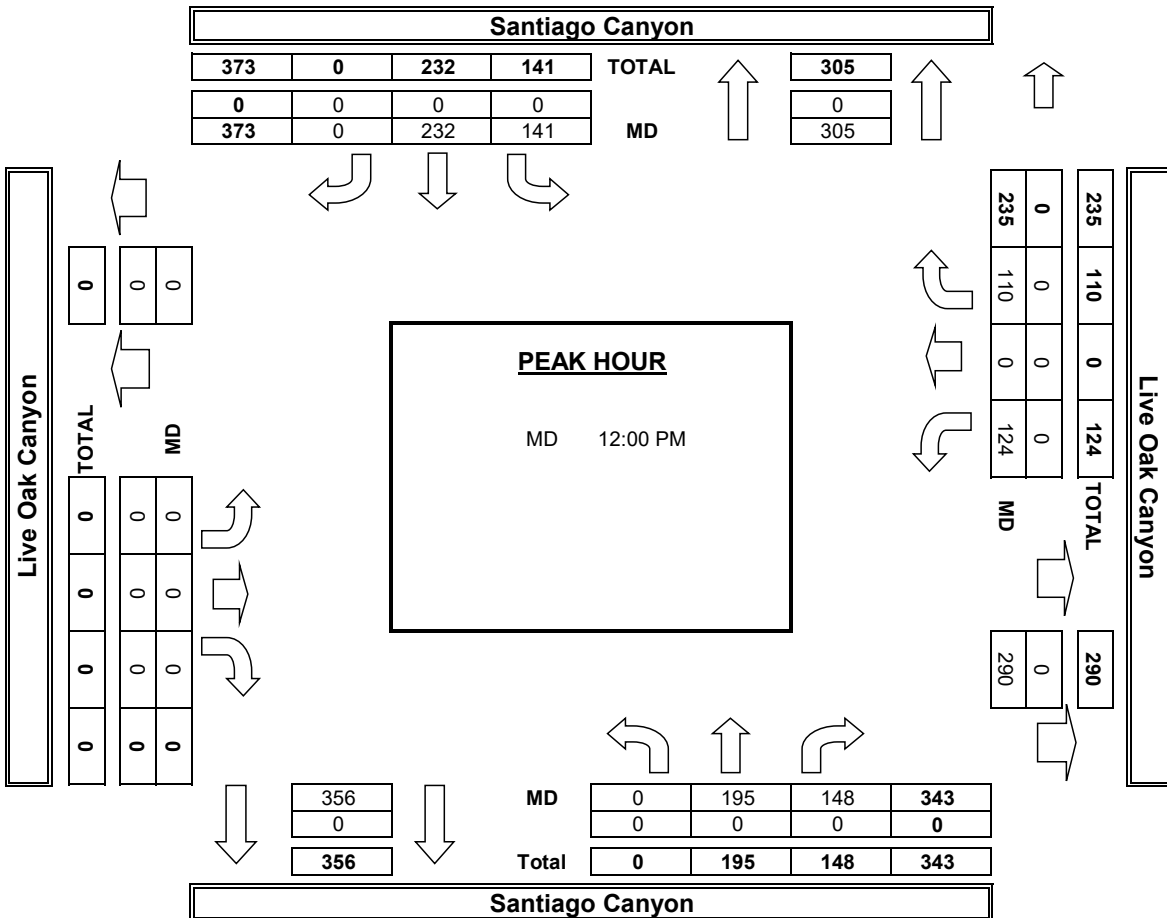
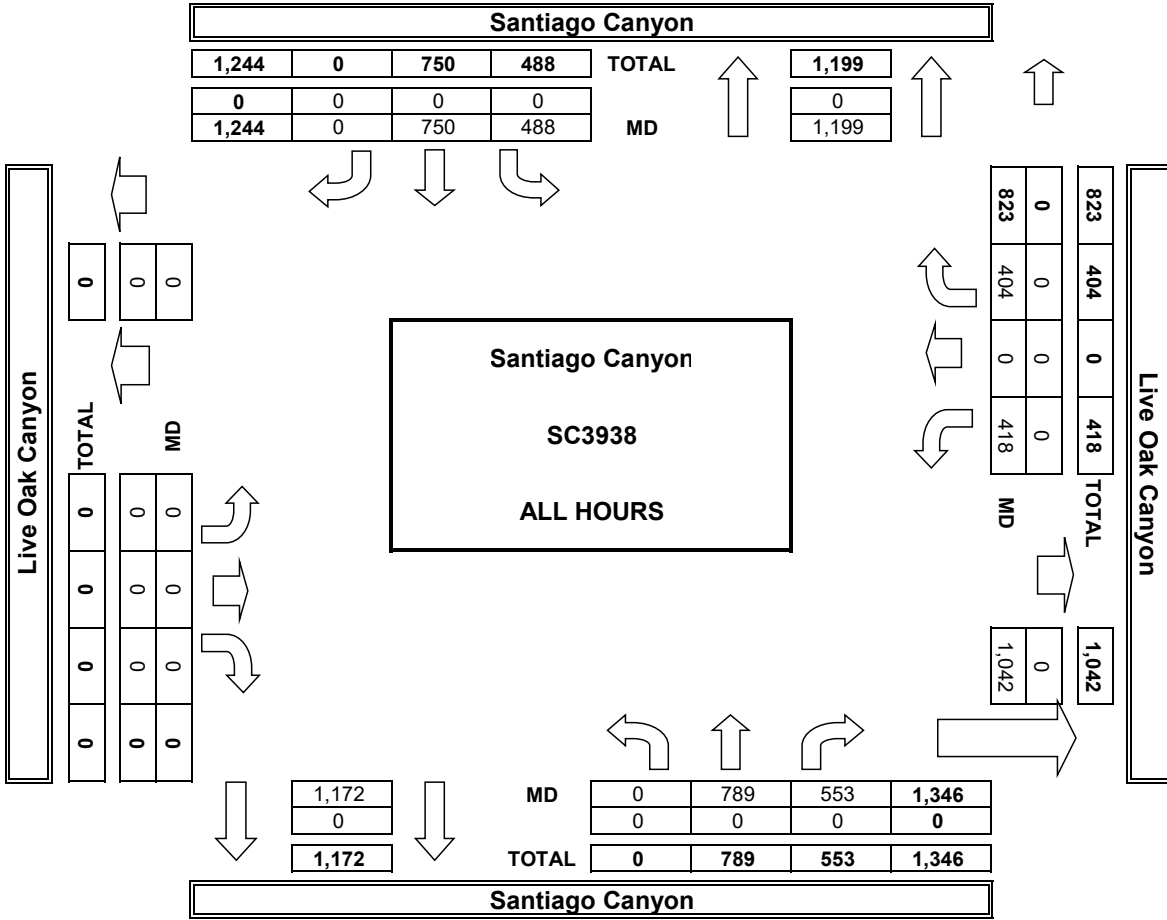
AimTD LLC
TURNING MOVEMENT COUNTS



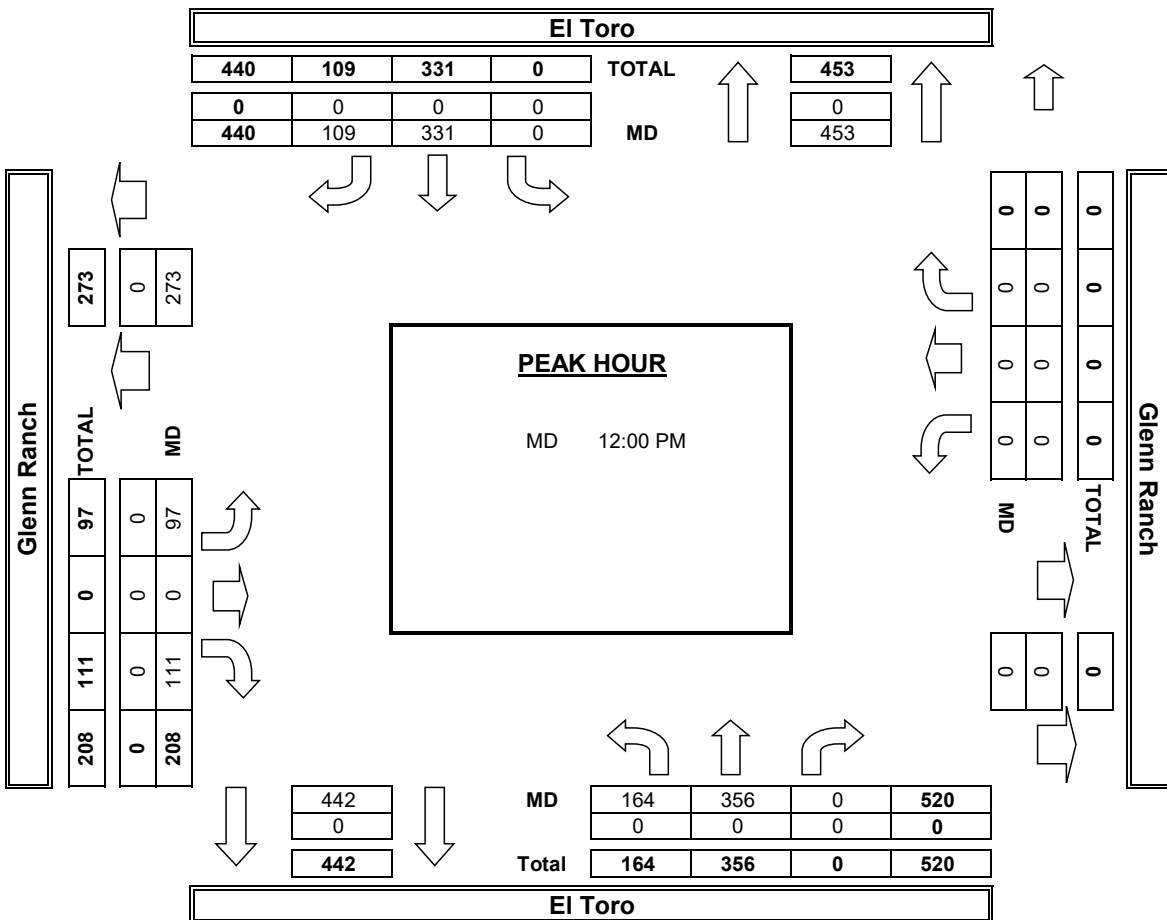
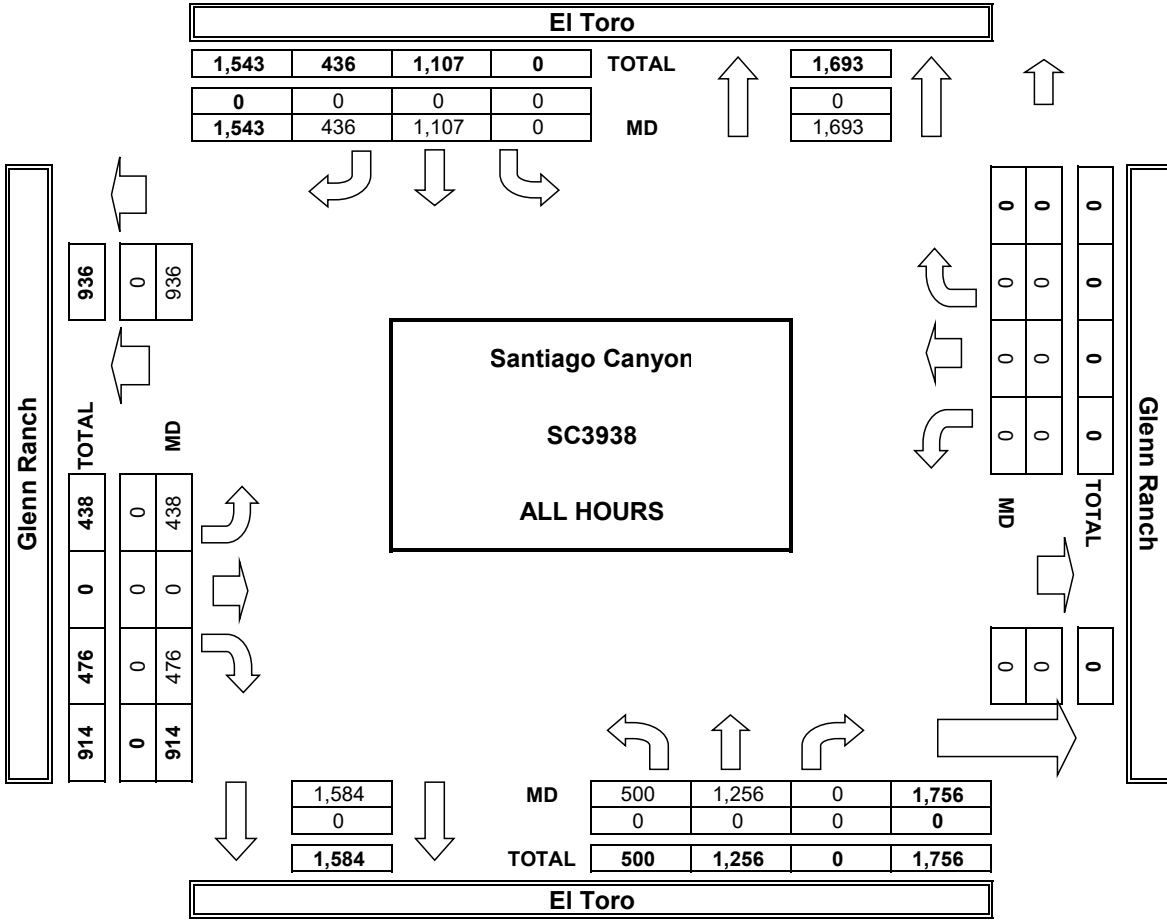
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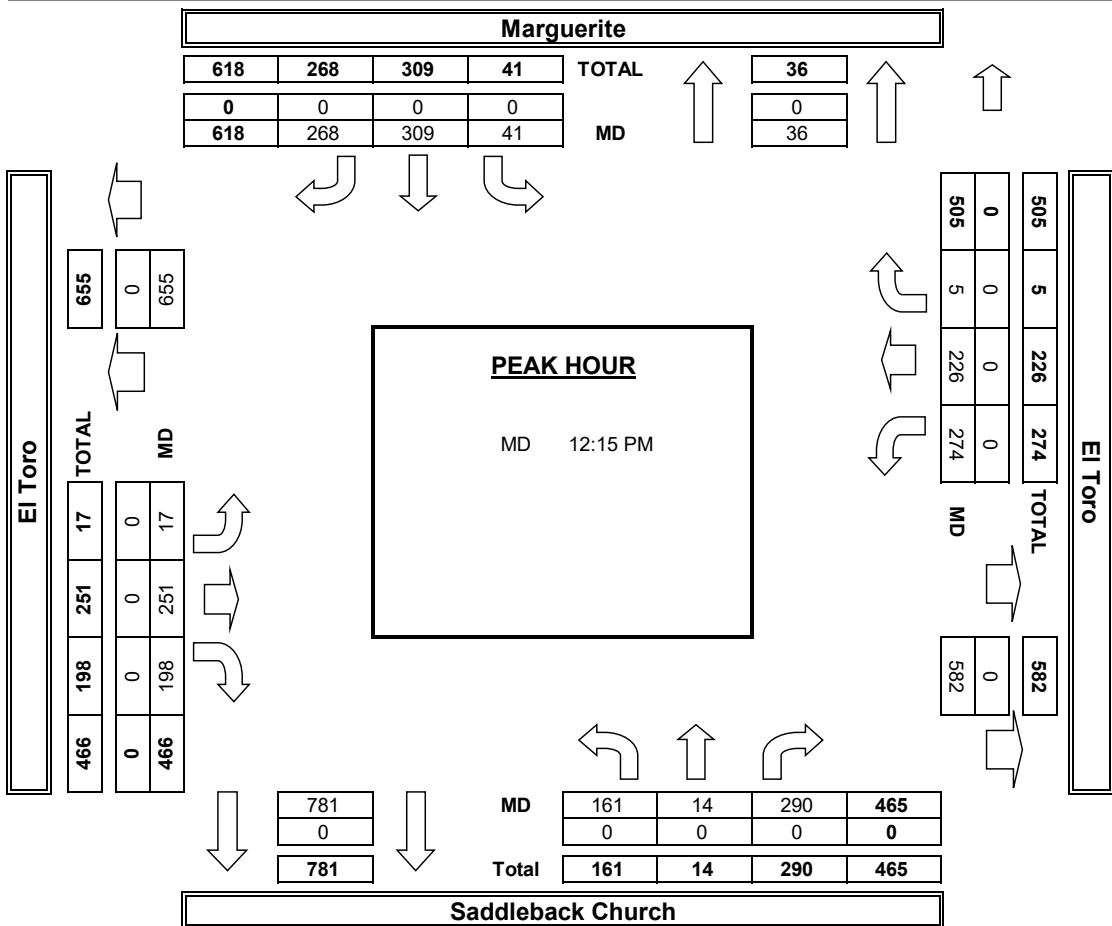
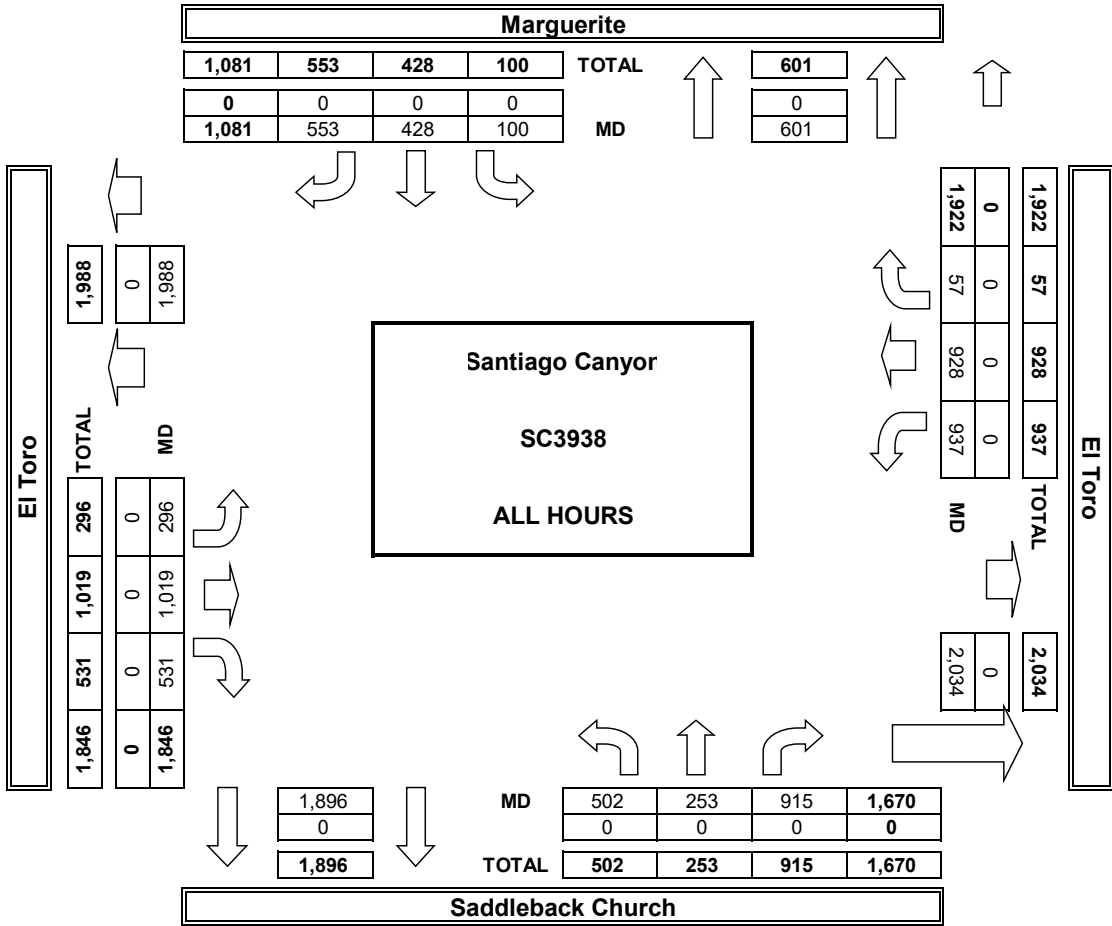
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TURNING MOVEMENT COUNTS



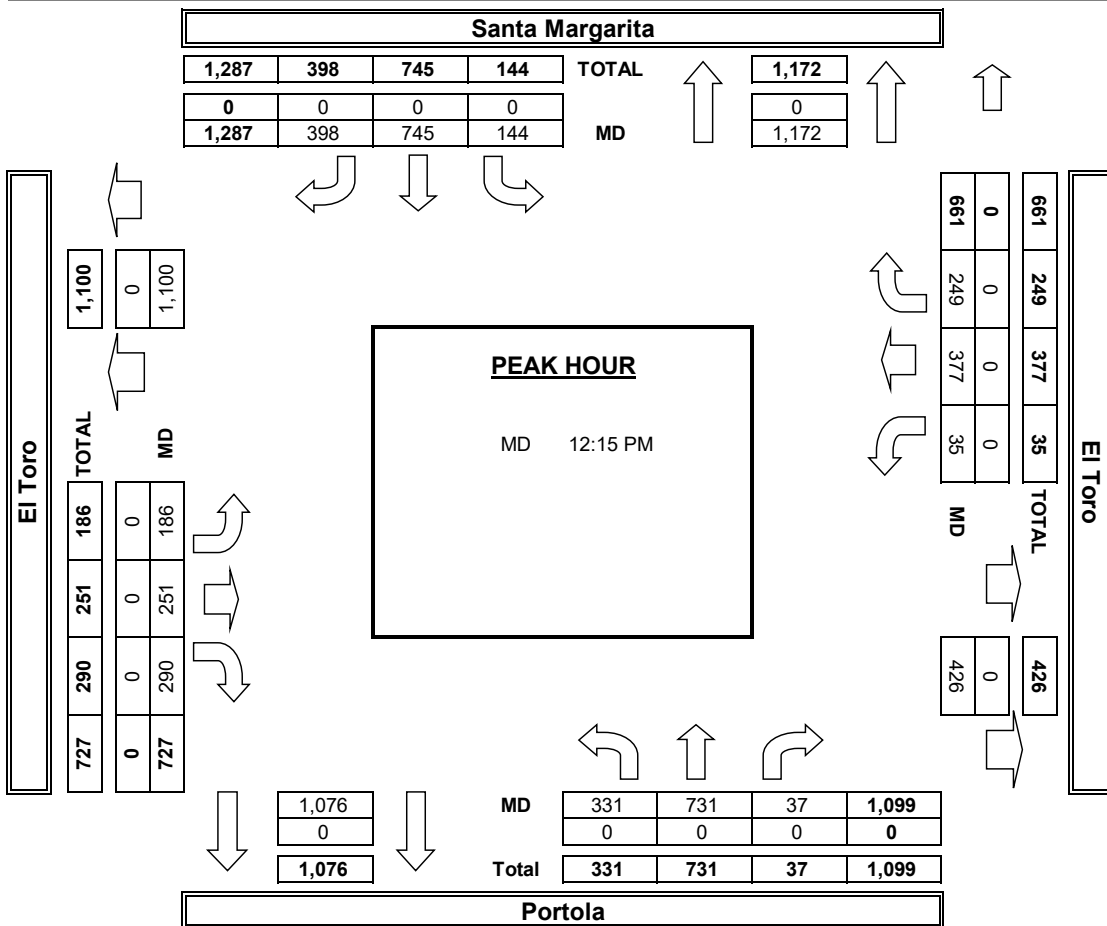
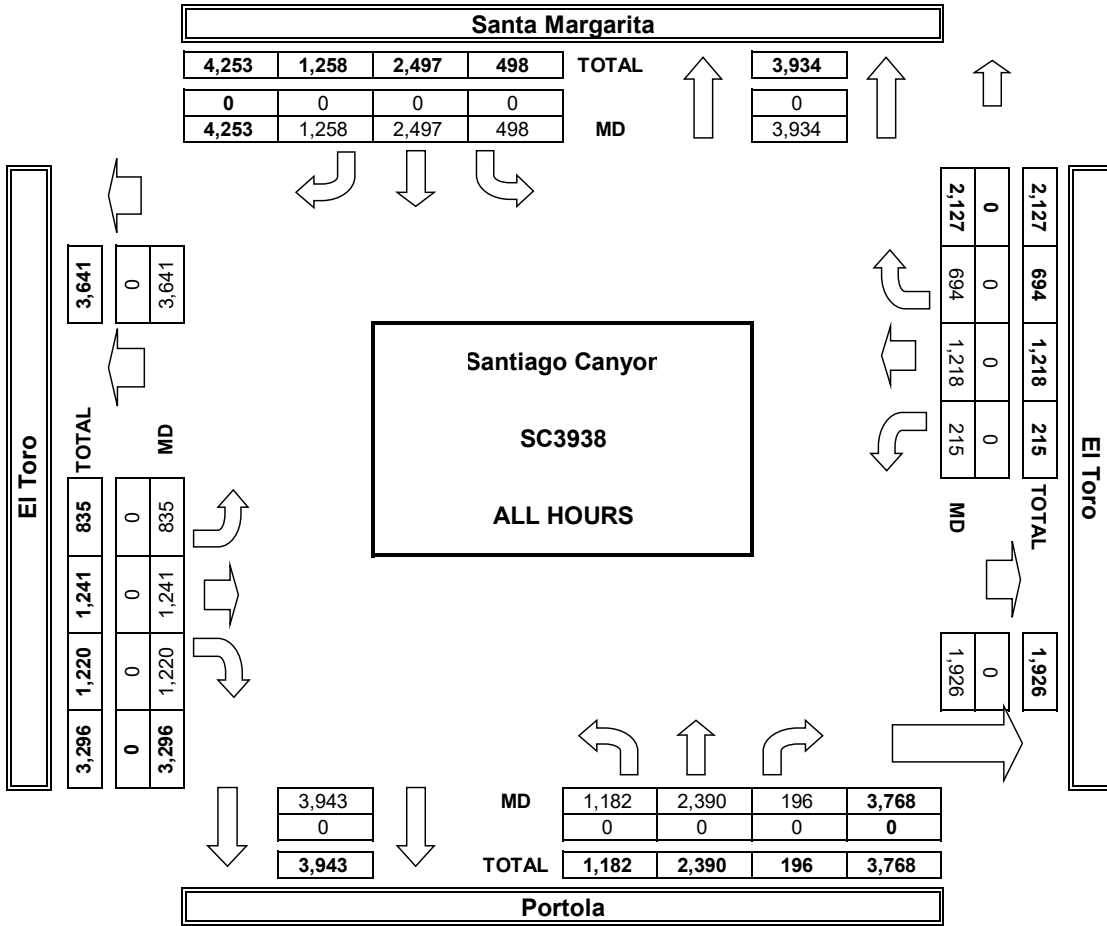
AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS





Appendix D

Weekend ADT Peak Hour Calculation Sheets

South Leg: ADTL Silverado Canyon Road from Santiago Canyon Road to Blackstar Canyon Rd
West Leg: ADTJ Blackstar Canyon Road from Silverado Canyon Road to County-controlled gate

ID: 6
Intersection: Silverado Canyon Road/Blackstar Canyon Road

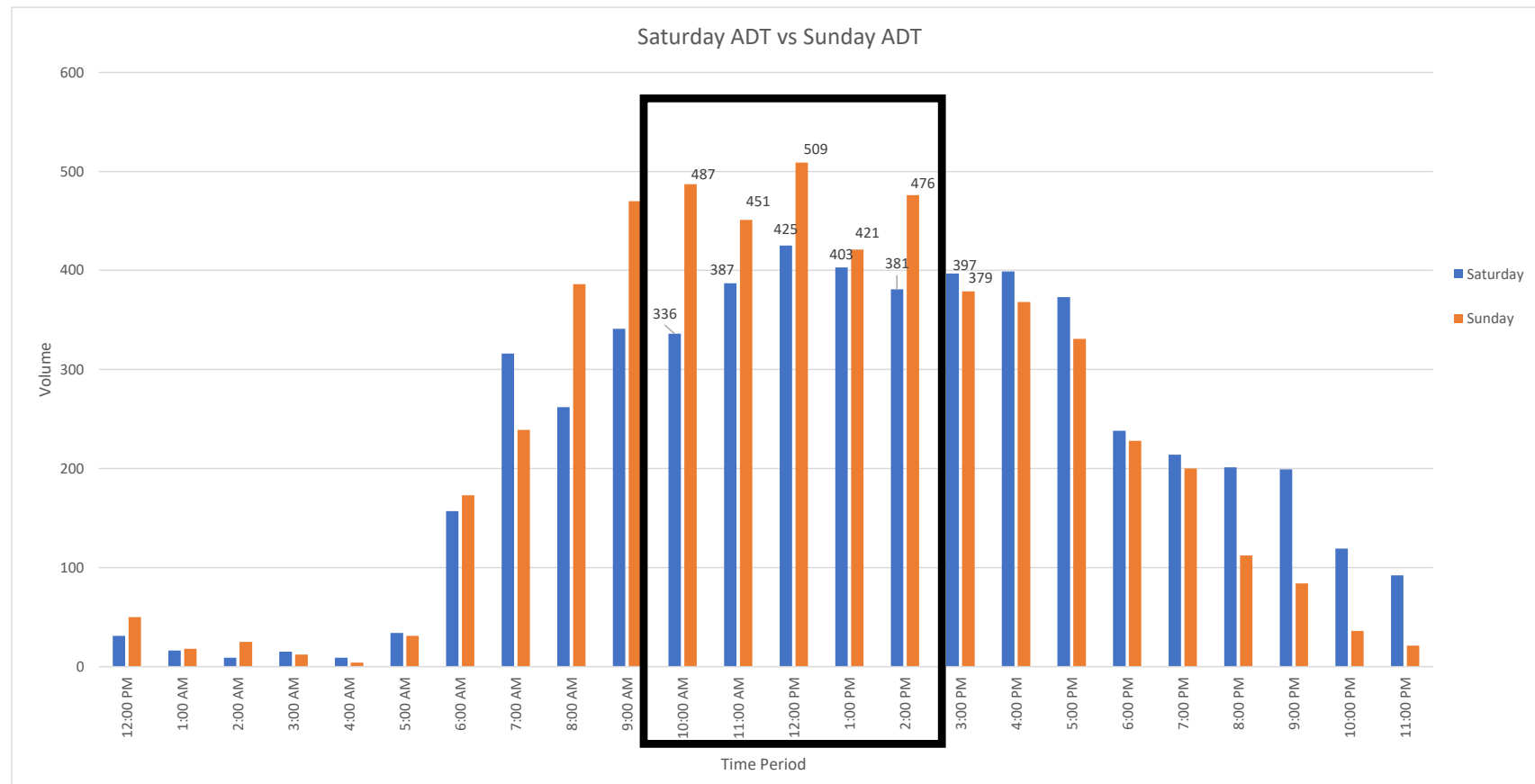
Saturday [Midday - 10AM to 2PM]

Sunday [Midday - 10AM to 2PM]

South Leg ADT		West Leg ADT		Total ADT		South Leg ADT		West Leg ADT		Total ADT	
Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume
12:00 PM	24	12:00 PM	7	12:00 PM	31	12:00 PM	43	12:00 PM	7	12:00 PM	50
1:00 AM	16	1:00 AM	0	1:00 AM	16	1:00 AM	15	1:00 AM	3	1:00 AM	18
2:00 AM	7	2:00 AM	2	2:00 AM	9	2:00 AM	17	2:00 AM	8	2:00 AM	25
3:00 AM	15	3:00 AM	0	3:00 AM	15	3:00 AM	6	3:00 AM	6	3:00 AM	12
4:00 AM	6	4:00 AM	3	4:00 AM	9	4:00 AM	4	4:00 AM	0	4:00 AM	4
5:00 AM	29	5:00 AM	5	5:00 AM	34	5:00 AM	24	5:00 AM	7	5:00 AM	31
6:00 AM	118	6:00 AM	39	6:00 AM	157	6:00 AM	134	6:00 AM	39	6:00 AM	173
7:00 AM	215	7:00 AM	101	7:00 AM	316	7:00 AM	165	7:00 AM	74	7:00 AM	239
8:00 AM	211	8:00 AM	51	8:00 AM	262	8:00 AM	295	8:00 AM	91	8:00 AM	386
9:00 AM	274	9:00 AM	67	9:00 AM	341	9:00 AM	378	9:00 AM	92	9:00 AM	470
10:00 AM	269	10:00 AM	67	10:00 AM	336	10:00 AM	431	10:00 AM	56	10:00 AM	487
11:00 AM	334	11:00 AM	53	11:00 AM	387	11:00 AM	385	11:00 AM	66	11:00 AM	451
12:00 PM	368	12:00 PM	57	12:00 PM	425	12:00 PM	431	12:00 PM	78	12:00 PM	509
1:00 PM	356	1:00 PM	47	1:00 PM	403	1:00 PM	358	1:00 PM	63	1:00 PM	421
2:00 PM	324	2:00 PM	57	2:00 PM	381	2:00 PM	402	2:00 PM	74	2:00 PM	476
3:00 PM	344	3:00 PM	53	3:00 PM	397	3:00 PM	318	3:00 PM	61	3:00 PM	379
4:00 PM	356	4:00 PM	43	4:00 PM	399	4:00 PM	302	4:00 PM	66	4:00 PM	368
5:00 PM	332	5:00 PM	41	5:00 PM	373	5:00 PM	294	5:00 PM	37	5:00 PM	331
6:00 PM	200	6:00 PM	38	6:00 PM	238	6:00 PM	195	6:00 PM	33	6:00 PM	228
7:00 PM	187	7:00 PM	27	7:00 PM	214	7:00 PM	166	7:00 PM	34	7:00 PM	200
8:00 PM	183	8:00 PM	18	8:00 PM	201	8:00 PM	94	8:00 PM	18	8:00 PM	112
9:00 PM	191	9:00 PM	8	9:00 PM	199	9:00 PM	77	9:00 PM	7	9:00 PM	84
10:00 PM	110	10:00 PM	9	10:00 PM	119	10:00 PM	33	10:00 PM	3	10:00 PM	36
11:00 PM	87	11:00 PM	5	11:00 PM	92	11:00 PM	21	11:00 PM	0	11:00 PM	21
Total	4556	Total	798	Total	5354	Total	4588	Total	923	Total	5511

LEGEND

- Highest ADT During TOD per Leg Direction
- Highest Total ADT Value
- Weekend TMC Count (Time Period)
10 AM to 2 PM



North Leg: ADTF Santiago Canyon Road from Ridgeline Road North to Live Oak Canyon Road
South Leg: ADTG El Toro Road from Live Oak Canyon Road to Glenn Ranch Road
East Leg: ADTK Live Oak Canyon Road from El Toro Road to East of Cooks Corner

ID: 12
Intersection: Santiago Canyon Road/Live Oak Canyon

Saturday [Midday - 10AM to 2PM]

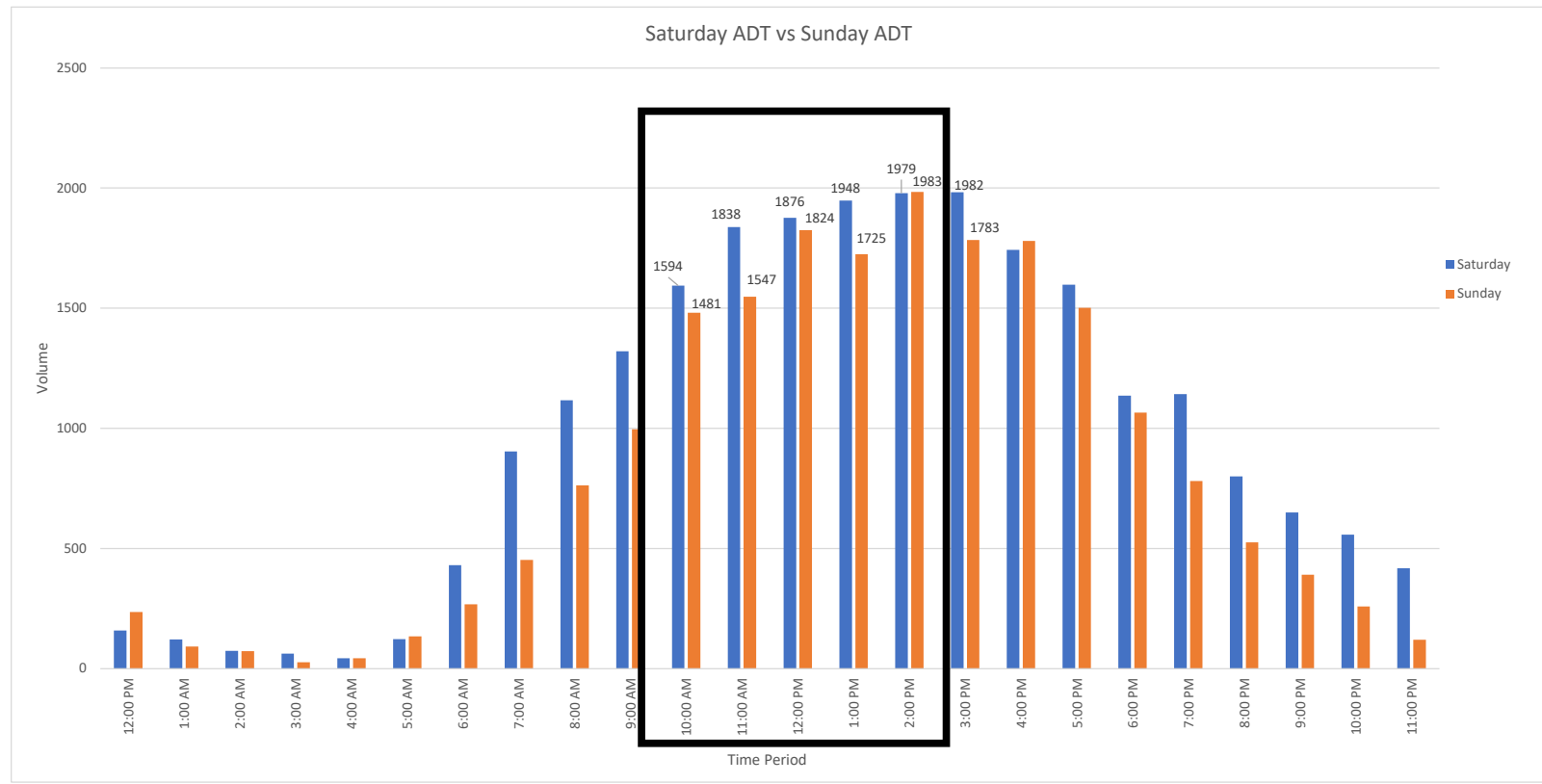
Sunday [Midday - 10AM to 2PM]

North Leg ADT		South Leg ADT		East Leg ADT		Total ADT		North Leg ADT		South Leg ADT		East Leg ADT		Total ADT	
Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume
12:00 PM	47	12:00 PM	70	12:00 PM	41	12:00 PM	158	12:00 PM	83	12:00 PM	103	12:00 PM	49	12:00 PM	235
1:00 AM	43	1:00 AM	49	1:00 AM	29	1:00 AM	121	1:00 AM	26	1:00 AM	39	1:00 AM	27	1:00 AM	92
2:00 AM	23	2:00 AM	34	2:00 AM	17	2:00 AM	74	2:00 AM	16	2:00 AM	32	2:00 AM	25	2:00 AM	73
3:00 AM	24	3:00 AM	28	3:00 AM	11	3:00 AM	63	3:00 AM	8	3:00 AM	12	3:00 AM	6	3:00 AM	26
4:00 AM	15	4:00 AM	20	4:00 AM	8	4:00 AM	43	4:00 AM	13	4:00 AM	22	4:00 AM	8	4:00 AM	43
5:00 AM	43	5:00 AM	51	5:00 AM	29	5:00 AM	123	5:00 AM	50	5:00 AM	59	5:00 AM	25	5:00 AM	134
6:00 AM	140	6:00 AM	185	6:00 AM	105	6:00 AM	430	6:00 AM	104	6:00 AM	112	6:00 AM	52	6:00 AM	268
7:00 AM	305	7:00 AM	376	7:00 AM	223	7:00 AM	904	7:00 AM	162	7:00 AM	189	7:00 AM	101	7:00 AM	452
8:00 AM	347	8:00 AM	492	8:00 AM	277	8:00 AM	1116	8:00 AM	288	8:00 AM	319	8:00 AM	156	8:00 AM	763
9:00 AM	456	9:00 AM	541	9:00 AM	324	9:00 AM	1321	9:00 AM	354	9:00 AM	401	9:00 AM	241	9:00 AM	996
10:00 AM	520	10:00 AM	655	10:00 AM	419	10:00 AM	1594	10:00 AM	529	10:00 AM	603	10:00 AM	349	10:00 AM	1481
11:00 AM	626	11:00 AM	799	11:00 AM	413	11:00 AM	1838	11:00 AM	555	11:00 AM	634	11:00 AM	358	11:00 AM	1547
12:00 PM	589	12:00 PM	832	12:00 PM	455	12:00 PM	1876	12:00 PM	634	12:00 PM	756	12:00 PM	434	12:00 PM	1824
1:00 PM	653	1:00 PM	845	1:00 PM	450	1:00 PM	1948	1:00 PM	588	1:00 PM	720	1:00 PM	417	1:00 PM	1725
2:00 PM	677	2:00 PM	882	2:00 PM	420	2:00 PM	1979	2:00 PM	682	2:00 PM	794	2:00 PM	507	2:00 PM	1983
3:00 PM	670	3:00 PM	870	3:00 PM	442	3:00 PM	1982	3:00 PM	594	3:00 PM	739	3:00 PM	450	3:00 PM	1783
4:00 PM	581	4:00 PM	797	4:00 PM	365	4:00 PM	1743	4:00 PM	558	4:00 PM	754	4:00 PM	468	4:00 PM	1780
5:00 PM	547	5:00 PM	708	5:00 PM	342	5:00 PM	1597	5:00 PM	481	5:00 PM	653	5:00 PM	368	5:00 PM	1502
6:00 PM	373	6:00 PM	525	6:00 PM	238	6:00 PM	1136	6:00 PM	333	6:00 PM	481	6:00 PM	251	6:00 PM	1065
7:00 PM	347	7:00 PM	506	7:00 PM	289	7:00 PM	1142	7:00 PM	243	7:00 PM	387	7:00 PM	151	7:00 PM	781
8:00 PM	266	8:00 PM	367	8:00 PM	167	8:00 PM	800	8:00 PM	176	8:00 PM	265	8:00 PM	85	8:00 PM	526
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10:00 PM	172	10:00 PM	253	10:00 PM	133	10:00 PM	558	10:00 PM	82	10:00 PM	121	10:00 PM	55	10:00 PM	258
11:00 PM	127	11:00 PM	173	11:00 PM	118	11:00 PM	418	11:00 PM	39	11:00 PM	47	11:00 PM	34	11:00 PM	120
Total	7811	Total	10353	Total	5450	Total	23614	Total	6716	Total	8437	Total	4695	Total	19848

LEGEND

- Highest ADT During TOD per Leg Direction
- Highest Total ADT Value
- Peak ADT Factor
- Weekend TMC Count (Time Period)
10 AM to 2 PM

Factor
1.087171



North Leg: ADTG El Toro Road from Live Oak Canyon Road to Glenn Ranch Roac
South Leg: ADTH El Toro Road from Glenn Ranch Road to Marguerite Parkway

ID: 16
Intersection: El Toro Road/Glenn Ranch Road

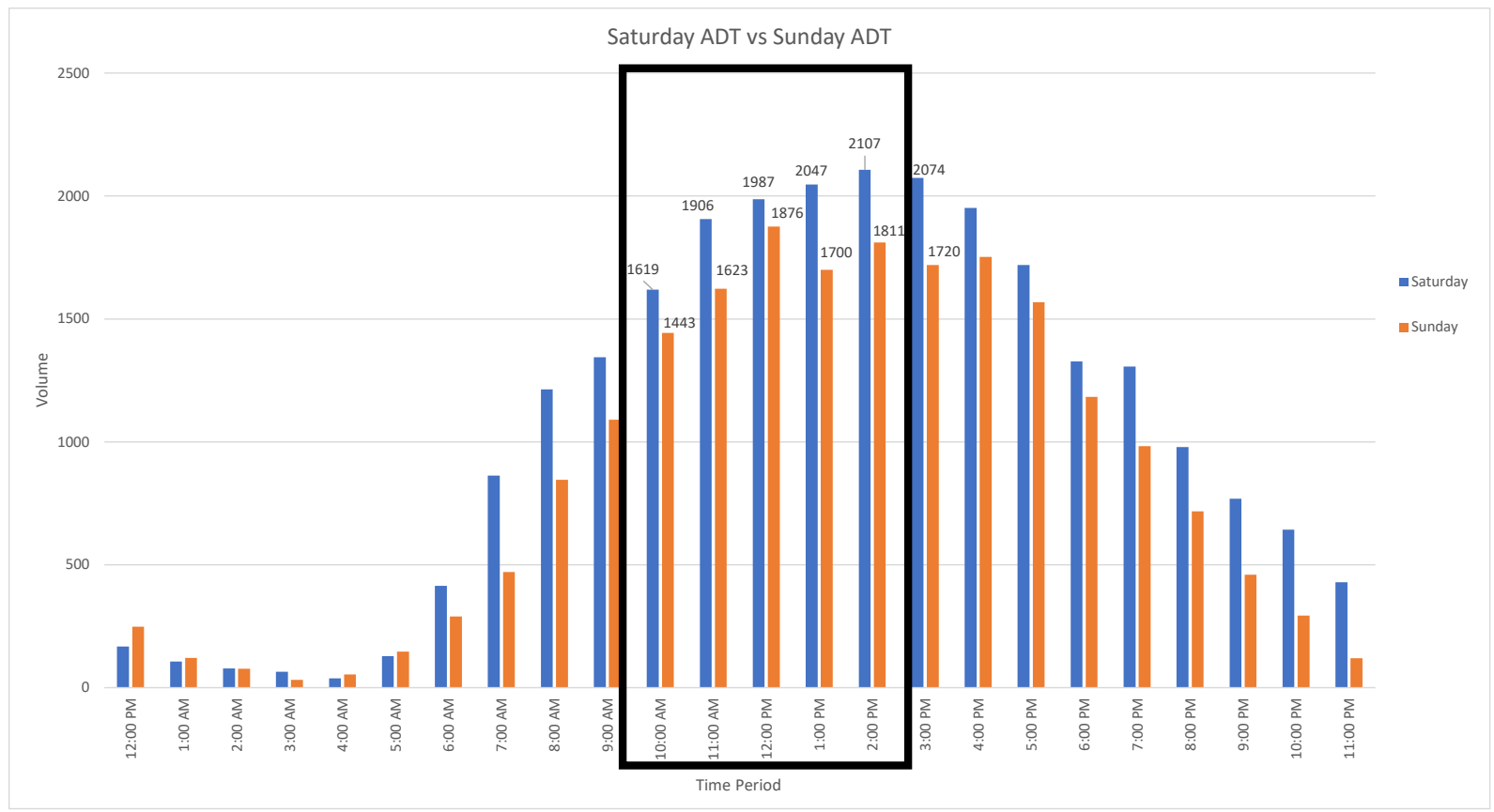
Saturday [Midday - 10AM to 2PM]

Sunday [Midday - 10AM to 2PM]

North Leg ADT		South Leg ADT		Total ADT		North Leg ADT		South Leg ADT		Total ADT	
Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume
12:00 PM	70	12:00 PM	98	12:00 PM	168	12:00 PM	103	12:00 PM	145	12:00 PM	248
1:00 AM	49	1:00 AM	57	1:00 AM	106	1:00 AM	39	1:00 AM	82	1:00 AM	121
2:00 AM	34	2:00 AM	44	2:00 AM	78	2:00 AM	32	2:00 AM	45	2:00 AM	77
3:00 AM	28	3:00 AM	37	3:00 AM	65	3:00 AM	12	3:00 AM	20	3:00 AM	32
4:00 AM	20	4:00 AM	18	4:00 AM	38	4:00 AM	22	4:00 AM	32	4:00 AM	54
5:00 AM	51	5:00 AM	78	5:00 AM	129	5:00 AM	59	5:00 AM	88	5:00 AM	147
6:00 AM	185	6:00 AM	229	6:00 AM	414	6:00 AM	112	6:00 AM	178	6:00 AM	290
7:00 AM	376	7:00 AM	487	7:00 AM	863	7:00 AM	189	7:00 AM	282	7:00 AM	471
8:00 AM	492	8:00 AM	721	8:00 AM	1213	8:00 AM	319	8:00 AM	527	8:00 AM	846
9:00 AM	541	9:00 AM	803	9:00 AM	1344	9:00 AM	401	9:00 AM	689	9:00 AM	1090
10:00 AM	655	10:00 AM	964	10:00 AM	1619	10:00 AM	603	10:00 AM	840	10:00 AM	1443
11:00 AM	799	11:00 AM	1107	11:00 AM	1906	11:00 AM	634	11:00 AM	989	11:00 AM	1623
12:00 PM	832	12:00 PM	1155	12:00 PM	1987	12:00 PM	756	12:00 PM	1120	12:00 PM	1876
1:00 PM	845	1:00 PM	1202	1:00 PM	2047	1:00 PM	720	1:00 PM	980	1:00 PM	1700
2:00 PM	882	2:00 PM	1225	2:00 PM	2107	2:00 PM	794	2:00 PM	1017	2:00 PM	1811
3:00 PM	870	3:00 PM	1204	3:00 PM	2074	3:00 PM	739	3:00 PM	981	3:00 PM	1720
4:00 PM	797	4:00 PM	1155	4:00 PM	1952	4:00 PM	754	4:00 PM	999	4:00 PM	1753
5:00 PM	708	5:00 PM	1012	5:00 PM	1720	5:00 PM	653	5:00 PM	915	5:00 PM	1568
6:00 PM	525	6:00 PM	802	6:00 PM	1327	6:00 PM	481	6:00 PM	702	6:00 PM	1183
7:00 PM	506	7:00 PM	800	7:00 PM	1306	7:00 PM	387	7:00 PM	596	7:00 PM	983
8:00 PM	367	8:00 PM	612	8:00 PM	979	8:00 PM	265	8:00 PM	452	8:00 PM	717
9:00 PM	295	9:00 PM	474	9:00 PM	769	9:00 PM	195	9:00 PM	265	9:00 PM	460
10:00 PM	253	10:00 PM	390	10:00 PM	643	10:00 PM	121	10:00 PM	173	10:00 PM	294
11:00 PM	173	11:00 PM	256	11:00 PM	429	11:00 PM	47	11:00 PM	73	11:00 PM	120
Total	10353	Total	14930	Total	25283	Total	8437	Total	12190	Total	20627

LEGEND

- Highest ADT During TOD per Leg Direction
- Highest Total ADT Value
- Peak ADT Factor
- Weekend TMC Count (Time Period)
10 AM to 2 PM



North Leg: ADTH El Toro Road from Glenn Ranch Road to Marguerite Parkway
South Leg: ADTI El Toro Road from Marguerite Parkway to Portola Parkway

ID: 19
Intersection: El Toro Road/Marguerite Parkway

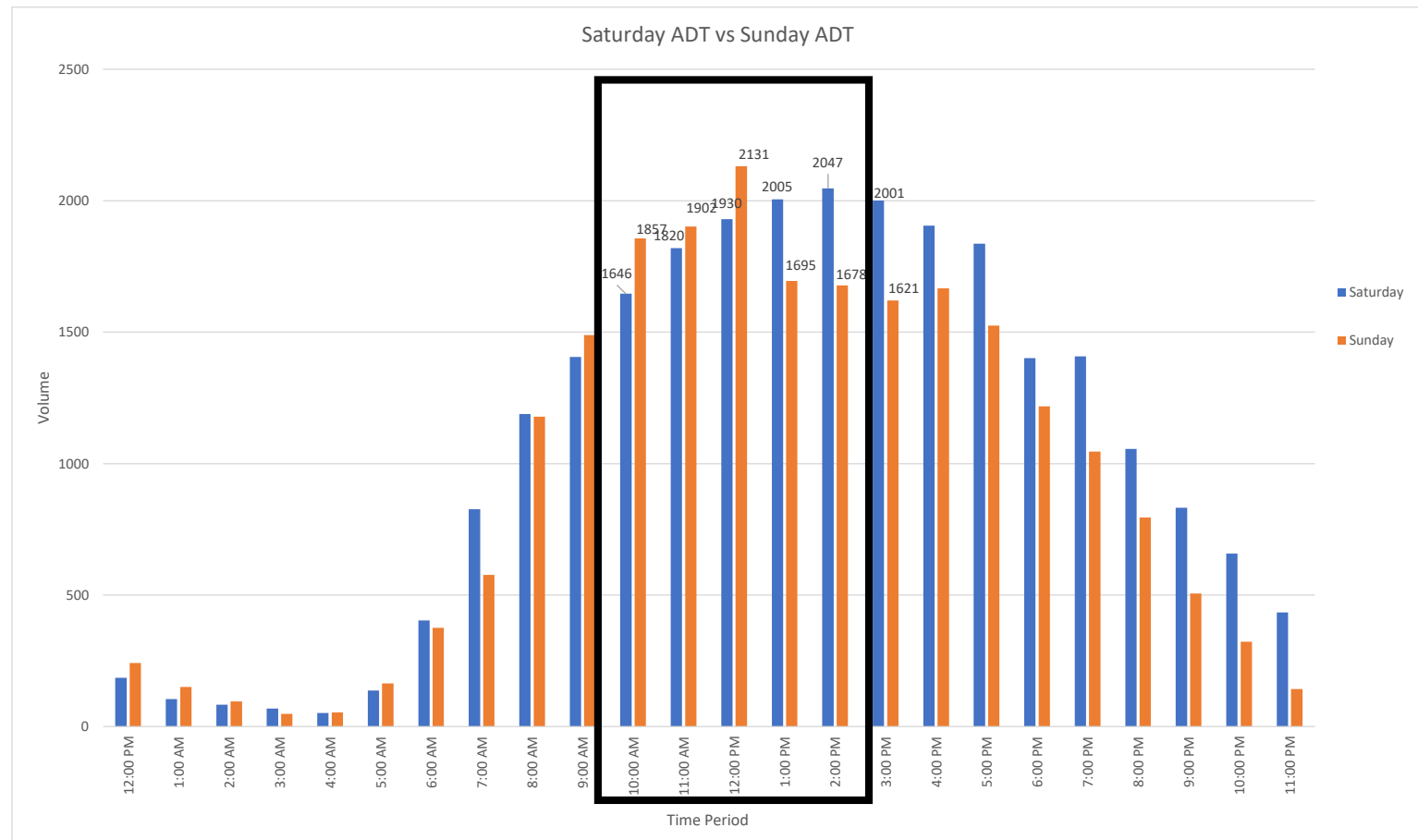
Saturday [Midday - 10AM to 2PM]

Sunday [Midday - 10AM to 2PM]

North Leg ADT		South Leg ADT		Total ADT		North Leg ADT		South Leg ADT		Total ADT	
Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume	Start Time	Volume
12:00 PM	98	12:00 PM	87	12:00 PM	185	12:00 PM	145	12:00 PM	97	12:00 PM	242
1:00 AM	57	1:00 AM	47	1:00 AM	104	1:00 AM	82	1:00 AM	69	1:00 AM	151
2:00 AM	44	2:00 AM	39	2:00 AM	83	2:00 AM	45	2:00 AM	50	2:00 AM	95
3:00 AM	37	3:00 AM	32	3:00 AM	69	3:00 AM	20	3:00 AM	28	3:00 AM	48
4:00 AM	18	4:00 AM	34	4:00 AM	52	4:00 AM	32	4:00 AM	22	4:00 AM	54
5:00 AM	78	5:00 AM	59	5:00 AM	137	5:00 AM	88	5:00 AM	76	5:00 AM	164
6:00 AM	229	6:00 AM	175	6:00 AM	404	6:00 AM	178	6:00 AM	198	6:00 AM	376
7:00 AM	487	7:00 AM	339	7:00 AM	826	7:00 AM	282	7:00 AM	295	7:00 AM	577
8:00 AM	721	8:00 AM	468	8:00 AM	1189	8:00 AM	527	8:00 AM	652	8:00 AM	1179
9:00 AM	803	9:00 AM	603	9:00 AM	1406	9:00 AM	689	9:00 AM	800	9:00 AM	1489
10:00 AM	964	10:00 AM	682	10:00 AM	1646	10:00 AM	840	10:00 AM	1017	10:00 AM	1857
11:00 AM	1107	11:00 AM	713	11:00 AM	1820	11:00 AM	989	11:00 AM	913	11:00 AM	1902
12:00 PM	1155	12:00 PM	775	12:00 PM	1930	12:00 PM	1120	12:00 PM	1011	12:00 PM	2131
1:00 PM	1202	1:00 PM	803	1:00 PM	2005	1:00 PM	980	1:00 PM	715	1:00 PM	1695
2:00 PM	1225	2:00 PM	822	2:00 PM	2047	2:00 PM	1017	2:00 PM	661	2:00 PM	1678
3:00 PM	1204	3:00 PM	797	3:00 PM	2001	3:00 PM	981	3:00 PM	640	3:00 PM	1621
4:00 PM	1155	4:00 PM	750	4:00 PM	1905	4:00 PM	999	4:00 PM	668	4:00 PM	1667
5:00 PM	1012	5:00 PM	825	5:00 PM	1837	5:00 PM	915	5:00 PM	610	5:00 PM	1525
6:00 PM	802	6:00 PM	599	6:00 PM	1401	6:00 PM	702	6:00 PM	516	6:00 PM	1218
7:00 PM	800	7:00 PM	608	7:00 PM	1408	7:00 PM	596	7:00 PM	450	7:00 PM	1046
8:00 PM	612	8:00 PM	444	8:00 PM	1056	8:00 PM	452	8:00 PM	343	8:00 PM	795
9:00 PM	474	9:00 PM	358	9:00 PM	832	9:00 PM	265	9:00 PM	241	9:00 PM	506
10:00 PM	390	10:00 PM	268	10:00 PM	658	10:00 PM	173	10:00 PM	150	10:00 PM	323
11:00 PM	256	11:00 PM	178	11:00 PM	434	11:00 PM	73	11:00 PM	70	11:00 PM	143
Total	14930	Total	10505	Total	25435	Total	12190	Total	10292	Total	22482

LEGEND

- Highest ADT During TOD per Leg Direction
- Highest Total ADT Value
- Weekend TMC Count (Time Period) 10 AM to 2 PM



North Leg: ADTI El Toro Road from Marguerite Parkway to Portola Parkway

ID: 21

Intersection: El Toro Road/Portola Parkway

Saturday [Midday - 10AM to 2PM]

Sunday [Midday - 10AM to 2PM]

North Leg ADT

Total ADT

North Leg ADT

Total ADT

Start Time	Volume
12:00 PM	87
1:00 AM	47
2:00 AM	39
3:00 AM	32
4:00 AM	34
5:00 AM	59
6:00 AM	175
7:00 AM	339
8:00 AM	468
9:00 AM	603
10:00 AM	682
11:00 AM	713
12:00 PM	775
1:00 PM	803
2:00 PM	822
3:00 PM	797
4:00 PM	750
5:00 PM	825
6:00 PM	599
7:00 PM	608
8:00 PM	444
9:00 PM	358
10:00 PM	268
11:00 PM	178
Total	10505

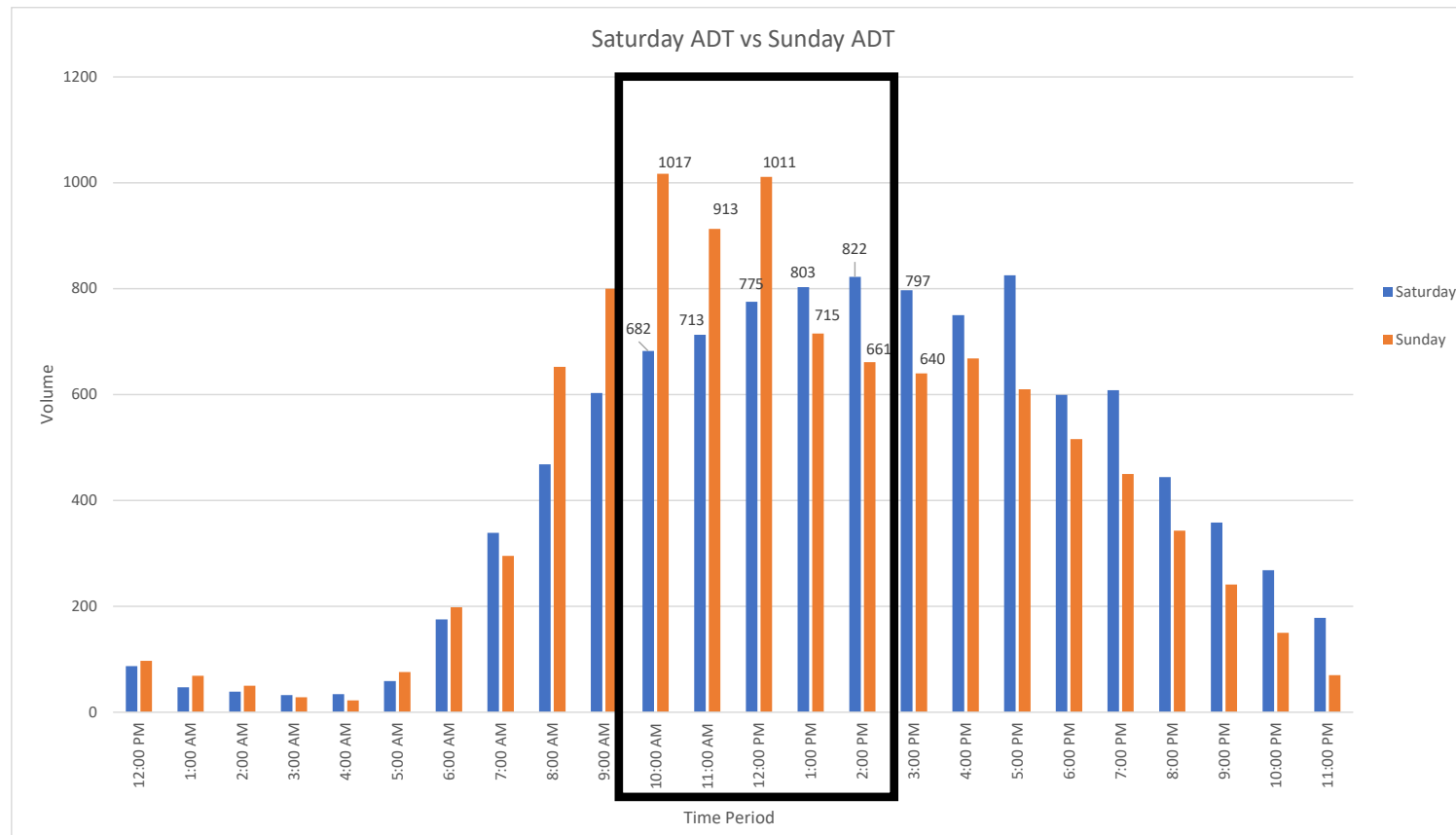
Start Time	Volume
12:00 PM	87
1:00 AM	47
2:00 AM	39
3:00 AM	32
4:00 AM	34
5:00 AM	59
6:00 AM	175
7:00 AM	339
8:00 AM	468
9:00 AM	603
10:00 AM	682
11:00 AM	713
12:00 PM	775
1:00 PM	803
2:00 PM	822
3:00 PM	797
4:00 PM	750
5:00 PM	825
6:00 PM	599
7:00 PM	608
8:00 PM	444
9:00 PM	358
10:00 PM	268
11:00 PM	178
Total	10505

Start Time	Volume
12:00 PM	97
1:00 AM	69
2:00 AM	50
3:00 AM	28
4:00 AM	22
5:00 AM	76
6:00 AM	198
7:00 AM	295
8:00 AM	652
9:00 AM	800
10:00 AM	1017
11:00 AM	913
12:00 PM	1011
1:00 PM	715
2:00 PM	661
3:00 PM	640
4:00 PM	668
5:00 PM	610
6:00 PM	516
7:00 PM	450
8:00 PM	343
9:00 PM	241
10:00 PM	150
11:00 PM	70
Total	10292

Start Time	Volume
12:00 PM	97
1:00 AM	69
2:00 AM	50
3:00 AM	28
4:00 AM	22
5:00 AM	76
6:00 AM	198
7:00 AM	295
8:00 AM	652
9:00 AM	800
10:00 AM	1017
11:00 AM	913
12:00 PM	1011
1:00 PM	715
2:00 PM	661
3:00 PM	640
4:00 PM	668
5:00 PM	610
6:00 PM	516
7:00 PM	450
8:00 PM	343
9:00 PM	241
10:00 PM	150
11:00 PM	70
Total	10292

LEGEND

- Highest ADT During TOD per Leg Direction
- Highest Total ADT Value
- Weekend TMC Count (Time Period)
10 AM to 2 PM





Appendix E

Santiago Canyon Road Classification Counts

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Wednesday, January 14, 2015

CITY: Rialto

JOB #: SC0523

LOCATION: 1/0/1900

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	2	2	0	4
0:15	0	0	0	0	12:15	2	3	2	7
0:30	0	0	0	0	12:30	0	4	0	4
0:45	0	0	0	0	12:45	13	5	1	19
1:00	0	0	0	0	13:00	6	4	3	13
1:15	0	0	0	0	13:15	3	3	1	7
1:30	0	0	0	0	13:30	2	5	0	7
1:45	0	0	0	0	13:45	5	3	1	9
2:00	0	0	0	0	14:00	2	7	0	9
2:15	0	0	0	0	14:15	0	4	1	5
2:30	0	0	0	0	14:30	2	7	1	10
2:45	0	0	0	0	14:45	2	2	0	4
3:00	0	0	0	0	15:00	3	1	0	4
3:15	0	0	0	0	15:15	5	3	0	8
3:30	0	0	0	0	15:30	3	4	0	7
3:45	0	0	0	0	15:45	2	5	0	7
4:00	0	0	0	0	16:00	3	1	0	4
4:15	0	0	0	0	16:15	2	2	0	4
4:30	0	0	0	0	16:30	5	1	0	6
4:45	0	0	0	0	16:45	4	3	0	7
5:00	0	0	0	0	17:00	1	0	0	1
5:15	0	0	0	0	17:15	3	4	0	7
5:30	0	0	0	0	17:30	4	3	1	8
5:45	0	0	0	0	17:45	1	3	0	4
6:00	1	0	0	1	18:00	0	0	0	0
6:15	1	0	0	1	18:15	0	0	0	0
6:30	0	1	0	1	18:30	0	0	0	0
6:45	1	4	0	5	18:45	0	0	0	0
7:00	1	3	0	4	19:00	0	0	0	0
7:15	0	5	0	5	19:15	0	0	0	0
7:30	2	4	0	6	19:30	0	0	0	0
7:45	1	2	0	3	19:45	0	0	0	0
8:00	0	1	0	1	20:00	0	0	0	0
8:15	0	4	0	4	20:15	0	0	0	0
8:30	1	5	1	7	20:30	0	0	0	0
8:45	0	1	1	2	20:45	0	0	0	0
9:00	0	4	0	4	21:00	0	0	0	0
9:15	0	4	0	4	21:15	0	0	0	0
9:30	1	3	2	6	21:30	0	0	0	0
9:45	0	1	1	2	21:45	0	0	0	0
10:00	0	8	2	10	22:00	0	0	0	0
10:15	1	2	4	7	22:15	0	0	0	0
10:30	1	1	0	2	22:30	0	0	0	0
10:45	1	2	3	6	22:45	0	0	0	0
11:00	2	2	0	4	23:00	0	0	0	0
11:15	5	1	3	9	23:15	0	0	0	0
11:30	2	4	0	6	23:30	0	0	0	0
11:45	0	2	4	6	23:45	0	0	0	0
TOTAL	21	64	21	106	TOTAL	75	79	11	165

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 25

AM PEAK HOUR 12:45 PM
AM PEAK VOLUME 46

CLASS	CLASS DESCRIPTION	TOTAL: AM+PM						
		1	2	3	4	5	6	7
CLASS 1	MOTORCYCLES	96	143	32	0	0	0	271
CLASS 2	TRUCKS	35.4%	52.8%	11.8%	0.0%	0.0%	0.0%	100.0%
CLASS 3	BIKES							

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 02, 2023

CITY: Santiago Canyon

JOB #: SC3938

LOCATION: CLASSG El Toro between Live Oak Canyon and Glen Ranch

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	1	3	1	5
0:15	0	0	0	0	12:15	2	3	1	6
0:30	0	0	0	0	12:30	0	5	0	5
0:45	0	0	0	0	12:45	0	2	2	4
1:00	0	0	0	0	13:00	9	4	1	14
1:15	0	0	0	0	13:15	2	3	0	5
1:30	0	0	0	0	13:30	2	4	0	6
1:45	0	0	0	0	13:45	1	1	0	2
2:00	0	0	0	0	14:00	2	5	0	7
2:15	0	0	0	0	14:15	1	1	1	3
2:30	0	0	0	0	14:30	3	4	0	7
2:45	0	0	0	0	14:45	1	2	1	4
3:00	0	0	0	0	15:00	1	2	0	3
3:15	0	0	0	0	15:15	3	3	1	7
3:30	0	0	0	0	15:30	3	3	1	7
3:45	0	0	0	0	15:45	0	3	2	5
4:00	0	0	0	0	16:00	3	1	2	6
4:15	0	0	0	0	16:15	2	1	0	3
4:30	0	0	0	0	16:30	3	4	1	8
4:45	0	0	0	0	16:45	1	5	2	8
5:00	0	0	0	0	17:00	2	1	0	3
5:15	0	0	0	0	17:15	1	3	0	4
5:30	0	0	0	0	17:30	1	0	0	1
5:45	0	0	0	0	17:45	3	0	1	4
6:00	0	0	0	0	18:00	0	0	0	0
6:15	0	0	0	0	18:15	0	0	0	0
6:30	0	0	0	0	18:30	0	0	0	0
6:45	0	2	0	2	18:45	0	0	0	0
7:00	0	4	0	4	19:00	0	0	0	0
7:15	2	4	0	6	19:15	0	0	0	0
7:30	0	4	4	8	19:30	0	0	0	0
7:45	1	3	1	5	19:45	0	0	0	0
8:00	0	3	1	4	20:00	0	0	0	0
8:15	0	5	0	5	20:15	0	0	0	0
8:30	1	4	1	6	20:30	0	0	0	0
8:45	1	6	0	7	20:45	0	0	0	0
9:00	0	7	0	7	21:00	0	0	0	0
9:15	0	5	0	5	21:15	0	0	0	0
9:30	0	3	0	3	21:30	0	0	0	0
9:45	0	4	0	4	21:45	0	0	0	0
10:00	1	1	0	2	22:00	0	0	0	0
10:15	0	3	1	4	22:15	0	0	0	0
10:30	0	4	0	4	22:30	0	0	0	0
10:45	0	4	0	4	22:45	0	0	0	0
11:00	0	1	0	1	23:00	0	0	0	0
11:15	2	0	0	2	23:15	0	0	0	0
11:30	0	2	0	2	23:30	0	0	0	0
11:45	7	1	1	9	23:45	0	0	0	0
TOTAL	15	70	9	94	TOTAL	47	63	17	127

AM PEAK HOUR 8:30 AM
AM PEAK VOLUME 25

AM PEAK HOUR 12:45 PM
AM PEAK VOLUME 29

CLASS	DESCRIPTION	TOTAL: AM+PM						
		1	2	3	4	5	6	7
CLASS 1	MOTORCYCLES	62	133	26	0	0	0	221
CLASS 2	TRUCKS	28.1%	60.2%	11.8%	0.0%	0.0%	0.0%	100.0%
CLASS 3	BIKES							

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Sunday, April 30, 2023

CITY: Santiago Canyon

JOB #: SC3938

LOCATION: CLASS El Toro between Live Oak Canyon and Glen Ranch

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	7	3	2	12
0:15	0	0	0	0	12:15	16	0	0	16
0:30	0	0	0	0	12:30	16	1	1	18
0:45	0	0	0	0	12:45	17	0	1	18
1:00	0	0	0	0	13:00	23	1	1	25
1:15	0	0	0	0	13:15	23	0	1	24
1:30	0	0	0	0	13:30	14	3	1	18
1:45	0	0	0	0	13:45	18	0	0	18
2:00	0	0	0	0	14:00	16	0	1	17
2:15	0	0	0	0	14:15	40	0	0	40
2:30	0	0	0	0	14:30	22	0	2	24
2:45	0	0	0	0	14:45	18	0	0	18
3:00	0	0	0	0	15:00	29	0	1	30
3:15	0	0	0	0	15:15	16	0	0	16
3:30	0	0	0	0	15:30	27	1	0	28
3:45	0	0	0	0	15:45	26	0	0	26
4:00	0	0	0	0	16:00	13	0	1	14
4:15	0	0	0	0	16:15	24	1	1	26
4:30	0	0	0	0	16:30	8	0	0	8
4:45	0	0	0	0	16:45	15	0	0	15
5:00	0	0	0	0	17:00	18	0	1	19
5:15	0	0	0	0	17:15	6	0	0	6
5:30	0	0	0	0	17:30	4	0	1	5
5:45	0	0	0	0	17:45	5	0	1	6
6:00	0	1	0	1	18:00	0	0	0	0
6:15	2	0	0	2	18:15	0	0	0	0
6:30	0	0	0	0	18:30	0	0	0	0
6:45	0	0	1	1	18:45	0	0	0	0
7:00	1	0	0	1	19:00	0	0	0	0
7:15	0	0	0	0	19:15	0	0	0	0
7:30	3	0	18	21	19:30	0	0	0	0
7:45	1	0	139	140	19:45	0	0	0	0
8:00	3	0	132	135	20:00	0	0	0	0
8:15	4	0	46	50	20:15	0	0	0	0
8:30	11	0	32	43	20:30	0	0	0	0
8:45	7	2	31	40	20:45	0	0	0	0
9:00	2	2	5	9	21:00	0	0	0	0
9:15	2	1	4	7	21:15	0	0	0	0
9:30	3	0	1	4	21:30	0	0	0	0
9:45	9	0	16	25	21:45	0	0	0	0
10:00	3	1	1	5	22:00	0	0	0	0
10:15	15	0	4	19	22:15	0	0	0	0
10:30	6	0	4	10	22:30	0	0	0	0
10:45	9	0	8	17	22:45	0	0	0	0
11:00	8	1	1	10	23:00	0	0	0	0
11:15	13	2	1	16	23:15	0	0	0	0
11:30	14	0	3	17	23:30	0	0	0	0
11:45	16	2	3	21	23:45	0	0	0	0
TOTAL	132	12	450	594	TOTAL	421	10	16	447

AM PEAK HOUR 7:45 AM
AM PEAK VOLUME 368

AM PEAK HOUR 2:15 PM
AM PEAK VOLUME 112

CLASS	CLASSIFICATION	TOTAL: AM+PM						
		1	2	3	4	5	6	TOTAL
CLASS 1	MOTORCYCLES							
CLASS 2	TRUCKS							
CLASS 3	BIKES							
		53.1%	2.1%	44.8%	0.0%	0.0%	0.0%	100.0%

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Tuesday, May 02, 2023

CITY: Santiago Canyon

JOB #: SC3938

LOCATION: CLASSI El Toro between Marguerite and Portola

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	1	2	0	3
0:15	0	0	0	0	12:15	0	2	0	2
0:30	0	0	0	0	12:30	1	7	0	8
0:45	0	0	0	0	12:45	0	5	0	5
1:00	0	0	0	0	13:00	7	7	0	14
1:15	0	0	0	0	13:15	3	4	1	8
1:30	0	0	0	0	13:30	2	4	0	6
1:45	0	0	0	0	13:45	1	3	0	4
2:00	0	0	0	0	14:00	1	5	0	6
2:15	0	0	0	0	14:15	1	1	0	2
2:30	0	0	0	0	14:30	2	2	0	4
2:45	0	0	0	0	14:45	0	3	0	3
3:00	0	0	0	0	15:00	1	3	1	5
3:15	0	0	0	0	15:15	3	4	0	7
3:30	0	0	0	0	15:30	2	4	1	7
3:45	0	0	0	0	15:45	0	1	3	4
4:00	0	0	0	0	16:00	2	1	1	4
4:15	0	0	0	0	16:15	3	1	0	4
4:30	0	0	0	0	16:30	0	1	0	1
4:45	0	0	0	0	16:45	1	1	1	3
5:00	0	0	0	0	17:00	1	2	0	3
5:15	0	0	0	0	17:15	0	3	0	3
5:30	0	0	0	0	17:30	1	0	0	1
5:45	0	0	0	0	17:45	3	1	2	6
6:00	0	0	0	0	18:00	0	0	0	0
6:15	0	0	0	0	18:15	0	0	0	0
6:30	0	0	0	0	18:30	0	0	0	0
6:45	1	0	0	1	18:45	0	0	0	0
7:00	0	9	0	9	19:00	0	0	0	0
7:15	1	7	0	8	19:15	0	0	0	0
7:30	0	2	0	2	19:30	0	0	0	0
7:45	1	3	0	4	19:45	0	0	0	0
8:00	1	8	1	10	20:00	0	0	0	0
8:15	0	7	0	7	20:15	0	0	0	0
8:30	0	6	0	6	20:30	0	0	0	0
8:45	0	2	0	2	20:45	0	0	0	0
9:00	0	6	0	6	21:00	0	0	0	0
9:15	0	5	0	5	21:15	0	0	0	0
9:30	0	1	0	1	21:30	0	0	0	0
9:45	0	8	0	8	21:45	0	0	0	0
10:00	0	4	0	4	22:00	0	0	0	0
10:15	0	5	1	6	22:15	0	0	0	0
10:30	0	2	0	2	22:30	0	0	0	0
10:45	0	7	0	7	22:45	0	0	0	0
11:00	0	2	0	2	23:00	0	0	0	0
11:15	0	4	0	4	23:15	0	0	0	0
11:30	0	2	0	2	23:30	0	0	0	0
11:45	4	2	1	7	23:45	0	0	0	0
TOTAL	8	92	3	103	TOTAL	36	67	10	113

AM PEAK HOUR 7:45 AM
AM PEAK VOLUME 27

AM PEAK HOUR 12:30 PM
AM PEAK VOLUME 35

CLASS 1 MOTORCYCLES CLASS 2 TRUCKS CLASS 3 BIKES	TOTAL: AM+PM	44	159	13	0	0	0	216
	% OF TOTAL	20.4%	73.6%	6.0%	0.0%	0.0%	0.0%	100.0%

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Saturday, April 29, 2023

CITY: Santiago Canyon

JOB #: SC3938

LOCATION: CLASSI El Toro between Marguerite and Portola

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	6	0	2	8
0:15	0	0	0	0	12:15	18	0	0	18
0:30	0	0	0	0	12:30	5	0	0	5
0:45	0	0	0	0	12:45	3	1	2	6
1:00	0	0	0	0	13:00	4	0	0	4
1:15	0	0	0	0	13:15	6	0	4	10
1:30	0	0	0	0	13:30	6	2	5	13
1:45	0	0	0	0	13:45	4	1	2	7
2:00	0	0	0	0	14:00	3	0	0	3
2:15	0	0	0	0	14:15	4	0	1	5
2:30	0	0	0	0	14:30	7	1	1	9
2:45	0	0	0	0	14:45	10	0	0	10
3:00	0	0	0	0	15:00	5	1	0	6
3:15	0	0	0	0	15:15	4	1	0	5
3:30	0	0	0	0	15:30	3	0	0	3
3:45	0	0	0	0	15:45	6	1	0	7
4:00	0	0	0	0	16:00	4	1	3	8
4:15	0	0	0	0	16:15	6	0	0	6
4:30	0	0	0	0	16:30	4	2	0	6
4:45	0	0	0	0	16:45	3	0	1	4
5:00	0	0	0	0	17:00	4	0	2	6
5:15	0	0	0	0	17:15	5	1	0	6
5:30	0	0	0	0	17:30	0	0	0	0
5:45	0	0	0	0	17:45	7	0	0	7
6:00	0	0	0	0	18:00	0	0	0	0
6:15	1	0	0	1	18:15	0	0	0	0
6:30	1	0	0	1	18:30	0	0	0	0
6:45	0	1	0	1	18:45	0	0	0	0
7:00	1	0	0	1	19:00	0	0	0	0
7:15	1	1	0	2	19:15	0	0	0	0
7:30	2	0	0	2	19:30	0	0	0	0
7:45	0	0	1	1	19:45	0	0	0	0
8:00	1	1	1	3	20:00	0	0	0	0
8:15	1	1	3	5	20:15	0	0	0	0
8:30	1	0	1	2	20:30	0	0	0	0
8:45	2	4	6	12	20:45	0	0	0	0
9:00	0	0	1	1	21:00	0	0	0	0
9:15	0	0	3	3	21:15	0	0	0	0
9:30	0	0	2	2	21:30	0	0	0	0
9:45	1	1	6	8	21:45	0	0	0	0
10:00	5	0	0	5	22:00	0	0	0	0
10:15	5	0	2	7	22:15	0	0	0	0
10:30	1	1	0	2	22:30	0	0	0	0
10:45	4	0	0	4	22:45	0	0	0	0
11:00	5	2	1	8	23:00	0	0	0	0
11:15	5	1	0	6	23:15	0	0	0	0
11:30	3	1	3	7	23:30	0	0	0	0
11:45	8	2	3	13	23:45	0	0	0	0
TOTAL	48	16	33	97	TOTAL	127	12	23	162

AM PEAK HOUR 11:00 AM
AM PEAK VOLUME 34

AM PEAK HOUR 12:00 PM
AM PEAK VOLUME 37

CLASS	DESCRIPTION	TOTAL: AM+PM						
		1	2	3	4	5	6	7
CLASS 1	MOTORCYCLES	175	28	56	0	0	0	259
CLASS 2	TRUCKS	67.6%	10.8%	21.6%	0.0%	0.0%	0.0%	100.0%
CLASS 3	BIKES							

A16123

24-HOUR ROADWAY SEGMENT COUNTS (WITH CLASSIFICATION)

Prepared by AimTD LLC tel. 714 253 7888 cs@aimtd.com

DATE: Sunday, April 30, 2023

CITY: Santiago Canyon

JOB #: SC3938

LOCATION: CLASSI El Toro between Marguerite and Portola

AM TIME	COMBINED			TOTAL	PM Time	COMBINED			TOTAL
	1	2	3			1	2	3	
0:00	0	0	0	0	12:00	2	0	1	3
0:15	0	0	0	0	12:15	10	0	0	10
0:30	0	0	0	0	12:30	8	1	5	14
0:45	0	0	0	0	12:45	10	1	2	13
1:00	0	0	0	0	13:00	12	0	2	14
1:15	0	0	0	0	13:15	12	0	1	13
1:30	0	0	0	0	13:30	10	0	1	11
1:45	0	0	0	0	13:45	11	0	0	11
2:00	0	0	0	0	14:00	8	1	1	10
2:15	0	0	0	0	14:15	8	0	0	8
2:30	0	0	0	0	14:30	21	0	0	21
2:45	0	0	0	0	14:45	5	0	0	5
3:00	0	0	0	0	15:00	8	0	0	8
3:15	0	0	0	0	15:15	3	0	3	6
3:30	0	0	0	0	15:30	26	1	0	27
3:45	0	0	0	0	15:45	16	0	0	16
4:00	0	0	0	0	16:00	5	0	0	5
4:15	0	0	0	0	16:15	20	0	3	23
4:30	0	0	0	0	16:30	1	0	0	1
4:45	0	0	0	0	16:45	2	0	1	3
5:00	0	0	0	0	17:00	11	0	0	11
5:15	0	0	0	0	17:15	3	0	0	3
5:30	0	0	0	0	17:30	1	0	1	2
5:45	0	0	0	0	17:45	2	0	1	3
6:00	0	0	0	0	18:00	0	0	0	0
6:15	1	0	0	1	18:15	0	0	0	0
6:30	0	0	1	1	18:30	0	0	0	0
6:45	0	0	0	0	18:45	0	0	0	0
7:00	0	0	1	1	19:00	0	0	0	0
7:15	0	0	0	0	19:15	0	0	0	0
7:30	3	0	0	3	19:30	0	0	0	0
7:45	1	0	0	1	19:45	0	0	0	0
8:00	4	0	1	5	20:00	0	0	0	0
8:15	4	0	2	6	20:15	0	0	0	0
8:30	8	0	4	12	20:30	0	0	0	0
8:45	5	0	27	32	20:45	0	0	0	0
9:00	1	2	2	5	21:00	0	0	0	0
9:15	5	0	7	12	21:15	0	0	0	0
9:30	3	1	0	4	21:30	0	0	0	0
9:45	6	0	4	10	21:45	0	0	0	0
10:00	2	0	4	6	22:00	0	0	0	0
10:15	10	0	8	18	22:15	0	0	0	0
10:30	4	0	1	5	22:30	0	0	0	0
10:45	3	0	3	6	22:45	0	0	0	0
11:00	6	0	3	9	23:00	0	0	0	0
11:15	5	1	0	6	23:15	0	0	0	0
11:30	9	1	0	10	23:30	0	0	0	0
11:45	10	0	3	13	23:45	0	0	0	0
TOTAL	90	5	71	166	TOTAL	215	4	22	241

AM PEAK HOUR 8:30 AM
AM PEAK VOLUME 61

AM PEAK HOUR 3:30 PM
AM PEAK VOLUME 71

CLASS	DESCRIPTION	TOTAL: AM+PM	% OF TOTAL						
CLASS 1	MOTORCYCLES	305	74.9%	9	2.2%	93	22.9%	0	0.0%
CLASS 2	TRUCKS	0	0.0%	0	0.0%	0	0.0%	0	0.0%
CLASS 3	BIKES	407	100.0%						

Appendix F

Intersection HCM Analysis Worksheets

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 1
Intersection: Jamboree Road/Santiago Canyon

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	122	0.04	3,400	277	0.08
NBT	2.0		3,400	154	0.05	3,400	954	0.28
NBR	2.0		3,400	192	0.06	3,400	166	0.05
SBL	2.0		3,400	675	0.20	3,400	249	0.07
SBT	3.0		5,100	870	0.17	5,100	232	0.05
SBR	1.0		1,700	34	0.02	1,700	55	0.03
EBL	2.0		3,400	33	0.01	3,400	24	0.01
EBT	3.0		5,100	660	0.13	5,100	295	0.06
EBR	1.0		1,700	107	0.06	1,700	79	0.05
WBL	2.0		3,400	182	0.05	3,400	175	0.05
WBT	3.0		5,100	289	0.06	5,100	961	0.19
WBR	1.0		1,700	246	0.14	1,700	808	0.48
			N/S Movements		0.24	N/S Movements		0.35
			E/W Movements		0.18	E/W Movements		0.41
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.48			
LEVEL OF SERVICE (LOS)					A	0.81		
						D		

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 13
Intersection: El Toro Road/Ridgeline Road South

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	99	0.06	1,700	126	0.07	*
NBT	1.0		1,700	240	0.14	1,700	606	0.36	*
NBR									
SBL									*
SBT	1.0		1,700	447	0.27	1,700	237	0.14	*
SBR				10			8		
EBL	1.0		1,700	18	0.01	1,700	15	0.01	*
EBT									
EBR	1.0		1,700	242	0.14	1,700	73	0.04	*
WBL									
WBT									*
WBR									
				N/S Movements	0.33		N/S Movements	0.36	
				E/W Movements	0.08		E/W Movements	0.01	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.46				0.42
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 14
Intersection: El Toro Road/Valley Vista

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL									*
NBT	1.0		1,700	313	0.18	1,700	736	0.43	*
NBR	1.0		1,700	27	0.02	1,700	71	0.04	
SBL	1.0		1,700	18	0.01	1,700	15	0.01	*
SBT	1.0		1,700	668	0.39	1,700	295	0.17	*
SBR									
EBL									
EBT									*
EBR									
WBL	0.5		850	89	0.10	850	34	0.04	*
WBT									
WBR	0.5		850	27	0.03	850	9	0.01	*
				N/S Movements	0.39		N/S Movements	0.44	
				E/W Movements	0.10		E/W Movements	0.04	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.55				0.53
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 16
Intersection: El Toro Road/Glenn Ranch Road

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	215	0.13	1,700	179	0.11	
NBT	1.0		1,700	283	0.17	1,700	636	0.37	*
NBR									
SBL									*
SBT	1.5		2,550	644	0.25	2,550	299	0.12	
SBR	0.5		850	164	0.19	850	64	0.08	
EBL	1.0		1,700	61	0.04	1,700	202	0.12	*
EBT									
EBR	1.0		1,700	233	0.14	1,700	162	0.10	
WBL									
WBT									*
WBR									
				N/S Movements	0.38		N/S Movements	0.37	
				E/W Movements	0.04		E/W Movements	0.12	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.46				0.54
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 17
Intersection: El Toro Road/Wandering Trails

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL								
NBT	1.0		1,700	447	0.26	1,700	784	0.46
NBR	1.0		1,700	20	0.01	1,700	42	0.02
SBL	1.0		1,700	28	0.02	1,700	29	0.02
SBT	2.0		3,400	848	0.25	3,400	452	0.13
SBR								
EBL								
EBT					*			*
EBR								
WBL	1.0		1,700	60	0.04	1,700	22	0.01
WBT								
WBR	1.0		1,700	50	0.03	1,700	20	0.01
				N/S Movements	0.28		N/S Movements	0.48
				E/W Movements	0.04		E/W Movements	0.01
				Yellow Clearance	0.05		Yellow Clearance	0.05
TOTAL CAPACITY UTILIZATION					0.36	0.54		
LEVEL OF SERVICE (LOS)					A	A		

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 18
Intersection: El Toro Road/Painted Trials

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	2.0		3,400	415	0.12	3,400	804	0.24	*
NBR	1.0		1,700	52	0.03	1,700	114	0.07	
SBL	1.0		1,700	18	0.01	1,700	23	0.01	*
SBT	2.0		3,400	887	0.26	3,400	454	0.13	
SBR									
EBL									
EBT									*
EBR									
WBL	1.0		1,700	144	0.08	1,700	68	0.04	*
WBT									
WBR	1.0		1,700	56	0.03	1,700	15	0.01	
				N/S Movements	0.26		N/S Movements	0.25	
				E/W Movements	0.08		E/W Movements	0.04	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.40				0.34
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 19
Intersection: El Toro Road/Marguerite Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	2	0.00	3,400	9	0.00
NBT	2.0		3,400	149	0.04	3,400	290	0.09
NBR	1.0		1,700	181	0.11	1,700	288	0.17
SBL	2.0		3,400	722	0.21	3,400	354	0.10
SBT	1.5		2,550	302	0.12	2,550	157	0.06
SBR	0.5		850	5	0.01	850	9	0.01
EBL	1.5		2,550	5	0.00	2,550	11	0.00
EBT	1.0		1,700	10	0.01	1,700	40	0.02
EBR	1.5		2,550	4	0.00	2,550	8	0.00
WBL	1.5		2,550	200	0.08	2,550	138	0.05
WBT	1.0		1,700	28	0.02	1,700	24	0.01
WBR	1.5		2,550	327	0.13	2,550	608	0.24
			N/S Movements		0.26	N/S Movements		0.22
			E/W Movements		0.08	E/W Movements		0.14
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.39			
LEVEL OF SERVICE (LOS)					A	0.41		
						A		

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 20
Intersection: El Toro Road/Pheasant Creek

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	3.0		5,100	287	0.06	5,100	593	0.12	*
NBR	1.0		1,700	21	0.01	1,700	47	0.03	
SBL	1.0		1,700	6	0.00	1,700	13	0.01	*
SBT	2.0		3,400	511	0.15	3,400	286	0.08	*
SBR									
EBL									
EBT									*
EBR									
WBL	1.5		2,550	89	0.03	2,550	40	0.02	*
WBT									
WBR	0.5		850	19	0.02	850	14	0.02	*
			N/S Movements		0.15	N/S Movements		0.12	
			E/W Movements		0.03	E/W Movements		0.02	
			Yellow Clearance		0.05	Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.24				0.19
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: Existing
ID: 21
Intersection: El Toro Road/Portola Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR				
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C		
NBL	1.0		1,700	268	0.16	*	1,700	236	0.14	*
NBT	3.0		5,100	196	0.04		5,100	378	0.07	
NBR	1.0	Yes	1,700	470			1,700	537		
SBL	1.0		1,700	31	0.02		1,700	11	0.01	
SBT	3.0		5,100	387	0.08	*	5,100	178	0.03	*
SBR	1.0		1,700	174	0.10	*	1,700	132	0.08	
EBL	2.0		3,400	85	0.03		3,400	220	0.06	
EBT	3.0		5,100	927	0.18	*	5,100	1,358	0.27	*
EBR	1.0		1,700	326	0.19		1,700	376	0.22	
WBL	2.0		3,400	434	0.13	*	3,400	403	0.12	*
WBT	4.0		6,800	1,336	0.20		6,800	1,006	0.15	
WBR	1.0		1,700	36	0.02		1,700	43	0.03	
				N/S Movements	0.24			N/S Movements	0.17	
				E/W Movements	0.31			E/W Movements	0.38	
				Yellow Clearance	0.05			Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.59					
LEVEL OF SERVICE (LOS)					A		0.61			
							B			

Project: Santiago Canyon MPAH
Scenario: Existing_Saturday
ID: 16
Intersection: El Toro Road/Glenn Ranch Road

MOVEMENT	LANES	Free?	MD PEAK HOUR		
			CAPACITY	VOLUME	V/C
NBL	1.0		1,700	143	0.08
NBT	1.0		1,700	404	0.24
NBR					
SBL					
SBT	1.5		2,550	349	0.14
SBR	0.5		850	108	0.13
EBL	1.0		1,700	172	0.10
EBT					
EBR	1.0		1,700	150	0.09
WBL					
WBT					
WBR					
			N/S Movements		0.24
			E/W Movements		0.10
			Yellow Clearance		0.05

TOTAL CAPACITY UTILIZATION **0.39**
LEVEL OF SERVICE (LOS) **A**

Project: Santiago Canyon MPAH
Scenario: Existing_Saturday
ID: 19
Intersection: El Toro Road/Marguerite Parkway

MOVEMENT	LANES	Free?	MD PEAK HOUR			
			CAPACITY	VOLUME	V/C	
NBL	2.0		3,400	162	0.05	*
NBT	2.0		3,400	37	0.01	
NBR	1.0		1,700	408	0.24	*
SBL	2.0		3,400	10	0.00	
SBT	1.5		2,550	10	0.00	*
SBR	0.5		850	10	0.01	*
EBL	1.5		2,550	6	0.00	
EBT	1.0		1,700	217	0.13	*
EBR	1.5		2,550	190	0.07	
WBL	1.5		2,550	328	0.13	*
WBT	1.0		1,700	241	0.14	
WBR	1.5		2,550	4	0.00	
			N/S Movements		0.11	
			E/W Movements		0.26	
			Yellow Clearance		0.05	

TOTAL CAPACITY UTILIZATION **0.42**
LEVEL OF SERVICE (LOS) **A**

Project: Santiago Canyon MPAH
Scenario: Existing_Saturday
ID: 21
Intersection: El Toro Road/Portola Parkway

MOVEMENT	LANES	Free?	MD PEAK HOUR			
			CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	351	0.21	*
NBT	3.0		5,100	860	0.17	
NBR	1.0	Yes	1,700	36		
SBL	1.0		1,700	141	0.08	
SBT	3.0		5,100	973	0.19	*
SBR	1.0		1,700	323	0.19	
EBL	2.0		3,400	166	0.05	*
EBT	3.0		5,100	218	0.04	
EBR	1.0		1,700	368	0.22	
WBL	2.0		3,400	20	0.01	
WBT	4.0		6,800	247	0.04	*
WBR	1.0		1,700	169	0.10	
			N/S Movements		0.40	
			E/W Movements		0.09	
			Yellow Clearance		0.05	

TOTAL CAPACITY UTILIZATION **0.53**
LEVEL OF SERVICE (LOS) **A**

Project: Santiago Canyon MPAH
Scenario: Existing_Sunday
ID: 16
Intersection: El Toro Road/Glenn Ranch Road

MOVEMENT	LANES	Free?	MD PEAK HOUR			
			CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	164	0.10	*
NBT	1.0		1,700	356	0.21	
NBR						
SBL						
SBT	1.5		2,550	331	0.13	*
SBR	0.5		850	109	0.13	
EBL	1.0		1,700	97	0.06	*
EBT						
EBR	1.0		1,700	111	0.07	
WBL						
WBT						*
WBR						
			N/S Movements		0.23	
			E/W Movements		0.06	
			Yellow Clearance		0.05	

TOTAL CAPACITY UTILIZATION **0.33**
LEVEL OF SERVICE (LOS) **A**

Project: Santiago Canyon MPAH
Scenario: Existing_Sunday
ID: 19
Intersection: El Toro Road/Marguerite Parkway

MOVEMENT	LANES	Free?	MD PEAK HOUR			
			CAPACITY	VOLUME	V/C	
NBL	2.0		3,400	161	0.05	*
NBT	2.0		3,400	14	0.00	
NBR	1.0		1,700	290	0.17	*
SBL	2.0		3,400	41	0.01	
SBT	1.5		2,550	309	0.12	*
SBR	0.5		850	268	0.32	*
EBL	1.5		2,550	17	0.01	
EBT	1.0		1,700	251	0.15	*
EBR	1.5		2,550	198	0.08	
WBL	1.5		2,550	274	0.11	*
WBT	1.0		1,700	226	0.13	
WBR	1.5		2,550	5	0.00	
			N/S Movements		0.36	
			E/W Movements		0.26	
			Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.66	
LEVEL OF SERVICE (LOS)					B	

Project: Santiago Canyon MPAH
Scenario: Existing_Sunday
ID: 21
Intersection: El Toro Road/Portola Parkway

MOVEMENT	LANES	Free?	MD PEAK HOUR			
			CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	331	0.19	*
NBT	3.0		5,100	731	0.14	
NBR	1.0	Yes	1,700	37		
SBL	1.0		1,700	144	0.08	
SBT	3.0		5,100	745	0.15	*
SBR	1.0		1,700	398	0.23	*
EBL	2.0		3,400	186	0.05	*
EBT	3.0		5,100	251	0.05	
EBR	1.0		1,700	290	0.17	
WBL	2.0		3,400	35	0.01	
WBT	4.0		6,800	377	0.06	*
WBR	1.0		1,700	249	0.15	*
			N/S Movements		0.37	
			E/W Movements		0.12	
			Yellow Clearance		0.05	

TOTAL CAPACITY UTILIZATION **0.54**
LEVEL OF SERVICE (LOS) **A**

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 1
Intersection: Jamboree Road/Santiago Canyon

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	157	0.05	3,400	296	0.09
NBT	2.0		3,400	136	0.04	3,400	1,038	0.31
NBR	2.0		3,400	174	0.05	3,400	282	0.08
SBL	2.0		3,400	884	0.26	3,400	503	0.15
SBT	3.0		5,100	751	0.15	5,100	233	0.05
SBR	1.0		1,700	63	0.04	1,700	70	0.04
EBL	2.0		3,400	38	0.01	3,400	42	0.01
EBT	3.0		5,100	777	0.15	5,100	813	0.16
EBR	1.0		1,700	83	0.05	1,700	108	0.06
WBL	2.0		3,400	325	0.10	3,400	145	0.04
WBT	3.0		5,100	1,106	0.22	5,100	1,006	0.20
WBR	1.0		1,700	649	0.38	1,700	861	0.51
			N/S Movements		0.30	N/S Movements		0.45
			E/W Movements		0.25	E/W Movements		0.37
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.60			
LEVEL OF SERVICE (LOS)					A	0.87		
						D		

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 13
Intersection: El Toro Road/Ridgeline Road South

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	1.0		1,700	108	0.06	1,700	119	0.07
NBT	2.0		3,400	965	0.28	3,400	780	0.23
NBR								
SBL								
SBT	3.0		5,100	533	0.11	5,100	555	0.11
SBR				5			15	
EBL	1.0		1,700	28	0.02	1,700	17	0.01
EBT								
EBR	1.0		1,700	224	0.13	1,700	75	0.04
WBL								
WBT								
WBR								
				N/S Movements	0.28		N/S Movements	0.23
				E/W Movements	0.07		E/W Movements	0.01
				Yellow Clearance	0.05		Yellow Clearance	0.05
TOTAL CAPACITY UTILIZATION					0.40			
LEVEL OF SERVICE (LOS)					A			
						0.29		
						A		

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 14
Intersection: El Toro Road/Valley Vista

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL								
NBT	3.0		5,100	1,033	0.20	5,100	963	0.19
NBR	1.0		1,700	35	0.02	1,700	106	0.06
SBL	1.0		1,700	11	0.01	1,700	31	0.02
SBT	3.0		5,100	838	0.16	5,100	627	0.12
SBR								
EBL								
EBT					*			*
EBR								
WBL	0.5		850	136	0.16	850	46	0.05
WBT								
WBR	0.5		850	49	0.06	850	10	0.01
			N/S Movements		0.21	N/S Movements		0.21
			E/W Movements		0.16	E/W Movements		0.05
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.42			
LEVEL OF SERVICE (LOS)					A			
						0.31		
						A		

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 16
Intersection: El Toro Road/Glenn Ranch Road

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR				
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C		
NBL	1.0		1,700	205	0.12	*	1,700	241	0.14	*
NBT	3.0		5,100	862	0.17		5,100	819	0.16	
NBR										
SBL										
SBT	2.5		4,250	807	0.19	*	4,250	519	0.12	*
SBR	0.5		850	174	0.20		850	174	0.20	
EBL	1.0		1,700	198	0.12	*	1,700	250	0.15	*
EBT										
EBR	1.0		1,700	280	0.16	*	1,700	134	0.08	
WBL										
WBT						*				*
WBR										
				N/S Movements	0.31			N/S Movements	0.26	
				E/W Movements	0.12			E/W Movements	0.15	
				Yellow Clearance	0.05			Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.48					
LEVEL OF SERVICE (LOS)					A		0.46			
							A			

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 17
Intersection: El Toro Road/Wandering Trails

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL									*
NBT	3.0		5,100	995	0.20	5,100	1,028	0.20	*
NBR	1.0		1,700	27	0.02	1,700	42	0.02	
SBL	1.0		1,700	21	0.01	1,700	29	0.02	*
SBT	3.0		5,100	1,066	0.21	5,100	647	0.13	
SBR									
EBL									
EBT									*
EBR									
WBL	1.0		1,700	60	0.04	1,700	23	0.01	*
WBT									
WBR	1.0		1,700	50	0.03	1,700	19	0.01	
				N/S Movements	0.21		N/S Movements	0.22	
				E/W Movements	0.04		E/W Movements	0.01	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.29				0.28
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 18
Intersection: El Toro Road/Painted Trials

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	3.0		5,100	981	0.19	5,100	1,054	0.21	*
NBR	1.0		1,700	61	0.04	1,700	117	0.07	
SBL	1.0		1,700	9	0.01	1,700	20	0.01	*
SBT	3.0		5,100	1,131	0.22	5,100	668	0.13	
SBR									
EBL									
EBT									*
EBR									
WBL	1.0		1,700	155	0.09	1,700	73	0.04	*
WBT									
WBR	1.0		1,700	46	0.03	1,700	12	0.01	
				N/S Movements	0.22		N/S Movements	0.22	
				E/W Movements	0.09		E/W Movements	0.04	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.36				0.31
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 19
Intersection: El Toro Road/Marguerite Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	1	0.00	3,400	7	0.00
NBT	3.0		5,100	254	0.05	5,100	360	0.07
NBR	1.0		1,700	121	0.07	1,700	203	0.12
SBL	2.0		3,400	977	0.29	3,400	498	0.15
SBT	1.5		2,550	342	0.13	2,550	222	0.09
SBR	0.5		850	7	0.01	850	14	0.02
EBL	1.5		2,550	9	0.00	2,550	16	0.01
EBT	1.0		1,700	7	0.00	1,700	34	0.02
EBR	1.5		2,550	2	0.00	2,550	7	0.00
WBL	1.5		2,550	166	0.07	2,550	109	0.04
WBT	1.0		1,700	27	0.02	1,700	21	0.01
WBR	1.5		2,550	831	0.33	2,550	842	0.33
			N/S Movements		0.34	N/S Movements		0.22
			E/W Movements		0.07	E/W Movements		0.19
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.46			
LEVEL OF SERVICE (LOS)					A			
						0.46		
						A		

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 20
Intersection: El Toro Road/Pheasant Creek

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	3.0		5,100	326	0.06	5,100	593	0.12	*
NBR	1.0		1,700	21	0.01	1,700	46	0.03	
SBL	1.0		1,700	6	0.00	1,700	14	0.01	*
SBT	3.0		5,100	514	0.10	5,100	321	0.06	
SBR									
EBL									
EBT									*
EBR									
WBL	1.5		2,550	87	0.03	2,550	40	0.02	*
WBT									
WBR	0.5		850	20	0.02	850	14	0.02	*
			N/S Movements		0.10	N/S Movements		0.12	
			E/W Movements		0.03	E/W Movements		0.02	
			Yellow Clearance		0.05	Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.19				0.19
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 With Widening
ID: 21
Intersection: El Toro Road/Portola Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR				
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C		
NBL	1.0		1,700	291	0.17	*	1,700	252	0.15	*
NBT	3.0		5,100	219	0.04		5,100	378	0.07	
NBR	1.0	Yes	1,700	508			1,700	538		
SBL	1.0		1,700	29	0.02		1,700	12	0.01	
SBT	3.0		5,100	405	0.08	*	5,100	203	0.04	*
SBR	1.0		1,700	163	0.10		1,700	147	0.09	
EBL	2.0		3,400	98	0.03		3,400	219	0.06	
EBT	3.0		5,100	1,036	0.20	*	5,100	1,356	0.27	*
EBR	1.0		1,700	410	0.24		1,700	409	0.24	
WBL	2.0		3,400	481	0.14	*	3,400	441	0.13	*
WBT	3.5		5,950	1,324	0.22		5,950	1,077	0.18	
WBR	0.5		850	37	0.04		850	43	0.05	
			N/S Movements		0.25		N/S Movements		0.19	
			E/W Movements		0.34		E/W Movements		0.40	
			Yellow Clearance		0.05		Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.65					
LEVEL OF SERVICE (LOS)					B		0.63			
					B		B			

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 1
Intersection: Jamboree Road/Santiago Canyon

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	190	0.06	3,400	300	0.09
NBT	2.0		3,400	173	0.05	3,400	1,050	0.31
NBR	2.0		3,400	206	0.06	3,400	271	0.08
SBL	2.0		3,400	847	0.25	3,400	477	0.14
SBT	3.0		5,100	800	0.16	5,100	242	0.05
SBR	1.0		1,700	62	0.04	1,700	70	0.04
EBL	2.0		3,400	40	0.01	3,400	42	0.01
EBT	3.0		5,100	756	0.15	5,100	766	0.15
EBR	1.0		1,700	90	0.05	1,700	112	0.07
WBL	2.0		3,400	269	0.08	3,400	147	0.04
WBT	3.0		5,100	847	0.17	5,100	978	0.19
WBR	1.0		1,700	522	0.31	1,700	837	0.49
			N/S Movements		0.30	N/S Movements		0.45
			E/W Movements		0.23	E/W Movements		0.36
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.58			
LEVEL OF SERVICE (LOS)					A	0.86		
						D		

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 13
Intersection: El Toro Road/Ridgeline Road South

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL	1.0		1,700	103	0.06	1,700	122	0.07	*
NBT	1.0		1,700	288	0.17	1,700	665	0.39	*
NBR									
SBL									*
SBT	1.0		1,700	454	0.27	1,700	249	0.15	*
SBR				11			12		
EBL	1.0		1,700	21	0.01	1,700	24	0.01	*
EBT									
EBR	1.0		1,700	235	0.14	1,700	71	0.04	*
WBL									*
WBT									*
WBR									*
				N/S Movements	0.33		N/S Movements	0.39	
				E/W Movements	0.08		E/W Movements	0.01	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.46				0.46
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 14
Intersection: El Toro Road/Valley Vista

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL									*
NBT	1.0		1,700	357	0.21	1,700	786	0.46	*
NBR	1.0		1,700	29	0.02	1,700	115	0.07	
SBL	1.0		1,700	17	0.01	1,700	22	0.01	*
SBT	1.0		1,700	679	0.40	1,700	328	0.19	*
SBR									
EBL									
EBT									*
EBR									
WBL	0.5		850	142	0.17	850	46	0.05	*
WBT									
WBR	0.5		850	43	0.05	850	11	0.01	*
				N/S Movements	0.40		N/S Movements	0.48	
				E/W Movements	0.17		E/W Movements	0.05	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.62				0.58
LEVEL OF SERVICE (LOS)					B				A

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 16
Intersection: El Toro Road/Glenn Ranch Road

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR				
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C		
NBL	1.0		1,700	207	0.12	*	1,700	290	0.17	
NBT	1.0		1,700	288	0.17		1,700	679	0.40	*
NBR										
SBL										*
SBT	1.5		2,550	650	0.26	*	2,550	302	0.12	
SBR	0.5		850	172	0.20		850	109	0.13	
EBL	1.0		1,700	100	0.06	*	1,700	220	0.13	*
EBT										
EBR	1.0		1,700	349	0.21	*	1,700	159	0.09	
WBL										
WBT						*				*
WBR										
				N/S Movements	0.38			N/S Movements	0.40	
				E/W Movements	0.08			E/W Movements	0.13	
				Yellow Clearance	0.05			Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.51					
LEVEL OF SERVICE (LOS)					A		0.58			
					A		A			

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 17
Intersection: El Toro Road/Wandering Trails

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	1.0		1,700	450	0.26	1,700	903	0.53	*
NBR	1.0		1,700	20	0.01	1,700	44	0.03	
SBL	1.0		1,700	28	0.02	1,700	27	0.02	*
SBT	2.0		3,400	985	0.29	3,400	452	0.13	
SBR									
EBL									
EBT									*
EBR									
WBL	1.0		1,700	64	0.04	1,700	22	0.01	*
WBT									
WBR	1.0		1,700	47	0.03	1,700	20	0.01	
				N/S Movements	0.29		N/S Movements	0.55	
				E/W Movements	0.04		E/W Movements	0.01	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.38				0.61
LEVEL OF SERVICE (LOS)					A				B

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 18
Intersection: El Toro Road/Painted Trials

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	2.0		3,400	433	0.13	3,400	932	0.27	*
NBR	1.0		1,700	57	0.03	1,700	119	0.07	
SBL	1.0		1,700	13	0.01	1,700	18	0.01	*
SBT	2.0		3,400	1,059	0.31	3,400	453	0.13	
SBR									
EBL									
EBT									*
EBR									
WBL	1.0		1,700	165	0.10	1,700	69	0.04	*
WBT									
WBR	1.0		1,700	38	0.02	1,700	13	0.01	
				N/S Movements	0.31		N/S Movements	0.28	
				E/W Movements	0.10		E/W Movements	0.04	
				Yellow Clearance	0.05		Yellow Clearance	0.05	
TOTAL CAPACITY UTILIZATION					0.46				0.38
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 19
Intersection: El Toro Road/Marguerite Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR		
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C
NBL	2.0		3,400	2	0.00	3,400	9	0.00
NBT	2.0		3,400	174	0.05	3,400	350	0.10
NBR	1.0		1,700	192	0.11	1,700	272	0.16
SBL	2.0		3,400	815	0.24	3,400	371	0.11
SBT	1.5		2,550	454	0.18	2,550	176	0.07
SBR	0.5		850	6	0.01	850	10	0.01
EBL	1.5		2,550	5	0.00	2,550	14	0.01
EBT	1.0		1,700	9	0.01	1,700	40	0.02
EBR	1.5		2,550	5	0.00	2,550	8	0.00
WBL	1.5		2,550	259	0.10	2,550	143	0.06
WBT	1.0		1,700	27	0.02	1,700	24	0.01
WBR	1.5		2,550	351	0.14	2,550	753	0.30
			N/S Movements		0.29	N/S Movements		0.21
			E/W Movements		0.11	E/W Movements		0.19
			Yellow Clearance		0.05	Yellow Clearance		0.05
TOTAL CAPACITY UTILIZATION					0.45			
LEVEL OF SERVICE (LOS)					A			
						0.45		
						A		

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 20
Intersection: El Toro Road/Pheasant Creek

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR			
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C	
NBL								*	
NBT	3.0		5,100	323	0.06	5,100	605	0.12	*
NBR	1.0		1,700	20	0.01	1,700	47	0.03	
SBL	1.0		1,700	7	0.00	1,700	13	0.01	*
SBT	2.0		3,400	725	0.21	3,400	311	0.09	*
SBR									
EBL									*
EBT									*
EBR									
WBL	1.5		2,550	90	0.04	2,550	40	0.02	*
WBT									
WBR	0.5		850	18	0.02	850	14	0.02	*
			N/S Movements		0.21	N/S Movements		0.13	
			E/W Movements		0.04	E/W Movements		0.02	
			Yellow Clearance		0.05	Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.30				0.19
LEVEL OF SERVICE (LOS)					A				A

Project: Santiago Canyon MPAH
Scenario: 2045 Without Widening
ID: 21
Intersection: El Toro Road/Portola Parkway

MOVEMENT	LANES	Free?	AM PEAK HOUR			PM PEAK HOUR				
			CAPACITY	VOLUME	V/C	CAPACITY	VOLUME	V/C		
NBL	1.0		1,700	268	0.16	*	1,700	255	0.15	*
NBT	3.0		5,100	210	0.04		5,100	386	0.08	
NBR	1.0	Yes	1,700	493			1,700	540		
SBL	1.0		1,700	43	0.03		1,700	11	0.01	
SBT	3.0		5,100	532	0.10	*	5,100	195	0.04	*
SBR	1.0		1,700	232	0.14	*	1,700	145	0.09	
EBL	2.0		3,400	104	0.03		3,400	223	0.07	
EBT	3.0		5,100	1,109	0.22	*	5,100	1,355	0.27	*
EBR	1.0		1,700	384	0.23		1,700	401	0.24	
WBL	2.0		3,400	462	0.14	*	3,400	439	0.13	*
WBT	3.5		5,950	1,378	0.23		5,950	1,101	0.18	
WBR	0.5		850	40	0.05		850	45	0.05	
			N/S Movements		0.26		N/S Movements		0.19	
			E/W Movements		0.35		E/W Movements		0.39	
			Yellow Clearance		0.05		Yellow Clearance		0.05	
TOTAL CAPACITY UTILIZATION					0.67					
LEVEL OF SERVICE (LOS)					B		0.63			
					B		B			



Appendix G

Intersection HCM Analysis Worksheets

HCM 6th Signalized Intersection Summary

Existing Year

2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙		↗↗	↙	↕↕			↕↕↕	↗
Traffic Volume (veh/h)	0	0	0	46	0	213	72	507	0	0	1250	285
Future Volume (veh/h)	0	0	0	46	0	213	72	507	0	0	1250	285
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				48	0	222	75	528	0	0	1302	297
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				282	0	441	186	2374	0	0	2515	572
Arrive On Green				0.16	0.00	0.16	0.10	0.67	0.00	0.00	0.48	0.40
Sat Flow, veh/h				1781	0	2790	1781	3647	0	0	5541	1200
Grp Volume(v), veh/h				48	0	222	75	528	0	0	1190	409
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1781	1777	0	0	1609	1654
Q Serve(g_s), s				1.1	0.0	3.3	1.8	2.7	0.0	0.0	7.9	8.4
Cycle Q Clear(g_c), s				1.1	0.0	3.3	1.8	2.7	0.0	0.0	7.9	8.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.73
Lane Grp Cap(c), veh/h				282	0	441	186	2374	0	0	2298	788
V/C Ratio(X)				0.17	0.00	0.50	0.40	0.22	0.00	0.00	0.52	0.52
Avail Cap(c_a), veh/h				387	0	606	387	3244	0	0	2937	1007
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.8	0.0	17.7	19.2	3.0	0.0	0.0	8.4	9.4
Incr Delay (d2), s/veh				0.3	0.0	0.9	1.4	0.0	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.4	0.0	1.0	0.7	0.4	0.0	0.0	2.0	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.0	0.0	18.6	20.6	3.0	0.0	0.0	8.6	9.9
LnGrp LOS				B	A	B	C	A	A	A	A	A
Approach Vol, veh/h					270			603			1599	
Approach Delay, s/veh					18.3			5.2			8.9	
Approach LOS					B			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		34.7			8.8	25.9		11.3				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		41.5			9.5	27.5		9.5				
Max Q Clear Time (g_c+I1), s		5.7			4.8	11.4		6.3				
Green Ext Time (p_c), s		4.0			0.1	10.0		0.3				
Intersection Summary												
HCM 6th Ctrl Delay				9.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

Existing Year
AM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↖	↑↑	↗↗	↖↖		↗
Traffic Volume (veh/h)	0	0	0	564	36	108	500	693	35	4	0
Future Volume (veh/h)	0	0	0	564	36	108	500	693	35	4	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No		No		
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	613	39	117	543	753	38	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	1210	77	289	2319	1401	277		
Arrive On Green			0.00	0.36	0.21	0.16	0.65	0.50	0.08	0.00	0.00
Sat Flow, veh/h			0	3486	216	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	321	331	117	543	753	38	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1832	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	4.2	4.3	1.8	1.9	5.5	0.3	0.0	0.0
Cycle Q Clear(g_c), s			0.0	4.2	4.3	1.8	1.9	5.5	0.3	0.0	0.0
Prop In Lane			0.00		0.12	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	634	653	289	2319	1401	277		
V/C Ratio(X)			0.00	0.51	0.51	0.40	0.23	0.54	0.14		
Avail Cap(c_a), veh/h			0	1485	1531	834	5108	3590	1040		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	7.6	7.8	11.2	2.1	5.1	12.8	0.0	0.0
Incr Delay (d2), s/veh			0.0	0.6	0.6	0.9	0.1	0.3	0.2	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	1.1	1.1	0.6	0.0	0.7	0.1	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	8.2	8.4	12.1	2.2	5.4	13.0	0.0	0.0
LnGrp LOS			A	A	A	B	A	A	B		
Approach Vol, veh/h				652			1413		38		
Approach Delay, s/veh				8.3			4.7		13.0		
Approach LOS				A			A		B		
Timer - Assigned Phs	1	2		4		6					
Phs Duration (G+Y+Rc), s	8.9	14.7		6.4		23.5					
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s	13.5	24.5		8.5		42.5					
Max Q Clear Time (g_c+I1), s	3.8	6.3		2.3		7.5					
Green Ext Time (p_c), s	0.2	3.8		0.0		8.5					

Intersection Summary

HCM 6th Ctrl Delay			6.0								
HCM 6th LOS			A								

Notes

Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Santiago Canyon & SR-241 NB Off-Ramp

Existing Year
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔		↑↑	↓↓	
Traffic Volume (veh/h)	196	8	0	410	503	0
Future Volume (veh/h)	196	8	0	410	503	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	206	8	0	432	529	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	848	389	0	1471	1471	0
Arrive On Green	0.25	0.25	0.00	0.41	0.41	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	206	8	0	432	529	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	1.1	0.1	0.0	1.9	2.4	0.0
Cycle Q Clear(g_c), s	1.1	0.1	0.0	1.9	2.4	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	848	389	0	1471	1471	0
V/C Ratio(X)	0.24	0.02	0.00	0.29	0.36	0.00
Avail Cap(c_a), veh/h	2648	1215	0	5144	5144	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.1	6.7	0.0	4.6	4.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.3	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.3	6.7	0.0	4.7	4.9	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	214			432	529	
Approach Delay, s/veh	7.2			4.7	4.9	
Approach LOS	A			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		13.7		9.8		13.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		33.5		17.5		33.5
Max Q Clear Time (g_c+I1), s		4.9		4.1		5.4
Green Ext Time (p_c), s		3.0		0.6		3.8
Intersection Summary						
HCM 6th Ctrl Delay			5.2			
HCM 6th LOS			A			

HCM 6th TWSC
5: Santiago Canyon Road & Silverado Canyon Road

Existing Year
AM Peak Hour

Intersection						
Int Delay, s/veh	1.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	59	99	290	24	37	467
Future Vol, veh/h	59	99	290	24	37	467
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	110	322	27	41	519

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	923	-	0	-	322
Stage 1	322	-	-	-	-
Stage 2	601	-	-	-	-
Critical Hdwy	6.42	-	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	-	-	-	2.218
Pot Cap-1 Maneuver	299	0	-	0	1238
Stage 1	735	0	-	0	-
Stage 2	547	0	-	0	-
Platoon blocked, %		-	-	-	-
Mov Cap-1 Maneuver	289	-	-	-	1238
Mov Cap-2 Maneuver	289	-	-	-	-
Stage 1	735	-	-	-	-
Stage 2	529	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.1	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 289	- 1238	-
HCM Lane V/C Ratio	- 0.227	- 0.033	-
HCM Control Delay (s)	- 21.1	0	8
HCM Lane LOS	- C	A	A
HCM 95th %tile Q(veh)	- 0.9	- 0.1	-

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Existing Year
AM Peak Hour

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	14	18	42	144	1
Future Vol, veh/h	1	14	18	42	144	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	16	20	47	162	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	250	163	163	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	739	882	1416	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	728	882	1416	-	-	-
Mov Cap-2 Maneuver	728	-	-	-	-	-
Stage 1	853	-	-	-	-	-
Stage 2	936	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1416	-	870	-	-
HCM Lane V/C Ratio	0.014	-	0.019	-	-
HCM Control Delay (s)	7.6	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

HCM 6th TWSC
7: Santiago Canyon Road & Modjeska Canyon Road

Existing Year
AM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	15	24	282	1	19	512
Future Vol, veh/h	15	24	282	1	19	512
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	28	328	1	22	595

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	967	328	0	0	329	0
Stage 1	328	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	282	713	-	-	1231	-
Stage 1	730	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	277	713	-	-	1231	-
Mov Cap-2 Maneuver	277	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	277	713	1231	-
HCM Lane V/C Ratio	-	-	0.063	0.039	0.018	-
HCM Control Delay (s)	-	-	18.9	10.3	8	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-

HCM 6th TWSC
 8: Santiago Canyon Road & Modjeska Grade Road

Existing Year
 AM Peak Hour

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	37	2	280	14	1	532
Future Vol, veh/h	37	2	280	14	1	532
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	2	318	16	1	605

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	925	318	0	0	334	0
Stage 1	318	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	299	723	-	-	1225	-
Stage 1	738	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	299	723	-	-	1225	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	543	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	299	723	1225	-
HCM Lane V/C Ratio	-	-	0.141	0.003	0.001	-
HCM Control Delay (s)	-	-	19	10	7.9	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-

HCM 6th TWSC
9: Santiago Canyon Road & Saddle Crest

Existing Year
AM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↗↘	↘↗	↑
Traffic Vol, veh/h	5	4	293	10	3	562
Future Vol, veh/h	5	4	293	10	3	562
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	4	329	11	3	631

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	966	329	0	0	340
Stage 1	329	-	-	-	-
Stage 2	637	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	282	712	-	-	1219
Stage 1	729	-	-	-	-
Stage 2	527	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	281	712	-	-	1219
Mov Cap-2 Maneuver	281	-	-	-	-
Stage 1	729	-	-	-	-
Stage 2	526	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	384	1219
HCM Lane V/C Ratio	-	-	0.026	0.003
HCM Control Delay (s)	-	-	14.6	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Existing Year
 AM Peak Hour

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	60	12	16	234	428	126
Future Vol, veh/h	60	12	16	234	428	126
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	13	17	252	460	135

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	814	528	595	0	-	0
Stage 1	528	-	-	-	-	-
Stage 2	286	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	550	981	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	550	981	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	763	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.5	0.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	981	-	364	-	-
HCM Lane V/C Ratio	0.018	-	0.213	-	-
HCM Control Delay (s)	8.7	-	17.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.8	-	-

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Existing Year
 AM Peak Hour

Intersection										
Int Delay, s/veh	0.8									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	↘		↘	↗	↗	↘	↗		↘	
Traffic Vol, veh/h	25	13	0	239	16	4	439	0	0	0
Future Vol, veh/h	25	13	0	239	16	4	439	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	15	0	269	18	4	493	0	0	0

Major/Minor	Minor1		Major1			Major2			Minor2	
Conflicting Flow All	770	269	493	0	0	287	0	0	787	493
Stage 1	269	-	-	-	-	-	-	-	501	-
Stage 2	501	-	-	-	-	-	-	-	286	-
Critical Hdwy	7.12	6.22	4.12	-	-	4.12	-	-	7.12	6.22
Critical Hdwy Stg 1	6.12	-	-	-	-	-	-	-	6.12	-
Critical Hdwy Stg 2	6.12	-	-	-	-	-	-	-	6.12	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	2.218	-	-	3.518	3.318
Pot Cap-1 Maneuver	318	770	1071	-	-	1275	-	0	309	576
Stage 1	737	-	-	-	-	-	-	0	552	-
Stage 2	552	-	-	-	-	-	-	0	721	-
Platoon blocked, %				-	-	-				
Mov Cap-1 Maneuver	317	770	1071	-	-	1275	-	-	303	576
Mov Cap-2 Maneuver	317	-	-	-	-	-	-	-	303	-
Stage 1	737	-	-	-	-	-	-	-	552	-
Stage 2	550	-	-	-	-	-	-	-	707	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	15.2	0	0.1	0
HCM LOS	C			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	1071	-	-	397	1275
HCM Lane V/C Ratio	-	-	-	-	0.108	0.004
HCM Control Delay (s)	0	0	-	-	15.2	7.8
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	-	0	-	-	0.4	0

HCM 6th TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Existing Year
 AM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑		↘	↑
Traffic Vol, veh/h	90	58	199	58	98	367
Future Vol, veh/h	90	58	199	58	98	367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	100	64	221	64	109	408

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	879	253	0	0	285
Stage 1	253	-	-	-	-
Stage 2	626	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	318	786	-	-	1277
Stage 1	789	-	-	-	-
Stage 2	533	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	291	786	-	-	1277
Mov Cap-2 Maneuver	291	-	-	-	-
Stage 1	789	-	-	-	-
Stage 2	488	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.3	0	1.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	291	786	1277	-
HCM Lane V/C Ratio	-	-	0.344	0.082	0.085	-
HCM Control Delay (s)	-	-	23.7	10	8.1	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.3	0.3	-

HCM 6th TWSC
15: El Toro Road & Cielo Entrada

Existing Year
AM Peak Hour

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	52	14	328	14	12	758
Future Vol, veh/h	52	14	328	14	12	758
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	18	410	18	15	948






























Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1388	410	0	0	428	0
Stage 1	410	-	-	-	-	-
Stage 2	978	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	157	642	-	-	1131	-
Stage 1	670	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	155	642	-	-	1131	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	359	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	642	1131	-
HCM Lane V/C Ratio	-	-	0.419	0.027	0.013	-
HCM Control Delay (s)	-	-	44	10.8	8.2	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.9	0.1	0	-

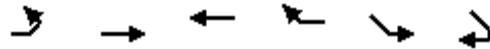
HCM 6th Signalized Intersection Summary
 22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

Existing Year
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 					
Traffic Volume (veh/h)	281	781	125	121	710	217	167	0	260	105	0	214
Future Volume (veh/h)	281	781	125	121	710	217	167	0	260	105	0	214
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	312	868	0	134	789	0	186	0	0	117	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	646	1897		521	1712		584	0		253	0	
Arrive On Green	0.19	0.37	0.00	0.15	0.34	0.00	0.17	0.00	0.00	0.14	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	186		1781	117	
Grp Volume(v), veh/h	312	868	0	134	789	0	186	14.5		117	16.6	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	B		1781	B	
Q Serve(g_s), s	3.1	5.0	0.0	1.3	4.7	0.0	1.8			2.3		
Cycle Q Clear(g_c), s	3.1	5.0	0.0	1.3	4.7	0.0	1.8			2.3		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	646	1897		521	1712		584			253		
V/C Ratio(X)	0.48	0.46		0.26	0.46		0.32			0.46		
Avail Cap(c_a), veh/h	1156	3549		801	3023		1068			550		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	14.1	9.2	0.0	14.6	10.1	0.0	14.2			15.3		
Incr Delay (d2), s/veh	0.6	0.2	0.0	0.3	0.2	0.0	0.3			1.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.1	1.4	0.0	0.5	1.4	0.0	0.6			0.9		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	9.4	0.0	14.8	10.3	0.0	14.5			16.6		
LnGrp LOS	B	A		B	B		B			B		
Approach Vol, veh/h		1180			923							
Approach Delay, s/veh		10.8			11.0							
Approach LOS		B			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	9.9	18.4	10.6		11.3	17.0	9.5					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	8.5	26.5	11.5		12.5	22.5	11.5					
Max Q Clear Time (g_c+I1), s	4.3	8.0	4.8		6.1	7.7	5.3					
Green Ext Time (p_c), s	0.1	5.9	0.3		0.6	4.8	0.1					
Intersection Summary												
HCM 6th Ctrl Delay			11.4									
HCM 6th LOS			B									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

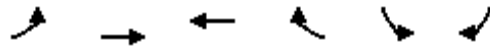
Existing Year
 AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↶↶	↶↶	↶↶	↶		
Traffic Volume (veh/h)	132	513	443	100	0	0
Future Volume (veh/h)	132	513	443	100	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	145	564	487	110		
Peak Hour Factor	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	724	2909	1519	678		
Arrive On Green	0.21	0.82	0.43	0.43		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	145	564	487	110		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	0.8	0.8	2.0	0.9		
Cycle Q Clear(g_c), s	0.8	0.8	2.0	0.9		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	724	2909	1519	678		
V/C Ratio(X)	0.20	0.19	0.32	0.16		
Avail Cap(c_a), veh/h	2509	9029	5804	2589		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.2	0.4	4.2	3.9		
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.1		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.3	0.5	4.3	4.0		
LnGrp LOS	A	A	A	A		
Approach Vol, veh/h		709	597			
Approach Delay, s/veh		1.9	4.2			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		22.0			8.6	13.4
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			15.5	35.5
Max Q Clear Time (g_c+I1), s		3.8			3.8	5.0
Green Ext Time (p_c), s		4.4			0.3	3.9
Intersection Summary						
HCM 6th Ctrl Delay			3.0			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

Existing Year
 AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	538	442	0	108	177
Future Volume (veh/h)	0	538	442	0	108	177
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	604	497	0	121	199
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1496	1496	0	918	421
Arrive On Green	0.00	0.42	0.42	0.00	0.27	0.27
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	604	497	0	121	199
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	3.0	2.4	0.0	0.7	2.7
Cycle Q Clear(g_c), s	0.0	3.0	2.4	0.0	0.7	2.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1496	1496	0	918	421
V/C Ratio(X)	0.00	0.40	0.33	0.00	0.13	0.47
Avail Cap(c_a), veh/h	0	4039	4039	0	3115	1429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.2	5.0	0.0	7.1	7.9
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.5	0.4	0.0	0.2	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.3	5.1	0.0	7.2	8.7
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		604	497		320	
Approach Delay, s/veh		5.3	5.1		8.1	
Approach LOS		A	A		A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		14.7		10.8		14.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		28.5		22.5		28.5
Max Q Clear Time (g_c+I1), s		6.0		5.7		5.4
Green Ext Time (p_c), s		4.2		1.0		3.4
Intersection Summary						
HCM 6th Ctrl Delay			5.9			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

Existing Year
 AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↖↗		↗	↖↗		↗
Traffic Volume (veh/h)	102	272	89	50	541	212	262	0	62	117	0	309
Future Volume (veh/h)	102	272	89	50	541	212	262	0	62	117	0	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	116	309	0	57	615	0	298	0	0	133	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	267	1791		177	1533		706	0		553	0	
Arrive On Green	0.15	0.35	0.00	0.10	0.30	0.00	0.20	0.00	0.00	0.16	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	298		3456	133	
Grp Volume(v), veh/h	116	309	0	57	615	0	298	12.4		133	13.0	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	B		1728	B	
Q Serve(g_s), s	2.1	1.5	0.0	1.0	3.3	0.0	2.6			1.2		
Cycle Q Clear(g_c), s	2.1	1.5	0.0	1.0	3.3	0.0	2.6			1.2		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	267	1791		177	1533		706			553		
V/C Ratio(X)	0.43	0.17		0.32	0.40		0.42			0.24		
Avail Cap(c_a), veh/h	615	3526		461	3085		1491			1491		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	13.4	7.8	0.0	14.6	9.7	0.0	12.0			12.8		
Incr Delay (d2), s/veh	1.1	0.0	0.0	1.0	0.2	0.0	0.4			0.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.7	0.4	0.0	0.4	0.9	0.0	0.8			0.4		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	7.8	0.0	15.6	9.8	0.0	12.4			13.0		
LnGrp LOS	B	A		B	A		B			B		
Approach Vol, veh/h		425			672							
Approach Delay, s/veh		9.7			10.3							
Approach LOS		A			B							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	9.6		7.5	16.2	11.1		9.2	14.4				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	14.5		8.5	23.5	14.5		11.5	20.5				
Max Q Clear Time (g_c+I1), s	4.2		4.0	4.5	5.6		5.1	6.3				
Green Ext Time (p_c), s	0.3		0.0	1.9	0.7		0.1	3.6				

Intersection Summary

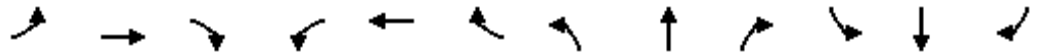
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

Existing Year
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙		↗↗	↙	↗↗			↗↗↗	
Traffic Volume (veh/h)	0	0	0	50	0	116	26	1832	0	0	683	25
Future Volume (veh/h)	0	0	0	50	0	116	26	1832	0	0	683	25
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				55	0	127	29	2013	0	0	751	27
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				156	0	245	83	2905	0	0	4646	166
Arrive On Green				0.09	0.00	0.09	0.05	0.82	0.00	0.00	0.72	0.72
Sat Flow, veh/h				1781	0	2790	1781	3647	0	0	6687	230
Grp Volume(v), veh/h				55	0	127	29	2013	0	0	563	215
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1781	1777	0	0	1609	1829
Q Serve(g_s), s				2.5	0.0	3.7	1.3	20.1	0.0	0.0	3.1	3.1
Cycle Q Clear(g_c), s				2.5	0.0	3.7	1.3	20.1	0.0	0.0	3.1	3.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.13
Lane Grp Cap(c), veh/h				156	0	245	83	2905	0	0	3490	1323
V/C Ratio(X)				0.35	0.00	0.52	0.35	0.69	0.00	0.00	0.16	0.16
Avail Cap(c_a), veh/h				190	0	298	169	3075	0	0	3490	1323
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.2	0.0	36.8	39.0	3.2	0.0	0.0	3.7	3.7
Incr Delay (d2), s/veh				1.3	0.0	1.7	2.5	0.6	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	1.3	0.6	3.5	0.0	0.0	0.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.6	0.0	38.5	41.4	3.9	0.0	0.0	3.8	3.9
LnGrp LOS				D	A	D	D	A	A	A	A	A
Approach Vol, veh/h					182			2042			778	
Approach Delay, s/veh					38.2			4.4			3.8	
Approach LOS					D			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		73.0			8.0	65.0		11.4				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		72.5			7.5	60.5		8.5				
Max Q Clear Time (g_c+I1), s		23.1			4.3	6.1		6.7				
Green Ext Time (p_c), s		29.6			0.0	6.2		0.1				
Intersection Summary												
HCM 6th Ctrl Delay				6.3								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

Existing Year
PM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↗	↑↑	↗↗	↘↘		↗
Traffic Volume (veh/h)	0	0	0	1590	46	133	358	236	296	44	0
Future Volume (veh/h)	0	0	0	1590	46	133	358	236	296	44	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	1728	50	145	389	257	322	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	2139	62	193	2725	1975	443		
Arrive On Green			0.00	0.61	0.55	0.11	0.77	0.71	0.13	0.00	0.00
Sat Flow, veh/h			0	3621	102	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	868	910	145	389	257	322	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1852	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	28.6	29.1	6.0	2.2	2.3	6.8	0.0	0.0
Cycle Q Clear(g_c), s			0.0	28.6	29.1	6.0	2.2	2.3	6.8	0.0	0.0
Prop In Lane			0.00		0.05	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	1077	1123	193	2725	1975	443		
V/C Ratio(X)			0.00	0.81	0.81	0.75	0.14	0.13	0.73		
Avail Cap(c_a), veh/h			0	1240	1293	266	3198	2346	608		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	11.5	11.7	33.0	2.3	3.6	31.9	0.0	0.0
Incr Delay (d2), s/veh			0.0	3.5	3.5	7.6	0.0	0.0	2.8	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	10.3	11.0	2.9	0.5	0.5	2.9	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	15.1	15.3	40.6	2.3	3.6	34.7	0.0	0.0
LnGrp LOS			A	B	B	D	A	A	C		
Approach Vol, veh/h				1778			791		322		
Approach Delay, s/veh				15.2			9.8		34.7		
Approach LOS				B			A		C		
Timer - Assigned Phs	1	2		4		6					
Phs Duration (G+Y+Rc), s	12.2	50.2		13.8		62.5					
Change Period (Y+Rc), s	4.5	4.5		4.5		4.5					
Max Green Setting (Gmax), s	10.9	52.7		12.9		68.1					
Max Q Clear Time (g_c+I1), s	8.0	31.6		8.8		4.3					
Green Ext Time (p_c), s	0.1	14.1		0.4		4.1					

Intersection Summary

HCM 6th Ctrl Delay	15.9
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary

4: Santiago Canyon & SR-241 NB Off-Ramp

Existing Year
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↔		↑↑	↓↓	
Traffic Volume (veh/h)	978	34	0	684	393	0
Future Volume (veh/h)	978	34	0	684	393	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	1075	37	0	752	432	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	1527	700	0	1283	1283	0
Arrive On Green	0.44	0.44	0.00	0.36	0.36	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	1075	37	0	752	432	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	10.2	0.5	0.0	7.0	3.6	0.0
Cycle Q Clear(g_c), s	10.2	0.5	0.0	7.0	3.6	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	1527	700	0	1283	1283	0
V/C Ratio(X)	0.70	0.05	0.00	0.59	0.34	0.00
Avail Cap(c_a), veh/h	2469	1132	0	2013	2013	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	9.2	6.5	0.0	10.5	9.4	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.1	0.0	2.1	1.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.8	6.5	0.0	10.9	9.6	0.0
LnGrp LOS	A	A	A	B	A	A
Approach Vol, veh/h	1112			752	432	
Approach Delay, s/veh	9.7			10.9	9.6	
Approach LOS	A			B	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		18.7		21.9		18.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		22.5		28.5		22.5
Max Q Clear Time (g_c+I1), s		10.0		13.2		6.6
Green Ext Time (p_c), s		4.2		4.2		2.5
Intersection Summary						
HCM 6th Ctrl Delay			10.1			
HCM 6th LOS			B			

HCM 6th TWSC
 5: Santiago Canyon Road & Silverado Canyon Road

Existing Year
 PM Peak Hour

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	39	76	624	43	132	264
Future Vol, veh/h	39	76	624	43	132	264
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	78	643	44	136	272

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1187	-	0
Stage 1	643	-	-
Stage 2	544	-	-
Critical Hdwy	6.42	-	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	-	-
Pot Cap-1 Maneuver	208	0	0
Stage 1	523	0	0
Stage 2	582	0	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	178	-	-
Mov Cap-2 Maneuver	178	-	-
Stage 1	523	-	-
Stage 2	498	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31	0	3.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 178	- 942	-
HCM Lane V/C Ratio	- 0.226	- 0.144	-
HCM Control Delay (s)	- 31	0	9.5
HCM Lane LOS	- D	A	A
HCM 95th %tile Q(veh)	- 0.8	- 0.5	-

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Existing Year
PM Peak Hour

Intersection						
Int Delay, s/veh	1.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		T
Traffic Vol, veh/h	2	33	26	146	87	7
Future Vol, veh/h	2	33	26	146	87	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	35	28	157	94	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	311	98	102	0	0
Stage 1	98	-	-	-	-
Stage 2	213	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	681	958	1490	-	-
Stage 1	926	-	-	-	-
Stage 2	823	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	667	958	1490	-	-
Mov Cap-2 Maneuver	667	-	-	-	-
Stage 1	907	-	-	-	-
Stage 2	823	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1490	-	935	-	-
HCM Lane V/C Ratio	0.019	-	0.04	-	-
HCM Control Delay (s)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC
 7: Santiago Canyon Road & Modjeska Canyon Road

Existing Year
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	13	18	665	10	23	247
Future Vol, veh/h	13	18	665	10	23	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	19	700	11	24	260

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1008	700	0	0	711	0
Stage 1	700	-	-	-	-	-
Stage 2	308	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	267	439	-	-	888	-
Stage 1	493	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	260	439	-	-	888	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	493	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	260	439	888	-
HCM Lane V/C Ratio	-	-	0.053	0.043	0.027	-
HCM Control Delay (s)	-	-	19.6	13.6	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-

HCM 6th TWSC
8: Santiago Canyon Road & Modjeska Grade Road

Existing Year
PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	24	1	683	27	0	267
Future Vol, veh/h	24	1	683	27	0	267
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	1	711	28	0	278

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	989	711	0	0	739	0
Stage 1	711	-	-	-	-	-
Stage 2	278	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	274	433	-	-	867	-
Stage 1	487	-	-	-	-	-
Stage 2	769	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	274	433	-	-	867	-
Mov Cap-2 Maneuver	274	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	769	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	274	433	867	-
HCM Lane V/C Ratio	-	-	0.091	0.002	-	-
HCM Control Delay (s)	-	-	19.5	13.3	0	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

HCM 6th TWSC
 9: Santiago Canyon Road & Saddle Crest

Existing Year
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘↗		↑	↗↘	↘↗	↑
Traffic Vol, veh/h	6	6	705	2	1	295
Future Vol, veh/h	6	6	705	2	1	295
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	6	727	2	1	304

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1033	727	0	0	729	0
Stage 1	727	-	-	-	-	-
Stage 2	306	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	258	424	-	-	875	-
Stage 1	478	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	258	424	-	-	875	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	746	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	321	875
HCM Lane V/C Ratio	-	-	0.039	0.001
HCM Control Delay (s)	-	-	16.7	9.1
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.1	0

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Existing Year
 PM Peak Hour

Intersection						
Int Delay, s/veh	4.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	134	10	15	601	275	70
Future Vol, veh/h	134	10	15	601	275	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	146	11	16	653	299	76

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1022	337	375	0	-	0
Stage 1	337	-	-	-	-	-
Stage 2	685	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	261	705	1183	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	500	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	257	705	1183	-	-	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	713	-	-	-	-	-
Stage 2	500	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.5	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1183	-	269	-	-
HCM Lane V/C Ratio	0.014	-	0.582	-	-
HCM Control Delay (s)	8.1	-	35.5	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	3.4	-	-

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Existing Year
 PM Peak Hour

Intersection										
Int Delay, s/veh	0.5									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	↘		↘	↗	↗	↘	↗		↘	
Traffic Vol, veh/h	16	7	0	601	32	6	245	0	0	0
Future Vol, veh/h	16	7	0	601	32	6	245	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	8	0	653	35	7	266	0	0	0

Major/Minor	Minor1	Major1	Major2	Minor2
Conflicting Flow All	933	653	266	0
Stage 1	653	-	-	-
Stage 2	280	-	-	-
Critical Hdwy	7.12	6.22	4.12	-
Critical Hdwy Stg 1	6.12	-	-	-
Critical Hdwy Stg 2	6.12	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-
Pot Cap-1 Maneuver	246	467	1298	-
Stage 1	456	-	-	-
Stage 2	727	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	245	467	1298	-
Mov Cap-2 Maneuver	245	-	-	-
Stage 1	456	-	-	-
Stage 2	721	-	-	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	18.8	0	0.2	0
HCM LOS	C			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	1298	-	-	286	906
HCM Lane V/C Ratio	-	-	-	-	0.087	0.007
HCM Control Delay (s)	0	0	-	-	18.8	9
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	-	0	-	-	0.3	0

HCM 6th TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Existing Year
 PM Peak Hour

Intersection						
Int Delay, s/veh	3.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑		↘	↑
Traffic Vol, veh/h	48	115	519	101	64	196
Future Vol, veh/h	48	115	519	101	64	196
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	51	122	552	107	68	209

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	951	606	0	0	659	0
Stage 1	606	-	-	-	-	-
Stage 2	345	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	288	497	-	-	929	-
Stage 1	545	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	267	497	-	-	929	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	665	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	2.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	267	497	929	-
HCM Lane V/C Ratio	-	-	0.191	0.246	0.073	-
HCM Control Delay (s)	-	-	21.6	14.6	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	1	0.2	-

HCM 6th TWSC
15: El Toro Road & Cielo Entrada

Existing Year
PM Peak Hour

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	28	4	803	32	6	341
Future Vol, veh/h	28	4	803	32	6	341
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	4	828	33	6	352
































Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1192	828	0	0	861	0
Stage 1	828	-	-	-	-	-
Stage 2	364	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	207	371	-	-	781	-
Stage 1	429	-	-	-	-	-
Stage 2	703	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	205	371	-	-	781	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	697	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.1	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	205	371	781	-
HCM Lane V/C Ratio	-	-	0.141	0.011	0.008	-
HCM Control Delay (s)	-	-	25.4	14.8	9.6	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-

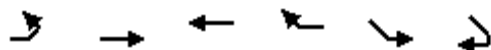
HCM 6th Signalized Intersection Summary
 22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

Existing Year
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		  	  		 				 	
Traffic Volume (veh/h)	139	750	135	220	909	121	100	0	127	129	0	247
Future Volume (veh/h)	139	750	135	220	909	121	100	0	127	129	0	247
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	149	806	0	237	977	0	108	0	0	139	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	534	1901		607	2008		467	0		268	0	
Arrive On Green	0.15	0.37	0.00	0.18	0.39	0.00	0.14	0.00	0.00	0.15	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	108		1781	139	
Grp Volume(v), veh/h	149	806	0	237	977	0	108	15.6		139	17.1	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	B		1781	B	
Q Serve(g_s), s	1.5	4.7	0.0	2.4	5.7	0.0	1.1			2.9		
Cycle Q Clear(g_c), s	1.5	4.7	0.0	2.4	5.7	0.0	1.1			2.9		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	534	1901		607	2008		467			268		
V/C Ratio(X)	0.28	0.42		0.39	0.49		0.23			0.52		
Avail Cap(c_a), veh/h	781	3079		955	3336		1129			582		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	14.9	9.3	0.0	14.5	9.1	0.0	15.4			15.6		
Incr Delay (d2), s/veh	0.3	0.2	0.0	0.4	0.2	0.0	0.3			1.5		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	0.5	1.3	0.0	0.8	1.6	0.0	0.4			1.1		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.1	9.5	0.0	14.9	9.2	0.0	15.6			17.1		
LnGrp LOS	B	A		B	A		B			B		
Approach Vol, veh/h		955			1214							
Approach Delay, s/veh		10.3			10.4							
Approach LOS		B			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	11.0	18.8	9.4		10.2	19.7	10.0					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	10.5	23.5	12.5		8.5	25.5	12.5					
Max Q Clear Time (g_c+I1), s	5.4	7.7	4.1		4.5	8.7	5.9					
Green Ext Time (p_c), s	0.4	5.1	0.2		0.1	6.4	0.2					
Intersection Summary												
HCM 6th Ctrl Delay			11.0									
HCM 6th LOS			B									
Notes												
Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.												

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

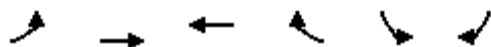
Existing Year
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↶↶	↶↶	↶↶	↶		
Traffic Volume (veh/h)	166	640	530	115	0	0
Future Volume (veh/h)	166	640	530	115	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	175	674	558	121		
Peak Hour Factor	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	769	2957	1569	700		
Arrive On Green	0.22	0.83	0.44	0.44		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	175	674	558	121		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	1.0	0.9	2.5	1.1		
Cycle Q Clear(g_c), s	1.0	0.9	2.5	1.1		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	769	2957	1569	700		
V/C Ratio(X)	0.23	0.23	0.36	0.17		
Avail Cap(c_a), veh/h	2466	8354	5222	2329		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.6	0.4	4.4	4.0		
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.1		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.7	0.5	4.5	4.1		
LnGrp LOS	A	A	A	A		
Approach Vol, veh/h		849	679			
Approach Delay, s/veh		2.0	4.5			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		23.8			9.3	14.5
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			16.5	34.5
Max Q Clear Time (g_c+I1), s		3.9			4.0	5.5
Green Ext Time (p_c), s		5.5			0.4	4.5
Intersection Summary						
HCM 6th Ctrl Delay			3.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

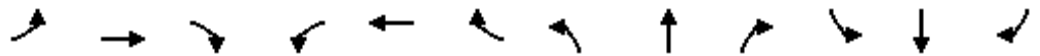
Existing Year
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	688	546	0	87	158
Future Volume (veh/h)	0	688	546	0	87	158
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	740	587	0	94	170
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1563	1563	0	864	396
Arrive On Green	0.00	0.44	0.44	0.00	0.25	0.25
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	740	587	0	94	170
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	3.8	2.9	0.0	0.5	2.3
Cycle Q Clear(g_c), s	0.0	3.8	2.9	0.0	0.5	2.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1563	1563	0	864	396
V/C Ratio(X)	0.00	0.47	0.38	0.00	0.11	0.43
Avail Cap(c_a), veh/h	0	2674	2564	0	1341	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	4.8	0.0	7.5	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.4	0.0	0.1	0.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.3	5.0	0.0	7.5	8.9
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		740	587		264	
Approach Delay, s/veh		5.3	5.0		8.4	
Approach LOS		A	A		A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		15.3		10.4		15.3
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.9		9.5		18.1
Max Q Clear Time (g_c+I1), s		6.8		5.3		5.9
Green Ext Time (p_c), s		4.0		0.3		3.2
Intersection Summary						
HCM 6th Ctrl Delay			5.7			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

Existing Year
 PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↑↑↑		↖	↑↑↑		↖↖		↖	↖↖		↖
Traffic Volume (veh/h)	181	502	188	67	463	148	49	0	63	194	0	82
Future Volume (veh/h)	181	502	188	67	463	148	49	0	63	194	0	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	203	564	0	75	520	0	55	0	0	218	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	335	1755		211	1400		337	0		662	0	
Arrive On Green	0.19	0.34	0.00	0.12	0.27	0.00	0.10	0.00	0.00	0.19	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	55		3456	218	
Grp Volume(v), veh/h	203	564	0	75	520	0	55	14.6		218	12.4	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	B		1728	B	
Q Serve(g_s), s	3.6	2.8	0.0	1.3	2.9	0.0	0.5			1.9		
Cycle Q Clear(g_c), s	3.6	2.8	0.0	1.3	2.9	0.0	0.5			1.9		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	335	1755		211	1400		337			662		
V/C Ratio(X)	0.61	0.32		0.36	0.37		0.16			0.33		
Avail Cap(c_a), veh/h	823	4274		463	3242		997			997		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	12.9	8.4	0.0	14.1	10.2	0.0	14.3			12.1		
Incr Delay (d2), s/veh	1.8	0.1	0.0	1.0	0.2	0.0	0.2			0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.3	0.7	0.0	0.5	0.8	0.0	0.2			0.6		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.7	8.5	0.0	15.1	10.3	0.0	14.6			12.4		
LnGrp LOS	B	A		B	B		B			B		
Approach Vol, veh/h		767			595							
Approach Delay, s/veh		10.1			10.9							
Approach LOS		B			B							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	10.6		8.1	15.9	7.4		10.5	13.5				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	9.5		8.5	28.5	9.5		15.5	21.5				
Max Q Clear Time (g_c+I1), s	4.9		4.3	5.8	3.5		6.6	5.9				
Green Ext Time (p_c), s	0.3		0.0	4.0	0.0		0.4	3.1				

Intersection Summary

HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Existing Year
Saturday MD Peak Hour

Intersection						
Int Delay, s/veh	3.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	14	94	39	125	143	6
Future Vol, veh/h	14	94	39	125	143	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	104	43	139	159	7

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	388	163	166	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	225	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	616	882	1412	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	596	882	1412	-	-	-
Mov Cap-2 Maneuver	596	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	812	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	1.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1412	-	830	-	-
HCM Lane V/C Ratio	0.031	-	0.145	-	-
HCM Control Delay (s)	7.6	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-

HCM 6th TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Existing Year
 Saturday MD Peak Hour

Intersection						
Int Delay, s/veh	6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	143	131	265	138	102	189
Future Vol, veh/h	143	131	265	138	102	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	151	138	279	145	107	199

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	765	352	0	0	424	0
Stage 1	352	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	371	692	-	-	1135	-
Stage 1	712	-	-	-	-	-
Stage 2	668	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	336	692	-	-	1135	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	605	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.1	0	3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	336	692	1135
HCM Lane V/C Ratio	-	-	0.448	0.199	0.095
HCM Control Delay (s)	-	-	24.1	11.5	8.5
HCM Lane LOS	-	-	C	B	A
HCM 95th %tile Q(veh)	-	-	2.2	0.7	0.3

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Existing Year
Sunday MD Peak Hour

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	9	55	67	160	178	7
Future Vol, veh/h	9	55	67	160	178	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	71	87	208	231	9

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	618	236	240	0	0
Stage 1	236	-	-	-	-
Stage 2	382	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	453	803	1327	-	-
Stage 1	803	-	-	-	-
Stage 2	690	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	419	803	1327	-	-
Mov Cap-2 Maneuver	419	-	-	-	-
Stage 1	744	-	-	-	-
Stage 2	690	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.7	2.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1327	-	711	-	-
HCM Lane V/C Ratio	0.066	-	0.117	-	-
HCM Control Delay (s)	7.9	0	10.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.4	-	-

HCM 2010 TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Existing Year
 Sunday MD Peak Hour

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↖		↙	↗
Traffic Vol, veh/h	135	120	212	161	153	252
Future Vol, veh/h	135	120	212	161	153	252
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	145	129	228	173	165	271

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	916	315	0	0	401
Stage 1	315	-	-	-	-
Stage 2	601	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	302	725	-	-	1158
Stage 1	740	-	-	-	-
Stage 2	547	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	259	725	-	-	1158
Mov Cap-2 Maneuver	259	-	-	-	-
Stage 1	740	-	-	-	-
Stage 2	469	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.9	0	3.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	259	725	1158
HCM Lane V/C Ratio	-	-	0.56	0.178	0.142
HCM Control Delay (s)	-	-	35.3	11	8.6
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	3.1	0.6	0.5

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↑↑	↗↗	↙	↑↑			↑↑↑	↘
Traffic Volume (veh/h)	0	0	0	80	1053	479	70	1314	0	0	1478	512
Future Volume (veh/h)	0	0	0	80	1053	479	70	1314	0	0	1478	512
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				83	1097	499	73	1369	0	0	1540	533
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				689	1234	1079	128	1856	0	0	1954	642
Arrive On Green				0.39	0.35	0.39	0.07	0.52	0.00	0.00	0.41	0.37
Sat Flow, veh/h				1781	3554	2790	1781	3647	0	0	5087	1585
Grp Volume(v), veh/h				83	1097	499	73	1369	0	0	1540	533
Grp Sat Flow(s),veh/h/ln				1781	1777	1395	1781	1777	0	0	1609	1585
Q Serve(g_s), s				2.6	25.7	11.8	3.5	26.4	0.0	0.0	24.6	27.0
Cycle Q Clear(g_c), s				2.6	25.7	11.8	3.5	26.4	0.0	0.0	24.6	27.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				689	1234	1079	128	1856	0	0	1954	642
V/C Ratio(X)				0.12	0.89	0.46	0.57	0.74	0.00	0.00	0.79	0.83
Avail Cap(c_a), veh/h				728	1311	1140	154	1856	0	0	1954	642
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.4	27.1	20.2	39.6	16.4	0.0	0.0	22.9	25.2
Incr Delay (d2), s/veh				0.1	7.6	0.3	4.0	2.7	0.0	0.0	3.3	11.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	11.7	3.7	1.6	9.2	0.0	0.0	8.6	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.4	34.7	20.5	43.5	19.0	0.0	0.0	26.2	37.1
LnGrp LOS				B	C	C	D	B	A	A	C	D
Approach Vol, veh/h					1679			1442			2073	
Approach Delay, s/veh					29.6			20.3			29.0	
Approach LOS					C			C			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.0			10.3	39.7		38.1				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		45.5			7.1	33.9		35.5				
Max Q Clear Time (g_c+I1), s		29.4			6.5	30.0		28.7				
Green Ext Time (p_c), s		8.0			0.0	3.3		4.9				
Intersection Summary												
HCM 6th Ctrl Delay											26.8	
HCM 6th LOS											C	

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

AM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↘	↑↑	↗↗	↘↘		↗
Traffic Volume (veh/h)	0	0	0	1218	787	72	578	1048	180	361	0
Future Volume (veh/h)	0	0	0	1218	787	72	578	1048	180	361	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	1324	855	78	628	1139	196	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	1645	957	106	3032	2276	279		
Arrive On Green			0.00	0.76	0.72	0.06	0.85	0.82	0.08	0.00	0.00
Sat Flow, veh/h			0	2256	1258	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	1062	1117	78	628	1139	196	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1644	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	43.0	63.8	5.2	3.8	15.4	6.7	0.0	0.0
Cycle Q Clear(g_c), s			0.0	43.0	63.8	5.2	3.8	15.4	6.7	0.0	0.0
Prop In Lane			0.00		0.77	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	1352	1250	106	3032	2276	279		
V/C Ratio(X)			0.00	0.79	0.89	0.74	0.21	0.50	0.70		
Avail Cap(c_a), veh/h			0	1458	1349	122	3277	2469	864		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	8.6	12.4	56.0	1.6	3.5	54.2	0.0	0.0
Incr Delay (d2), s/veh			0.0	2.7	7.6	17.9	0.0	0.2	3.2	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	14.6	22.8	2.9	0.8	3.2	3.0	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	11.3	20.0	74.0	1.6	3.6	57.4	0.0	0.0
LnGrp LOS			A	B	C	E	A	A	E		
Approach Vol, veh/h				2179			1845		196		
Approach Delay, s/veh				15.8			5.9		57.4		
Approach LOS				B			A		E		
Timer - Assigned Phs	1	2		4			6				
Phs Duration (G+Y+Rc), s	11.2	96.1		13.8			107.3				
Change Period (Y+Rc), s	4.5	4.5		4.5			4.5				
Max Green Setting (Gmax), s	7.8	98.9		29.8			111.2				
Max Q Clear Time (g_c+I1), s	7.2	65.8		8.7			17.4				
Green Ext Time (p_c), s	0.0	25.9		0.6			14.9				

Intersection Summary

HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Santiago Canyon & SR-241 NB Off-Ramp

Year 2045 No Project (With Widening)
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↔↔	↗		↕↕	↕↕	
Traffic Volume (veh/h)	290	11	0	1352	500	0
Future Volume (veh/h)	290	11	0	1352	500	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	305	12	0	1423	526	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	591	271	0	2298	2298	0
Arrive On Green	0.17	0.17	0.00	0.65	0.65	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	305	12	0	1423	526	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	3.5	0.3	0.0	10.4	2.7	0.0
Cycle Q Clear(g_c), s	3.5	0.3	0.0	10.4	2.7	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	591	271	0	2298	2298	0
V/C Ratio(X)	0.52	0.04	0.00	0.62	0.23	0.00
Avail Cap(c_a), veh/h	1102	506	0	3886	3886	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	15.2	0.0	4.6	3.2	0.0
Incr Delay (d2), s/veh	0.7	0.1	0.0	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.0	1.8	0.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.2	15.3	0.0	4.8	3.3	0.0
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	317			1423	526	
Approach Delay, s/veh	17.2			4.8	3.3	
Approach LOS	B			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		32.4		11.5		32.4
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		47.5		13.5		47.5
Max Q Clear Time (g_c+I1), s		13.4		6.5		5.7
Green Ext Time (p_c), s		14.5		0.6		4.0
Intersection Summary						
HCM 6th Ctrl Delay			6.2			
HCM 6th LOS			A			

HCM 6th TWSC
 5: Santiago Canyon Road & Silverado Canyon Road

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑	↗	↘	↑↑
Traffic Vol, veh/h	49	111	1304	46	22	477
Future Vol, veh/h	49	111	1304	46	22	477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	123	1449	51	24	530

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1762	-	0
Stage 1	1449	-	-
Stage 2	313	-	-
Critical Hdwy	6.84	-	-
Critical Hdwy Stg 1	5.84	-	-
Critical Hdwy Stg 2	5.84	-	-
Follow-up Hdwy	3.52	-	-
Pot Cap-1 Maneuver	75	0	0
Stage 1	182	0	0
Stage 2	715	0	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	71	-	-
Mov Cap-2 Maneuver	71	-	-
Stage 1	182	-	-
Stage 2	678	-	-

Approach	WB	NB	SB
HCM Control Delay, s	145.5	0	0.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 71	- 463	-
HCM Lane V/C Ratio	- 0.767	- 0.053	-
HCM Control Delay (s)	- 145.5	0 13.2	-
HCM Lane LOS	- F	A B	-
HCM 95th %tile Q(veh)	- 3.6	- 0.2	-

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Year 2045 No Project (With Widening)
AM Peak Hour

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	15	19	48	143	1
Future Vol, veh/h	1	15	19	48	143	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	17	21	54	161	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	258	162	162	0	-	0
Stage 1	162	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	731	883	1417	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	720	883	1417	-	-	-
Mov Cap-2 Maneuver	720	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1417	-	871	-	-
HCM Lane V/C Ratio	0.015	-	0.021	-	-
HCM Control Delay (s)	7.6	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↕↕	↗	↘	↕↕
Traffic Vol, veh/h	18	32	1288	4	17	509
Future Vol, veh/h	18	32	1288	4	17	509
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	37	1498	5	20	592

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1834	749	0	0	1503
Stage 1	1498	-	-	-	-
Stage 2	336	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	67	354	-	-	442
Stage 1	172	-	-	-	-
Stage 2	696	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	64	354	-	-	442
Mov Cap-2 Maneuver	64	-	-	-	-
Stage 1	172	-	-	-	-
Stage 2	665	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	41.6	0	0.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	64	354	442
HCM Lane V/C Ratio	-	-	0.327	0.105	0.045
HCM Control Delay (s)	-	-	86.5	16.4	13.5
HCM Lane LOS	-	-	F	C	B
HCM 95th %tile Q(veh)	-	-	1.2	0.3	0.1

HCM 6th TWSC
 8: Santiago Canyon Road & Modjeska Grade Road

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑	↗	↘	↑↑
Traffic Vol, veh/h	37	2	1283	16	0	532
Future Vol, veh/h	37	2	1283	16	0	532
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	2	1458	18	0	605

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1761	729	0	0	1476	0
Stage 1	1458	-	-	-	-	-
Stage 2	303	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	76	365	-	-	452	-
Stage 1	180	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	76	365	-	-	452	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	180	-	-	-	-	-
Stage 2	723	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	95.4	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	76	365	452	-
HCM Lane V/C Ratio	-	-	0.553	0.006	-	-
HCM Control Delay (s)	-	-	99.8	14.9	0	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	2.4	0	0	-

HCM 6th TWSC
 9: Santiago Canyon Road & Saddle Crest

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	7.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↑	↑↑
Traffic Vol, veh/h	53	73	1228	35	4	522
Future Vol, veh/h	53	73	1228	35	4	522
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	82	1380	39	4	587

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1682	690	0	0	1419
Stage 1	1380	-	-	-	-
Stage 2	302	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	85	388	-	-	476
Stage 1	199	-	-	-	-
Stage 2	724	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	84	388	-	-	476
Mov Cap-2 Maneuver	84	-	-	-	-
Stage 1	199	-	-	-	-
Stage 2	718	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	110.2	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	154	476
HCM Lane V/C Ratio	-	-	0.919	0.009
HCM Control Delay (s)	-	-	110.2	12.6
HCM Lane LOS	-	-	F	B
HCM 95th %tile Q(veh)	-	-	6.6	0

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	15.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑↑	↑↑	Y
Traffic Vol, veh/h	195	19	33	1075	425	113
Future Vol, veh/h	195	19	33	1075	425	113
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	20	35	1156	457	122

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1105	229	579	0	-	0
Stage 1	457	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 205	774	991	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 198	774	991	-	-	-
Mov Cap-2 Maneuver	~ 198	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	483	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	134.3	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	991	-	212	-	-
HCM Lane V/C Ratio	0.036	-	1.085	-	-
HCM Control Delay (s)	8.8	-	134.3	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	10.5	-	-

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

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection										
Int Delay, s/veh	2.5									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	↘↗		↘	↑↑	↗	↘	↑↑		↘↗	
Traffic Vol, veh/h	40	26	0	1062	19	1	440	0	0	0
Future Vol, veh/h	40	26	0	1062	19	1	440	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	29	0	1193	21	1	494	0	0	0

Major/Minor	Minor1	Major1	Major2	Minor2
Conflicting Flow All	1442	597	494	0
Stage 1	1193	-	-	-
Stage 2	249	-	-	-
Critical Hdwy	7.54	6.94	4.14	-
Critical Hdwy Stg 1	6.54	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-
Pot Cap-1 Maneuver	93	446	1066	-
Stage 1	198	-	-	-
Stage 2	733	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	93	446	1066	-
Mov Cap-2 Maneuver	93	-	-	-
Stage 1	198	-	-	-
Stage 2	732	-	-	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	60.2	0	0	0
HCM LOS	F			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	1066	-	-	135	570
HCM Lane V/C Ratio	-	-	-	-	0.549	0.002
HCM Control Delay (s)	0	0	-	-	60.2	11.3
HCM Lane LOS		A	A	-	F	B
HCM 95th %tile Q(veh)	-	0	-	-	2.7	0

HCM 6th TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Year 2045 No Project (With Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	32.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑		↘	↑↑
Traffic Vol, veh/h	152	173	901	96	70	405
Future Vol, veh/h	152	173	901	96	70	405
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	169	192	1001	107	78	450

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1436	554	0	0	1108
Stage 1	1055	-	-	-	-
Stage 2	381	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	~ 124	476	-	-	626
Stage 1	296	-	-	-	-
Stage 2	660	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	~ 109	476	-	-	626
Mov Cap-2 Maneuver	~ 109	-	-	-	-
Stage 1	296	-	-	-	-
Stage 2	578	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	176.5	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	109	476	626	-
HCM Lane V/C Ratio	-	-	1.549	0.404	0.124	-
HCM Control Delay (s)	-	-	\$ 357.4	17.6	11.6	-
HCM Lane LOS	-	-	F	C	B	-
HCM 95th %tile Q(veh)	-	-	12.5	1.9	0.4	-

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

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	46	18	1046	17	9	935
Future Vol, veh/h	46	18	1046	17	9	935
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	23	1308	21	11	1169

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1798	654	0	0	1329
Stage 1	1308	-	-	-	-
Stage 2	490	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	120	351	-	-	271
Stage 1	156	-	-	-	-
Stage 2	531	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	115	351	-	-	271
Mov Cap-2 Maneuver	115	-	-	-	-
Stage 1	156	-	-	-	-
Stage 2	509	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	50.6	0	0.2
HCM LOS	F		






























Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	115	351	271
HCM Lane V/C Ratio	-	-	0.5	0.064	0.042
HCM Control Delay (s)	-	-	64.2	16	18.9
HCM Lane LOS	-	-	F	C	C
HCM 95th %tile Q(veh)	-	-	2.3	0.2	0.1

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 					
Traffic Volume (veh/h)	356	3245	353	177	1860	142	249	0	318	124	0	309
Future Volume (veh/h)	356	3245	353	177	1860	142	249	0	318	124	0	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	396	3606	0	197	2067	0	277	0	0	138	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	500	3787		230	3388		317	0		163	0	
Arrive On Green	0.14	0.74	0.00	0.07	0.66	0.00	0.09	0.00	0.00	0.09	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	277		1781	138	
Grp Volume(v), veh/h	396	3606	0	197	2067	0	277	76.5		138	85.1	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	E		1781	F	
Q Serve(g_s), s	13.3	74.5	0.0	6.8	27.5	0.0	9.5			9.2		
Cycle Q Clear(g_c), s	13.3	74.5	0.0	6.8	27.5	0.0	9.5			9.2		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	500	3787		230	3388		317			163		
V/C Ratio(X)	0.79	0.95		0.86	0.61		0.87			0.85		
Avail Cap(c_a), veh/h	602	3787		230	3388		317			163		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	49.6	13.6	0.0	55.4	11.4	0.0	53.8			53.7		
Incr Delay (d2), s/veh	6.0	7.1	0.0	25.6	0.8	0.0	22.7			31.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	6.1	25.9	0.0	3.8	9.9	0.0	5.1			5.5		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.5	20.7	0.0	81.0	12.2	0.0	76.5			85.1		
LnGrp LOS	E	C		F	B		E			F		
Approach Vol, veh/h		4002			2264							
Approach Delay, s/veh		24.2			18.2							
Approach LOS		C			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	12.0	93.0	15.0		21.4	83.6	15.0					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	7.5	88.5	10.5		20.4	75.6	10.5					
Max Q Clear Time (g_c+I1), s	9.8	77.5	12.5		16.3	30.5	12.2					
Green Ext Time (p_c), s	0.0	10.9	0.0		0.6	26.8	0.0					

Intersection Summary

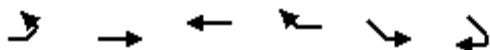
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

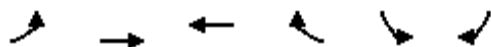
Year 2045 No Project (With Widening)
 AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↔↔	↑↑	↑↑	↗		
Traffic Volume (veh/h)	301	513	481	156	0	0
Future Volume (veh/h)	301	513	481	156	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	331	564	529	171		
Peak Hour Factor	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	560	3317	2504	1117		
Arrive On Green	0.16	0.93	0.70	0.70		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	331	564	529	171		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	5.3	0.8	3.1	2.1		
Cycle Q Clear(g_c), s	5.3	0.8	3.1	2.1		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	560	3317	2504	1117		
V/C Ratio(X)	0.59	0.17	0.21	0.15		
Avail Cap(c_a), veh/h	1209	3317	2504	1117		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	23.3	0.2	3.1	2.9		
Incr Delay (d2), s/veh	1.0	0.1	0.2	0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	2.1	0.1	0.7	0.5		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.3	0.3	3.3	3.2		
LnGrp LOS	C	A	A	A		
Approach Vol, veh/h		895	700			
Approach Delay, s/veh		9.2	3.3			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		60.0			13.7	46.3
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			20.5	30.5
Max Q Clear Time (g_c+I1), s		3.8			8.3	6.1
Green Ext Time (p_c), s		4.4			0.9	4.3
Intersection Summary						
HCM 6th Ctrl Delay			6.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

Year 2045 No Project (With Widening)
 AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	710	473	0	75	203
Future Volume (veh/h)	0	710	473	0	75	203
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	798	531	0	84	228
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	2237	2237	0	737	338
Arrive On Green	0.00	0.63	0.63	0.00	0.21	0.21
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	798	531	0	84	228
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	5.5	3.3	0.0	1.0	6.7
Cycle Q Clear(g_c), s	0.0	5.5	3.3	0.0	1.0	6.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2237	2237	0	737	338
V/C Ratio(X)	0.00	0.36	0.24	0.00	0.11	0.67
Avail Cap(c_a), veh/h	0	2237	2237	0	1359	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.5	4.1	0.0	16.1	18.4
Incr Delay (d2), s/veh	0.0	0.1	0.3	0.0	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.2	0.8	0.0	0.4	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	4.6	4.4	0.0	16.2	20.7
LnGrp LOS	A	A	A	A	B	C
Approach Vol, veh/h		798	531		312	
Approach Delay, s/veh		4.6	4.4		19.5	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		36.0		14.8		36.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		31.5		19.5		31.5
Max Q Clear Time (g_c+I1), s		8.5		9.7		6.3
Green Ext Time (p_c), s		5.9		0.8		3.8
Intersection Summary						
HCM 6th Ctrl Delay			7.4			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↗		↖	↗		↖
Traffic Volume (veh/h)	233	833	250	23	1580	81	448	0	19	29	0	433
Future Volume (veh/h)	233	833	250	23	1580	81	448	0	19	29	0	433
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	265	947	0	26	1795	0	509	0	0	33	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	346	2927		85	2178		683	0		192	0	
Arrive On Green	0.19	0.57	0.00	0.05	0.43	0.00	0.20	0.00	0.00	0.06	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	509		3456	33	
Grp Volume(v), veh/h	265	947	0	26	1795	0	509	28.6		33	30.2	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	C		1728	C	
Q Serve(g_s), s	9.3	6.4	0.0	0.9	20.6	0.0	9.2			0.6		
Cycle Q Clear(g_c), s	9.3	6.4	0.0	0.9	20.6	0.0	9.2			0.6		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	346	2927		85	2178		683			192		
V/C Ratio(X)	0.77	0.32		0.31	0.82		0.75			0.17		
Avail Cap(c_a), veh/h	390	2927		202	2239		758			758		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	25.2	7.4	0.0	30.4	16.8	0.0	25.0			29.8		
Incr Delay (d2), s/veh	7.8	0.1	0.0	2.0	2.6	0.0	3.6			0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	4.5	1.9	0.0	0.4	7.6	0.0	3.9			0.3		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	7.5	0.0	32.4	19.4	0.0	28.6			30.2		
LnGrp LOS	C	A		C	B		C			C		
Approach Vol, veh/h		1212			1821							
Approach Delay, s/veh		13.1			19.5							
Approach LOS		B			B							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	7.7		7.2	41.9	17.1		16.9	32.2				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	14.0		7.0	35.5	14.0		14.0	28.5				
Max Q Clear Time (g_c+I1), s	3.6		3.9	9.4	12.2		12.3	23.6				
Green Ext Time (p_c), s	0.0		0.0	7.5	0.4		0.1	4.1				

Intersection Summary

HCM 6th Ctrl Delay	18.7
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	94	31	1077	32	11	858
Future Vol, veh/h	94	31	1077	32	11	858
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	120	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	34	1171	35	12	933

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1568	586	0	0	1206
Stage 1	1171	-	-	-	-
Stage 2	397	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	159	389	-	-	311
Stage 1	190	-	-	-	-
Stage 2	593	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	153	389	-	-	311
Mov Cap-2 Maneuver	153	-	-	-	-
Stage 1	190	-	-	-	-
Stage 2	570	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	53.6	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	153	389	311	-
HCM Lane V/C Ratio	-	-	0.668	0.087	0.038	-
HCM Control Delay (s)	-	-	66.3	15.1	17	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	3.8	0.3	0.1	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	28	4	1077	9	1	1336
Future Vol, veh/h	28	4	1077	9	1	1336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	140	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	1171	10	1	1452



















Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1754	586	0	0	1181
Stage 1	1171	-	-	-	-
Stage 2	583	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	127	389	-	-	320
Stage 1	190	-	-	-	-
Stage 2	475	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	127	389	-	-	320
Mov Cap-2 Maneuver	127	-	-	-	-
Stage 1	190	-	-	-	-
Stage 2	474	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	38.6	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	127	389	320	-
HCM Lane V/C Ratio	-	-	0.24	0.011	0.003	-
HCM Control Delay (s)	-	-	42.1	14.4	16.3	-
HCM Lane LOS	-	-	E	B	C	-
HCM 95th %tile Q(veh)	-	-	0.9	0	0	-

























HCM 6th Signalized Intersection Summary
 30: Jeffrey Road & SR-241 NB Off-Ramp

Year 2045 No Project (With Widening)
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	25	40	53	0	0	200	0
Future Volume (veh/h)	0	0	0	0	0	25	40	53	0	0	200	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				0	0	27	43	58	0	0	217	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				127	0	199	333	1999	0	0	1005	448
Arrive On Green				0.00	0.00	0.07	0.10	0.56	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1781	0	2790	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				0	0	27	43	58	0	0	217	0
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1728	1777	0	0	1777	1585
Q Serve(g_s), s				0.0	0.0	0.2	0.2	0.2	0.0	0.0	1.0	0.0
Cycle Q Clear(g_c), s				0.0	0.0	0.2	0.2	0.2	0.0	0.0	1.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				127	0	199	333	1999	0	0	1005	448
V/C Ratio(X)				0.00	0.00	0.14	0.13	0.03	0.00	0.00	0.22	0.00
Avail Cap(c_a), veh/h				978	0	1532	2215	6507	0	0	3579	1596
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	9.5	9.0	2.1	0.0	0.0	6.0	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				0.0	0.0	9.8	9.2	2.1	0.0	0.0	6.1	0.0
LnGrp LOS				A	A	A	A	A	A	A	A	A
Approach Vol, veh/h					27			101			217	
Approach Delay, s/veh					9.8			5.1			6.1	
Approach LOS					A			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		16.3			6.1	10.2		5.6				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		39.5			13.5	21.5		11.5				
Max Q Clear Time (g_c+I1), s		3.2			3.2	3.0		3.2				
Green Ext Time (p_c), s		0.3			0.0	1.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				6.1								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary
31: Jeffrey Road & SR-241 SB Off-Ramp

Year 2045 No Project (With Widening)
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			 					 		 	 	 
Traffic Volume (veh/h)	0	0	705	0	0	0	0	93	0	34	166	0
Future Volume (veh/h)	0	0	705	0	0	0	0	93	0	34	166	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	766				0	101	0	37	180	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	689	0	1079				0	709	316	257	1375	0
Arrive On Green	0.00	0.00	0.39				0.00	0.20	0.00	0.07	0.39	0.00
Sat Flow, veh/h	1781	0	2790				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	0	0	766				0	101	0	37	180	0
Grp Sat Flow(s),veh/h/ln	1781	0	1395				0	1777	1585	1728	1777	0
Q Serve(g_s), s	0.0	0.0	8.2				0.0	0.8	0.0	0.4	1.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	8.2				0.0	0.8	0.0	0.4	1.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	689	0	1079				0	709	316	257	1375	0
V/C Ratio(X)	0.00	0.00	0.71				0.00	0.14	0.00	0.14	0.13	0.00
Avail Cap(c_a), veh/h	1259	0	1972				0	1306	583	977	2713	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	9.2				0.0	11.7	0.0	15.3	7.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.9				0.0	0.1	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.8				0.0	0.3	0.0	0.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	10.0				0.0	11.8	0.0	15.6	7.0	0.0
LnGrp LOS	A	A	B				A	B	A	B	A	A
Approach Vol, veh/h		766						101			217	
Approach Delay, s/veh		10.0						11.8			8.5	
Approach LOS		B						B			A	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	6.6	11.1	17.7	17.7								
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5								
Max Green Setting (Gmax), s	9.5	12.5	24.5	26.5								
Max Q Clear Time (g_c+I1), s	2.4	2.8	10.2	3.2								
Green Ext Time (p_c), s	0.0	0.3	3.0	1.1								
Intersection Summary												
HCM 6th Ctrl Delay			9.9									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↑↑	↗↗	↙	↑↑			↑↑↑	↘
Traffic Volume (veh/h)	0	0	0	98	548	109	70	1858	0	0	1326	27
Future Volume (veh/h)	0	0	0	98	548	109	70	1858	0	0	1326	27
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				108	602	120	77	2042	0	0	1457	30
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				380	729	596	167	2310	0	0	3189	66
Arrive On Green				0.21	0.21	0.21	0.09	0.65	0.00	0.00	0.49	0.48
Sat Flow, veh/h				1781	3554	2790	1781	3647	0	0	6799	135
Grp Volume(v), veh/h				108	602	120	77	2042	0	0	1075	412
Grp Sat Flow(s),veh/h/ln				1781	1777	1395	1781	1777	0	0	1609	1846
Q Serve(g_s), s				3.0	9.5	2.1	2.4	27.7	0.0	0.0	8.6	8.6
Cycle Q Clear(g_c), s				3.0	9.5	2.1	2.4	27.7	0.0	0.0	8.6	8.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.07
Lane Grp Cap(c), veh/h				380	729	596	167	2310	0	0	2354	900
V/C Ratio(X)				0.28	0.83	0.20	0.46	0.88	0.00	0.00	0.46	0.46
Avail Cap(c_a), veh/h				395	758	619	228	2365	0	0	2354	900
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.3	22.3	18.9	25.1	8.4	0.0	0.0	9.9	9.9
Incr Delay (d2), s/veh				0.4	7.3	0.2	2.0	4.3	0.0	0.0	0.1	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	4.4	0.6	1.0	8.2	0.0	0.0	2.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.7	29.6	19.1	27.1	12.8	0.0	0.0	10.0	10.3
LnGrp LOS				B	C	B	C	B	A	A	B	B
Approach Vol, veh/h					830			2119			1487	
Approach Delay, s/veh					26.8			13.3			10.1	
Approach LOS					C			B			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.1			9.5	32.6		16.5				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		38.5			7.0	27.0		12.5				
Max Q Clear Time (g_c+I1), s		30.7			5.4	11.6		11.5				
Green Ext Time (p_c), s		6.9			0.0	8.9		0.5				
Intersection Summary												
HCM 6th Ctrl Delay				14.7								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

PM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↗	↑↑	↗↗	↗↗		↗
Traffic Volume (veh/h)	0	0	0	1710	999	239	681	538	310	985	0
Future Volume (veh/h)	0	0	0	1710	999	239	681	538	310	985	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach			No	No	No	No	No	No	No	No	No
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	1859	1086	260	740	585	337	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	1674	889	166	3080	2334	276		
Arrive On Green			0.00	0.75	0.72	0.09	0.87	0.84	0.08	0.00	0.00
Sat Flow, veh/h			0	2336	1191	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	1435	1510	260	740	585	337	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1656	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	112.0	112.0	14.0	5.3	6.5	12.0	0.0	0.0
Cycle Q Clear(g_c), s			0.0	112.0	112.0	14.0	5.3	6.5	12.0	0.0	0.0
Prop In Lane			0.00		0.72	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	1327	1236	166	3080	2334	276		
V/C Ratio(X)			0.00	1.08	1.22	1.56	0.24	0.25	1.22		
Avail Cap(c_a), veh/h			0	1327	1236	166	3080	2334	276		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	19.0	20.6	68.0	1.7	2.5	69.0	0.0	0.0
Incr Delay (d2), s/veh			0.0	49.9	107.1	280.9	0.0	0.1	126.7	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	58.5	75.7	19.4	1.3	1.5	10.2	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	68.9	127.7	348.9	1.7	2.6	195.7	0.0	0.0
LnGrp LOS			A	F	F	F	A	A	F		
Approach Vol, veh/h				2945			1585		337		
Approach Delay, s/veh				99.1			59.0		195.7		
Approach LOS				F			E		F		
Timer - Assigned Phs	1	2		4			6				
Phs Duration (G+Y+Rc), s	18.0	116.0		16.0			134.0				
Change Period (Y+Rc), s	4.5	4.5		4.5			4.5				
Max Green Setting (Gmax), s	13.5	111.5		11.5			129.5				
Max Q Clear Time (g_c+I1), s	16.0	115.0		14.0			8.5				
Green Ext Time (p_c), s	0.0	0.0		0.0			10.3				

Intersection Summary

HCM 6th Ctrl Delay	92.7
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Santiago Canyon & SR-241 NB Off-Ramp

Year 2045 No Project (With Widening)
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷		↶↶	↶↶	
Traffic Volume (veh/h)	1072	34	0	824	750	0
Future Volume (veh/h)	1072	34	0	824	750	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	1178	37	0	905	824	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	1483	680	0	1503	1503	0
Arrive On Green	0.43	0.43	0.00	0.42	0.42	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	1178	37	0	905	824	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	16.0	0.7	0.0	10.7	9.4	0.0
Cycle Q Clear(g_c), s	16.0	0.7	0.0	10.7	9.4	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	1483	680	0	1503	1503	0
V/C Ratio(X)	0.79	0.05	0.00	0.60	0.55	0.00
Avail Cap(c_a), veh/h	1858	852	0	1503	1503	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.4	9.0	0.0	12.1	11.7	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.0	1.8	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.2	0.0	3.9	3.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.3	9.1	0.0	13.9	13.2	0.0
LnGrp LOS	B	A	A	B	B	A
Approach Vol, veh/h	1215			905	824	
Approach Delay, s/veh	15.1			13.9	13.2	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		26.9		27.2		26.9
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		22.4		28.6		22.4
Max Q Clear Time (g_c+I1), s		13.7		19.0		12.4
Green Ext Time (p_c), s		4.0		3.7		4.0
Intersection Summary						
HCM 6th Ctrl Delay			14.2			
HCM 6th LOS			B			

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↕↕	↗	↘	↕↕
Traffic Vol, veh/h	45	75	712	23	153	757
Future Vol, veh/h	45	75	712	23	153	757
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	46	77	734	24	158	780

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1440	-	0	-	734
Stage 1	734	-	-	-	-
Stage 2	706	-	-	-	-
Critical Hdwy	6.84	-	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	-	-	-	2.22
Pot Cap-1 Maneuver	124	0	-	0	867
Stage 1	436	0	-	0	-
Stage 2	450	0	-	0	-
Platoon blocked, %					
Mov Cap-1 Maneuver	101	-	-	-	867
Mov Cap-2 Maneuver	101	-	-	-	-
Stage 1	436	-	-	-	-
Stage 2	368	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	67.9	0	1.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 101	- 867	-
HCM Lane V/C Ratio	- 0.459	- 0.182	-
HCM Control Delay (s)	- 67.9	0 10.1	-
HCM Lane LOS	- F	A B	-
HCM 95th %tile Q(veh)	- 2	- 0.7	-

HCM 6th TWSC
6: Silverado Canyon Road & Blackstar Canyon Road

Year 2045 No Project (With Widening)
PM Peak Hour

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	35	27	146	90	7
Future Vol, veh/h	2	35	27	146	90	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	38	29	157	97	8

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	316	101	105	0	0
Stage 1	101	-	-	-	-
Stage 2	215	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	677	954	1486	-	-
Stage 1	923	-	-	-	-
Stage 2	821	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	663	954	1486	-	-
Mov Cap-2 Maneuver	663	-	-	-	-
Stage 1	904	-	-	-	-
Stage 2	821	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	932	-	-
HCM Lane V/C Ratio	0.02	-	0.043	-	-
HCM Control Delay (s)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

HCM 6th TWSC
 7: Santiago Canyon Road & Modjeska Canyon Road

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.6					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑	↗	↘	↑↑
Traffic Vol, veh/h	15	19	727	6	35	738
Future Vol, veh/h	15	19	727	6	35	738
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	20	765	6	37	777

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1228	383	0	0	771	0
Stage 1	765	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	170	615	-	-	840	-
Stage 1	420	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	163	615	-	-	840	-
Mov Cap-2 Maneuver	163	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	574	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	163	615	840
HCM Lane V/C Ratio	-	-	0.097	0.033	0.044
HCM Control Delay (s)	-	-	29.4	11.1	9.5
HCM Lane LOS	-	-	D	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	0.1

HCM 6th TWSC
 8: Santiago Canyon Road & Modjeska Grade Road

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑	↗	↘	↑↑
Traffic Vol, veh/h	24	1	743	27	0	758
Future Vol, veh/h	24	1	743	27	0	758
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	1	774	28	0	790

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1169	387	0	0	802	0
Stage 1	774	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	186	611	-	-	817	-
Stage 1	415	-	-	-	-	-
Stage 2	650	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	186	611	-	-	817	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	415	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	186	611	817	-
HCM Lane V/C Ratio	-	-	0.134	0.002	-	-
HCM Control Delay (s)	-	-	27.3	10.9	0	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-

HCM 6th TWSC
 9: Santiago Canyon Road & Saddle Crest

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑↑	↑	↑	↑↑
Traffic Vol, veh/h	32	22	744	52	43	759
Future Vol, veh/h	32	22	744	52	43	759
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	23	767	54	44	782

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1246	384	0	0	821	0
Stage 1	767	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	166	614	-	-	804	-
Stage 1	419	-	-	-	-	-
Stage 2	589	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	157	614	-	-	804	-
Mov Cap-2 Maneuver	157	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.2	0	0.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	225	804
HCM Lane V/C Ratio	-	-	0.247	0.055
HCM Control Delay (s)	-	-	26.2	9.7
HCM Lane LOS	-	-	D	A
HCM 95th %tile Q(veh)	-	-	0.9	0.2

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑↑	↑↑	Y
Traffic Vol, veh/h	135	9	19	705	643	189
Future Vol, veh/h	135	9	19	705	643	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	105
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	10	21	766	699	205

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	1124	350	904	0	-	0
Stage 1	699	-	-	-	-	-
Stage 2	425	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	199	646	748	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	193	646	748	-	-	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	441	-	-	-	-	-
Stage 2	627	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	65.9	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	748	-	202	-	-
HCM Lane V/C Ratio	0.028	-	0.775	-	-
HCM Control Delay (s)	9.9	-	65.9	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	5.3	-	-

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection										
Int Delay, s/veh	0.6									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	↘↗		↘	↑↑	↗	↘	↑↑		↘↗	
Traffic Vol, veh/h	17	8	0	706	41	17	600	0	0	0
Future Vol, veh/h	17	8	0	706	41	17	600	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	9	0	767	45	18	652	0	0	0

Major/Minor	Minor1	Major1		Major2			Minor2		
Conflicting Flow All	1129	384	652	0	0	812	0	1072	326
Stage 1	767	-	-	-	-	-	-	688	-
Stage 2	362	-	-	-	-	-	-	384	-
Critical Hdwy	7.54	6.94	4.14	-	-	4.14	-	7.54	6.94
Critical Hdwy Stg 1	6.54	-	-	-	-	-	-	6.54	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-	-	6.54	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	159	614	930	-	-	810	-	175	670
Stage 1	361	-	-	-	-	-	-	403	-
Stage 2	629	-	-	-	-	-	-	611	-
Platoon blocked, %				-	-	-			
Mov Cap-1 Maneuver	156	614	930	-	-	810	-	170	670
Mov Cap-2 Maneuver	156	-	-	-	-	-	-	170	-
Stage 1	361	-	-	-	-	-	-	403	-
Stage 2	615	-	-	-	-	-	-	602	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	25.2	0	0.3	0
HCM LOS	D			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	930	-	-	205	810
HCM Lane V/C Ratio	-	-	-	-	0.133	0.023
HCM Control Delay (s)	0	0	-	-	25.2	9.5
HCM Lane LOS	A	A	-	-	D	A
HCM 95th %tile Q(veh)	-	0	-	-	0.4	0.1

HCM 6th TWSC
 12: Santiago Canyon Road & Live Oak Canyon Road

Year 2045 No Project (With Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑		↘	↑↑
Traffic Vol, veh/h	73	112	635	157	130	490
Future Vol, veh/h	73	112	635	157	130	490
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	78	119	676	167	138	521

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1297	422	0	0	843
Stage 1	760	-	-	-	-
Stage 2	537	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	154	580	-	-	789
Stage 1	422	-	-	-	-
Stage 2	550	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	127	580	-	-	789
Mov Cap-2 Maneuver	127	-	-	-	-
Stage 1	422	-	-	-	-
Stage 2	454	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.4	0	2.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	127	580	789	-
HCM Lane V/C Ratio	-	-	0.611	0.205	0.175	-
HCM Control Delay (s)	-	-	70.2	12.8	10.5	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	3.1	0.8	0.6	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	27	5	1070	28	10	674
Future Vol, veh/h	27	5	1070	28	10	674
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	5	1103	29	10	695

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1401	552	0	0	1132
Stage 1	1103	-	-	-	-
Stage 2	298	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	194	409	-	-	338
Stage 1	209	-	-	-	-
Stage 2	667	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	188	409	-	-	338
Mov Cap-2 Maneuver	188	-	-	-	-
Stage 1	209	-	-	-	-
Stage 2	647	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	188	409	338	-
HCM Lane V/C Ratio	-	-	0.148	0.013	0.031	-
HCM Control Delay (s)	-	-	27.4	13.9	16	-
HCM Lane LOS	-	-	D	B	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0.1	-

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔	↑↑↑	↗	↔↔	↑↑↑	↗	↔↔		↗	↘		↗
Traffic Volume (veh/h)	251	1117	241	172	1214	96	208	0	129	93	0	365
Future Volume (veh/h)	251	1117	241	172	1214	96	208	0	129	93	0	365
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	270	1201	0	185	1305	0	224	0	0	100	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	537	2277		506	2231		525	0		213	0	
Arrive On Green	0.16	0.45	0.00	0.15	0.44	0.00	0.15	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	224		1781	100	
Grp Volume(v), veh/h	270	1201	0	185	1305	0	224	18.6		100	20.9	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	B		1781	C	
Q Serve(g_s), s	3.4	8.0	0.0	2.3	9.1	0.0	2.8			2.5		
Cycle Q Clear(g_c), s	3.4	8.0	0.0	2.3	9.1	0.0	2.8			2.5		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	537	2277		506	2231		525			213		
V/C Ratio(X)	0.50	0.53		0.37	0.58		0.43			0.47		
Avail Cap(c_a), veh/h	810	3157		663	2939		737			380		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	18.1	9.4	0.0	18.1	10.0	0.0	18.0			19.3		
Incr Delay (d2), s/veh	0.7	0.2	0.0	0.4	0.2	0.0	0.6			1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.2	2.3	0.0	0.8	2.7	0.0	1.0			1.0		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	9.6	0.0	18.5	10.2	0.0	18.6			20.9		
LnGrp LOS	B	A		B	B		B			C		
Approach Vol, veh/h		1471			1490							
Approach Delay, s/veh		11.3			11.3							
Approach LOS		B			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	10.9	24.9	11.1		11.3	24.5	9.6					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	8.5	28.5	9.5		10.5	26.5	9.5					
Max Q Clear Time (g_c+I1), s	5.3	11.0	5.8		6.4	12.1	5.5					
Green Ext Time (p_c), s	0.2	8.2	0.3		0.4	7.9	0.1					

Intersection Summary

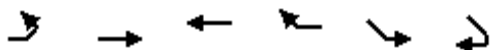
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

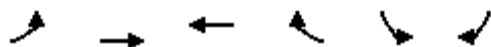
Year 2045 No Project (With Widening)
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↶↶	↶↶	↶↶	↷		
Traffic Volume (veh/h)	172	640	546	109	0	0
Future Volume (veh/h)	172	640	546	109	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	181	674	575	115		
Peak Hour Factor	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	775	2967	1583	706		
Arrive On Green	0.22	0.83	0.45	0.45		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	181	674	575	115		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	1.0	0.9	2.6	1.1		
Cycle Q Clear(g_c), s	1.0	0.9	2.6	1.1		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	775	2967	1583	706		
V/C Ratio(X)	0.23	0.23	0.36	0.16		
Avail Cap(c_a), veh/h	2283	8219	5283	2357		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.7	0.4	4.4	4.0		
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.1		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.8	0.4	4.6	4.1		
LnGrp LOS	A	A	A	A		
Approach Vol, veh/h		855	690			
Approach Delay, s/veh		2.0	4.5			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		24.2			9.4	14.8
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			15.5	35.5
Max Q Clear Time (g_c+I1), s		3.9			4.0	5.6
Green Ext Time (p_c), s		5.5			0.4	4.7
Intersection Summary						
HCM 6th Ctrl Delay			3.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

Year 2045 No Project (With Widening)
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	708	574	0	67	181
Future Volume (veh/h)	0	708	574	0	67	181
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	761	617	0	72	195
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1594	1594	0	855	392
Arrive On Green	0.00	0.45	0.45	0.00	0.25	0.25
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	761	617	0	72	195
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	4.0	3.0	0.0	0.4	2.8
Cycle Q Clear(g_c), s	0.0	4.0	3.0	0.0	0.4	2.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1594	1594	0	855	392
V/C Ratio(X)	0.00	0.48	0.39	0.00	0.08	0.50
Avail Cap(c_a), veh/h	0	2770	2500	0	1183	542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.1	4.8	0.0	7.6	8.5
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.5	0.0	0.1	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.3	5.0	0.0	7.6	9.5
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		761	617		267	
Approach Delay, s/veh		5.3	5.0		9.0	
Approach LOS		A	A		A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		15.8		10.5		15.8
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		20.0		8.5		18.0
Max Q Clear Time (g_c+I1), s		7.0		5.8		6.0
Green Ext Time (p_c), s		4.3		0.2		3.3
Intersection Summary						
HCM 6th Ctrl Delay			5.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

Year 2045 No Project (With Widening)

26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↗↖		↗	↗↖		↗
Traffic Volume (veh/h)	210	428	303	75	540	119	259	0	169	163	0	136
Future Volume (veh/h)	210	428	303	75	540	119	259	0	169	163	0	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	236	481	0	84	607	0	291	0	0	183	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	371	1871		218	1433		660	0		596	0	
Arrive On Green	0.21	0.37	0.00	0.12	0.28	0.00	0.19	0.00	0.00	0.17	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	291		3456	183	
Grp Volume(v), veh/h	236	481	0	84	607	0	291	13.9		183	13.8	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	B		1728	B	
Q Serve(g_s), s	4.5	2.5	0.0	1.6	3.6	0.0	2.8			1.7		
Cycle Q Clear(g_c), s	4.5	2.5	0.0	1.6	3.6	0.0	2.8			1.7		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	371	1871		218	1433		660			596		
V/C Ratio(X)	0.64	0.26		0.39	0.42		0.44			0.31		
Avail Cap(c_a), veh/h	808	3951		380	2725		1014			1014		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	13.5	8.3	0.0	15.2	11.0	0.0	13.4			13.6		
Incr Delay (d2), s/veh	1.8	0.1	0.0	1.1	0.2	0.0	0.5			0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.6	0.7	0.0	0.6	1.1	0.0	0.9			0.6		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	8.4	0.0	16.3	11.2	0.0	13.9			13.8		
LnGrp LOS	B	A		B	B		B			B		
Approach Vol, veh/h		717			691							
Approach Delay, s/veh		10.7			11.8							
Approach LOS		B			B							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	10.5		8.6	17.7	11.2		11.8	14.5				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	10.5		7.5	28.5	10.5		16.5	19.5				
Max Q Clear Time (g_c+I1), s	4.7		4.6	5.5	5.8		7.5	6.6				
Green Ext Time (p_c), s	0.3		0.0	3.3	0.4		0.4	3.4				

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	61	21	896	108	36	652
Future Vol, veh/h	61	21	896	108	36	652
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	120	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	23	974	117	39	709

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1336	487	0	0	1091
Stage 1	974	-	-	-	-
Stage 2	362	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	209	450	-	-	354
Stage 1	251	-	-	-	-
Stage 2	618	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	186	450	-	-	354
Mov Cap-2 Maneuver	186	-	-	-	-
Stage 1	251	-	-	-	-
Stage 2	550	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.2	0	0.9
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	186	450	354	-
HCM Lane V/C Ratio	-	-	0.356	0.051	0.111	-
HCM Control Delay (s)	-	-	34.7	13.4	16.4	-
HCM Lane LOS	-	-	D	B	C	-
HCM 95th %tile Q(veh)	-	-	1.5	0.2	0.4	-

Intersection						
Int Delay, s/veh	0.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑↑↑	↗	↘	↑↑↑
Traffic Vol, veh/h	17	2	1178	28	4	762
Future Vol, veh/h	17	2	1178	28	4	762
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	140	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	2	1280	30	4	828



















Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1619	640	0	0	1310
Stage 1	1280	-	-	-	-
Stage 2	339	-	-	-	-
Critical Hdwy	5.74	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-	-
Follow-up Hdwy	3.82	3.92	-	-	3.12
Pot Cap-1 Maneuver	149	358	-	-	277
Stage 1	163	-	-	-	-
Stage 2	635	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	147	358	-	-	277
Mov Cap-2 Maneuver	147	-	-	-	-
Stage 1	163	-	-	-	-
Stage 2	626	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.1	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	147	358	277	-
HCM Lane V/C Ratio	-	-	0.126	0.006	0.016	-
HCM Control Delay (s)	-	-	33	15.1	18.2	-
HCM Lane LOS	-	-	D	C	C	-
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-

HCM 6th Signalized Intersection Summary
30: Jeffrey Road & SR-241 NB Off-Ramp

Year 2045 No Project (With Widening)
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	21	440	160	0	0	71	0
Future Volume (veh/h)	0	0	0	0	0	21	440	160	0	0	71	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				0	0	23	478	174	0	0	77	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				106	0	165	923	2306	0	0	838	374
Arrive On Green				0.00	0.00	0.06	0.27	0.65	0.00	0.00	0.24	0.00
Sat Flow, veh/h				1781	0	2790	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				0	0	23	478	174	0	0	77	0
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1728	1777	0	0	1777	1585
Q Serve(g_s), s				0.0	0.0	0.2	3.2	0.5	0.0	0.0	0.5	0.0
Cycle Q Clear(g_c), s				0.0	0.0	0.2	3.2	0.5	0.0	0.0	0.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				106	0	165	923	2306	0	0	838	374
V/C Ratio(X)				0.00	0.00	0.14	0.52	0.08	0.00	0.00	0.09	0.00
Avail Cap(c_a), veh/h				650	0	1018	3153	5446	0	0	1686	752
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	12.2	8.5	1.8	0.0	0.0	8.2	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.4	0.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	0.1	0.8	0.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				0.0	0.0	12.6	9.0	1.8	0.0	0.0	8.2	0.0
LnGrp LOS				A	A	B	A	A	A	A	A	A
Approach Vol, veh/h					23			652			77	
Approach Delay, s/veh					12.6			7.1			8.2	
Approach LOS					B			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		21.8			11.3	10.5		5.6				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		41.5			24.5	12.5		9.5				
Max Q Clear Time (g_c+I1), s		2.5			5.2	2.5		3.0				
Green Ext Time (p_c), s		1.2			1.7	0.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				7.4								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary
 31: Jeffrey Road & SR-241 SB Off-Ramp

Year 2045 No Project (With Widening)

PM Peak Hour

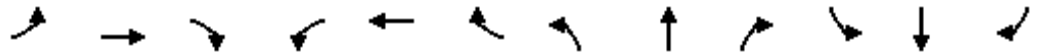
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	220	0	0	0	0	601	0	22	49	0
Future Volume (veh/h)	0	0	220	0	0	0	0	601	0	22	49	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	239				0	653	0	24	53	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	369	0	578				0	1289	575	199	1935	0
Arrive On Green	0.00	0.00	0.21				0.00	0.36	0.00	0.06	0.54	0.00
Sat Flow, veh/h	1781	0	2790				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	0	0	239				0	653	0	24	53	0
Grp Sat Flow(s),veh/h/ln	1781	0	1395				0	1777	1585	1728	1777	0
Q Serve(g_s), s	0.0	0.0	2.4				0.0	4.6	0.0	0.2	0.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	2.4				0.0	4.6	0.0	0.2	0.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	369	0	578				0	1289	575	199	1935	0
V/C Ratio(X)	0.00	0.00	0.41				0.00	0.51	0.00	0.12	0.03	0.00
Avail Cap(c_a), veh/h	553	0	866				0	3199	1427	966	4634	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	11.1				0.0	8.0	0.0	14.4	3.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.5				0.0	0.3	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.6				0.0	1.2	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	11.5				0.0	8.3	0.0	14.7	3.4	0.0
LnGrp LOS	A	A	B				A	A	A	B	A	A
Approach Vol, veh/h		239						653			77	
Approach Delay, s/veh		11.5						8.3			6.9	
Approach LOS		B						A			A	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	5.9	15.7	10.7	21.5								
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5								
Max Green Setting (Gmax), s	8.5	28.5	9.5	41.5								
Max Q Clear Time (g_c+I1), s	2.2	6.6	4.4	2.2								
Green Ext Time (p_c), s	0.0	4.6	0.4	0.3								
Intersection Summary												
HCM 6th Ctrl Delay			9.0									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↕	↗	↙	↕			↕↗↘	
Traffic Volume (veh/h)	0	0	0	57	1069	467	70	771	0	0	1402	503
Future Volume (veh/h)	0	0	0	57	1069	467	70	771	0	0	1402	503
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				59	1114	486	73	803	0	0	1460	524
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				717	1284	1123	131	1790	0	0	1850	608
Arrive On Green				0.40	0.36	0.40	0.07	0.50	0.00	0.00	0.38	0.34
Sat Flow, veh/h				1781	3554	2790	1781	3647	0	0	5087	1585
Grp Volume(v), veh/h				59	1114	486	73	803	0	0	1460	524
Grp Sat Flow(s),veh/h/ln				1781	1777	1395	1781	1777	0	0	1609	1585
Q Serve(g_s), s				1.7	24.9	10.7	3.4	12.3	0.0	0.0	22.8	26.3
Cycle Q Clear(g_c), s				1.7	24.9	10.7	3.4	12.3	0.0	0.0	22.8	26.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				717	1284	1123	131	1790	0	0	1850	608
V/C Ratio(X)				0.08	0.87	0.43	0.56	0.45	0.00	0.00	0.79	0.86
Avail Cap(c_a), veh/h				773	1397	1211	163	1876	0	0	1880	617
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.7	25.3	18.4	38.2	13.6	0.0	0.0	23.2	25.9
Incr Delay (d2), s/veh				0.0	5.7	0.3	3.7	0.2	0.0	0.0	2.3	11.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.7	11.0	3.4	1.5	4.1	0.0	0.0	7.8	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.8	31.0	18.7	41.8	13.7	0.0	0.0	25.5	37.8
LnGrp LOS				B	C	B	D	B	A	A	C	D
Approach Vol, veh/h					1659			876			1984	
Approach Delay, s/veh					26.9			16.1			28.8	
Approach LOS					C			B			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		46.9			10.3	36.7		38.3				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		44.5			7.3	32.7		36.5				
Max Q Clear Time (g_c+I1), s		15.3			6.4	29.3		27.9				
Green Ext Time (p_c), s		5.2			0.0	2.9		5.9				
Intersection Summary												
HCM 6th Ctrl Delay					25.6							
HCM 6th LOS					C							

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

AM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↘	↑↑	↗↗	↘↘		↗
Traffic Volume (veh/h)	0	0	0	703	613	62	444	1064	150	365	0
Future Volume (veh/h)	0	0	0	703	613	62	444	1064	150	365	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No		No		
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	764	666	67	483	1157	163	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	1404	1185	103	3060	2293	239		
Arrive On Green			0.00	0.77	0.73	0.06	0.86	0.82	0.07	0.00	0.00
Sat Flow, veh/h			0	1921	1542	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	742	688	67	483	1157	163	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1593	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	19.1	22.7	4.2	2.5	14.5	5.3	0.0	0.0
Cycle Q Clear(g_c), s			0.0	19.1	22.7	4.2	2.5	14.5	5.3	0.0	0.0
Prop In Lane			0.00		0.97	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	1365	1224	103	3060	2293	239		
V/C Ratio(X)			0.00	0.54	0.56	0.65	0.16	0.50	0.68		
Avail Cap(c_a), veh/h			0	1365	1224	496	3060	2293	391		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	5.3	6.7	53.0	1.3	3.1	52.3	0.0	0.0
Incr Delay (d2), s/veh			0.0	1.6	1.9	6.6	0.1	0.8	3.4	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	6.3	7.5	2.1	0.5	3.0	2.4	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	6.9	8.5	59.6	1.4	3.9	55.6	0.0	0.0
LnGrp LOS			A	A	A	E	A	A	E		
Approach Vol, veh/h				1430			1707		163		
Approach Delay, s/veh				7.7			5.4		55.6		
Approach LOS				A			A		E		
Timer - Assigned Phs	1	2		4			6				
Phs Duration (G+Y+Rc), s	10.7	92.3		12.0			103.0				
Change Period (Y+Rc), s	4.5	4.5		4.5			4.5				
Max Green Setting (Gmax), s	31.5	62.5		12.5			98.5				
Max Q Clear Time (g_c+I1), s	6.2	24.7		7.3			16.5				
Green Ext Time (p_c), s	0.1	14.9		0.2			12.5				

Intersection Summary

HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.
 Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Santiago Canyon & SR-241 NB Off-Ramp

Year 2045 With Project (No Widening)
AM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷		↶↶	↶↶	
Traffic Volume (veh/h)	413	13	0	519	498	0
Future Volume (veh/h)	413	13	0	519	498	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	435	14	0	546	524	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	983	451	0	1422	1422	0
Arrive On Green	0.28	0.28	0.00	0.40	0.40	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	435	14	0	546	524	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	2.6	0.2	0.0	2.8	2.6	0.0
Cycle Q Clear(g_c), s	2.6	0.2	0.0	2.8	2.6	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	983	451	0	1422	1422	0
V/C Ratio(X)	0.44	0.03	0.00	0.38	0.37	0.00
Avail Cap(c_a), veh/h	2724	1249	0	4482	4482	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.4	6.6	0.0	5.4	5.4	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.5	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.7	6.6	0.0	5.6	5.5	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h	449			546	524	
Approach Delay, s/veh	7.7			5.6	5.5	
Approach LOS	A			A	A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		14.2		11.2		14.2
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		31.5		19.5		31.5
Max Q Clear Time (g_c+I1), s		5.8		5.6		5.6
Green Ext Time (p_c), s		3.9		1.4		3.7
Intersection Summary						
HCM 6th Ctrl Delay			6.2			
HCM 6th LOS			A			

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	54	107	439	30	37	472
Future Vol, veh/h	54	107	439	30	37	472
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	119	488	33	41	524

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1094	-	0
Stage 1	488	-	-
Stage 2	606	-	-
Critical Hdwy	6.42	-	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	-	-
Pot Cap-1 Maneuver	237	0	0
Stage 1	617	0	0
Stage 2	545	0	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	228	-	-
Mov Cap-2 Maneuver	228	-	-
Stage 1	617	-	-
Stage 2	524	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.3	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 228	- 1075	-
HCM Lane V/C Ratio	- 0.263	- 0.038	-
HCM Control Delay (s)	- 26.3	0	8.5
HCM Lane LOS	- D	A	A
HCM 95th %tile Q(veh)	- 1	- 0.1	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	T			T		
Traffic Vol, veh/h	1	15	19	48	143	1
Future Vol, veh/h	1	15	19	48	143	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	17	21	54	161	1

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	258	162	162	0	-	0
Stage 1	162	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	731	883	1417	-	-	-
Stage 1	867	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	720	883	1417	-	-	-
Mov Cap-2 Maneuver	720	-	-	-	-	-
Stage 1	854	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.2	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1417	-	871	-	-
HCM Lane V/C Ratio	0.015	-	0.021	-	-
HCM Control Delay (s)	7.6	0	9.2	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	18	31	423	1	19	509
Future Vol, veh/h	18	31	423	1	19	509
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	36	492	1	22	592

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1128	492	0	0	493
Stage 1	492	-	-	-	-
Stage 2	636	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	226	577	-	-	1071
Stage 1	615	-	-	-	-
Stage 2	527	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	221	577	-	-	1071
Mov Cap-2 Maneuver	221	-	-	-	-
Stage 1	615	-	-	-	-
Stage 2	516	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.9	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	221	577	1071	-
HCM Lane V/C Ratio	-	-	0.095	0.062	0.021	-
HCM Control Delay (s)	-	-	23	11.7	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	0.1	-

HCM 6th TWSC
 8: Santiago Canyon Road & Modjeska Grade Road

Year 2045 With Project (No Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	37	2	419	16	1	532
Future Vol, veh/h	37	2	419	16	1	532
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	2	476	18	1	605

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1083	476	0	0	494
Stage 1	476	-	-	-	-
Stage 2	607	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	240	589	-	-	1070
Stage 1	625	-	-	-	-
Stage 2	544	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	240	589	-	-	1070
Mov Cap-2 Maneuver	240	-	-	-	-
Stage 1	625	-	-	-	-
Stage 2	543	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	240	589	1070	-
HCM Lane V/C Ratio	-	-	0.175	0.004	0.001	-
HCM Control Delay (s)	-	-	23.2	11.1	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0	0	-

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	56	66	371	29	9	511
Future Vol, veh/h	56	66	371	29	9	511
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	63	74	417	33	10	574

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1011	417	0	0	450
Stage 1	417	-	-	-	-
Stage 2	594	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	265	636	-	-	1110
Stage 1	665	-	-	-	-
Stage 2	552	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	263	636	-	-	1110
Mov Cap-2 Maneuver	263	-	-	-	-
Stage 1	665	-	-	-	-
Stage 2	547	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.4	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	385	1110
HCM Lane V/C Ratio	-	-	0.356	0.009
HCM Control Delay (s)	-	-	19.4	8.3
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	1.6	0

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Year 2045 With Project (No Widening)
 AM Peak Hour

Intersection						
Int Delay, s/veh	2.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	82	14	20	329	426	128
Future Vol, veh/h	82	14	20	329	426	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	15	22	354	458	138

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	925	527	596	0	-	0
Stage 1	527	-	-	-	-	-
Stage 2	398	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	299	551	980	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	678	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	292	551	980	-	-	-
Mov Cap-2 Maneuver	292	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.1	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	980	-	313	-	-
HCM Lane V/C Ratio	0.022	-	0.33	-	-
HCM Control Delay (s)	8.8	-	22.1	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Year 2045 With Project (No Widening)
 AM Peak Hour

Intersection										
Int Delay, s/veh	1.4									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	Y		Y	↑	Y	Y	↑		Y	
Traffic Vol, veh/h	39	26	0	320	16	4	425	0	0	0
Future Vol, veh/h	39	26	0	320	16	4	425	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	29	0	360	18	4	478	0	0	0

Major/Minor	Minor1	Major1	Major2	Minor2
Conflicting Flow All	846	360	478	0
Stage 1	360	-	-	-
Stage 2	486	-	-	-
Critical Hdwy	7.12	6.22	4.12	-
Critical Hdwy Stg 1	6.12	-	-	-
Critical Hdwy Stg 2	6.12	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-
Pot Cap-1 Maneuver	282	684	1084	-
Stage 1	658	-	-	-
Stage 2	563	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	281	684	1084	-
Mov Cap-2 Maneuver	281	-	-	-
Stage 1	658	-	-	-
Stage 2	561	-	-	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	17.2	0	0.1	0
HCM LOS	C			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	1084	-	-	368	1180
HCM Lane V/C Ratio	-	-	-	-	0.198	0.004
HCM Control Delay (s)	0	0	-	-	17.2	8.1
HCM Lane LOS	A	A	-	-	C	A
HCM 95th %tile Q(veh)	-	0	-	-	0.7	0

Intersection						
Int Delay, s/veh	7.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑		↘	↑
Traffic Vol, veh/h	150	121	220	63	106	322
Future Vol, veh/h	150	121	220	63	106	322
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	167	134	244	70	118	358

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	873	279	0	0	314
Stage 1	279	-	-	-	-
Stage 2	594	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	321	760	-	-	1246
Stage 1	768	-	-	-	-
Stage 2	552	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	291	760	-	-	1246
Mov Cap-2 Maneuver	291	-	-	-	-
Stage 1	768	-	-	-	-
Stage 2	500	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.9	0	2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	291	760	1246	-
HCM Lane V/C Ratio	-	-	0.573	0.177	0.095	-
HCM Control Delay (s)	-	-	32.7	10.8	8.2	-
HCM Lane LOS	-	-	D	B	A	-
HCM 95th %tile Q(veh)	-	-	3.3	0.6	0.3	-

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	46	17	370	12	14	785
Future Vol, veh/h	46	17	370	12	14	785
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	58	21	463	15	18	981

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1480	463	0	0	478	0
Stage 1	463	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	138	599	-	-	1084	-
Stage 1	634	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	136	599	-	-	1084	-
Mov Cap-2 Maneuver	136	-	-	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	39.2	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	136	599	1084
HCM Lane V/C Ratio	-	-	0.423	0.035	0.016
HCM Control Delay (s)	-	-	49.6	11.2	8.4
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	1.8	0.1	0

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖↗	↑↑↑	↖	↖↗	↑↑↑	↖	↖↗		↖	↖		↖
Traffic Volume (veh/h)	357	3276	358	178	1867	141	244	0	311	135	0	337
Future Volume (veh/h)	357	3276	358	178	1867	141	244	0	311	135	0	337
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	397	3640	0	198	2074	0	271	0	0	150	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	506	3786		230	3379		317	0		163	0	
Arrive On Green	0.15	0.74	0.00	0.07	0.66	0.00	0.09	0.00	0.00	0.09	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	271		1781	150	
Grp Volume(v), veh/h	397	3640	0	198	2074	0	271	73.6		150	101.3	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	E		1781	F	
Q Serve(g_s), s	13.3	77.0	0.0	6.8	27.8	0.0	9.3			10.0		
Cycle Q Clear(g_c), s	13.3	77.0	0.0	6.8	27.8	0.0	9.3			10.0		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	506	3786		230	3379		317			163		
V/C Ratio(X)	0.78	0.96		0.86	0.61		0.86			0.92		
Avail Cap(c_a), veh/h	663	3789		230	3379		317			163		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	49.4	14.0	0.0	55.4	11.6	0.0	53.7			54.0		
Incr Delay (d2), s/veh	4.6	7.7	0.0	26.2	0.3	0.0	19.9			47.2		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	6.1	27.0	0.0	3.8	9.9	0.0	4.9			6.6		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.9	21.6	0.0	81.7	11.9	0.0	73.6			101.3		
LnGrp LOS	D	C		F	B		E			F		
Approach Vol, veh/h		4037			2272							
Approach Delay, s/veh		24.8			18.0							
Approach LOS		C			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	12.0	92.9	15.0		21.6	83.4	15.0					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	7.5	88.5	10.5		22.5	73.5	10.5					
Max Q Clear Time (g_c+I1), s	9.8	80.0	12.3		16.3	30.8	13.0					
Green Ext Time (p_c), s	0.0	8.5	0.0		0.8	26.1	0.0					

Intersection Summary

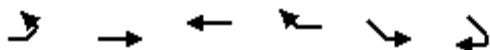
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

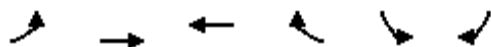
Year 2045 With Project (No Widening)
 AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↔↔	↑↑	↑↑	↗		
Traffic Volume (veh/h)	472	513	468	213	0	0
Future Volume (veh/h)	472	513	468	213	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	519	564	514	234		
Peak Hour Factor	0.91	0.91	0.91	0.91		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	1074	3029	1400	624		
Arrive On Green	0.31	0.85	0.39	0.39		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	519	564	514	234		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	3.3	0.8	2.8	2.8		
Cycle Q Clear(g_c), s	3.3	0.8	2.8	2.8		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	1074	3029	1400	624		
V/C Ratio(X)	0.48	0.19	0.37	0.37		
Avail Cap(c_a), veh/h	3061	7344	3672	1638		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.6	0.4	5.8	5.8		
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.5	0.5		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.9	0.4	6.0	6.2		
LnGrp LOS	A	A	A	A		
Approach Vol, veh/h		1083	748			
Approach Delay, s/veh		4.0	6.1			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		27.1			12.4	14.7
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			23.5	27.5
Max Q Clear Time (g_c+I1), s		3.8			6.3	5.8
Green Ext Time (p_c), s		4.4			1.8	4.3
Intersection Summary						
HCM 6th Ctrl Delay			4.8			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

Year 2045 With Project (No Widening)
 AM Peak Hour



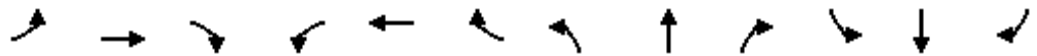
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	886	475	0	69	216
Future Volume (veh/h)	0	886	475	0	69	216
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	996	534	0	78	243
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1834	1834	0	865	397
Arrive On Green	0.00	0.52	0.52	0.00	0.25	0.25
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	996	534	0	78	243
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	6.5	2.9	0.0	0.6	4.7
Cycle Q Clear(g_c), s	0.0	6.5	2.9	0.0	0.6	4.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1834	1834	0	865	397
V/C Ratio(X)	0.00	0.54	0.29	0.00	0.09	0.61
Avail Cap(c_a), veh/h	0	3423	3423	0	1917	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	5.6	4.7	0.0	9.9	11.4
Incr Delay (d2), s/veh	0.0	0.3	0.1	0.0	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.3	0.6	0.0	0.2	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.8	4.8	0.0	9.9	12.9
LnGrp LOS	A	A	A	A	A	B
Approach Vol, veh/h		996	534		321	
Approach Delay, s/veh		5.8	4.8		12.2	
Approach LOS		A	A		B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		21.7		12.6		21.7
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		32.5		18.5		32.5
Max Q Clear Time (g_c+I1), s		9.5		7.7		5.9
Green Ext Time (p_c), s		7.7		0.8		3.8
Intersection Summary						
HCM 6th Ctrl Delay			6.6			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↑↑↑		↖	↑↑↑		↖↗		↗	↖↗		↖
Traffic Volume (veh/h)	223	822	252	28	1724	91	446	0	20	30	0	430
Future Volume (veh/h)	223	822	252	28	1724	91	446	0	20	30	0	430
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	253	934	0	32	1959	0	507	0	0	34	0	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	302	2750		101	2176		695	0		204	0	
Arrive On Green	0.17	0.54	0.00	0.06	0.43	0.00	0.20	0.00	0.00	0.06	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	507		3456	34	
Grp Volume(v), veh/h	253	934	0	32	1959	0	507	25.4		34	26.8	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	C		1728	C	
Q Serve(g_s), s	8.1	6.1	0.0	1.0	21.1	0.0	8.1			0.6		
Cycle Q Clear(g_c), s	8.1	6.1	0.0	1.0	21.1	0.0	8.1			0.6		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	302	2750		101	2176		695			204		
V/C Ratio(X)	0.84	0.34		0.32	0.90		0.73			0.17		
Avail Cap(c_a), veh/h	302	2750		226	2180		749			749		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	23.7	7.7	0.0	26.7	15.8	0.0	22.1			26.4		
Incr Delay (d2), s/veh	18.4	0.1	0.0	1.8	5.6	0.0	3.3			0.4		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	4.7	1.8	0.0	0.5	8.0	0.0	3.4			0.2		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	7.8	0.0	28.5	21.4	0.0	25.4			26.8		
LnGrp LOS	D	A		C	C		C			C		
Approach Vol, veh/h		1187			1991							
Approach Delay, s/veh		15.1			21.5							
Approach LOS		B			C							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	7.5		7.4	35.8	15.9		14.0	29.2				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	12.3		7.0	27.2	12.3		9.5	24.7				
Max Q Clear Time (g_c+I1), s	3.6		4.0	9.1	11.1		11.1	24.1				
Green Ext Time (p_c), s	0.0		0.0	6.4	0.3		0.0	0.6				

Intersection Summary

HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	3.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	94	31	393	32	11	699
Future Vol, veh/h	94	31	393	32	11	699
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	120	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	102	34	427	35	12	760

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1211	427	0	0	462
Stage 1	427	-	-	-	-
Stage 2	784	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	201	628	-	-	1099
Stage 1	658	-	-	-	-
Stage 2	450	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	199	628	-	-	1099
Mov Cap-2 Maneuver	199	-	-	-	-
Stage 1	658	-	-	-	-
Stage 2	445	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.4	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	199	628	1099
HCM Lane V/C Ratio	-	-	0.513	0.054	0.011
HCM Control Delay (s)	-	-	40.8	11.1	8.3
HCM Lane LOS	-	-	E	B	A
HCM 95th %tile Q(veh)	-	-	2.6	0.2	0

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵	↵ ↵ ↵ ↵			↵	↵ ↵
Traffic Vol, veh/h	28	4	514	9	1	1273
Future Vol, veh/h	28	4	514	9	1	1273
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	30	4	559	10	1	1384



















Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1258	285	0	0	569	0
Stage 1	564	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Critical Hdwy	6.29	7.14	-	-	5.34	-
Critical Hdwy Stg 1	6.64	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.67	3.92	-	-	3.12	-
Pot Cap-1 Maneuver	193	607	-	-	628	-
Stage 1	456	-	-	-	-	-
Stage 2	444	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	607	-	-	628	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	456	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.1	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	193	607	628	-
HCM Lane V/C Ratio	-	-	0.158	0.007	0.002	-
HCM Control Delay (s)	-	-	27.1	11	10.7	-
HCM Lane LOS	-	-	D	B	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0	0	-

























HCM 6th Signalized Intersection Summary
 30: Jeffrey Road & SR-241 NB Off-Ramp

Year 2045 With Project (No Widening)
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	30	30	53	0	0	162	0
Future Volume (veh/h)	0	0	0	0	0	30	30	53	0	0	162	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				0	0	33	33	58	0	0	176	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				146	0	228	283	1922	0	0	961	429
Arrive On Green				0.00	0.00	0.08	0.08	0.54	0.00	0.00	0.27	0.00
Sat Flow, veh/h				1781	0	2790	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				0	0	33	33	58	0	0	176	0
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1728	1777	0	0	1777	1585
Q Serve(g_s), s				0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.8	0.0
Cycle Q Clear(g_c), s				0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.8	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				146	0	228	283	1922	0	0	961	429
V/C Ratio(X)				0.00	0.00	0.14	0.12	0.03	0.00	0.00	0.18	0.00
Avail Cap(c_a), veh/h				1008	0	1578	2281	6702	0	0	3686	1644
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	9.0	9.0	2.3	0.0	0.0	5.9	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.3	0.2	0.0	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				0.0	0.0	9.3	9.2	2.3	0.0	0.0	6.0	0.0
LnGrp LOS				A	A	A	A	A	A	A	A	A
Approach Vol, veh/h					33			91			176	
Approach Delay, s/veh					9.3			4.8			6.0	
Approach LOS					A			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		15.5			5.7	9.7		5.7				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		39.5			13.5	21.5		11.5				
Max Q Clear Time (g_c+I1), s		3.2			3.2	3.8		3.2				
Green Ext Time (p_c), s		0.3			0.0	0.9		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				6.0								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary
 31: Jeffrey Road & SR-241 SB Off-Ramp

Year 2045 With Project (No Widening)
 AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			 					 		 	 	 
Traffic Volume (veh/h)	0	0	703	0	0	0	0	83	0	26	136	0
Future Volume (veh/h)	0	0	703	0	0	0	0	83	0	26	136	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	764				0	90	0	28	148	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	725	0	1135				0	685	306	213	1306	0
Arrive On Green	0.00	0.00	0.41				0.00	0.19	0.00	0.06	0.37	0.00
Sat Flow, veh/h	1781	0	2790				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	0	0	764				0	90	0	28	148	0
Grp Sat Flow(s),veh/h/ln	1781	0	1395				0	1777	1585	1728	1777	0
Q Serve(g_s), s	0.0	0.0	7.9				0.0	0.7	0.0	0.3	1.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	7.9				0.0	0.7	0.0	0.3	1.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	725	0	1135				0	685	306	213	1306	0
V/C Ratio(X)	0.00	0.00	0.67				0.00	0.13	0.00	0.13	0.11	0.00
Avail Cap(c_a), veh/h	1308	0	2048				0	1304	582	878	2609	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	8.6				0.0	11.8	0.0	15.7	7.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.7				0.0	0.1	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.7				0.0	0.2	0.0	0.1	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	9.3				0.0	11.9	0.0	16.0	7.4	0.0
LnGrp LOS	A	A	A				A	B	A	B	A	A
Approach Vol, veh/h		764						90			176	
Approach Delay, s/veh		9.3						11.9			8.8	
Approach LOS		A						B			A	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	6.2	10.8	18.4	17.0								
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5								
Max Green Setting (Gmax), s	8.5	12.5	25.5	25.5								
Max Q Clear Time (g_c+I1), s	2.3	2.7	10.9	4.0								
Green Ext Time (p_c), s	0.0	0.3	3.0	0.8								
Intersection Summary												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

2: SR-241 SB On-Ramp/SR-241 SB Off-Ramp & Santiago Canyon Road

PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↑↑	↗↗	↙	↑↑			↑↑↑	↘
Traffic Volume (veh/h)	0	0	0	67	493	106	70	1840	0	0	1173	63
Future Volume (veh/h)	0	0	0	67	493	106	70	1840	0	0	1173	63
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				74	542	116	77	2022	0	0	1289	69
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				358	684	561	169	2346	0	0	3124	167
Arrive On Green				0.20	0.19	0.20	0.09	0.66	0.00	0.00	0.50	0.49
Sat Flow, veh/h				1781	3554	2790	1781	3647	0	0	6561	336
Grp Volume(v), veh/h				74	542	116	77	2022	0	0	987	371
Grp Sat Flow(s),veh/h/ln				1781	1777	1395	1781	1777	0	0	1609	1810
Q Serve(g_s), s				2.0	8.4	2.0	2.4	25.9	0.0	0.0	7.5	7.5
Cycle Q Clear(g_c), s				2.0	8.4	2.0	2.4	25.9	0.0	0.0	7.5	7.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.19
Lane Grp Cap(c), veh/h				358	684	561	169	2346	0	0	2394	898
V/C Ratio(X)				0.21	0.79	0.21	0.46	0.86	0.00	0.00	0.41	0.41
Avail Cap(c_a), veh/h				386	739	605	232	2434	0	0	2394	898
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.2	22.2	19.2	24.7	7.7	0.0	0.0	9.2	9.2
Incr Delay (d2), s/veh				0.3	5.5	0.2	1.9	3.3	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	3.7	0.6	1.0	7.1	0.0	0.0	2.2	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.5	27.7	19.4	26.6	11.1	0.0	0.0	9.3	9.6
LnGrp LOS				B	C	B	C	B	A	A	A	A
Approach Vol, veh/h					732			2099			1358	
Approach Delay, s/veh					25.5			11.6			9.4	
Approach LOS					C			B			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.1			9.5	32.6		15.6				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		39.0			7.0	27.5		12.0				
Max Q Clear Time (g_c+I1), s		28.9			5.4	10.5		10.4				
Green Ext Time (p_c), s		8.7			0.0	8.7		0.7				
Intersection Summary												
HCM 6th Ctrl Delay				13.3								
HCM 6th LOS				B								

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

3: Santiago Canyon Road & SR-261 NB Off-Ramp/SR-241 NB On-Ramp

PM Peak Hour



Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER	NER2
Lane Configurations				↑↑		↗	↑↑	↗↗	↘↘		↗
Traffic Volume (veh/h)	0	0	0	1628	1016	190	418	668	343	899	0
Future Volume (veh/h)	0	0	0	1628	1016	190	418	668	343	899	0
Initial Q (Qb), veh			0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)			1.00		1.00	1.00		1.00	1.00	1.00	1.00
Parking Bus, Adj			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No		No		
Adj Sat Flow, veh/h/ln			0	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h			0	1770	1104	207	454	726	373	0	0
Peak Hour Factor			0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %			0	2	2	2	2	2	2	2	2
Cap, veh/h			0	1694	955	95	3032	2297	323		
Arrive On Green			0.00	0.77	0.74	0.05	0.85	0.82	0.09	0.00	0.00
Sat Flow, veh/h			0	2284	1235	1781	3554	2790	3456	1585	1585
Grp Volume(v), veh/h			0	1400	1474	207	454	726	373	0	0
Grp Sat Flow(s),veh/h/ln			0	1777	1648	1781	1777	1395	1728	1585	1585
Q Serve(g_s), s			0.0	116.0	116.0	8.0	3.2	9.3	14.0	0.0	0.0
Cycle Q Clear(g_c), s			0.0	116.0	116.0	8.0	3.2	9.3	14.0	0.0	0.0
Prop In Lane			0.00		0.75	1.00		1.00	1.00	1.00	1.00
Lane Grp Cap(c), veh/h			0	1374	1275	95	3032	2297	323		
V/C Ratio(X)			0.00	1.02	1.16	2.18	0.15	0.32	1.16		
Avail Cap(c_a), veh/h			0	1374	1275	95	3032	2297	323		
HCM Platoon Ratio			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)			0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh			0.0	17.0	18.7	71.0	1.8	3.2	68.0	0.0	0.0
Incr Delay (d2), s/veh			0.0	29.1	79.6	563.5	0.0	0.1	99.6	0.0	0.0
Initial Q Delay(d3),s/veh			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln			0.0	50.9	66.9	18.5	0.8	2.2	10.7	0.0	0.0
Unsig. Movement Delay, s/veh											
LnGrp Delay(d),s/veh			0.0	46.1	98.3	634.5	1.9	3.2	167.6	0.0	0.0
LnGrp LOS			A	F	F	F	A	A	F		
Approach Vol, veh/h				2874			1387		373		
Approach Delay, s/veh				72.9			97.0		167.6		
Approach LOS				E			F		F		
Timer - Assigned Phs	1	2		4			6				
Phs Duration (G+Y+Rc), s	12.0	120.0		18.0			132.0				
Change Period (Y+Rc), s	4.5	4.5		4.5			4.5				
Max Green Setting (Gmax), s	7.5	115.5		13.5			127.5				
Max Q Clear Time (g_c+I1), s	10.0	119.0		16.0			11.3				
Green Ext Time (p_c), s	0.0	0.0		0.0			7.7				

Intersection Summary

HCM 6th Ctrl Delay	87.7
HCM 6th LOS	F

Notes

- User approved volume balancing among the lanes for turning movement.
- Unsignalized Delay for [NER2] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
4: Santiago Canyon & SR-241 NB Off-Ramp

Year 2045 With Project (No Widening)
PM Peak Hour



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	↶↶	↷		↶↶	↶↶	
Traffic Volume (veh/h)	1097	35	0	717	392	0
Future Volume (veh/h)	1097	35	0	717	392	0
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	0	1870	1870	0
Adj Flow Rate, veh/h	1205	38	0	788	431	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	0	2	2	0
Cap, veh/h	1521	698	0	1459	1459	0
Arrive On Green	0.44	0.44	0.00	0.41	0.41	0.00
Sat Flow, veh/h	3456	1585	0	3741	3741	0
Grp Volume(v), veh/h	1205	38	0	788	431	0
Grp Sat Flow(s),veh/h/ln	1728	1585	0	1777	1777	0
Q Serve(g_s), s	16.1	0.7	0.0	9.0	4.4	0.0
Cycle Q Clear(g_c), s	16.1	0.7	0.0	9.0	4.4	0.0
Prop In Lane	1.00	1.00	0.00			0.00
Lane Grp Cap(c), veh/h	1521	698	0	1459	1459	0
V/C Ratio(X)	0.79	0.05	0.00	0.54	0.30	0.00
Avail Cap(c_a), veh/h	1935	887	0	1459	1459	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.9	8.6	0.0	12.0	10.6	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.0	1.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	0.2	0.0	3.3	1.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	8.6	0.0	13.4	11.1	0.0
LnGrp LOS	B	A	A	B	B	A
Approach Vol, veh/h	1243			788	431	
Approach Delay, s/veh	14.5			13.4	11.1	
Approach LOS	B			B	B	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		26.0		27.6		26.0
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		21.5		29.5		21.5
Max Q Clear Time (g_c+I1), s		12.0		19.1		7.4
Green Ext Time (p_c), s		3.7		4.0		2.4
Intersection Summary						
HCM 6th Ctrl Delay			13.6			
HCM 6th LOS			B			

Intersection						
Int Delay, s/veh	2.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	41	78	622	35	141	356
Future Vol, veh/h	41	78	622	35	141	356
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Free	-	Free	-	None
Storage Length	75	0	-	0	150	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	80	641	36	145	367

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	1298	-	0
Stage 1	641	-	-
Stage 2	657	-	-
Critical Hdwy	6.42	-	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	-	-
Pot Cap-1 Maneuver	178	0	0
Stage 1	525	0	0
Stage 2	516	0	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	151	-	-
Mov Cap-2 Maneuver	151	-	-
Stage 1	525	-	-
Stage 2	437	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.9	0	2.7
HCM LOS	E		

Minor Lane/Major Mvmt	NBTWBLn1WBLn2	SBL	SBT
Capacity (veh/h)	- 151	- 943	-
HCM Lane V/C Ratio	- 0.28	- 0.154	-
HCM Control Delay (s)	- 37.9	0	9.5
HCM Lane LOS	- E	A	A
HCM 95th %tile Q(veh)	- 1.1	- 0.5	-

Intersection						
Int Delay, s/veh	1.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	35	27	146	90	7
Future Vol, veh/h	2	35	27	146	90	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	Free	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	38	29	157	97	8

Major/Minor	Minor2	Major1	Major2			
Conflicting Flow All	316	101	105	0	-	0
Stage 1	101	-	-	-	-	-
Stage 2	215	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	677	954	1486	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	821	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	663	954	1486	-	-	-
Mov Cap-2 Maneuver	663	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	821	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1486	-	932	-	-
HCM Lane V/C Ratio	0.02	-	0.043	-	-
HCM Control Delay (s)	7.5	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	14	19	664	10	30	336
Future Vol, veh/h	14	19	664	10	30	336
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	300	75	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	20	699	11	32	354

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1117	699	0	0	710
Stage 1	699	-	-	-	-
Stage 2	418	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	229	440	-	-	889
Stage 1	493	-	-	-	-
Stage 2	664	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	221	440	-	-	889
Mov Cap-2 Maneuver	221	-	-	-	-
Stage 1	493	-	-	-	-
Stage 2	640	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.4	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	221	440	889	-
HCM Lane V/C Ratio	-	-	0.067	0.045	0.036	-
HCM Control Delay (s)	-	-	22.5	13.6	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0.1	0.1	-

HCM 6th TWSC
 8: Santiago Canyon Road & Modjeska Grade Road

Year 2045 With Project (No Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	24	1	683	27	0	355
Future Vol, veh/h	24	1	683	27	0	355
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	-	150	105	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	25	1	711	28	0	370

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1081	711	0	0	739	0
Stage 1	711	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	241	433	-	-	867	-
Stage 1	487	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	241	433	-	-	867	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	487	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.4	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	241	433	867	-
HCM Lane V/C Ratio	-	-	0.104	0.002	-	-
HCM Control Delay (s)	-	-	21.7	13.3	0	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑	↑	↑	↑
Traffic Vol, veh/h	28	28	683	58	37	364
Future Vol, veh/h	28	28	683	58	37	364
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	310	300	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	29	704	60	38	375

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1155	704	0	0	764	0
Stage 1	704	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	218	437	-	-	849	-
Stage 1	490	-	-	-	-	-
Stage 2	642	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	208	437	-	-	849	-
Mov Cap-2 Maneuver	208	-	-	-	-	-
Stage 1	490	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21	0	0.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	282	849
HCM Lane V/C Ratio	-	-	0.205	0.045
HCM Control Delay (s)	-	-	21	9.4
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.8	0.1

HCM 6th TWSC
 10: Santiago Canyon Road & Ridgeline Road North

Year 2045 With Project (No Widening)
 PM Peak Hour

Intersection						
Int Delay, s/veh	5.8					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y		Y	↑	↑	
Traffic Vol, veh/h	141	8	21	594	297	133
Future Vol, veh/h	141	8	21	594	297	133
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	153	9	23	646	323	145

Major/Minor	Minor2	Major1		Major2	
Conflicting Flow All	1088	396	468	0	0
Stage 1	396	-	-	-	-
Stage 2	692	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-
Pot Cap-1 Maneuver	239	653	1094	-	-
Stage 1	680	-	-	-	-
Stage 2	497	-	-	-	-
Platoon blocked, %				-	-
Mov Cap-1 Maneuver	234	653	1094	-	-
Mov Cap-2 Maneuver	234	-	-	-	-
Stage 1	666	-	-	-	-
Stage 2	497	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.5	0.3	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1094	-	242	-	-
HCM Lane V/C Ratio	0.021	-	0.669	-	-
HCM Control Delay (s)	8.4	-	45.5	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0.1	-	4.3	-	-

HCM 6th TWSC
 11: Santiago Canyon Road & Crystal Canyon Road

Year 2045 With Project (No Widening)
 PM Peak Hour

Intersection										
Int Delay, s/veh	0.6									
Movement	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	NEL	NER
Lane Configurations	↘		↘	↗	↗	↘	↗		↘	
Traffic Vol, veh/h	16	8	0	600	47	11	260	0	0	0
Future Vol, veh/h	16	8	0	600	47	11	260	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	-	None	-	-	None	-	-
Storage Length	0	-	180	-	440	160	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	9	0	652	51	12	283	0	0	0

Major/Minor	Minor1	Major1	Major2	Minor2
Conflicting Flow All	959	652	283	0
Stage 1	652	-	-	-
Stage 2	307	-	-	-
Critical Hdwy	7.12	6.22	4.12	-
Critical Hdwy Stg 1	6.12	-	-	-
Critical Hdwy Stg 2	6.12	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-
Pot Cap-1 Maneuver	237	468	1279	-
Stage 1	457	-	-	-
Stage 2	703	-	-	-
Platoon blocked, %				
Mov Cap-1 Maneuver	235	468	1279	-
Mov Cap-2 Maneuver	235	-	-	-
Stage 1	457	-	-	-
Stage 2	694	-	-	-

Approach	WB	NB	SB	NE
HCM Control Delay, s	19.1	0	0.4	0
HCM LOS	C			A

Minor Lane/Major Mvmt	NELn1	NBL	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	1279	-	-	282	895
HCM Lane V/C Ratio	-	-	-	-	0.093	0.013
HCM Control Delay (s)	0	0	-	-	19.1	9.1
HCM Lane LOS		A	A	-	C	A
HCM 95th %tile Q(veh)	-	0	-	-	0.3	0

Intersection						
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↙	↗	↑		↙	↑
Traffic Vol, veh/h	65	123	511	182	90	189
Future Vol, veh/h	65	123	511	182	90	189
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	131	544	194	96	201

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1034	641	0	0	738
Stage 1	641	-	-	-	-
Stage 2	393	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	257	475	-	-	868
Stage 1	525	-	-	-	-
Stage 2	682	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	228	475	-	-	868
Mov Cap-2 Maneuver	228	-	-	-	-
Stage 1	525	-	-	-	-
Stage 2	606	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	3.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	228	475	868
HCM Lane V/C Ratio	-	-	0.303	0.275	0.11
HCM Control Delay (s)	-	-	27.5	15.4	9.7
HCM Lane LOS	-	-	D	C	A
HCM 95th %tile Q(veh)	-	-	1.2	1.1	0.4

Intersection						
Int Delay, s/veh	0.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	26	6	898	30	8	377
Future Vol, veh/h	26	6	898	30	8	377
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	370	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	6	926	31	8	389

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1331	926	0	0	957	0
Stage 1	926	-	-	-	-	-
Stage 2	405	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	170	326	-	-	719	-
Stage 1	386	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %			-	-		
Mov Cap-1 Maneuver	168	326	-	-	719	-
Mov Cap-2 Maneuver	168	-	-	-	-	-
Stage 1	386	-	-	-	-	-
Stage 2	666	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.8	0	0.2
HCM LOS	D		






























Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	168	326	719	-
HCM Lane V/C Ratio	-	-	0.16	0.019	0.011	-
HCM Control Delay (s)	-	-	30.5	16.3	10.1	-
HCM Lane LOS	-	-	D	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	0	-

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

22: SR-241 SB Off-Ramp/SR-241 NB On-Ramp & Portola Parkway

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  		 	  		 					
Traffic Volume (veh/h)	261	1152	243	165	1224	95	198	0	119	96	0	387
Future Volume (veh/h)	261	1152	243	165	1224	95	198	0	119	96	0	387
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	281	1239	0	177	1316	0	213	0	0	103	0	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	538	2296		500	2240		519	0		215	0	
Arrive On Green	0.16	0.45	0.00	0.14	0.44	0.00	0.15	0.00	0.00	0.12	0.00	0.00
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	213		1781	103	
Grp Volume(v), veh/h	281	1239	0	177	1316	0	213	18.6		103	20.9	
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	B		1781	C	
Q Serve(g_s), s	3.5	8.3	0.0	2.2	9.2	0.0	2.6			2.5		
Cycle Q Clear(g_c), s	3.5	8.3	0.0	2.2	9.2	0.0	2.6			2.5		
Prop In Lane	1.00		1.00	1.00		1.00	1.00			1.00		
Lane Grp Cap(c), veh/h	538	2296		500	2240		519			215		
V/C Ratio(X)	0.52	0.54		0.35	0.59		0.41			0.48		
Avail Cap(c_a), veh/h	809	3259		588	2933		735			379		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	18.2	9.4	0.0	18.1	10.0	0.0	18.1			19.3		
Incr Delay (d2), s/veh	0.8	0.2	0.0	0.4	0.2	0.0	0.5			1.6		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.3	2.4	0.0	0.8	2.7	0.0	1.0			1.0		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.0	9.6	0.0	18.5	10.2	0.0	18.6			20.9		
LnGrp LOS	B	A		B	B		B			C		
Approach Vol, veh/h		1520			1493							
Approach Delay, s/veh		11.3			11.2							
Approach LOS		B			B							
Timer - Assigned Phs	1	2	3		5	6	7					
Phs Duration (G+Y+Rc), s	10.8	25.1	11.1		11.3	24.6	9.7					
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5	4.5	4.5					
Max Green Setting (Gmax), s	7.5	29.5	9.5		10.5	26.5	9.5					
Max Q Clear Time (g_c+I1), s	5.2	11.3	5.6		6.5	12.2	5.5					
Green Ext Time (p_c), s	0.1	8.7	0.2		0.4	8.0	0.1					

Intersection Summary

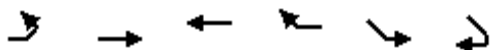
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Summary
 24: Lake Forest Drive & SR-241 NB On-Ramp

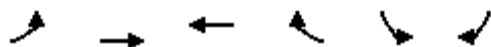
Year 2045 With Project (No Widening)
 PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations	↔↔	↑↑	↑↑	↗		
Traffic Volume (veh/h)	173	640	549	108	0	0
Future Volume (veh/h)	173	640	549	108	0	0
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Work Zone On Approach		No	No			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		
Adj Flow Rate, veh/h	182	674	578	114		
Peak Hour Factor	0.95	0.95	0.95	0.95		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h	776	2968	1585	707		
Arrive On Green	0.22	0.84	0.45	0.45		
Sat Flow, veh/h	3456	3647	3647	1585		
Grp Volume(v), veh/h	182	674	578	114		
Grp Sat Flow(s),veh/h/ln	1728	1777	1777	1585		
Q Serve(g_s), s	1.0	0.9	2.6	1.0		
Cycle Q Clear(g_c), s	1.0	0.9	2.6	1.0		
Prop In Lane	1.00			1.00		
Lane Grp Cap(c), veh/h	776	2968	1585	707		
V/C Ratio(X)	0.23	0.23	0.36	0.16		
Avail Cap(c_a), veh/h	2278	8197	5270	2350		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	1.00	1.00	1.00	1.00		
Uniform Delay (d), s/veh	7.7	0.4	4.4	4.0		
Incr Delay (d2), s/veh	0.2	0.0	0.1	0.1		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.3	0.1		
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.9	0.4	4.6	4.1		
LnGrp LOS	A	A	A	A		
Approach Vol, veh/h		856	692			
Approach Delay, s/veh		2.0	4.5			
Approach LOS		A	A			
Timer - Assigned Phs		2			5	6
Phs Duration (G+Y+Rc), s		24.3			9.4	14.8
Change Period (Y+Rc), s		4.5			4.5	4.5
Max Green Setting (Gmax), s		55.5			15.5	35.5
Max Q Clear Time (g_c+I1), s		3.9			4.0	5.6
Green Ext Time (p_c), s		5.5			0.4	4.7
Intersection Summary						
HCM 6th Ctrl Delay			3.1			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary
 25: Lake Forest Drive & SR-241 SB Off-Ramp

Year 2045 With Project (No Widening)
 PM Peak Hour


























Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	↑
Traffic Volume (veh/h)	0	708	566	0	67	176
Future Volume (veh/h)	0	708	566	0	67	176
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	0	761	609	0	72	189
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1695	1695	0	815	374
Arrive On Green	0.00	0.48	0.48	0.00	0.24	0.24
Sat Flow, veh/h	0	3741	3741	0	3456	1585
Grp Volume(v), veh/h	0	761	609	0	72	189
Grp Sat Flow(s),veh/h/ln	0	1777	1777	0	1728	1585
Q Serve(g_s), s	0.0	4.0	3.0	0.0	0.5	2.9
Cycle Q Clear(g_c), s	0.0	4.0	3.0	0.0	0.5	2.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1695	1695	0	815	374
V/C Ratio(X)	0.00	0.45	0.36	0.00	0.09	0.51
Avail Cap(c_a), veh/h	0	4336	4336	0	2232	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	4.8	4.6	0.0	8.3	9.2
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.6	0.5	0.0	0.1	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.0	5.0	4.7	0.0	8.4	10.3
LnGrp LOS	A	A	A	A	A	B
Approach Vol, veh/h		761	609		261	
Approach Delay, s/veh		5.0	4.7		9.8	
Approach LOS		A	A		A	
Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		17.3		10.6		17.3
Change Period (Y+Rc), s		4.5		4.5		4.5
Max Green Setting (Gmax), s		33.5		17.5		33.5
Max Q Clear Time (g_c+I1), s		7.0		5.9		6.0
Green Ext Time (p_c), s		5.8		0.7		4.5
Intersection Summary						
HCM 6th Ctrl Delay			5.7			
HCM 6th LOS			A			

HCM 6th Signalized Intersection Summary

Year 2045 With Project (No Widening)

26: SR-241 NB Off-Ramp/SR-241 SB Off-Ramp & Alton Parkway

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 					 		
Traffic Volume (veh/h)	211	433	304	74	547	118	255	0	164	163	0	138
Future Volume (veh/h)	211	433	304	74	547	118	255	0	164	163	0	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	0	1870	1870	0	1870
Adj Flow Rate, veh/h	237	487	0	83	615	0	287	0	0	183	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	0	2	2	0	2
Cap, veh/h	371	1887		216	1442		657	0		594	0	
Arrive On Green	0.21	0.37	0.00	0.12	0.28	0.00	0.19	0.00	0.00	0.17	0.00	0.00
Sat Flow, veh/h	1781	5274	0	1781	5274	0	3456	287		3456	183	
Grp Volume(v), veh/h	237	487	0	83	615	0	287	13.9		183	13.9	
Grp Sat Flow(s),veh/h/ln	1781	1702	0	1781	1702	0	1728	B		1728	B	
Q Serve(g_s), s	4.6	2.5	0.0	1.6	3.7	0.0	2.8			1.7		
Cycle Q Clear(g_c), s	4.6	2.5	0.0	1.6	3.7	0.0	2.8			1.7		
Prop In Lane	1.00		0.00	1.00		0.00	1.00			1.00		
Lane Grp Cap(c), veh/h	371	1887		216	1442		657			594		
V/C Ratio(X)	0.64	0.26		0.38	0.43		0.44			0.31		
Avail Cap(c_a), veh/h	805	3937		379	2715		1011			1011		
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00		
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	0.00	1.00			1.00		
Uniform Delay (d), s/veh	13.6	8.3	0.0	15.2	11.0	0.0	13.5			13.6		
Incr Delay (d2), s/veh	1.8	0.1	0.0	1.1	0.2	0.0	0.5			0.3		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0			0.0		
%ile BackOfQ(50%),veh/ln	1.7	0.7	0.0	0.6	1.1	0.0	0.9			0.6		
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	8.3	0.0	16.4	11.2	0.0	13.9			13.9		
LnGrp LOS	B	A		B	B		B			B		
Approach Vol, veh/h		724			698							
Approach Delay, s/veh		10.7			11.8							
Approach LOS		B			B							
Timer - Assigned Phs	1		3	4	5		7	8				
Phs Duration (G+Y+Rc), s	10.5		8.6	17.9	11.2		11.8	14.6				
Change Period (Y+Rc), s	4.5		4.5	4.5	4.5		4.5	4.5				
Max Green Setting (Gmax), s	10.5		7.5	28.5	10.5		16.5	19.5				
Max Q Clear Time (g_c+I1), s	4.7		4.6	5.5	5.8		7.6	6.7				
Green Ext Time (p_c), s	0.3		0.0	3.4	0.4		0.4	3.4				

Intersection Summary

HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

Unsignalized Delay for [NBR, EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↘	↗	↑	↗	↘	↑
Traffic Vol, veh/h	61	21	745	108	36	348
Future Vol, veh/h	61	21	745	108	36	348
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	120	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	23	810	117	39	378

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	1266	810	0	0	927	0
Stage 1	810	-	-	-	-	-
Stage 2	456	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	187	380	-	-	737	-
Stage 1	438	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	177	380	-	-	737	-
Mov Cap-2 Maneuver	177	-	-	-	-	-
Stage 1	438	-	-	-	-	-
Stage 2	604	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31.4	0	1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	177	380	737	-
HCM Lane V/C Ratio	-	-	0.375	0.06	0.053	-
HCM Control Delay (s)	-	-	37	15.1	10.2	-
HCM Lane LOS	-	-	E	C	B	-
HCM 95th %tile Q(veh)	-	-	1.6	0.2	0.2	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↵	↵ ↵ ↵ ↵	↵ ↵ ↵ ↵		↵	↵ ↵
Traffic Vol, veh/h	17	2	1076	28	4	531
Future Vol, veh/h	17	2	1076	28	4	531
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	-	-	140	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	2	1170	30	4	577



















Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1482	600	0	0	1200
Stage 1	1185	-	-	-	-
Stage 2	297	-	-	-	-
Critical Hdwy	6.29	7.14	-	-	5.34
Critical Hdwy Stg 1	6.64	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.67	3.92	-	-	3.12
Pot Cap-1 Maneuver	143	381	-	-	313
Stage 1	190	-	-	-	-
Stage 2	702	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	141	381	-	-	313
Mov Cap-2 Maneuver	141	-	-	-	-
Stage 1	190	-	-	-	-
Stage 2	693	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.2	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	141	381	313	-
HCM Lane V/C Ratio	-	-	0.131	0.006	0.014	-
HCM Control Delay (s)	-	-	34.3	14.5	16.7	-
HCM Lane LOS	-	-	D	B	C	-
HCM 95th %tile Q(veh)	-	-	0.4	0	0	-

























HCM 6th Signalized Intersection Summary
 30: Jeffrey Road & SR-241 NB Off-Ramp

Year 2045 With Project (No Widening)
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	16	437	128	0	0	76	0
Future Volume (veh/h)	0	0	0	0	0	16	437	128	0	0	76	0
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No		No		No		No		No
Adj Sat Flow, veh/h/ln				1870	0	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				0	0	17	475	139	0	0	83	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	2	2	0	0	2	2
Cap, veh/h				89	0	139	941	2316	0	0	817	364
Arrive On Green				0.00	0.00	0.05	0.27	0.65	0.00	0.00	0.23	0.00
Sat Flow, veh/h				1781	0	2790	3456	3647	0	0	3647	1585
Grp Volume(v), veh/h				0	0	17	475	139	0	0	83	0
Grp Sat Flow(s),veh/h/ln				1781	0	1395	1728	1777	0	0	1777	1585
Q Serve(g_s), s				0.0	0.0	0.2	3.1	0.4	0.0	0.0	0.5	0.0
Cycle Q Clear(g_c), s				0.0	0.0	0.2	3.1	0.4	0.0	0.0	0.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				89	0	139	941	2316	0	0	817	364
V/C Ratio(X)				0.00	0.00	0.12	0.50	0.06	0.00	0.00	0.10	0.00
Avail Cap(c_a), veh/h				665	0	1041	3225	5572	0	0	1725	769
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				0.0	0.0	12.2	8.2	1.7	0.0	0.0	8.1	0.0
Incr Delay (d2), s/veh				0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				0.0	0.0	12.6	8.6	1.7	0.0	0.0	8.2	0.0
LnGrp LOS				A	A	B	A	A	A	A	A	A
Approach Vol, veh/h					17			614			83	
Approach Delay, s/veh					12.6			7.1			8.2	
Approach LOS					B			A			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		21.5			11.3	10.2		5.3				
Change Period (Y+Rc), s		4.5			4.5	4.5		4.5				
Max Green Setting (Gmax), s		41.5			24.5	12.5		9.5				
Max Q Clear Time (g_c+I1), s		2.4			5.1	2.5		3.0				
Green Ext Time (p_c), s		0.9			1.7	0.2		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				7.3								
HCM 6th LOS				A								

HCM 6th Signalized Intersection Summary
 31: Jeffrey Road & SR-241 SB Off-Ramp

Year 2045 With Project (No Widening)
 PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			 					 		 	 	 
Traffic Volume (veh/h)	0	0	208	0	0	0	0	566	0	29	46	0
Future Volume (veh/h)	0	0	208	0	0	0	0	566	0	29	46	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	0	0	226				0	615	0	32	50	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	2	2	0
Cap, veh/h	367	0	574				0	1234	550	242	1929	0
Arrive On Green	0.00	0.00	0.21				0.00	0.35	0.00	0.07	0.54	0.00
Sat Flow, veh/h	1781	0	2790				0	3647	1585	3456	3647	0
Grp Volume(v), veh/h	0	0	226				0	615	0	32	50	0
Grp Sat Flow(s),veh/h/ln	1781	0	1395				0	1777	1585	1728	1777	0
Q Serve(g_s), s	0.0	0.0	2.2				0.0	4.3	0.0	0.3	0.2	0.0
Cycle Q Clear(g_c), s	0.0	0.0	2.2				0.0	4.3	0.0	0.3	0.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	367	0	574				0	1234	550	242	1929	0
V/C Ratio(X)	0.00	0.00	0.39				0.00	0.50	0.00	0.13	0.03	0.00
Avail Cap(c_a), veh/h	616	0	964				0	3127	1395	977	4579	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	10.9				0.0	8.2	0.0	13.9	3.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4				0.0	0.3	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.5				0.0	1.1	0.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	11.4				0.0	8.5	0.0	14.1	3.4	0.0
LnGrp LOS	A	A	B				A	A	A	B	A	A
Approach Vol, veh/h		226						615			82	
Approach Delay, s/veh		11.4						8.5			7.6	
Approach LOS		B						A			A	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	6.2	15.0	10.6	21.3								
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5								
Max Green Setting (Gmax), s	8.5	27.5	10.5	40.5								
Max Q Clear Time (g_c+I1), s	2.3	6.3	4.2	2.2								
Green Ext Time (p_c), s	0.0	4.2	0.4	0.3								
Intersection Summary												
HCM 6th Ctrl Delay			9.1									
HCM 6th LOS			A									



Appendix H

Portola Parkway Gap Closure Sensitivity Test Memo

DRAFT TECHNICAL MEMORANDUM

To: Ms. Wei Zhu
Traffic & Development Support
Orange County Public Works (OCPW)
601 North Ross Street
Santa Ana, CA 92701

From: Chris Devlin
Iteris, Inc.
1700 Carnegie Avenue, Suite 100
Santa Ana, CA 92705

Date: January 31, 2024

RE: **MPAH Reclassification Study - Portola Parkway Gap Closure Sensitivity Testing**

The purpose of this memorandum is to document a sensitivity test performed to test whether the removal of the future Portola Parkway “Gap closure” between the City of Lake Forest and the City of Orange would significantly affect the traffic volumes on El Toro Road compared to the volumes shown in the Draft Traffic Study report for the Santiago Canyon Road (SCR) /El Toro Road (ETR) /Blackstar Canyon Road Master Plan of Arterial Highways (MPAH) Reclassification Study (MPAH Study) currently being performed by the County of Orange.

1.0 Introduction

The County of Orange circulated the Draft Traffic Study report in October 2023 and the City of Lake Forest made two comments regarding the assumptions in the future highway network.

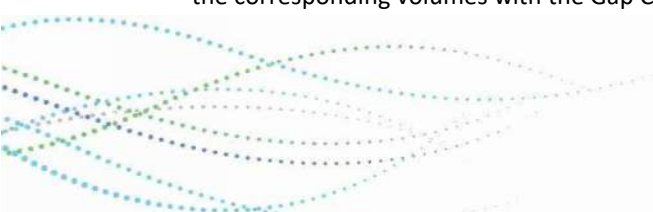
“It appears that the model has Portola Parkway gap closure and Jeffrey road extension to Santiago Canyon road as actually being built in the future. I don’t believe it would be prudent to downgrade the MPAH based on that assumption at this time. I believe the study should also model it without those two improvements and see the actual effect. On face value it’s hard to believe the ADT will be less in the future on Santiago, so I think addressing the issue of those two improvements will save questions down the line.”

“In Section 4.4 (Future Forecast OCTAM Volumes), OCTAM assumes that the Portola Parkway gap closure (Figure 4-4) and the connector road from the State Route (SR) 241 southbound off ramp to Jamboree Road (Figure 4-3) would be constructed. However, these road improvements may realistically never happen. For Portola Parkway, the construction of the gap closure would only occur in conjunction with the new development on the vacant land in that area. However, it is our understanding that this new development is not going to come to fruition and that the vacant land would instead be re-designated as open space. As such, this segment of Portola Parkway would realistically never be built get built.....because these two (2) road improvements may never happen, the traffic study should be expanded to include a separate scenario which does not include these two (2) road improvements on Portola Parkway and the connector road”

2.0 Sensitivity Tests

OCTA’s MPAH Methodology requires that only the roads being evaluated for the amendment study should be changed in the traffic modeling and analysis for the Study. All other future MPAH improvements should remain in the OCTAM MPAH highway network. It is not appropriate to remove other improvements that have yet to be built the OCTAM MPAH network even if the likelihood of these improvements coming to eventual fruition may be perceived as being low at the current time. A separate MPAH amendment would be required to remove these improvements from the network.

However, since the Portola Gap closure would directly affect the City of Lake Forest and its residents the County performed sensitivity testing to see what forecast volumes would look like on SCR and ETR with and without the current SCR and ETR MPAH improvements without the Portola Gap closure. These results were then compared to the corresponding volumes with the Gap Closure assumed in the highway network.



The results of the No Project scenario (current MPAH on SCR/ETR) are provided in **Table 1**. Overall, there is little change in the MPAH amendment study area due to the Gap closure with an average of 3% change in volumes on SCR less than one percent change on ETR north of Portola Parkway. **Figure 1** shows the percentage change on volumes on the surrounding streets with Alton Parkway (>25%) experiencing the largest percentage change followed by Irvine Boulevard (10%) , Bake Parkway (6%) followed by El Toro Road south of Portola Parkway (5%). There is also a significant increase in volumes on SR-241 between Alton Parkway and Portola Parkway .

Table 1 – Difference in Postprocessed Volumes Current MPAH With and without Portola Gap Closure

I D	Roadway	Segment	2023	2045 Current MPAH on SRC/ETR			% Change
				With Gap Closure	No Gap Closure	Volume Change	
A	SCR	SR-241 NB Off-Ramp to Irvine Lake	9,300	11,700	12,400	700	6%
B		Irvine Lake to Silverado Canyon Road	9,100	13,200	13,600	400	3%
C		Silverado Canyon Road to Modjeska Canyon Road	8,200	12,100	12,600	500	4%
D		Modjeska Canyon Road to Modjeska Grade Road	8,000	11,800	12,300	500	4%
E		Modjeska Grade Road to Ridgeline Road North	8,600	12,800	13,300	500	4%
F		Ridgeline Road North to Live Oak Canyon Road	7,500	11,300	11,600	300	3%
G	ETR	Live Oak Canyon Road to Glenn Ranch Road	9,900	13,800	13,800	0	0%
H		Glenn Ranch Road to Marguerite Parkway	15,100	19,400	19,500	100	1%
I		Marguerite Parkway to Portola Parkway	12,200	10,400	10,300	-100	-1%
		Average	9,800	12,900	13,300	400	3%
		Average Santiago Canyon Road	8,500	12,200	12,600	400	3%
		Average El Toro Road	12,400	14,500	14,500	0	0%



Figure1 – Percentage difference in 2045 OCTAM Volumes Current MPAH with and without Portola Gap Closure

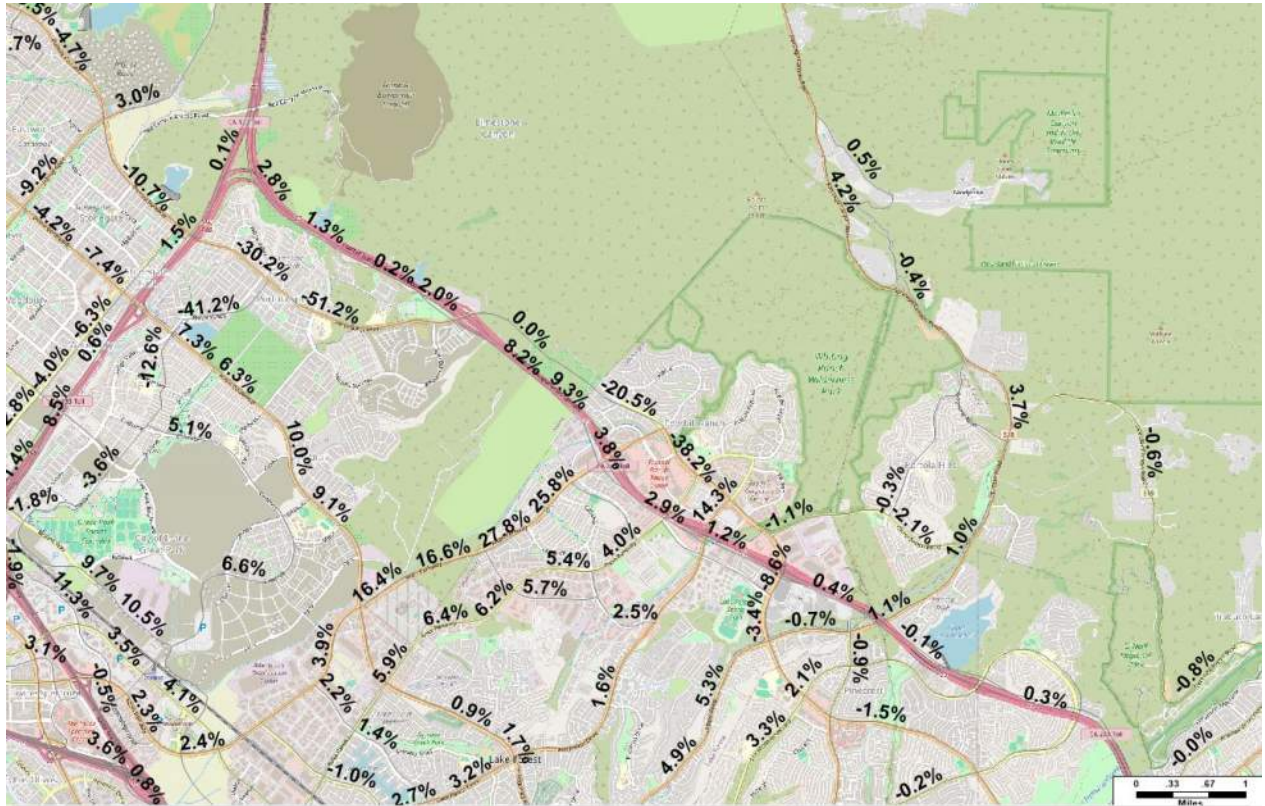
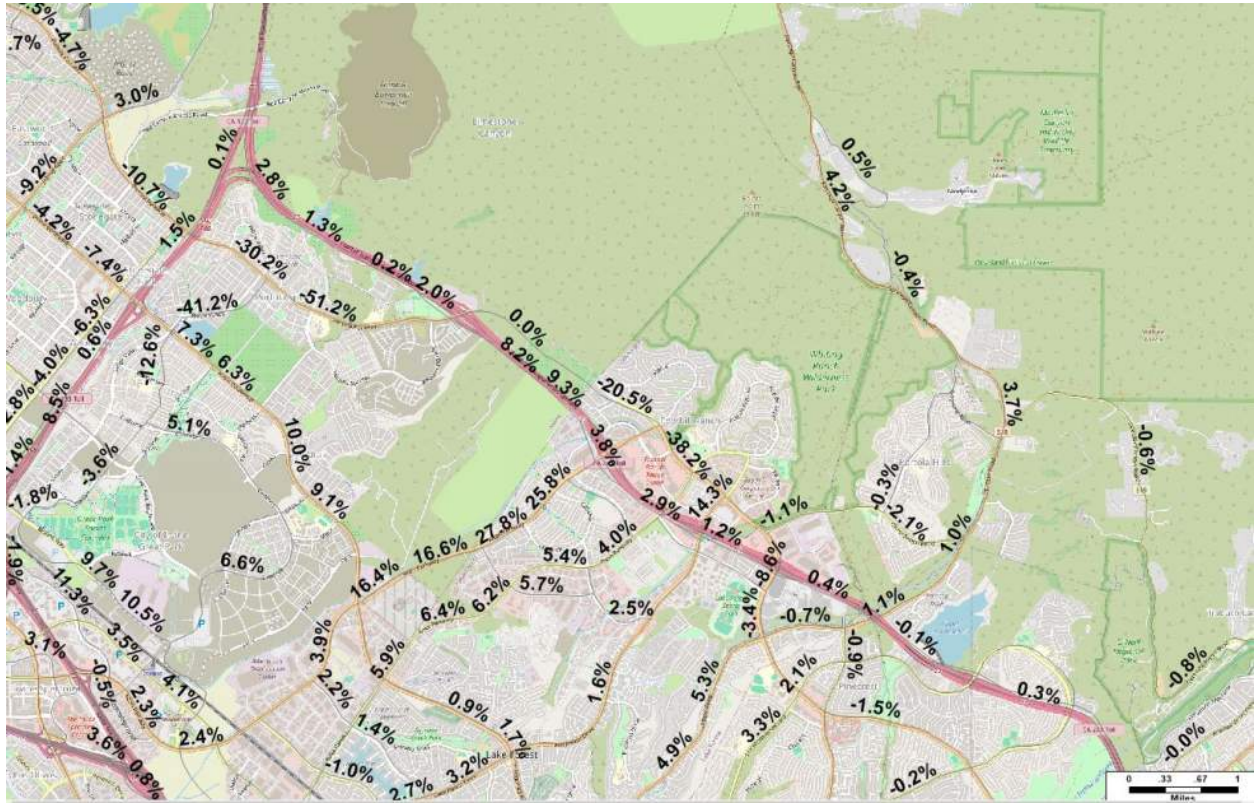


Table 2 shows the results of the sensitivity test on the With Project scenario (existing configuration on SCR/ETR) . The results are very similar to the No Project scenario with little change in the MPAH study area with an average of 2% change in volumes on SCR less than one percent change on ETR road north of Portola Parkway. **Figure 2** shows the percentage change on volumes on the surrounding streets with Alton Parkway again experiencing the largest percentage change followed by Irvine Boulevard, Bake Parkway followed by El Toro Road south of Portola Parkway. The is a similar increase in volumes on SR-241 between Alton Parkway and Portola Parkway to the No Project sensitivity test.

Table 2 – Difference in Year Postprocessed Volumes Existing SCR/ETR with and without Portola Gap Closure

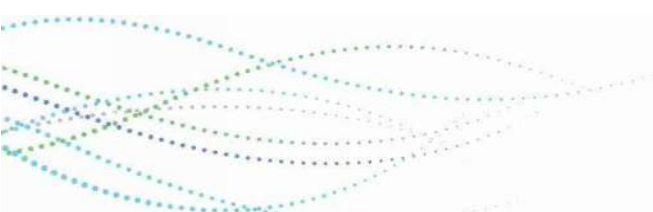
ID	Roadway	Segment	2023	2045 Existing SRC/ETR			Change	%
				Gap Closure	No Gap Closure			
	SCR	SR-241 NB Off-Ramp to Irvine Lake	9,300	8,700	8,900	200	2%	
B		Irvine Lake to Silverado Canyon Road	9,100	9,500	9,700	200	2%	
C		Silverado Canyon Road to Modjeska Canyon Road	8,200	8,100	8,300	200	2%	
D		Modjeska Canyon Road to Modjeska Grade Road	8,000	7,800	8,000	200	3%	
E		Modjeska Grade Road to Ridgeline Road North	8,600	9,000	9,200	200	2%	
F		Ridgeline Road North to Live Oak Canyon Road	7,500	7,800	7,900	100	1%	
G	ETR	Live Oak Canyon Road to Glenn Ranch Road	9,900	10,300	10,300	0	0%	
H		Glenn Ranch Road to Marguerite Parkway	15,100	16,800	16,700	-100	-1%	
I		Marguerite Parkway to Portola Parkway	12,200	10,900	10,900	0	0%	
		Average	9,800	9,900	10,000	100	1%	
		Average Santiago Canyon Road	8,500	8,500	8,700	200	2%	
		Average El Toro Road	12,400	12,700	12,600	-100	-1%	

Figure2 – Difference in Raw 2045 OCTAM % Volumes Existing SCR/ETR With and without Portola Gap Closure



3.0 Conclusion

If the Portola Gap Closure is not implemented, this will have a minimal effect on traffic volumes in the MPAH amendment study area on ETR north of Portola Parkway and along SCR. The majority of the traffic volume reassignment related to not implementing the Gap Closure would occur on the west side of the City of Lake Forest in particular on Alton Parkway and SR-241.





Appendix I

Traffic Signal Warrant Analysis Worksheets

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 1 of 5)

COUNT DATE May 2023

CALC _____ DATE _____

CHK _____ DATE _____

DIST _____ CO _____ RTE _____ PM _____

Major St: Santiago Canyon Road Critical Approach Speed 55 mph

Minor St: Live Oak Canyon Road Critical Approach Speed 35 mph

Speed limit or critical speed on major street traffic > 40 mph..... or } **RURAL (R)**

In built up area of isolated community of < 10,000 population..... } **URBAN (U)**

WARRANT 1 - Eight Hour Vehicular Volume SATISFIED YES NO
 (Condition A or Condition B or combination of A and B must be satisfied)

Condition A - Minimum Vehicle Volume 100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)																			
	U		R		U		R													
	1				2 or More															
Both Approaches Major Street	500 (400)	350 (280)	600 (480)	420 (336)																
Highest Approach Minor Street	150 (120)	105 (84)	200 (160)	140 (112)																

Study did not include Eight-Hour Traffic Counts.

Condition B - Interruption of Continuous Traffic 100% SATISFIED YES NO
 80% SATISFIED YES NO

APPROACH LANES	MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS)																			
	U		R		U		R													
	1				2 or More															
Both Approaches Major Street	75 (60)	53 (42)	90 (72)	70 (56)																
Highest Approach Minor Street	75 (60)	53 (42)	100 (80)	70 (56)																

Not Applicable

Combination of Conditions A & B SATISFIED YES NO

REQUIREMENT	CONDITION	✓	FULFILLED
TWO CONDITIONS SATISFIED 80%	A. MINIMUM VEHICULAR VOLUME		Yes <input type="checkbox"/> No <input type="checkbox"/>
	AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC		
AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS			Yes <input type="checkbox"/> No <input type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 2 of 5)

WARRANT 2 - Four Hour Vehicular Volume

Record hourly vehicular volumes for any four hours of an average day

SATISFIED* YES NO

APPROACH LANES	One		2 or More		Hour			
	7 AM	8 AM	4 PM	5 PM	7 AM	8 AM	4 PM	5 PM
Both Approaches - Major Street	X		681	672	877	837		
Higher Approach - Minor Street	X		124	121	162	145		

Only applies to Existing Year.

*All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS)	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<u>OR</u> , All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 3 - Peak Hour
 (Part A or Part B must be satisfied)**

SATISFIED YES NO

PART A

SATISFIED YES NO

(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)

1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; <u>AND</u>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**PART B Existing Year and Year 2045 With Project - 1 Lane & 1 Lane
 Year 2045 No Project - 2 Lanes & 1 Lane**

SATISFIED YES NO

APPROACH LANES	One		2 or More		Hour	Existing	Year 2045 No Project	Year 2045 With Project	
	AM	PM	AM	PM		AM	PM	AM	PM
Both Approaches - Major Street						722/880	2/880	1,473/1,412	472/1,492
Higher Approach - Minor Street						148/163	163	325/185	185 271/187

The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

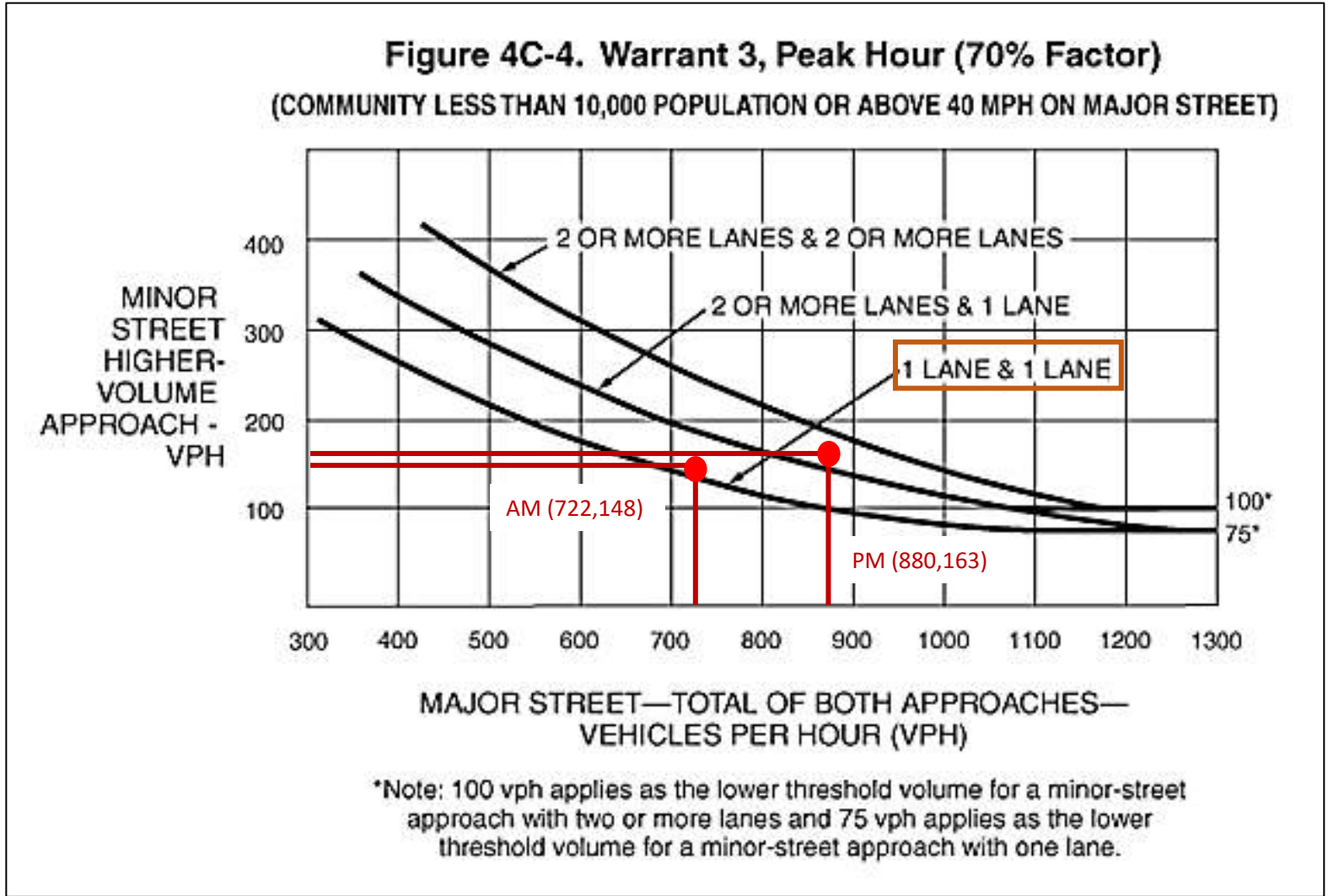
The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Existing Year and Year 2045 With Project volumes did not fall above the applicable curve in Figure 4C-3; therefore; Figure 4C-4 was used.

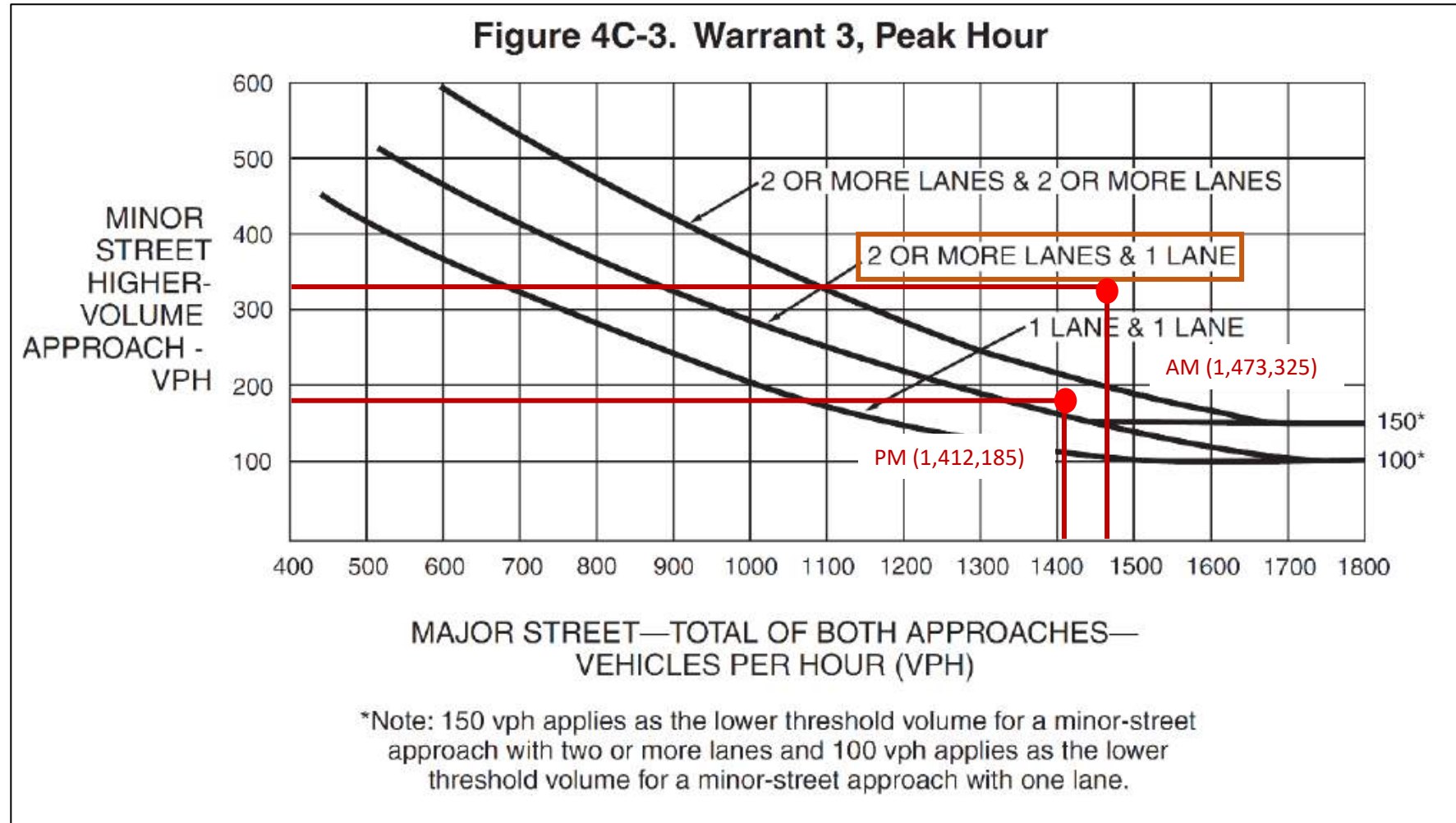
Year 2045 No Project volumes plotted above the applicable curve in Figure 4C-3.4C-1.

Existing Year volumes did not fall above the applicable curve in Figure 4C-1, but since the speed limit along Santiago Canyon Road is 55 MPH, Figure 4C-2 was used.

Existing Year AM/PM Peaks at Santiago Canyon Road / Live Oak Canyon Road



Year 2045 No Project (With Widening) AM/PM Peaks at Santiago Canyon Road / Live Oak Canyon Road



Year 2045 With Project (No Widening) AM/PM Peaks at Santiago Canyon Road / Live Oak Canyon Road

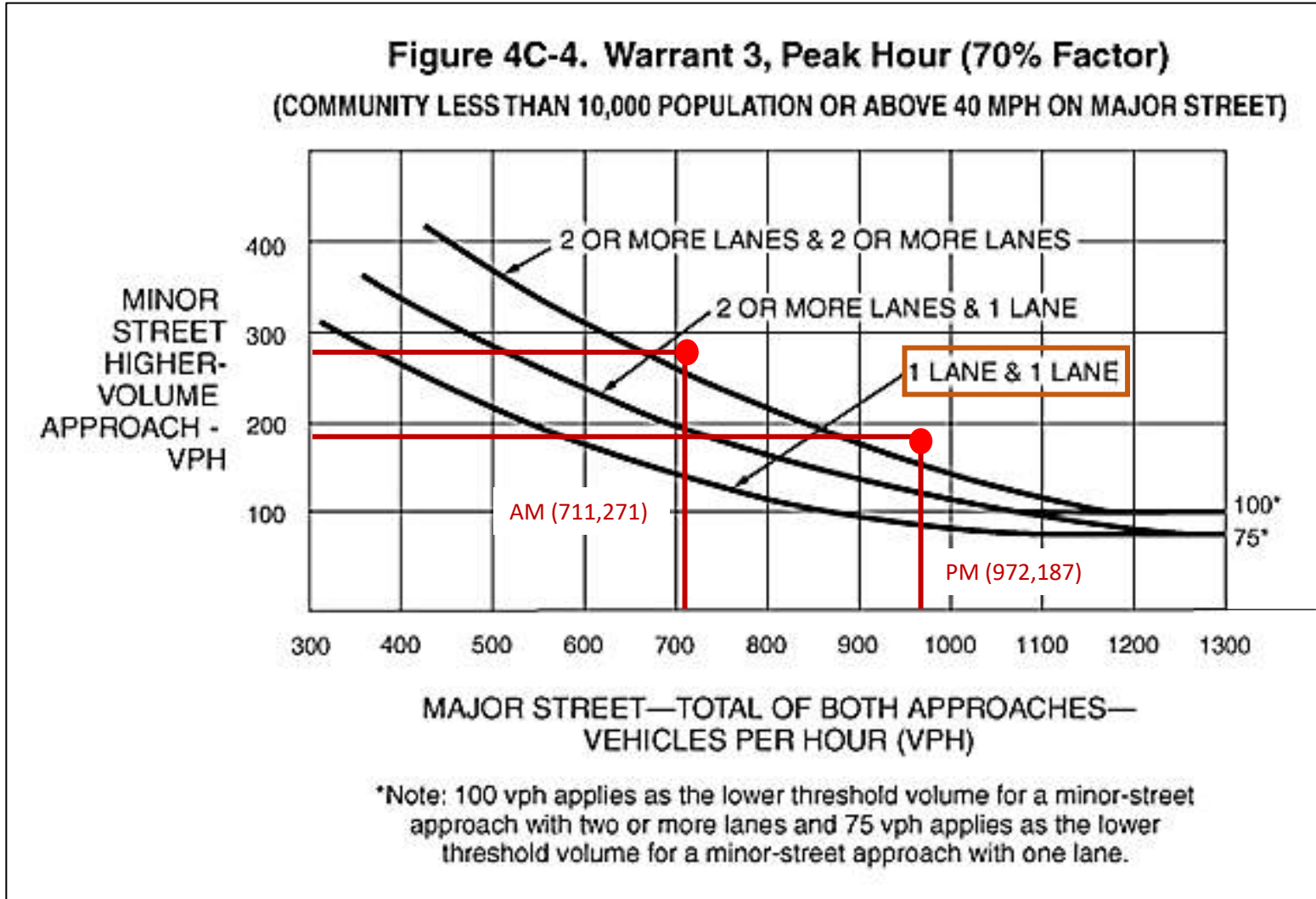


Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 3 of 5)

**WARRANT 4 - Pedestrian Volume
 (Parts 1 and 2 Must Be Satisfied)**

SATISFIED YES NO

Study did not include pedestrian counts.

Part 1 (Parts A or B must be satisfied)

Hours -->

A.	Vehicles per hour for any 4 hours				
	Pedestrians per hour for any 4 hours				

Figure 4C-5 or Figure 4C-6
 SATISFIED YES NO

Hours -->

B.	Vehicles per hour for any 1 hour				
	Pedestrians per hour for any 1 hour				

Figure 4C-7 or Figure 4C-8
 SATISFIED YES NO

Not Applicable

Part 2

SATISFIED YES NO

<u>AND</u> , The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed traffic signal will not restrict progressive traffic flow along the major street.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

**WARRANT 5 - School Crossing
 (Parts A and B Must Be Satisfied)**

SATISFIED YES NO

No school near study area.

Part A

Gap/Minutes and # of Children

SATISFIED YES NO

Gaps vs Minutes	Minutes Children Using Crossing	
	Number of Adequate Gaps	
School Age Pedestrians Crossing Street / hr		

Hour

Gaps < Minutes YES NO

AND Children > 20/hr YES NO

<u>AND</u> , Consideration has been given to less restrictive remedial measures.	Yes <input type="checkbox"/>	No <input type="checkbox"/>
----------------------------------------------------------------------------------	------------------------------	-----------------------------

Part B

SATISFIED YES NO

The distance to the nearest traffic signal along the major street is greater than 300 ft	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<u>OR</u> , The proposed signal will not restrict the progressive movement of traffic.	Yes <input type="checkbox"/>	No <input type="checkbox"/>

Not Applicable

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 4 of 5)

**WARRANT 6 - Coordinated Signal System
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM REQUIREMENTS	DISTANCE TO NEAREST SIGNAL	
≥ 1000 ft	N _____ ft, S <u>580</u> ft, E _____ ft, W _____ ft	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
<u>OR</u> , On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.		

**WARRANT 7 - Crash Experience Warrant
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency.		Yes <input type="checkbox"/> No <input type="checkbox"/>
REQUIREMENTS	Number of crashes reported within a 12 month period susceptible to correction by a traffic signal, and involving injury or damage exceeding the requirements for a reportable crash.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
5 OR MORE		
REQUIREMENTS	CONDITIONS	✓
ONE CONDITION SATISFIED 80%	Warrant 1, Condition A - Minimum Vehicular Volume	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	<u>OR</u> , Warrant 1, Condition B - Interruption of Continuous Traffic	
	<u>OR</u> , Warrant 4, Pedestrian Volume Condition Ped Vol ≥ 80% of Figure 4C-5 through Figure 4C-8	

Only TWO crashes were report at Santiago Canyon Road/ Live Oak Canyon Road, nut both were not near the intersection.

**WARRANT 8 - Roadway Network
 (All Parts Must Be Satisfied)**

SATISFIED YES NO

MINIMUM VOLUME REQUIREMENTS	ENTERING VOLUMES - ALL APPROACHES		✓	FULFILLED
1000 Veh/Hr	During Typical Weekday Peak Hour _____ Veh/Hr and has 5-year projected traffic volumes that meet one or more of Warrants 1, 2, and 3 during an average weekday.			Yes <input type="checkbox"/> No <input type="checkbox"/>
	OR During Each of Any 5 Hrs. of a Sat. or Sun _____ Veh/Hr			
CHARACTERISTICS OF MAJOR ROUTES			MAJOR ROUTE A	MAJOR ROUTE B
Hwy. System Serving as Principal Network for Through Traffic			×	
Rural or Suburban Highway Outside Of, Entering, or Traversing a City			×	×
Appears as Major Route on an Official Plan			×	
Any Major Route Characteristics Met, Both Streets				Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-101 (CA). Traffic Signal Warrants Worksheet (Sheet 5 of 5)

WARRANT 9 - Intersection Near a Grade Crossing **SATISFIED YES NO**
(Both Parts A and B Must Be Satisfied) **No grade crossing near study area.**

<p>PART A</p> <p>A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach. Track Center Line to Limit Line _____ ft</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>PART B</p> <p>There is one minor street approach lane at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-9.</p> <p>Major Street - Total of both approaches: _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>
<p>OR, There are two or more minor street approach lanes at the track crossing - During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point falls above the applicable curve in Figure 4C-10.</p> <p>Major Street - Total of both approaches : _____ VPH Minor Street - Crosses the track (one direction only, approaching the intersection): _____ VPH X AF (Use Tables 4C-2, 3, & 4 below to calculate AF) = _____ VPH</p>	<p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>

Not Applicable

The minor street approach volume may be multiplied by up to three following adjustment factors (AF) as described in Section 4C.10.

- 1- Number of Rail Traffic per Day _____ Adjustment factor from table 4C-2 _____
- 2- Percentage of High-Occupancy Buses on Minor Street Approach _____ Adjustment factor from table 4C-3 _____
- 3- Percentage of Tractor-Trailer Trucks on Minor Street Approach _____ Adjustment factor from table 4C-4 _____

NOTE: If no data is available or known, then use AF = 1 (no adjustment)

Appendix J

SIDRA Roundabout Reports

MOVEMENT SUMMARY

 Site: 12 [2045 No Project - AM Peak Hour (Site Folder: General)]

2045 No Project - With Widening
 Site Category: Future Conditions 1
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Santiago Canyon Road														
8	T1	901	2.0	979	2.0	0.418	6.8	LOS A	2.5	64.3	0.28	0.14	0.28	34.3
18	R2	96	2.0	104	2.0	0.418	6.8	LOS A	2.5	64.3	0.28	0.14	0.28	33.2
Approach		997	2.0	1084	2.0	0.418	6.8	LOS A	2.5	64.3	0.28	0.14	0.28	34.2
East: Live Oak Canyon Road														
1	L2	152	2.0	165	2.0	0.295	10.5	LOS B	1.2	29.5	0.68	0.70	0.75	30.2
16	R2	173	2.0	188	2.0	0.335	11.3	LOS B	1.4	35.8	0.70	0.74	0.84	30.9
Approach		325	2.0	353	2.0	0.335	10.9	LOS B	1.4	35.8	0.69	0.72	0.79	30.6
North: Santiago Canyon Road														
7	L2	70	2.0	76	2.0	0.216	4.9	LOS A	1.0	24.9	0.33	0.20	0.33	34.5
4	T1	405	2.0	440	2.0	0.216	4.9	LOS A	1.0	24.9	0.33	0.20	0.33	34.9
Approach		475	2.0	516	2.0	0.216	4.9	LOS A	1.0	24.9	0.33	0.20	0.33	34.9
All Vehicles		1797	2.0	1953	2.0	0.418	7.1	LOS A	2.5	64.3	0.37	0.26	0.38	33.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Project: C:\Users\modeler\Desktop\Santiago Canyon TIA_Roundabout Analysis.sip9

MOVEMENT SUMMARY

 Site: 12 [2045 No Project - PM Peak Hour (Site Folder: General)]

2045 No Project - With Widening
 Site Category: Future Conditions 1
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Santiago Canyon Road														
8	T1	635	2.0	690	2.0	0.353	6.3	LOS A	1.9	47.8	0.35	0.21	0.35	34.5
18	R2	157	2.0	171	2.0	0.353	6.3	LOS A	1.9	47.8	0.35	0.21	0.35	33.4
Approach		792	2.0	861	2.0	0.353	6.3	LOS A	1.9	47.8	0.35	0.21	0.35	34.3
East: Live Oak Canyon Road														
1	L2	73	2.0	79	2.0	0.108	6.0	LOS A	0.4	10.1	0.57	0.54	0.57	32.1
16	R2	112	2.0	122	2.0	0.166	6.7	LOS A	0.6	16.1	0.58	0.58	0.58	33.1
Approach		185	2.0	201	2.0	0.166	6.4	LOS A	0.6	16.1	0.58	0.56	0.58	32.6
North: Santiago Canyon Road														
7	L2	130	2.0	141	2.0	0.261	5.1	LOS A	1.3	32.5	0.23	0.11	0.23	34.1
4	T1	490	2.0	533	2.0	0.261	5.1	LOS A	1.3	32.5	0.23	0.11	0.23	34.8
Approach		620	2.0	674	2.0	0.261	5.1	LOS A	1.3	32.5	0.23	0.11	0.23	34.6
All Vehicles		1597	2.0	1736	2.0	0.353	5.8	LOS A	1.9	47.8	0.33	0.21	0.33	34.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 12 [2045 With Project - AM Peak Hour (Site Folder: General)]

2045 With Project - No Widening
 Site Category: Future Conditions 2
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Santiago Canyon Road														
8	T1	220	2.0	239	2.0	0.256	5.3	LOS A	1.3	33.9	0.31	0.17	0.31	35.1
18	R2	63	2.0	68	2.0	0.256	5.3	LOS A	1.3	33.9	0.31	0.17	0.31	34.0
Approach		283	2.0	308	2.0	0.256	5.3	LOS A	1.3	33.9	0.31	0.17	0.31	34.8
East: Live Oak Canyon Road														
1	L2	150	2.0	163	2.0	0.279	6.1	LOS A	1.4	35.8	0.45	0.33	0.45	33.1
16	R2	121	2.0	132	2.0	0.279	6.1	LOS A	1.4	35.8	0.45	0.33	0.45	32.1
Approach		271	2.0	295	2.0	0.279	6.1	LOS A	1.4	35.8	0.45	0.33	0.45	32.7
North: Santiago Canyon Road														
7	L2	106	2.0	115	2.0	0.407	7.3	LOS A	2.5	62.7	0.44	0.29	0.44	33.4
4	T1	322	2.0	350	2.0	0.407	7.3	LOS A	2.5	62.7	0.44	0.29	0.44	33.3
Approach		428	2.0	465	2.0	0.407	7.3	LOS A	2.5	62.7	0.44	0.29	0.44	33.4
All Vehicles		982	2.0	1067	2.0	0.407	6.4	LOS A	2.5	62.7	0.40	0.27	0.40	33.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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MOVEMENT SUMMARY

Site: 12 [2045 With Project - PM Peak Hour (Site Folder: General)]

2045 With Project - No Widening
 Site Category: Future Conditions 2
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] ft				
South: Santiago Canyon Road														
8	T1	511	2.0	555	2.0	0.616	10.6	LOS B	5.5	139.8	0.48	0.27	0.48	32.4
18	R2	182	2.0	198	2.0	0.616	10.6	LOS B	5.5	139.8	0.48	0.27	0.48	31.5
Approach		693	2.0	753	2.0	0.616	10.6	LOS B	5.5	139.8	0.48	0.27	0.48	32.2
East: Live Oak Canyon Road														
1	L2	65	2.0	71	2.0	0.269	7.8	LOS A	1.2	30.2	0.62	0.61	0.62	32.8
16	R2	123	2.0	134	2.0	0.269	7.8	LOS A	1.2	30.2	0.62	0.61	0.62	31.8
Approach		188	2.0	204	2.0	0.269	7.8	LOS A	1.2	30.2	0.62	0.61	0.62	32.2
North: Santiago Canyon Road														
7	L2	90	2.0	98	2.0	0.241	5.0	LOS A	1.3	32.0	0.23	0.11	0.23	34.4
4	T1	189	2.0	205	2.0	0.241	5.0	LOS A	1.3	32.0	0.23	0.11	0.23	34.3
Approach		279	2.0	303	2.0	0.241	5.0	LOS A	1.3	32.0	0.23	0.11	0.23	34.3
All Vehicles		1160	2.0	1261	2.0	0.616	8.8	LOS A	5.5	139.8	0.44	0.29	0.44	32.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.

LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).

Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).

Roundabout Capacity Model: US HCM 6.

Delay Model: HCM Delay Formula (Geometric Delay is not included).

Queue Model: HCM Queue Formula.

Gap-Acceptance Capacity: Traditional M1.

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

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Appendix K

Speed Survey Records

SPEED SURVEY FORM

Date: 6/6/2023	Begin: 10:20 AM	End: 10:55 AM	Direction: BOTH
Posted Speed: 55 MPH	Weather: CLOUDY	Road Type: 2 lanes - undiv	
Street Name: SANTIAGO CANYON RD		Limits:	
Survey Location: N/O IRVING LAKE			

69

MPH				5				10				15				20				25				30				35	
65	/	/	/																										65
64	/	/	/																										64
63	/	/	/																										63
62	/	/	/																										62
61	/	/	/	/	/																								61
60	/	/	/	/	/																								60
59	/	/	/	/	/	/	/																						59
58	/	/	/	/	/	/	/	/	/																				58
57	/	/	/	/	/	/	/	/	/	/																			57
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52	/	/	/	/	/	/	/	/	/	/	/	/																	52
51	/	/	/	/	/	/	/	/	/	/	/	/	/																51
50	/	/	/	/	/	/	/	/	/	/	/	/	/	/															50
49	/	/	/	/	/	/	/	/	/	/	/	/	/	/															49
48	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/														48
47	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/														47
46	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/													46
45	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/												45
44	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/												44
43	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/											43
42	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/										42
41	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/									41
40	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/								40
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19																													19
18																													18
17																													17
16																													16
15																													15

85th = 59 mph
 50th = 54 mph
 15th = 49 mph

SPEED SURVEY FORM

Date: 6/6/2023	Begin: 11:05 AM	End: 11:40 AM	Direction: BOTH
Posted Speed: 55 MPH	Weather: CLOUDY	Road Type: 2 lane - undw.	
Street Name: SANTIAGO CANYON RD		Limits:	
Survey Location: N/O SILVERADO CANYON RD			

76 66 66 73 66 67 73 74

MPH				5				10				15				20			25			30			35			
65	/	/																									65	
64	/	/																										64
63	/	/	/																									63
62	/	/	/	/																								62
61	/	/	/	/	/																							61
60	/	/	/	/	/	/																						60
59	/	/	/	/	/	/	/																					59
58	/	/	/	/	/	/	/	/																				58
57	/	/	/	/	/	/	/	/	/																			57
56	/	/	/	/	/	/	/	/	/	/																		56
55	/	/	/	/	/	/	/	/	/	/	/																	55
54	/	/	/	/	/	/	/	/	/	/	/	/																54
53	/	/	/	/	/	/	/	/	/	/	/	/	/															53
52	/	/	/	/	/	/	/	/	/	/	/	/	/	/														52
51	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/													51
50	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/												50
49	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/											49
48	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/										48
47	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/									47
46	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/								46
45	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/							45
44	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/						44
43	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/					43
42	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/				42
41	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/			41
40	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		40
39	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		39
38	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		38
37	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		37
36	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		36
35	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		35
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32	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		32
31	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		31
30	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		30
29	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		29
28	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		28
27	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		27
26	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		26
25	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/		25
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85th = 62 mph
 50th = 57 mph
 15th = 50 mph

SPEED SURVEY FORM

Date: <u>6/6/2023</u>	Begin: <u>11:50 AM</u>	End: <u>12:17 PM</u>	Direction: <u>BOTH</u>
Posted Speed: <u>55 MPH</u>	Weather: <u>CLOUDY</u>	Road Type: <u>2 lanes - divided</u>	
Street Name: <u>SANTIAGO CANYON RD</u>		Limits:	
Survey Location: <u>N/O JACKSON RANCH ROAD SOUTH</u>			

66 71
67 77

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85th = 61 mph
50th = 55 mph
15th = 49 mph



Appendix L Collision Data

**Orange County
Traffic Engineering Department**

From 6/19/2013 to 6/19/2023

**Total Collisions: 305
Injury Collisions: 172
Fatal Collisions: 12**

Collision Summary Report

6/19/23

SANTIAGO CANYON RD

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389	7/24/2013	11:15	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	5808'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 22		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention		Cell Phone Not In Use		
1309-122	9/7/2013	17:40	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD	5280'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 18		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
1309-081	9/9/2013	01:29	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD	42'	Direction: East	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Other Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 3	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 19		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
1309-162	9/9/2013	01:30	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD	100'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Fatal	# Inj: 3	# Killed: 1
Party 1	Driver	South	Proceeding Straight	Male	Age: 19		Passenger Car, Station Wagon, Jeep		killed
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
1309-178	9/11/2013	18:45	Wednesday	SANTIAGO CANYON RD - LIMESTONE CANYON RD	800'	Direction: South	Daylight	Clear	Pty at Fault:
	Other		Animal	Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Slowing/Stopping	Female	Age: 28		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 58		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
340	9/22/2013	02:48	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD	1256'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 18		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use		
2013-100015	10/3/2013	16:20	Thursday	SANTIAGO CANYON RD - CRYSTAL CANYON RD	20'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Making Right Turn	Male	Age: 43		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 62		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		

SANTIAGO CANYON RD

314	10/16/2013	22:37	Wednesday	SANTIAGO CANYON RD - LOMA RIDGE RD	3500'	Direction: South	Dark - No Street	Clear	Pty at Fault:
	Hit Object		Animal	Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 33		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Violation		Cell Phone Not In Use		
1311-307	11/14/2013	12:30	Thursday	SANTIAGO CANYON RD - JACKSON RANCH RD (S)	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 19		Motorcycle	Severe Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	South	Making Left Turn	Male	Age: 30		Pickups & Panels	No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
1312-467	12/22/2013	20:00	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD	200'	Direction: West	Dark - No Street	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 50		Pickups & Panels	No Injury	
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	West	Proceeding Straight	Male	Age: 26		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
1312-529	12/28/2013	06:50	Saturday	SANTIAGO CANYON RD - SR-241	5280'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 33		Sport Utility Vehicle	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
015	1/5/2014	15:50	Sunday	SANTIAGO CANYON RD - FALCON ST	307'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object	Driving Under Influence	23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Female	Age: 46		Motorcycle	No Injury	
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use		
1401-418	1/26/2014	14:20	Sunday	SANTIAGO CANYON RD - RED ROCK RIDGE RD	2000'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Bicycle	Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 24		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 26		Bicycle	Severe Injury	
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
1402-001	2/2/2014	06:55	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD	381'	Direction: South	Daylight	Clear	Pty at Fault:1
	Rear-End		Bicycle	Driving Under Influence	23152E	Hit & Run: Felony	Fatal	# Inj: 0	# Killed: 1
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 18		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: Under Drug Influenc		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Handheld In Use		
Party 2	Bicyclist	South	Proceeding Straight	Male	Age: 21		Bicycle	killed	
	Veh Type: Bicycle		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
323	2/19/2014	00:05	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	7920'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 48		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		

SANTIAGO CANYON RD

1402-330	2/19/2014	12:07	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	2640'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 19		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
1402-482	2/25/2014	18:45	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	800'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Other		Non-Collision	Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 52		Sport Utility Vehicle		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Uninvolved Vehicl		Lap/Shoulder Harness Used	Cell Phone Not In Use		
1403-204	3/12/2014	17:50	Wednesday	SANTIAGO CANYON RD - RED ROCK CANYON RD	207'	Direction: North	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Crossed Into Opposing Lane	Male	Age: 44		Pickups & Panels		Other Visible Injury
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 32		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 3	Driver	North	Proceeding Straight	Female	Age: 28		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
108	3/21/2014	15:55	Friday	SANTIAGO CANYON RD - RIDGELINE RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21802A	Hit & Run: No	Fatal	# Inj: 2	# Killed: 1
Party 1	Driver	East	Making Left Turn	Female	Age: 38		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent			Not Stated		
Party 2	Driver	South	Proceeding Straight	Male	Age: 23		Motorcycle		No Injury
	Veh Type: Motorcycle		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent			Cell Phone Not In Use		
155	3/30/2014	16:15	Sunday	SANTIAGO CANYON RD - MODJESKA GRADE RD	20'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 51		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent			Cell Phone Not In Use		
1404-016	4/2/2014	04:22	Wednesday	SANTIAGO CANYON RD - IRVINE MESA RD	1500'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age:		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
1405-044	5/3/2014	19:45	Saturday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD	2640'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:2
	Sideswipe		Other Motor Vehicle	Wrong Side of Road	21460A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Crossed Into Opposing Lane	Male	Age:		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2014-050037	5/11/2014	14:50	Sunday	SANTIAGO CANYON RD - CRYSTAL CANYON RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle	Auto R/W Violation	21801A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Making Left Turn	Male	Age: 23		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		

SANTIAGO CANYON RD

Party 2	Bicyclist	South	Proceeding Straight	Male	Age: 56		Bicycle		Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
1405-382	5/21/2014	17:05	Wednesday	SANTIAGO CANYON RD - SR-241			63'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Bicycle	Unsafe Lane Change			21658A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Bicyclist	South	Changing Lanes	Male	Age:		Bicycle		Complaint of Pain		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Female	Age:		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
1406-426	6/23/2014	13:20	Monday	SANTIAGO CANYON RD - BLUE DIAMOND ACCESS R			485'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed			22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North		Male	Age:		Sport Utility Vehicle		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety:		Assoc Factor:	Lap/Shoulder Harness Used					
Party 2	Driver	North	Proceeding Straight	Male	Age:		Misc. Motor Vehicle (Snowmobile, Golf		No Injury		
	Veh Type: Other		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 3	Driver	South	Proceeding Straight	Male	Age:		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
1408-246	8/15/2014	23:40	Friday	SANTIAGO CANYON RD - PRAIRE RD			188'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Driving Under Influence			23152A	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	South	Crossed Into Opposing Lane	Male	Age:		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Female	Age:		Sport Utility Vehicle		Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
1408-500	8/27/2014	21:00	Wednesday	SANTIAGO CANYON RD - CHINCHILLA PASTURE RD			539'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Unsafe Speed			22350	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Traveling Wrong Way	Male	Age:		Motorcycle		Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age:		Passenger Car, Station Wagon, Jeep		Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
1409-197	9/11/2014	20:45	Thursday	SANTIAGO CANYON RD - JACKSON RANCH RD (S)			1088'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Overtuned		Non-Collision	Unsafe Speed			22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age:		Passenger Car, Station Wagon, Jeep		Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Handheld In Use				
081	9/20/2014	08:15	Saturday	SANTIAGO CANYON RD - CRYSTAL CANYON RD			300'	Direction: South	Daylight	Cloudy	Pty at Fault:
	Other		Animal	Other Than Driver				Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Female	Age: 53		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use				
1409-482	9/25/2014	10:35	Thursday	SANTIAGO CANYON RD - HAUL RD			120'	Direction: South	Daylight	Clear	Pty at Fault:1
	Other		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age:		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				

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1409-609	9/27/2014	16:00	Saturday	SANTIAGO CANYON RD - RED ROCK CANYON RD	2640'	Direction: West	Daylight	Clear	Pty at Fault:1
	Overtuned		Non-Collision	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	West	Passing Other Vehicle	Male	Age:		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
1410-137	10/7/2014	08:26	Tuesday	SANTIAGO CANYON RD - MODJESKA CANYON RD	382'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Bicycle	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age:		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: Sleepy - Fatigued		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Bicyclist	South	Proceeding Straight	Male	Age:		Bicycle		Other Visible Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
1410-127	10/7/2014	11:10	Tuesday	SANTIAGO CANYON RD - LOMA RIDGE RD	1800'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
120	10/25/2014	10:20	Saturday	SANTIAGO CANYON RD - RIDGELINE RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle	Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	East	Making Left Turn	Male	Age: 52		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 2	Bicyclist	South	Proceeding Straight	Male	Age: 51		Bicycle		No Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
006	11/2/2014	04:30	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD	3000'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 19		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
039	11/6/2014	07:26	Thursday	SANTIAGO CANYON RD - CRYSTAL CANYON RD	35'	Direction: North	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 18		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 2	Driver	South	Slowing/Stopping	Female	Age: 29		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
1411-340	11/14/2014	19:05	Friday	SANTIAGO CANYON RD - ORANGE PARK BLVD	200'	Direction: East	Dark - Street Ligh	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Proceeding Straight	Male	Age: 30		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	East	Backing	Male	Age: 35		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 3	Parked Vehicle	East	Parked		Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: Not Applicable		Assoc Factor: None Apparent		Cell Phone Not In Use		
1411-386	11/18/2014	08:40	Tuesday	SANTIAGO CANYON RD - HAUL RD	5280'	Direction: South	Daylight	Clear	Pty at Fault:2
	Hit Object		Other Object	Unknown	23114	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	South	Proceeding Straight	Male	Age: 52		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 23		Three or More Axle Truck	No Injury		
	Veh Type: Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
204	11/29/2014	14:20	Saturday	SANTIAGO CANYON RD - CRYSTAL CANYON RD		5'	Direction: North	Daylight	Clear	Pty at Fault:2
	Rear-End		Other Motor Vehicle		Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Making Right Turn	Male	Age: 26		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 52		Motorcycle	No Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
024	12/1/2014	21:50	Monday	SANTIAGO CANYON RD - LOMA RIDGE		1584'	Direction: South	Dark - Street Ligh	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object		Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 33		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use			
1412-090	12/4/2014	05:20	Thursday	SANTIAGO CANYON RD - MODJESKA CANYON RD		1720'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 20		Pickups & Panels	Severe Injury		
	Veh Type: Pickup Truck		Sobriety: Sleepy - Fatigued		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
140	12/18/2014	16:59	Thursday	RIDGELINE RD - SANTIAGO CANYON RD		0'	Direction: Not Stated	Dusk - Dawn	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle		Auto R/W Violation	21801A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Making Left Turn	Female	Age: 19		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
Party 2	Driver	West	Proceeding Straight	Male	Age: 41		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
1501-037	1/4/2015	10:05	Sunday	SANTIAGO CANYON RD - IRVINE LAKE ENTRANCE		900'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Bicycle		Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 3	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 93		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Bicyclist	South	Proceeding Straight	Male	Age: 27		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 3	Bicyclist	South	Proceeding Straight	Male	Age: 32		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 4	Bicyclist	South	Proceeding Straight	Male	Age: 32		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
023	2/2/2015	00:40	Monday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD		1000'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Overtuned		Fixed Object		Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 25		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use			
2015-02-221	2/11/2015	12:00	Wednesday	SANTIAGO CANYON RD - GERTNER ESTATE RD		5'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	North	Other Unsafe Turning	Male	Age: 21		Passenger Car, Station Wagon, Jeep	No Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-02-308	2/15/2015	02:20	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD			1195'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 20		Passenger Car, Station Wagon, Jeep	No Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
296	2/15/2015	18:25	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD			5280'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 26		Motorcycle	No Injury			
	Veh Type: Motorcycle		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent		Cell Phone Not In Use				
1502-349	2/18/2015	06:50	Wednesday	SANTIAGO CANYON RD - LOMA RIDGE RD			4224'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Overturned		Fixed Object	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 39		Pickups & Panels	Complaint of Pain			
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
110	2/21/2015	16:10	Saturday	SANTIAGO CANYON RD - CRYSTAL CANYON RD			775'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 39		Motorcycle	No Injury			
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use				
2015-02-307	3/14/2015	14:00	Saturday	SANTIAGO CANYON RD - IRVINE LAKE ENTRANCE			55'	Direction: North	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning			22107	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Making U Turn	Male	Age: 86		Mini Van	Other Visible Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 65		Motorcycle	Other Visible Injury			
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2015-02-623	3/29/2015	13:00	Sunday	SANTIAGO CANYON RD - GERTNER ESTATE RD			2640'	Direction: North	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning			22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 57		Motorcycle	Other Visible Injury			
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: Uninvolved Vehicl	M/C Helmet Driver - Yes	Cell Phone Not In Use				
1504-219	4/12/2015	09:08	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD			1500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Other Unsafe Turning	Male	Age: 38		Passenger Car, Station Wagon, Jeep	No Injury			
	Veh Type: Passenger Car		Sobriety: Sleepy - Fatigued		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-04-238	4/13/2015	16:45	Monday	SANTIAGO CANYON RD - HICKS HAUL RD			3047'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed			22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 23		Motorcycle	Other Visible Injury			
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
176	4/29/2015	08:14	Wednesday	SANTIAGO CANYON RD - RIDGELINE RD			686'	Direction: North	Daylight	Clear	Pty at Fault:
	Hit Object		Fixed Object	Other Than Driver				Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 47		Pickups & Panels	No Injury			
	Veh Type: Pickup Truck		Sobriety: Other Physical Impai		Assoc Factor: None Apparent		Cell Phone Not In Use				

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210	5/10/2015	01:59	Sunday	SANTIAGO CANYON RD - MODJESKA CANYON RD	792'	Direction: North	Dark - No Street	Clear	Pty at Fault:2
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Fatal	# Inj: 1	# Killed: 1
Party 1	Driver	North	Proceeding Straight	Male	Age: 19		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent			Cell Phone Not In Use		
2015-05-597	5/31/2015	13:10	Sunday	SANTIAGO CANYON RD - SCHOOL RD	900'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 28		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
1506-333	6/9/2015	18:00	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	0'	Direction: North			Pty at Fault:1
				Unknown	20002A	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South		Male	Age: 39		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety:	Assoc Factor:		Lap/Shoulder Harness Used			
Party 2	Driver	South		Female	Age: 26		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety:	Assoc Factor:		Lap/Shoulder Harness Used			
2015-06-256	6/15/2015	12:30	Monday	SANTIAGO CANYON RD - GERTNER ESTATE RD	10'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 60		Two-Axle Tow Truck		No Injury
	Veh Type: Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2015-06-593	6/27/2015	17:00	Saturday	SANTIAGO CANYON RD - HAUL RD	500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing	21750	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	South	Passing Other Vehicle	Male	Age: 27		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	West	Proceeding Straight	Female	Age: 29		Motorcycle		Complaint of Pain
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2015-06-557	6/27/2015	17:20	Saturday	SANTIAGO CANYON RD - CHINCHILLA PASTURE RD	200'	Direction: South	Daylight	Clear	Pty at Fault:2
	Broadside		Other Motor Vehicle	Improper Passing	21750	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 28		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: Violation		M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	North	Passing Other Vehicle	Male	Age: 38		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2015-06-573	6/27/2015	22:00	Saturday	SANTIAGO CANYON RD - SCHOOL RD	1500'	Direction: North	Dark - Street Ligh	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 26		Motorcycle		Complaint of Pain
	Veh Type: Motorcycle		Sobriety: HBD Under Influence	Assoc Factor: Violation		M/C Helmet Driver - Yes	Cell Phone Not In Use		
1506-571	6/28/2015	11:00	Sunday	SANTIAGO CANYON RD - SCHOOL ROAD	1040'	Direction: South	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 5	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 30		Pickups & Panels		Other Visible Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: Inattention		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Stopped In Road	Female	Age: 18		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		

SANTIAGO CANYON RD

Party 3	Driver	South	Stopped In Road	Female	Age: 17		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 4	Driver	South	Proceeding Straight	Male	Age: 22		Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 5	Driver	South	Proceeding Straight	Male	Age: 60		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
260	7/3/2015	02:30	Friday	SANTIAGO CANYON RD - LOMA RIDGE JEEP TRAIL		3168'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 24		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
2015-07-363	7/20/2015	10:30	Monday	SANTIAGO CANYON RD - LOMA RIDGE RD		475'	Direction: South	Daylight	Clear	Pty at Fault:
	Hit Object		Other Object		Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 35		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
1508-112	8/7/2015	09:26	Friday	SANTIAGO CANYON RD - GERTNER ESTATE RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle		Auto R/W Violation	21801A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Making Left Turn	Male	Age:		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Male	Age:		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
190	8/29/2015	09:45	Saturday	SANTIAGO CANYON RD - RIDGELINE RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle		Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Making Left Turn	Female	Age: 23		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
Party 2	Bicyclist	East	Proceeding Straight	Male	Age: 31		Bicycle	No Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
2015-09-155	9/9/2015	17:55	Wednesday	SANTIAGO CANYON RD - RIDGETOP RD		5280'	Direction: North	Daylight	Cloudy	Pty at Fault:1
	Sideswipe		Other Motor Vehicle		Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 73		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Female	Age: 55		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2015-0080	10/4/2015	17:25	Sunday	SANTIAGO CANYON RD - CRYSTAL CANYON RD		300'	Direction: West	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Non-Collision		Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	West	Proceeding Straight	Male	Age: 41		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2015-0485	10/6/2015	21:49	Tuesday	SANTIAGO CANYON RD - LIMESTONE CANYON ROA		2650'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:1
	Overtuned		Non-Collision		Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Female	Age:		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			

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Party 2	Driver	South	Proceeding Straight	Male	Age:			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-0557	10/8/2015	22:42	Thursday	SANTIAGO CANYON RD - MODJESKA CANYON RD			33'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age:			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-0757	10/18/2015	09:10	Sunday	SANTIAGO CANYON RD - LOMA RIDGE ROAD			5800'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Sideswipe		Fixed Object	Improper Turning			22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 21			Passenger Car, Station Wagon, Jeep	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
1510-039	10/21/2015	21:43	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Not Stated	Not Stated	Pty at Fault:2
	Not Stated		Not Stated	Unknown				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North		Male	Age:			Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety:		Assoc Factor:	Lap/Shoulder Harness Used					
Party 2	Driver	North			Age:			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety:		Assoc Factor:	Unknown					
013	10/29/2015	01:30	Thursday	SANTIAGO CANYON RD - RED ROCK RIDGE RD			1584'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Ran Off Road	Male	Age: 53			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Sleepy - Fatigued		Assoc Factor: None Apparent		Cell Phone Not In Use				
2015-0269	10/31/2015	15:20	Saturday	SANTIAGO CANYON RD - CRYSTAL CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed			22350	Hit & Run: No	Complaint of Pain	# Inj: 2	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 39			Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Slowing/Stopping	Male	Age: 18			Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-1120	11/3/2015	14:25	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD			650'	Direction: North	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 33			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-1275	11/9/2015	05:45	Monday	SANTIAGO CANYON RD - BLACK STAR CANYON ROA			5808'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing			21750	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Passing Other Vehicle	Male	Age: 51			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 37			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2015-1338	11/12/2015	14:35	Thursday	SANTIAGO CANYON RD - SILVERADO CANYON RD			1500'	Direction: North	Daylight	Clear	Pty at Fault:1
	Overtaken		Other Motor Vehicle	Improper Turning			22107	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	East	Other Unsafe Turning	Female	Age: 62			Sport Utility Vehicle	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				

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2015-1434	11/17/2015	15:02	Tuesday	SANTIAGO CANYON RD - HICKS HAUL RD	110'	Direction: North	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 4	# Killed: 0
Party 1	Driver	South	Making U Turn	Male	Age: 44		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Female	Age:		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2015-1675	11/28/2015	17:10	Saturday	SANTIAGO CANYON RD - MODJESKA GRADE RD	10'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age:		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Stopped In Road	Male	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2015-2176	12/20/2015	00:53	Sunday	SANTIAGO CANYON RD - HAUL RD	794'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age:		Sport Utility Vehicle		Severe Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
239	12/22/2015	19:30	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	5280'	Direction: South	Dark - No Street	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 20		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: Sleepy - Fatigued		Assoc Factor: None Apparent		Cell Phone Not In Use		
2015-2289	12/27/2015	15:45	Sunday	SANTIAGO CANYON RD - WILLIAMS CANYON RD	2379'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Passing	21755	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age:		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2016-0017	1/4/2016	09:15	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD	5280'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Female	Age: 43		Sport Utility Vehicle		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
0025	1/5/2016	09:48	Tuesday	SANTIAGO CANYON RD - COUNTRY HOME RD	247'	Direction: South	Daylight	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 34		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
2016-0067	1/7/2016	18:05	Thursday	SANTIAGO CANYON RD - IRVINE MESA RD	300'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing	21755	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age:		Two Axle Truck		No Injury
	Veh Type: Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-1306	1/31/2016	04:25	Sunday	SANTIAGO CANYON RD - MODJESKA CANYON RD	1056'	Direction: East	Dark - No Street	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	East	Other	Female	Age:		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HBD	Under Influence	Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use			
421	2/3/2016	20:48	Wednesday	SANTIAGO CANYON RD - RED ROCK RIDGE RD		1600'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 29		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent			Cell Phone Not In Use			
2016-2506	2/6/2016	10:40	Saturday	SANTIAGO CANYON RD - CHINCHILLA CANYON RD		5280'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age:		Misc. Motor Vehicle (Snowmobile, Golf	Other Visible Injury		
	Veh Type: Other		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use			
2016-0322	2/27/2016	15:50	Saturday	SANTIAGO CANYON RD - COUNTRY HOME RD		528'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 28		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Slowing/Stopping	Male	Age: 44		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2016-6302	3/7/2016	17:24	Monday	SANTIAGO CANYON RD - MODJESKA CANYON RD		200'	Direction: North	Daylight	Raining	Pty at Fault:
	Hit Object		Animal	Other Than Driver			Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 64		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2016-6166	3/10/2016	20:10	Thursday	SANTIAGO CANYON RD - SR-241		100'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 20		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Other Unsafe Turning	Female	Age: 17		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2016-6518	3/29/2016	06:20	Tuesday	SANTIAGO CANYON RD - SCHOOL RD		1584'	Direction: West	Dusk - Dawn	Clear	Pty at Fault:
	Hit Object		Animal	Other Than Driver			Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 24		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use			
2016-6767	4/10/2016	18:05	Sunday	SANTIAGO CANYON RD - HAUL RD		0'	Direction: West	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Other Unsafe Turning	Female	Age: 24		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Uninvolved Vehicl		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2016-6904	4/18/2016	22:30	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD		0'	Direction: Not Stated	Dark - No Street	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation		21802A	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Making Left Turn		Age:		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Unknown	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Male	Age: 67		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			

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3108	4/28/2016	09:57	Thursday	CRYSTAL CANYON RD - SANTIAGO CANYON RD	0'	Direction: Not Stated	Daylight	Cloudy	Pty at Fault:1
	Other		Bicycle	Auto R/W Violation	21804A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Entering Traffic	Male	Age: 30		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 2	Bicyclist	East	Proceeding Straight	Female	Age: 31		Bicycle		No Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
2016-7336	5/10/2016	22:11	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	1056'	Direction: West	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Other Unsafe Turning	Male	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation		Cell Phone Not In Use		
2016-7365	5/11/2016	18:20	Wednesday	SANTIAGO CANYON RD - LIMESTONE CANYON RD	1200'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Slowing/Stopping	Female	Age:		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-7596	5/22/2016	09:35	Sunday	SANTIAGO CANYON RD - SR-241	327'	Direction: East	Daylight	Clear	Pty at Fault:1
	Rear-End		Parked Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	East	Proceeding Straight	Male	Age: 43		Bicycle		Other Visible Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: Inattention	M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Parked Vehicle	East	Parked		Age:		Police Motorcycle		No Injury
	Veh Type: Emergency Vehicle		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
3262	5/25/2016	21:30	Wednesday	SANTIAGO CANYON RD - RIDGELINE RD	1056'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Other		Other Object		23114	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 22		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 28		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
2016-7737	5/28/2016	10:20	Saturday	SANTIAGO CANYON RD - PR RD	430'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	South	Other	Female	Age:		Bicycle		Other Visible Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2016-8048	6/13/2016	14:15	Monday	SANTIAGO CANYON RD - SCHOOL RD	6336'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Slowing/Stopping	Female	Age:		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-8196	6/20/2016	18:40	Monday	SANTIAGO CANYON RD - LOMA RIDGE RD	2000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age:		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: Under Drug Influenc		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-8220	6/22/2016	06:03	Wednesday	SANTIAGO CANYON RD - SR-241 NORTHBOUND	26400'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0

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Party 1	Driver	North	Other	Female	Age: 26		Passenger Car, Station Wagon, Jeep	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2016-8307	6/25/2016	08:34	Saturday	SANTIAGO CANYON RD - SR-241 NORTHBOUND		200'	Direction: South	Daylight	Clear	Pty at Fault:
	Hit Object		Fixed Object	Other Than Driver			Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age:		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2016-8375	6/28/2016	11:00	Tuesday	SANTIAGO CANYON RD - SR-241 NORTHBOUND		7920'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Turning		22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning		Age:		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age:		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
4161	7/13/2016	15:45	Wednesday	SANTIAGO CANYON RD - CRYSTAL CANYON RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation		21801A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Making Left Turn	Female	Age: 28		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Male	Age: 54		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
2016-8927	7/23/2016	08:20	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD		300'	Direction: North	Daylight	Clear	Pty at Fault:1
	Other		Bicycle	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Proceeding Straight	Male	Age:		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 2	Bicyclist	North	Slowing/Stopping	Male	Age:		Bicycle	No Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2016-8938	7/23/2016	21:30	Saturday	SANTIAGO CANYON RD - HAUL RD		3000'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing		21755	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Passing Other Vehicle	Male	Age: 37		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 2	Driver	North	Making Right Turn	Male	Age: 65		Fire Truck	No Injury		
	Veh Type: Emergency Vehicle		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
9429	8/13/2016	23:02	Saturday	SANTIAGO CANYON RD - LOMA RIDGE RD		1000'	Direction: West	Dark - Street Ligh	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 26		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
Party 2	Driver	West	Stopped In Road	Male	Age:		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			
9445	8/15/2016	00:07	Monday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD		200'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Overtuned		Fixed Object	Improper Turning		22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Making U Turn	Male	Age: 20		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use			

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9536	8/18/2016	17:35	Thursday	SANTIAGO CANYON RD - ORANGE PARK BLVD	200'	Direction: East	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 2	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Female	Age: 30		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention		Cell Phone Handheld In Use		
Party 2	Driver	West	Stopped In Road	Female	Age: 52		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 3	Driver	West	Proceeding Straight	Male	Age: 60		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
9591	8/20/2016	15:55	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD	100'	Direction: North	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Making U Turn	Male	Age: 48		Sport Utility Vehicle	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 22		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
9603	8/21/2016	14:43	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD	6591'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Fatal	# Inj: 0	# Killed: 1
Party 1	Driver	North	Other	Male	Age: 58		Motorcycle	No Injury	
	Veh Type: Motorcycle		Sobriety: HBD Impairment Un		Assoc Factor: None Apparent		Cell Phone Not In Use		
0028	9/8/2016	23:15	Thursday	SANTIAGO CANYON RD - JACKSON RANCH ROAD (S)	1000'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Other		Animal	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 47		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent		Cell Phone Not In Use		
2016-4700	10/7/2016	21:45	Friday	SANTIAGO CANYON RD - RIDGELINE RD	215'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 19		Passenger Car, Station Wagon, Jeep	Other Visible Injury	
	Veh Type:		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-10789	10/9/2016	03:30	Sunday	SANTIAGO CANYON RD - HAUL RD	6300'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: Misde	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 20		Passenger Car, Station Wagon, Jeep	Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-4837	10/24/2016	06:35	Monday	SANTIAGO CANYON RD - RIDGELINE RD	400'	Direction: South	Dark - No Street	Raining	Pty at Fault:1
	Hit Object		Other Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 17		Sport Utility Vehicle	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2016-11903	11/24/2016	16:45	Thursday	SANTIAGO CANYON RD - LOMA RIDGE RD	1250'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:1
	Overtuned		Non-Collision	Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	West	Other	Male	Age: 30		Motorcycle	Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: Violation	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2016-12334	12/14/2016	06:50	Wednesday	SANTIAGO CANYON RD - JACKSON RANCH RD (N)	150'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	South	Other Unsafe Turning	Male	Age: 30			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-12239	1/9/2017	05:48	Monday	SANTIAGO CANYON RD - RED ROCK RIDGE RD			1000'	Direction: North	Dark - No Street	Raining	Pty at Fault:
	Hit Object		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 24			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-12694	1/28/2017	11:40	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			1500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Broadside		Motor Vehicle on Othe	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 22			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 50			Motorcycle	Complaint of Pain		
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-14701	2/12/2017	21:35	Sunday	SANTIAGO CANYON RD - JACKSON RANCH RD (S)			1056'	Direction: East	Dark - No Street	Clear	Pty at Fault:
	Hit Object		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 19			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-14963	2/25/2017	22:47	Saturday	SANTIAGO CANYON RD - BOLERO LOOKOUT RD			10'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:
	Hit Object		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 46			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-14966	2/25/2017	22:47	Saturday	SANTIAGO CANYON RD - GERTNER ESTATE RD			50'	Direction: West	Dark - No Street	Cloudy	Pty at Fault:
	Hit Object		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 23			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-14965	2/25/2017	22:48	Saturday	SANTIAGO CANYON RD - GERTNER ESTATE RD			50'	Direction: West	Dark - No Street	Cloudy	Pty at Fault:
	Hit Object		Other Object	Other Than Driver				Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 27			Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Previous Collision		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-15111	3/5/2017	04:50	Sunday	SANTIAGO CANYON RD - CHINCHILLA PASTURE RD			500'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 15			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Sleepy - Fatigued	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-15154	3/7/2017	12:15	Tuesday	SANTIAGO CANYON RD - CHINCHILLA PASTURE			2000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 34			Mini Van	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 21			Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-15295	3/13/2017	14:50	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD			825'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overtuned		Other Motor Vehicle	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0

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Party 1	Driver	West	Other	Male	Age: 18			Sport Utility Vehicle		Complaint of Pain	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-00393	3/18/2017	14:05	Saturday	SANTIAGO CANYON RD - LAWRENCE CANYON			30'	Direction: East	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	West	Proceeding Straight	Male	Age: 54			Motorcycle		Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	West	Making Right Turn	Female	Age: 33			Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
9675-2017-15772	4/4/2017	12:10	Tuesday	SANTIAGO CANYON RD - MODJESKA CANYON RD			2059'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence		23152A	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0	
Party 1	Driver	South	Other	Male	Age: 50			Passenger Car, Station Wagon, Jeep		Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Female	Age: 43			Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
9675-2017-15908	4/10/2017	14:50	Monday	SANTIAGO CANYON RD - MODJESKA CANYON RD			1500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 69			Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-00598	4/22/2017	13:35	Saturday	SANTIAGO CANYON RD - RIDGELINE RD			31'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Other Than Driver			Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	South	Ran Off Road	Male	Age: 54			Passenger Car, Station Wagon, Jeep		Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: Other Physical Impai		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-16217	4/25/2017	18:29	Tuesday	SANTIAGO CANYON RD - HAUL RD			2640'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence		23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	West	Other Unsafe Turning	Male	Age: 42			Pickups & Panels		No Injury	
	Veh Type: Pickup Truck		Sobriety: Sleepy - Fatigued		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-16530	5/9/2017	20:50	Tuesday	SANTIAGO CANYON RD - HAUL RD			500'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing		21750A	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Passing Other Vehicle		Age:			Unknown Hit and Run Vehicle Involvem		No Injury	
	Veh Type: Other		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Female	Age: 18			Sport Utility Vehicle		No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-16900	5/26/2017	14:30	Friday	SANTIAGO CANYON RD - GERTNER ESTATE RD			15'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Overtuned		Fixed Object	Improper Turning		22107	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0	
Party 1	Driver	North	Other	Male	Age: 49			Motorcycle		Severe Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: Inattention	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-16907	5/26/2017	17:35	Friday	SANTIAGO CANYON RD - MODJESKA CANYON RD			30'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	North	Proceeding Straight	Male	Age: 24			Motorcycle		Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				

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Party 2	Driver	North	Slowing/Stopping	Male	Age: 45		Pickups & Panels	No Injury			
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-00793	6/1/2017	08:39	Thursday	RIDGELINE RD - SANTIAGO CANYON RD			0'	Direction: Not Stated	Daylight	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Hazardous Parking			22515A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Backing	Female	Age: 35		Sport Utility Vehicle	No Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Previous Collision	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-17813	7/8/2017	16:30	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			869'	Direction: North	Daylight	Cloudy	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed			22350	Hit & Run: No	Fatal	# Inj: 0	# Killed: 1
Party 1	Driver	North	Passing Other Vehicle	Male	Age: 59		Motorcycle	Fatal Injury			
	Veh Type: Motorcycle		Sobriety: Impairment Not Kno		Assoc Factor: Violation	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 35		Motorcycle	No Injury			
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-18304	7/27/2017	14:55	Thursday	SANTIAGO CANYON RD - HICKS HAUL RD			1500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed			22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 62		Motorcycle	Other Visible Injury			
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-18675	8/13/2017	06:36	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD			4224'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Female	Age: 16		Passenger Car, Station Wagon, Jeep	No Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-18816	8/20/2017	20:25	Sunday	SANTIAGO CANYON RD - HICKS HAUL RD			1200'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Female	Age: 53		Motorcycle	Severe Injury			
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: Violation	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-01252	8/23/2017	17:15	Wednesday	SANTIAGO CANYON RD - CRYSTAL CANYON RD			480'	Direction: East	Daylight	Clear	Pty at Fault:2
	Sideswipe		Other Motor Vehicle	Improper Turning			22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Proceeding Straight	Male	Age: 54		Passenger Car, Station Wagon, Jeep	No Injury			
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	East	Other Unsafe Turning		Age:		Pickups & Panels	No Injury			
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use				
2017-19115	9/2/2017	10:10	Saturday	SANTIAGO CANYON RD - SR-241			1000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed			22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Proceeding Straight	Male	Age: 32		Bicycle	Severe Injury			
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2017-19328	9/12/2017	22:54	Tuesday	SANTIAGO CANYON RD - SILVERADO TRUCK TRAIL			1014'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 25		Pickups & Panels	Other Visible Injury			
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-19367	9/14/2017	07:40	Thursday	SANTIAGO CANYON RD - MODJESKA CANYON RD			2000'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	South	Other	Male	Age: 29		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-19601	9/23/2017	16:55	Saturday	SANTIAGO CANYON RD - SR-261 FREEWAY		5'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 3	# Killed: 0
Party 1	Driver	South	Slowing/Stopping	Female	Age: 26		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Stopped In Road	Female	Age: 77		Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-01451	9/28/2017	07:45	Thursday	SANTIAGO CANYON RD - RIDGELINE RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle		Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	East	Making Left Turn	Male	Age: 23		Passenger Car, Station Wagon, Jeep	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 41		Pickups & Panels	Other Visible Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-20136	10/15/2017	10:50	Sunday	SANTIAGO CANYON RD - IRVINE LAKE ENTRANCE		60'	Direction: North	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle		Auto R/W Violation	21804	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	West	Making Left Turn	Male	Age: 62		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Female	Age: 22		Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-01548	10/17/2017	17:20	Tuesday	SANTIAGO CANYON RD - RIDGELINE RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle		Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	East	Making Left Turn	Female	Age: 35		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Female	Age: 28		Sport Utility Vehicle	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-01582	10/24/2017	20:00	Tuesday	SANTIAGO CANYON RD - RIDGELINE RD		350'	Direction: East	Dark - No Street	Clear	Pty at Fault:
	Other		Animal		Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 64		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-20737	11/7/2017	19:42	Tuesday	SANTIAGO CANYON RD - LOMA RIDGE RD		1884'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 44		Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 2	Driver	North	Stopped In Road	Female	Age: 18		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2017-20880	11/13/2017	17:29	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD		1000'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 88		Pickups & Panels	Complaint of Pain		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			

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2017-21027	11/18/2017	12:05	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Driving Under Influence	23152A	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Other	Male	Age: 47		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HBD	Under Influence	Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	West	Proceeding Straight	Male	Age: 22		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2017-21110	11/21/2017	15:30	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21801A	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	South	Making Left Turn	Male	Age: 19		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 49		Pickups & Panels		Complaint of Pain
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2017-21681	12/14/2017	10:25	Thursday	SANTIAGO CANYON RD - SR-241	2640'	Direction: East	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle	Improper Passing	21750	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Bicyclist	West	Passing Other Vehicle	Male	Age: 52		Bicycle		No Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	West	Making U Turn	Male	Age: 55		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2017-01932	12/23/2017	10:00	Saturday	SANTIAGO CANYON RD - RIDGELINE RD	10'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Rear-End		Bicycle	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	South	Other Unsafe Turning	Male	Age: 41		Bicycle		Other Visible Injury
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	South	Stopped In Road	Female	Age: 20		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Unfamiliar With R	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2017-22098	12/30/2017	10:38	Saturday	SANTIAGO CANYON RD - HAUL RD	1000'	Direction: East	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Bicyclist	West	Proceeding Straight	Male	Age: 55		Bicycle		Complaint of Pain
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: Inattention	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2018-00064	1/4/2018	08:50	Thursday	SANTIAGO CANYON RD - HAUL RD	2000'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 55		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-00105	1/6/2018	19:35	Saturday	SANTIAGO CANYON RD - JACKSON RANCH RD	0'	Direction: Not Stated	Dark - Street Ligh	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21802A	Hit & Run: No	Severe Injury	# Inj: 3	# Killed: 0
Party 1	Driver	West	Making Left Turn	Male	Age: 53		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 35		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2018-00282	1/14/2018	13:54	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD	2200'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	South	Other Unsafe Turning	Male	Age: 25		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2018-00384	1/20/2018	00:16	Saturday	SANTIAGO CANYON RD - MODJESKA CANYON RD		2110'	Direction: South	Dark - No Street	Cloudy	Pty at Fault:1
	Broadside		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Fatal	# Inj: 2	# Killed: 1
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 17		Passenger Car, Station Wagon, Jeep	Fatal Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 33		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2018-00575	1/27/2018	14:50	Saturday	SANTIAGO CANYON RD - HAUL RD		400'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Stopped In Road	Female	Age: 66		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 39		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2018-00771	2/4/2018	09:25	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD		250'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning		22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Other	Male	Age: 43		Bicycle	Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use			
2018-00772	2/4/2018	09:26	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD		270'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning		22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Other	Male	Age: 53		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use			
2018-00773	2/4/2018	09:27	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD		290'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning		22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Other	Female	Age: 54		Bicycle	Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use			
2018-00813	2/6/2018	16:00	Tuesday	SANTIAGO CANYON RD - SR-241		6600'	Direction: East	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Wrong Side of Road		21460A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Crossed Into Opposing Lane	Female	Age: 56		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver		Proceeding Straight	Male	Age: 29		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2018-01031	2/15/2018	19:25	Thursday	SANTIAGO CANYON RD - HAUL RD		5280'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing		21755	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Passing Other Vehicle	Male	Age: 75		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Female	Age: 26		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use			
2018-01162	2/22/2018	06:30	Thursday	SANTIAGO CANYON RD - MODJESKA CANYON RD		10'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Auto R/W Violation		21801A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0

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Party 1	Driver	South	Stopped In Road	Male	Age: 61			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 56			Pickups & Panels	Complaint of Pain		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
9675-2018-01261	2/25/2018	21:17	Sunday	SANTIAGO CANYON RD - SR-241			777'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Fatal	# Inj: 0	# Killed: 2	
Party 1	Driver	North	Ran Off Road	Male	Age: 20			Passenger Car, Station Wagon, Jeep	Fatal Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2017-01945	3/24/2018	03:10	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			30'	Direction: South	Dark - No Street	Raining	Pty at Fault:1
	Overturned		Non-Collision		Driving Under Influence	23152A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	South	Ran Off Road	Male	Age: 28			Pickups & Panels	Complaint of Pain		
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-02110	4/1/2018	08:10	Sunday	SANTIAGO CANYON RD - SCHOOL RD			130'	Direction: North	Daylight	Clear	Pty at Fault:1
	Other		Bicycle		Following Too Closely	21703	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0	
Party 1	Bicyclist	North	Proceeding Straight	Male	Age: 53			Bicycle	Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 42			Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2018-02821	5/4/2018	16:00	Friday	SANTIAGO CANYON RD - MODJESKA CANYON RD			1250'	Direction: West	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object		Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	West	Other	Male	Age: 43			Three or More Axle Truck	No Injury		
	Veh Type: Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-02856	5/6/2018	09:40	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD			1640'	Direction: North	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision		Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0	
Party 1	Bicyclist	North	Proceeding Straight	Female	Age: 60			Bicycle	Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2018-02865	5/7/2018	08:03	Monday	SANTIAGO CANYON RD - LOMA RIDGE RD			6336'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Proceeding Straight	Female	Age: 36			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-03307	5/27/2018	22:38	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD			300'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	West	Other	Male	Age: 28			Sport Utility Vehicle	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-03306	5/28/2018	17:24	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle		Auto R/W Violation	21802A	Hit & Run: No	Fatal	# Inj: 1	# Killed: 1	
Party 1	Driver	West	Making Left Turn	Male	Age: 32			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 50			Motorcycle	Fatal Injury		
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				

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2018-03416	6/1/2018	20:27	Friday	SANTIAGO CANYON RD - WILLIAMS CANYON RD	1000'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Overtuned		Other Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Female	Age: 24		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-03612	6/7/2018	20:25	Thursday	SANTIAGO CANYON RD - SR 241	7300'	Direction: East	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 36		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-00874	6/18/2018	15:25	Monday	SANTIAGO CANYON RD - RIDGELINE RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Auto R/W Violation	21802A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	East	Making Left Turn	Male	Age: 23		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 45		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-03815	6/18/2018	15:45	Monday	SANTIAGO CANYON RD - SR-241	30'	Direction: West	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed:
Party 1	Driver	West	Proceeding Straight	Female	Age: 32		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	West	Stopped In Road	Female	Age: 28		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-04106	6/29/2018	14:47	Friday	SANTIAGO CANYON RD - MODJESKA CANYON RD	3530'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 61		Passenger Car, Station Wagon, Jeep		Severe Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Not Us	Cell Phone Not In Use		
2018-04123	6/29/2018	22:24	Friday	SANTIAGO CANYON RD - JACKSON RANCH RD	850'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: Misde	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 33		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-04196	7/4/2018	00:38	Wednesday	SANTIAGO CANYON RD - HICKS HAUL RD	2181'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 28		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2018-04456	7/15/2018	19:40	Sunday	SANTIAGO CANYON RD - SR-241	50'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Driving Under Influence	23152A	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 40		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HBD Under Influence	Assoc Factor: Violation		M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 53		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
9675-2018-04695	7/24/2018	22:06	Tuesday	SANTIAGO CANYON RD - SCHOOL RD	187'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Fatal	# Inj: 0	# Killed: 1

SANTIAGO CANYON RD

Party 1	Driver	South	Other	Female	Age: 22		Passenger Car, Station Wagon, Jeep	Fatal Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-05226	8/14/2018	15:50	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD		500'	Direction: South	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Other Unsafe Turning	Female	Age: 22		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 44		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-05715	9/2/2018	19:30	Sunday	SANTIAGO CANYON RD - LIMESTONE CANYON RD		5250'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 26		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-05876	9/10/2018	17:43	Monday	SANTIAGO CANYON RD - WILLIAMS CANYON RD		7'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 31		Pickups & Panels	Other Visible Injury		
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-06205	9/23/2018	10:30	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD		930'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed:	
Party 1	Driver	North	Proceeding Straight	Male	Age: 54		Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2018-06560	10/6/2018	21:00	Saturday	SANTIAGO CANYON RD - LOMA RIDGE RD		1700'	Direction: West	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Other Motor Vehicle	Driving Under Influence	23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	West	Other	Male	Age: 58		Passenger Car, Station Wagon, Jeep	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-01390	10/16/2018	13:19	Tuesday	SANTIAGO CANYON RD - RIDGELINE RD		528'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	North	Proceeding Straight	Male	Age: 30		Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-07012	10/24/2018	11:50	Wednesday	SANTIAGO CANYON RD - MODJESKA CANYON RD		2700'	Direction: South	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Proceeding Straight	Male	Age: 17		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Stopped In Road	Male	Age: 45		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: Defective Vehicle E	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2018-01437	10/24/2018	18:20	Wednesday	SANTIAGO CANYON RD - RIDGELINE RD		0'	Direction: Not Stated	Dusk - Dawn	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21802A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	East	Making Left Turn	Female	Age: 40		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 47		Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				

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2018-07208	11/5/2018	17:15	Monday	SANTIAGO CANYON RD - MODJESKA CANYON RD	3500'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Overturned		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 51		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Uninvolved Vehicl	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2018-07468	11/11/2018	17:58	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD	0'	Direction: Not Stated	Dark - Street Ligh	Clear	Pty at Fault:1
	Overturned		Non-Collision	Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 42		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HBD Under Influence	Assoc Factor: Violation	M/C Helmet	Driver - Yes	Cell Phone Not In Use		
2018-07838	11/28/2018	08:29	Wednesday	SANTIAGO CANYON RD - RANDALL ST	50'	Direction: East	Daylight	Cloudy	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Unsafe Lane Change	21658A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	East	Changing Lanes	Male	Age: 65		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Stop and Go Traffi	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
Party 2	Driver	East	Proceeding Straight	Male	Age: 24		Motorcycle		Complaint of Pain
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: Violation	M/C Helmet	Driver - Yes	Cell Phone Not In Use		
Party 3	Driver	West	Proceeding Straight	Male	Age: 54		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2018-07853	11/28/2018	17:40	Wednesday	SANTIAGO CANYON RD - LOMA RIDGE RD	3800'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 21		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Not Under Infl	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2018-07858	11/28/2018	17:45	Wednesday	SANTIAGO CANYON RD - SR-241	200'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 42		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: Entering - Leaving	Lap/Shoulder	Harness Used	Cell Phone Handsfree In Use		
Party 2	Driver	North	Stopped In Road	Male	Age: 21		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2018-08125	12/10/2018	17:55	Monday	SANTIAGO CANYON RD - LIMESTONE CANYON RD	200'	Direction: East	Dark - Street Ligh	Cloudy	Pty at Fault:
	Hit Object		Other Object	Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Proceeding Straight	Male	Age: 23		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2018-08145	12/11/2018	16:20	Tuesday	SANTIAGO CANYON RD - MODJESKA CANYON RD	1577'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 22		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 26		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		
2019-00032	1/3/2019	12:10	Thursday	SANTIAGO CANYON RD - HAUL RD	398'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Passing	21755	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Passing Other Vehicle	Male	Age: 55		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use		

SANTIAGO CANYON RD

Party 2	Driver	South	Making Right Turn	Male	Age: 50		Pickups & Panels		No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2019-00380	1/21/2019	19:35	Monday	SANTIAGO CANYON RD - MODJESKA CANYON RD		500'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 34		Passenger Car, Station Wagon, Jeep		Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2019-00545	1/29/2019	06:30	Tuesday	SANTIAGO CANYON RD - HAUL RD		1630'	Direction: North	Dusk - Dawn	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other		Age:		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use			
9675-2019-01422	3/9/2019	12:50	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD		3695'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Sideswipe		Other Motor Vehicle		Auto R/W Violation	21801A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Backing	Male	Age: 26		Pickups & Panels		No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Male	Age: 64		Motorcycle		No Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2019-01522	3/11/2019	03:00	Monday	SANTIAGO CANYON RD - HICKS HAUL RD		107'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Ran Off Road	Female	Age: 23		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2019-02022	4/7/2019	12:35	Sunday	SANTIAGO CANYON RD - HAUL RD		825'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Ran Off Road	Male	Age: 64		Motorcycle		Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2019-02177	4/13/2019	09:23	Saturday	SANTIAGO CANYON RD - JACKSON RANCH RD		1200'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 63		Sport Utility Vehicle		Severe Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2019-02192	4/14/2019	09:45	Sunday	SANTIAGO CANYON RD - JACKSON RANCH RD		909'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object		Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	North	Proceeding Straight	Male	Age: 56		Bicycle		Severe Injury	
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2019-02345	4/21/2019	06:00	Sunday	SANTIAGO CANYON RD - LOMA RIDGE RD		1600'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle		Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Making U Turn	Male	Age: 65		Pickups & Panels		No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Female	Age: 55		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2019-02346	4/21/2019	09:12	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD		21'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Impeding Traffic	22400A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	South	Slowing/Stopping	Female	Age: 61			Mini Van	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 49			Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-03014	5/25/2019	12:10	Saturday	SANTIAGO CANYON RD - LIMESTONE SPUR			215'	Direction: North	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Other Object	Improper Turning			22107	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 35			Passenger Car, Station Wagon, Jeep	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-03073	5/28/2019	21:33	Tuesday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD			500'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Female	Age: 23			Sport Utility Vehicle	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-03149	6/2/2019	00:20	Sunday	SANTIAGO CANYON RD - WILLIAMS CANYON RD			85'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Auto R/W Violation			21800A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Making Left Turn	Female	Age: 58			Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 25			Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2019-03209	6/4/2019	19:50	Tuesday	SANTIAGO CANYON RD - JACKSON RANCH RD			5287'	Direction: West	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 32			Pickups & Panels	Other Visible Injury		
	Veh Type: Pickup Truck		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-03414	6/14/2019	07:45	Friday	SANTIAGO CANYON RD - SR-241			2640'	Direction: South	Daylight	Clear	Pty at Fault:
	Sideswipe		Other Motor Vehicle	Unknown				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 44			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 46			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-03878	7/7/2019	16:32	Sunday	SANTIAGO CANYON RD - HICKS HAUL RD			5583'	Direction: South	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Driving Under Influence			23152A	Hit & Run: No	Fatal	# Inj: 0	# Killed: 4
Party 1	Driver	North	Traveling Wrong Way	Male	Age: 50			Motorcycle	Fatal Injury		
	Veh Type: Motorcycle		Sobriety: HBD Under Influence		Assoc Factor: Violation	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 59			Motorcycle	Fatal Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2019-03941	7/11/2019	06:59	Thursday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Other		Bicycle	Auto R/W Violation			21801A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	East	Making Left Turn	Male	Age: 58			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: Vision Obscureme	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 35			Bicycle	Complaint of Pain		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				

SANTIAGO CANYON RD

2019-04613	8/8/2019	13:18	Thursday	SANTIAGO CANYON RD - BOLERO LOOKOUT RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21801A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Making Left Turn	Male	Age: 48		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Unfamiliar With R		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 30		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2019-00979	8/10/2019	07:35	Saturday	SANTIAGO CANYON RD - RIDGELINE RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle	Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	East	Making Left Turn	Female	Age: 30		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Bicyclist	South	Proceeding Straight	Male	Age: 67		Bicycle		Other Visible Injury
	Veh Type: Bicycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2019-04794	8/16/2019	14:35	Friday	SANTIAGO CANYON RD - WILLIAMS CANYON RD	50'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 21		Sport Utility Vehicle		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Inattention		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-05223	9/1/2019	13:10	Sunday	SANTIAGO CANYON RD - SR-241	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:
	Sideswipe		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	West	Making Left Turn	Female	Age: 29		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	West	Making Left Turn	Female	Age: 63		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-05239	9/3/2019	07:40	Tuesday	SANTIAGO CANYON RD - RED ROCK RIDGE RD	1500'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 26		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Stopped In Road	Male	Age: 57		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-01165	9/19/2019	02:30	Thursday	SANTIAGO CANYON RD - RIDGELINE RD	2000'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Ran Off Road	Male	Age: 39		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-05650	9/21/2019	01:30	Saturday	SANTIAGO CANYON RD - LOMA RIDGE RD	2000'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other	Male	Age: 21		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-05663	9/21/2019	14:44	Saturday	SANTIAGO CANYON RD - JACKSON RANCH RD	150'	Direction: North	Daylight	Clear	Pty at Fault:1
	Other		Bicycle	Improper Passing	21755	Hit & Run: Felony	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other		Age:		Unknown Hit and Run Vehicle Involvem		Severe Injury
	Veh Type: Other		Sobriety: Impairment Not Kno	Assoc Factor: None Apparent			Cell Phone Not In Use		

SANTIAGO CANYON RD

Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 55		Bicycle		No Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2019-05961	10/5/2019	10:20	Saturday	SANTIAGO CANYON RD - RIDGE TOP RD			2100'	Direction: North	Daylight	Clear	Pty at Fault:1
	Sideswipe		Bicycle		Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0	
Party 1	Bicyclist	North	Other Unsafe Turning	Male	Age: 44		Bicycle		Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 44		Bicycle		No Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 3	Bicyclist	North	Proceeding Straight	Male	Age: 39		Bicycle		Complaint of Pain		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: Violation	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2019-05971	10/5/2019	20:54	Saturday	SANTIAGO CANYON RD - HAUL RD			3650'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Head-On		Non-Collision		Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0	
Party 1	Bicyclist	North	Other Unsafe Turning	Male	Age: 43		Bicycle		Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: Uninvolved Vehicl	M/C Helmet Driver - No	Cell Phone Not In Use				
2019-06113	10/10/2019	07:36	Thursday	SANTIAGO CANYON RD - HAUL RD			7500'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Proceeding Straight	Female	Age: 38		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	South	Slowing/Stopping	Female	Age: 22		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 3	Driver	South	Slowing/Stopping	Female	Age: 34		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-06446	10/24/2019	03:39	Thursday	SANTIAGO CANYON RD - LOMA RIDGE RD			976'	Direction: North	Dark - No Street	Wind	Pty at Fault:1
	Hit Object		Fixed Object		Driving Under Influence	23152A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	South	Other	Male	Age: 26		Passenger Car, Station Wagon, Jeep		Severe Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-06850	11/9/2019	05:30	Saturday	SANTIAGO CANYON RD - RED ROCK CANYON RD			2350'	Direction: North	Dark - No Street	Clear	Pty at Fault:
	Hit Object		Other Object		Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Proceeding Straight	Male	Age: 35		Passenger Car, Station Wagon, Jeep		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2019-07163	11/22/2019		Friday	SANTIAGO CANYON RD - RED ROCK CANYON RD			380'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Other		Age:		Sport Utility Vehicle		No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use				
2019-07308	11/30/2019	13:50	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Cloudy	Pty at Fault:1
	Head-On		Other Motor Vehicle		Auto R/W Violation	21802A	Hit & Run: No	Complaint of Pain	# Inj: 2	# Killed: 0	
Party 1	Driver	West	Making Left Turn	Male	Age: 38		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 54		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				

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2019-07464	12/9/2019	09:04	Monday	SANTIAGO CANYON RD - HICKS HUAL RD	225'	Direction: South	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 38		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Stopped In Road	Male	Age: 36		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-07753	12/19/2019	18:13	Thursday	SANTIAGO CANYON RD - HAUL RD	1500'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Traveling Wrong Way	Female	Age: 26		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 60		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 3	Driver	South	Proceeding Straight	Female	Age: 34		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2019-07865	12/26/2019	00:30	Thursday	SANTIAGO CANYON RD - SILVERADO CANYON RD	375'	Direction: North	Dark - No Street	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 19		Pickups & Panels		Other Visible Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-00285	1/16/2020	17:50	Thursday	SANTIAGO CANYON RD - RIDGETOP RD	900'	Direction: South	Dark - No Street	Clear	Pty at Fault:
	Broadside		Animal	Other Than Driver		Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 24		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Handsfree In Use		
2020-00627	2/2/2020	15:25	Sunday	SANTIAGO CANYON RD - BLUE DIAMOND HAUL RD	2000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Wrong Side of Road	21460A	Hit & Run: No	Severe Injury	# Inj: 3	# Killed: 0
Party 1	Driver	North	Traveling Wrong Way	Male	Age: 28		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 41		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2020-01538	3/18/2020	16:24	Wednesday	SANTIAGO CANYON RD - LOMA RIDGE RD	5000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 3	# Killed: 0
Party 1	Driver	South	Ran Off Road	Male	Age: 17		Passenger Car, Station Wagon, Jeep		Severe Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Not Us	Cell Phone Not In Use		
2020-01545	3/19/2020	13:55	Thursday	SANTIAGO CANYON RD - JACKSON RANCH RD	130'	Direction: South	Daylight	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 54		Pickups & Panels		Severe Injury
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-01571	3/22/2020	12:00	Sunday	SANTIAGO CANYON RD - EOC RD	1847'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 21		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		

SANTIAGO CANYON RD

2020-01598	3/24/2020	13:09	Tuesday	SANTIAGO CANYON RD - HICKS HAUL RD	200'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 31		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HBD Under Influence	Assoc Factor: Violation		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-01934	5/7/2020	15:06	Thursday	SANTIAGO CANYON RD - HICKS HAUL RD	1750'	Direction: South	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 26		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: Inattention		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 37		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-01955	5/10/2020	14:40	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD	4224'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Passing Other Vehicle	Female	Age: 20		Passenger Car, Station Wagon, Jeep		Complaint of Pain
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Making U Turn	Male	Age: 54		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-02559	7/12/2020	13:50	Sunday	SANTIAGO CANYON RD - HICKS HAUL RD	1300'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	North	Ran Off Road	Male	Age: 18		Passenger Car, Station Wagon, Jeep		Other Visible Injury
	Veh Type: Passenger Car		Sobriety: Other Physical Impai	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-02560	7/12/2020	16:41	Sunday	SANTIAGO CANYON RD - HICKS HAUL RD	2000'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overtuned		Non-Collision	Unsafe Speed	22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 45		Motorcycle		Other Visible Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 42		Pickups & Panels		No Injury
	Veh Type: Pickup Truck		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
2020-02630	7/18/2020	11:02	Saturday	SANTIAGO CANYON RD - MODJESKA CANYON RD	1041'	Direction: South	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning	22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Making U Turn	Male	Age: 16		Sport Utility Vehicle		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 70		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2020-02946	8/13/2020	16:35	Thursday	SANTIAGO CANYON RD - SILVERADO CANYON RD	0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation	21802A	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	West	Making Left Turn	Male	Age: 24		Passenger Car, Station Wagon, Jeep		No Injury
	Veh Type: Passenger Car		Sobriety: HNBD	Assoc Factor: None Apparent		Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	North	Proceeding Straight	Male	Age: 69		Motorcycle		Severe Injury
	Veh Type: Motorcycle		Sobriety: HNBD	Assoc Factor: None Apparent		M/C Helmet Driver - Yes	Cell Phone Not In Use		
2020-03149	8/28/2020	18:55	Friday	SANTIAGO CANYON RD - MODJESKA CANYON RD	50'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0

SANTIAGO CANYON RD

Party 1	Driver	South	Proceeding Straight	Male	Age: 47		Motorcycle	Complaint of Pain		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
Party 2	Driver	South	Changing Lanes	Female	Age: 45		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-03658	10/2/2020	13:20	Friday	SANTIAGO CANYON RD - HICKS HAUL RD		1900'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Male	Age:		Passenger Car, Station Wagon, Jeep	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Handheld In Use			
2020-03727	10/7/2020	17:20	Wednesday	SANTIAGO CANYON RD - SCHOOL RD		2000'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age:		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-03992	10/23/2020	03:30	Friday	SANTIAGO CANYON RD - SILVERADO CANYON RD		0'	Direction: North	Dark - No Street	Clear	Pty at Fault:
	Hit Object		Fixed Object	Other Than Driver			Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age:		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-04010	10/24/2020	16:32	Saturday	SANTIAGO CANYON RD - IRVINE MESA RD		1050'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 25		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-04189	11/5/2020	21:55	Thursday	SANTIAGO CANYON RD - SR-241		8315'	Direction: East	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence		23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	East	Proceeding Straight	Male	Age: 22		Sport Utility Vehicle	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: Under Drug Influenc		Assoc Factor: Violation	Lap/Shoulder Harness Not Us	Cell Phone Not In Use			
2020-04231	11/7/2020	17:35	Saturday	SANTIAGO CANYON RD - IRVINE MESA DR		2000'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed		22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 18		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-04369	11/16/2020	17:45	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD		400'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence		23152A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 65		Passenger Car, Station Wagon, Jeep	Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2020-04448	11/21/2020	13:20	Saturday	SANTIAGO CANYON RD - CANYON HEIGHTS DR		25'	Direction: South	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Improper Turning		22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Entering Traffic	Female	Age: 61		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 28		Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2020-04754	12/16/2020	13:40	Wednesday	SANTIAGO CANYON RD - IRVINE MESA RD		2'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

SANTIAGO CANYON RD

Party 1	Driver	North	Making Right Turn	Male	Age: 33			Three or More Axle Truck	No Injury		
	Veh Type: Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-00057	1/7/2021	08:00	Thursday	SANTIAGO CANYON RD - HAUL RD			2112'	Direction: North	Daylight	Clear	Pty at Fault:
	Other		Animal	Other Than Driver				Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 31			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-00066	1/8/2021	00:10	Friday	SANTIAGO CANYON RD - HICKS HAUL RD			230'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 19			Sport Utility Vehicle	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
9690-2021-00040	1/15/2021	05:20	Friday	SANTIAGO CANYON RD - RIDGELINE RD			463'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 20			Pickups & Panels	Complaint of Pain		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-00753	2/21/2021	22:30	Sunday	SANTIAGO CANYON RD - HICKS HAUL RD			1056'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 23			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: Sleepy - Fatigued		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-00286	3/21/2021	12:33	Sunday	SANTIAGO CANYON RD - LIVE OAK CANYON RD			750'	Direction: East	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed			22350	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	West	Proceeding Straight	Male	Age: 63			Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes		Cell Phone Not In Use			
2021-01587	4/14/2021	06:05	Wednesday	SANTIAGO CANYON RD - MODJESKA CANYON RD			750'	Direction: South	Dusk - Dawn	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 36			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-01688	4/20/2021	20:07	Tuesday	SANTIAGO CANYON RD - SR-241			1000'	Direction: South	Dark - No Street	Clear	Pty at Fault:2
	Sideswipe		Other Motor Vehicle	Improper Turning			22107	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 55			Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Other Unsafe Turning		Age:			Unknown Hit and Run Vehicle Involvem	No Injury		
	Veh Type: Other		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown		Cell Phone Not In Use			
2021-10380	6/9/2021	13:41	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation			21802A	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	West	Stopped In Road	Male	Age: 60			Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
Party 2	Driver	North	Proceeding Straight	Female	Age: 52			Sport Utility Vehicle	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder	Harness Used	Cell Phone Not In Use			
2021-10430	6/11/2021	22:00	Friday	SANTIAGO CANYON RD - SCHOOL RD			600'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0

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Party 1	Driver	North	Other Unsafe Turning	Male	Age: 18			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2021-10456	6/13/2021	13:31	Sunday	SANTIAGO CANYON RD - SILVERADO CANYON RD			4000'	Direction: North	Daylight	Clear	Pty at Fault:1
	Overtuned		Non-Collision		Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Proceeding Straight	Male	Age: 35			Motorcycle	Severe Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 27			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2021-10733	6/24/2021	15:22	Thursday	SANTIAGO CANYON RD - SR-241			570'	Direction: South	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object		Driving Under Influence	23152A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 30			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2021-10920	7/8/2021	13:55	Thursday	SANTIAGO CANYON RD - HAUL RD			3168'	Direction: North	Daylight	Clear	Pty at Fault:
	Sideswipe		Other Motor Vehicle		Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South	Proceeding Straight	Male	Age: 52			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Female	Age: 47			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
9675-2021-10998	7/12/2021	00:01	Monday	SANTIAGO CANYON RD - HAUL RD			1000'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 25			Motor Driven Cycle/Scooter	No Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
9675-2021-11086	7/17/2021	02:48	Saturday	SANTIAGO CANYON RD - MODJESKA CANYON RD			1650'	Direction: South	Dark - Street Ligh	Clear	Pty at Fault:1
	Hit Object		Other Object		Unsafe Speed	22350	Hit & Run: No	Severe Injury	# Inj: 2	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 19			Passenger Car, Station Wagon, Jeep	Severe Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2021-11230	7/24/2021	09:40	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Broadside		Bicycle		Auto R/W Violation	21802A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0	
Party 1	Driver	West	Stopped In Road	Male	Age: 22			Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Bicyclist	North	Proceeding Straight	Male	Age: 38			Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2021-11295	7/27/2021	18:30	Tuesday	SANTIAGO CANYON RD - SILVERADO CANYON RD			5280'	Direction: West	Daylight	Clear	Pty at Fault:1
	Hit Object		Other Object		Hazardous Parking	22515A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	East	Parked	Female	Age: 66			Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Runaway Vehicle	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2021-11431	8/3/2021	08:48	Tuesday	SANTIAGO CANYON RD - LIMESTONE SPUR			1214'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 32			Passenger Car, Station Wagon, Jeep	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				

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Party 2	Driver	North	Passing Other Vehicle	Male	Age: 63		Pickups & Panels	No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-11438	8/3/2021	23:00	Tuesday	SANTIAGO CANYON RD - RANCHO WAY			1075' Direction: North	Dark - No Street Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed			22350	Hit & Run: No	Property Damage Only # Inj: 0 # Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 20		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-12194	9/14/2021	02:25	Tuesday	SANTIAGO CANYON RD - HAUL RD			3960' Direction: North	Dark - No Street Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning			22107	Hit & Run: No	Property Damage Only # Inj: 0 # Killed: 0
Party 1	Driver	South	Other	Male	Age: 19		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-12706	10/10/2021	13:10	Sunday	SANTIAGO CANYON RD - JACKSON RANCH RD			500' Direction: North	Daylight Clear	Pty at Fault:1
	Overtaken		Non-Collision	Improper Turning			22107	Hit & Run: No	Other Visible Injury # Inj: 1 # Killed: 0
Party 1	Driver	North	Other	Male	Age: 27		Motorcycle	Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2021-10736	10/19/2021	20:15	Tuesday	SANTIAGO CANYON RD - LIVE OAK CANYON RD			1400' Direction: North	Dark - No Street Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Improper Turning			22107	Hit & Run: No	Property Damage Only # Inj: 0 # Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 54		Pickups & Panels	No Injury	
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Male	Age: 38		Passenger Car, Station Wagon, Jeep	No Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-13888	12/11/2021	01:50	Saturday	SANTIAGO CANYON RD - MODJESKA CANYON RD			1350' Direction: South	Dark - No Street Clear	Pty at Fault:1
	Hit Object		Fixed Object	Driving Under Influence			23152A	Hit & Run: No	Other Visible Injury # Inj: 1 # Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Female	Age: 21		Passenger Car, Station Wagon, Jeep	Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: HBD Under Influence		Assoc Factor: Violation	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-11055	12/17/2021	17:40	Friday	SANTIAGO CANYON RD - RIDGELINE RD			0' Direction: Not Stated	Dark - Street Ligh Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Auto R/W Violation			21804A	Hit & Run: No	Other Visible Injury # Inj: 3 # Killed: 0
Party 1	Driver	East	Making Left Turn	Male	Age: 63		Passenger Car, Station Wagon, Jeep	Other Visible Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
Party 2	Driver	South	Proceeding Straight	Female	Age: 20		Sport Utility Vehicle	Complaint of Pain	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use		
2021-14156	12/26/2021	10:10	Sunday	SANTIAGO CANYON RD - MODJESKA CANYON RD			500' Direction: North	Daylight Clear	Pty at Fault:1
	Overtaken		Non-Collision	Improper Turning			22107	Hit & Run: No	Other Visible Injury # Inj: 1 # Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 70		Motorcycle	Other Visible Injury	
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use		
2022-00075	1/7/2022	20:43	Friday	SANTIAGO CANYON RD - HICKS HAUL RD			683' Direction: North	Dark - No Street Clear	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed			22350	Hit & Run: No	Fatal # Inj: 0 # Killed: 1
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 17		Passenger Car, Station Wagon, Jeep	Fatal Injury	
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: Violation	Lap/Shoulder Harness Used	School Bus Related		
2022-00164	1/16/2022	13:00	Sunday	SANTIAGO CANYON RD - HAUL RD			1000' Direction: North	Daylight Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Wrong Side of Road			21651A	Hit & Run: No	Other Visible Injury # Inj: 1 # Killed: 0

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Party 1	Driver	North	Traveling Wrong Way	Male	Age: 53		Motorcycle		Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
Party 2	Driver	South	Proceeding Straight	Male	Age: 62		Pickups & Panels		No Injury		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2022-00093	1/30/2022	01:20	Sunday	SANTIAGO CANYON RD - RIDGELINE RD			350'	Direction: South	Dark - No Street	Clear	Pty at Fault:1
	Overtuned		Fixed Object		Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	South	Ran Off Road	Male	Age: 24		Motorcycle		Complaint of Pain		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use				
2022-00511	2/7/2022	12:46	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle		Auto R/W Violation	21801A	Hit & Run: No	Complaint of Pain	# Inj: 3	# Killed: 0	
Party 1	Driver	South	Making Left Turn	Male	Age: 16		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Proceeding Straight	Male	Age: 52		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 3	Driver	West	Stopped In Road	Male	Age: 56		Pickups & Panels		Complaint of Pain		
	Veh Type: Pickup Truck		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2022-00964	3/5/2022	16:35	Saturday	SANTIAGO CANYON RD - SILVERADO CANYON RD			5000'	Direction: North	Daylight	Cloudy	Pty at Fault:1
	Sideswipe		Other Motor Vehicle		Improper Passing	21750	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0	
Party 1	Driver	South			Age:		Motorcycle		No Injury		
	Veh Type: Motorcycle		Sobriety:		Assoc Factor:	Unknown					
Party 2	Driver	South		Male	Age: 64		Sport Utility Vehicle		No Injury		
	Veh Type: Passenger Car		Sobriety:		Assoc Factor:	Lap/Shoulder Harness Used					
2022-01642	4/16/2022	11:00	Saturday	SANTIAGO CANYON RD - LOMA RIDGE RD			7920'	Direction: South	Daylight	Clear	Pty at Fault:1
	Rear-End		Other Motor Vehicle		Unsafe Speed	22350	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	
Party 1	Driver	North	Proceeding Straight	Female	Age: 26		Mini Van		No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
Party 2	Driver	North	Stopped In Road	Male	Age: 83		Passenger Car, Station Wagon, Jeep		Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2022-02079	5/13/2022	22:24	Friday	SANTIAGO CANYON RD - LOMA RIDGE RD			2000'	Direction: North	Dark - Street Ligh	Clear	Pty at Fault:1
	Overtuned		Non-Collision		Improper Turning	22107	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0	
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 17		Passenger Car, Station Wagon, Jeep		Other Visible Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use				
2022-02082	5/14/2022	10:43	Saturday	SANTIAGO CANYON RD - SR-241			1950'	Direction: North	Daylight	Clear	Pty at Fault:
	Rear-End		Bicycle		Unknown		Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0	
Party 1	Bicyclist	North	Proceeding Straight	Male	Age: 68		Bicycle		Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - No	Cell Phone Not In Use				
Party 2	Bicyclist	North	Slowing/Stopping	Male	Age: 51		Bicycle		Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - No	Cell Phone Not In Use				
2022-02164	5/21/2022	06:10	Saturday	SANTIAGO CANYON RD - SANTIAGO CANYON LAND			1600'	Direction: South	Daylight	Cloudy	Pty at Fault:1
	Hit Object		Fixed Object		Improper Turning	22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0	

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Party 1	Driver	South	Proceeding Straight	Male	Age: 21		Sport Utility Vehicle	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2022-02173	5/22/2022	08:42	Sunday	SANTIAGO CANYON RD - MODJESKA CANYON RD		1584'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 0	# Killed: 0
Party 1	Bicyclist	North	Proceeding Straight	Male	Age: 28		Bicycle	Other Visible Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	Unknown	Cell Phone Not In Use			
2022-03070	7/23/2022	08:25	Saturday	SANTIAGO CANYON RD - IRVINE LAKE ENTRANCE		2700'	Direction: North	Daylight	Clear	Pty at Fault:
	Overturned		Non-Collision	Unknown			Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Bicyclist	South	Proceeding Straight	Male	Age: 64		Bicycle	Severe Injury		
	Veh Type: Bicycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2022-03437	8/15/2022		Monday	SANTIAGO CANYON RD - HAUL RD		1320'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning		Age:		Pickups & Panels	No Injury		
	Veh Type: Pickup Truck		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Unknown	School Bus Related			
2022-03821	9/4/2022	14:55	Sunday	SANTIAGO CANYON RD - WILLIAMS CANYON RD		150'	Direction: South	Daylight	Clear	Pty at Fault:2
	Rear-End		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Slowing/Stopping	Male	Age: 64		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: Impairment Not Kno		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Passing Other Vehicle	Male	Age: 50		Passenger Car, Station Wagon, Jeep	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2022-03862	9/7/2022	08:15	Wednesday	SANTIAGO CANYON RD - SILVERADO CANYON RD		600'	Direction: South	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 24		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2022-04024	9/16/2022	16:04	Friday	SANTIAGO CANYON RD - HAUL RD		2000'	Direction: North	Daylight	Clear	Pty at Fault:1
	Overturned		Non-Collision	Improper Turning		22107	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 18		Motorcycle	Other Visible Injury		
	Veh Type: Motorcycle		Sobriety: HNBD		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2022-04343	10/3/2022	19:10	Monday	SANTIAGO CANYON RD - WILLIAMS CANYON RD		5280'	Direction: North	Dark - No Street	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Other Unsafe Turning	Male	Age: 82		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2022-04398	10/8/2022	06:00	Saturday	SANTIAGO CANYON RD - LOMA RIDGE RD		3000'	Direction: South	Dusk - Dawn	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Other Unsafe Turning	Male	Age: 34		Sport Utility Vehicle	Complaint of Pain		
	Veh Type: Passenger Car		Sobriety: HNBD		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2022-04908	11/6/2022	12:10	Sunday	SANTIAGO CANYON RD - HAUL RD		341'	Direction: South	Daylight	Clear	Pty at Fault:1
	Broadside		Other Motor Vehicle	Improper Turning		22107	Hit & Run: No	Severe Injury	# Inj: 1	# Killed: 0
Party 1	Driver	South	Making U Turn	Female	Age: 34		Sport Utility Vehicle	No Injury		
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			

SANTIAGO CANYON RD

Party 2	Driver	South	Proceeding Straight	Male	Age: 29		Motorcycle		Severe Injury	
	Veh Type: Motorcycle		Sobriety:		Assoc Factor: None Apparent	M/C Helmet Driver - Yes	Cell Phone Not In Use			
2022-05546	12/12/2022	05:55	Monday	SANTIAGO CANYON RD - SILVERADO CANYON RD		5755'	Direction: South	Dark - No Street	Raining	Pty at Fault:
	Hit Object		Fixed Object	Other Than Driver			Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 57		Passenger Car, Station Wagon, Jeep		Complaint of Pain	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2023-00098	1/24/2023	10:30	Tuesday	SANTIAGO CANYON RD - RIDGELINE RD		0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Sideswipe		Other Motor Vehicle	Auto R/W Violation		21802A	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Making Left Turn	Female	Age: 25		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Proceeding Straight	Male	Age: 63		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2023-01072	3/1/2023	08:00	Wednesday	SANTIAGO CANYON RD - HAUL RD		1200'	Direction: North	Daylight	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed		22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Proceeding Straight	Male	Age: 23		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2023-01421	3/20/2023	00:37	Monday	SANTIAGO CANYON RD - HAUL RD		2428'	Direction: North	Dark - No Street	Raining	Pty at Fault:1
	Hit Object		Fixed Object	Unsafe Speed		22350	Hit & Run: No	Other Visible Injury	# Inj: 2	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Female	Age: 18		Passenger Car, Station Wagon, Jeep		Other Visible Injury	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2023-01488	3/22/2023	21:45	Wednesday	SANTIAGO CANYON RD - HAUL RD		150'	Direction: North	Dark - No Street	Cloudy	Pty at Fault:1
	Rear-End		Other Motor Vehicle	Unsafe Speed		22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	South	Proceeding Straight	Male	Age: 31		Pickups & Panels		No Injury	
	Veh Type: Pickup Truck		Sobriety:		Assoc Factor: Inattention	Lap/Shoulder Harness Used	Cell Phone Not In Use			
Party 2	Driver	South	Slowing/Stopping	Male	Age: 32		Passenger Car, Station Wagon, Jeep		No Injury	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			
2023-01551	3/26/2023	10:33	Sunday	SANTIAGO CANYON RD - SR-241		7708'	Direction: North	Daylight	Clear	Pty at Fault:1
	Hit Object		Fixed Object	Improper Turning		22107	Hit & Run: No	Complaint of Pain	# Inj: 1	# Killed: 0
Party 1	Driver	North	Other	Male	Age: 20		Sport Utility Vehicle		Complaint of Pain	
	Veh Type: Passenger Car		Sobriety:		Assoc Factor: None Apparent	Lap/Shoulder Harness Used	Cell Phone Not In Use			

Settings for Query:

Street: SANTIAGO CANYON RD

Note that when a street is selected, the results return all collisions with that street as a primary road and all collisions with that street as a secondary road with a distance of 0'.

Sorted By: Date and Time

Primary Rd SANTIAGO CANYC Distance (ft) 500 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 018102 Collision Date 20180814 Time 1550 Day TUE Primary Collision Factor IMPROP TURN Violation 22107 Collision Type BROADSIDE Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20180817 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																							
PARTY INFO										VICTIM INFO													
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	22	F	H	HNBD		UNS TURN	S	A	0700	CHRY	2004	- 3	N	-	M	G						
2	DRVR	44	M	W	HNBD		PROC ST	S	A	0700	FORD	2012	- 3	N	-	M	G						
Primary Rd SANTIAGO CANYC Distance (ft) 7 Direction N Secondary Rd WILLIAMS CANYON NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020240 Collision Date 20180910 Time 1743 Day MON Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180918 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																							
PARTY INFO										VICTIM INFO													
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	31	M	H	IMP UNK	IMP UNK	UNS TURN	N	D	2200	FORD	2002	- 3	N	-	M	G	DRVR	MINOR	31	M	1	M G 0

Primary Rd SANTIAGO CANYO Distance (ft) 50 Direction E Secondary Rd RANDALL ST NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 002 Type 3 CalTrans Dist Badge 018714 Collision Date 20181128 Time 0829 Day WED
 Primary Collision Factor LANE CHANGE Violation 21658A Collision Type SIDESWIPE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20181205
 Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	65	M	W	HNBD		CHANG LN	E	A		0700	TOYT	2004	-	3	G	-	M	G								
2	DRVR	24	M	H	HNBD		PROC ST	E	C		0200	HOND	2004	-	3	A	22350	G	-	W	DRVR POSSIBLE	24	M	1	P	W	1
3	DRVR	54	M	A	HNBD		PROC ST	W	A		0700	HOND	2012	-	3	N	-	L	G								

Primary Rd SANTIAGO CANYO Distance (ft) 2000 Direction N Secondary Rd HAUL RD. NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 018929 Collision Date 20180104 Time 0850 Day THU
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180108
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	55	M	W	HNBD		OTHER	N	D		2200	DODGE	2016	-	3	F	N	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 1250 Direction W Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021438 Collision Date 20180504 Time 1600 Day FRI
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20180514
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	43	M	W	HNBD		OTHER	W	G		2731	VOLVO	2016	-	3	N	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 6336 Direction S Secondary Rd LOMA RIDGE RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019566 Collision Date 20180507 Time 0803 Day MON
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180510
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	36	F	W	HNBD		PROC ST	N	A		0100	VOLK	2009	-	3	N	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 10 Direction N Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021982 Collision Date 20180222 Time 0630 Day THU
 Primary Collision Factor R-O-W AUTO Violation 21801A Collision Type SIDESWIPE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180301
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	61	M	H	HNBD		STOPPED	S	D		2200	DODG	2002	-	3	N	-	L	G							
2	DRVR	56	M	H	HNBD		PROC ST	N	D		2200	FORD	1997	-	3	N	-	L	G	DRVR POSSIBLE	56	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 3500 Direction N Secondary Rd MODJESKA CYN. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 015208 Collision Date 20181105 Time 1715 Day MON
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20181116
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	51	M	W	HNBD		UNS TURN	N	A		0700	FORD	2001	-	3	L	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 5250 Direction S Secondary Rd LIMESTONE CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021305 Collision Date 20180902 Time 1930 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180913
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DUSK/DAWN Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	26	M	H	HNBD	UNSTURN	S	A	0700	TOYO	1996	-	3	N	-	M	G					

Primary Rd SANTIAGO CANYO Distance (ft) 30 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021983 Collision Date 20180324 Time 0310 Day SAT
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180402
 Weather1 RAINING Weather2 Rdwly Surface WET Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected					
1F	DRVR	28	M	O	HBD-UI	RAN OFF RD	S	D	2200	DODGE	2011	-	3	A	22106	-	M	G	DRVR	MINOR	28	M	1	M	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 1700 Direction W Secondary Rd LOMA RIDGE RD. NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 002 Type 3 CalTrans Dist Badge 021322 Collision Date 20181006 Time 2100 Day SAT
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20181011
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected					
1F	DRVR	58	M	H	HBD-UI	OTHER	W	A	0100	HONDA	2000	-	3	A	22107	-	L	G	DRVR	MINOR	58	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 400 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021716 Collision Date 20180127 Time 1450 Day SAT
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180201
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	66	F	A	HNBD	STOPPED	S	A	0100	MAZD	2016	-	3	N	-	M	G					
2	DRVR	39	M	A	HNBD	PROC ST	S	A	0100	HOND	2014	-	3	N	-	M	G					

Primary Rd SANTIAGO CANYO Distance (ft) 1640 Direction N Secondary Rd LOMA RIDGE RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020627 Collision Date 20180506 Time 0940 Day SUN
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20180510
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 LOOSE MATRL Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	BICY	60	F	W	HNBD	PROC ST	N	L	0400	SPECI	-	3	N	-	-	W	BICY	SERIOUS	60	F	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 2700 Direction S Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 015784 Collision Date 20181024 Time 1150 Day WED
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20181031
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 CONS ZONE Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	30	M	W	HNBD	PROC ST	N	A	0100	HYUND	2005	-	3	N	-	M	G					
2	DRVR	59	M	W	HNBD	STOPPED	N	D	2200	FORD	2015	-	3	K	-	M	G					

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction Secondary Rd RIDGELINE RD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 030 Type 2 CalTrans Dist Badge 020147 Collision Date 20181024 Time 1820 Day WED
 Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type BROADSIDE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20181105
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DUSK/DAWN Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	40	F	W	HNBD		LFT TURN	E	A		0100	TOYT	2013	-	3	N	-	M	G								
2	DRVR	47	M	W	HNBD		PROC ST	S	C		0200	HD	2017	-	3	N	-	-	W	DRVR	SERIOUS	47	M	1	P	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 528 Direction N Secondary Rd RIDGELINE ROAD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 030 Type 2 CalTrans Dist Badge 014351 Collision Date 20181016 Time 1319 Day TUE
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20181019
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	30	M	O	HNBD		PROC ST	N	A		0100	TOYT	2016	-	3	N	-	L	G	DRVR	POSSIBLE	30	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 2200 Direction N Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021716 Collision Date 20180114 Time 1354 Day SUN
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180116
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	25	M	H	HBD-UI		UNS TURN	S	D		2200	DODG	2003	-	3	A	22107	-	M	G					

Primary Rd SANTIAGO CANYO Distance (ft) 300 Direction N Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021483 Collision Date 20180527 Time 2238 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180604
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	28	M	H	HNBD		OTHER	W	A		0700	GMC	2006	-	3	N	-	M	G	DRVR	POSSIBLE	28	M	1	M	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 930 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019394 Collision Date 20180923 Time 1030 Day SUN
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20181002
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	54	M	W	HNBD		PROC ST	N	C		0200	HD	1996	-	3	N	-	-	W	DRVR	SERIOUS	54	M	1	P	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 6600 Direction E Secondary Rd SR-241 NORTHBOUI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 010 Type 2 CalTrans Dist Badge 021691 Collision Date 20180206 Time 1600 Day TUE
 Primary Collision Factor WRONG SIDE Violation 21460A Collision Type HEAD-ON Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180216
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	56	F	A	HNBD		OPPOS LN	E	A		0700	CHEV	1996	-	3	N	-	L	G						
2	DRVR	29	M	W	HNBD		PROC ST	-	A		0700	JEEP	2016	-	3	N	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 7300 Direction E Secondary Rd SR-241 NORTHBOUI NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021749 Collision Date 20180607 Time 2025 Day THU
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180618
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected					
1F	DRVR	36	M	W	HNBD	OTHER	S	A	0100	INFI	2014	-	3	N	-	L	G	DRVR	MINOR	36	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 1000 Direction N Secondary Rd WILLIAMS CANYON NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021984 Collision Date 20180601 Time 2027 Day FRI
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type OVERTURNED Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180611
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected					
1F	DRVR	24	F	H	HBD-UI	OTHER	N	A	0700	TOYT	2005	-	3	A	22107	-	M	G							

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction N Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021941 Collision Date 20180528 Time 1724 Day MON
 Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type HEAD-ON Severity FATAL # Killed 1 # Injured 1 Tow Away? Y Process Date 20181127
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected					
1F	DRVR	32	M	H	HNBD	LFT TURN	W	A	0100	NISS	2015	-	3	N	-	L	G								
2	DRVR	50	M	H	HBD-UI	PROC ST	N	C	0200	SUZU	2015	-	3	N	-	-	W	DRVR	KILLED	50	M	1	P	W	1
																		PASS	SERIOUS	51	F	0	P	Y	1

Primary Rd SANTIAGO CANYO Distance (ft) 250 Direction S Secondary Rd BLUE DIAMOND HAI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021224 Collision Date 20180204 Time 0925 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20180209
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected				
1F	BICY	43	M	A	HNBD	OTHER	N	L	0400	CIPO	-	3	N	-	-	W	BICY	SERIOUS	43	M	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 290 Direction S Secondary Rd BLUE DIAMOND HAI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021224 Collision Date 20180204 Time 0927 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20180209
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 OBSTR ON RD Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected				
1F	BICY	54	F	W	HNBD	OTHER	N	L	0400	CANN	-	3	N	-	-	W	BICY	SERIOUS	54	F	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 270 Direction S Secondary Rd BLUE DIAMOND HAI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021224 Collision Date 20180204 Time 0926 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20180209
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 OBSTR ON RD Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected				
1F	BICY	53	M	W	HNBD	OTHER	N	L	0400	CERV	-	3	N	-	-	W	BICY	MINOR	53	M	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 2000 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 010 Type 2 CalTrans Dist Badge 021984 Collision Date 20180623 Time 1500 Day SAT
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity INJURY # Killed 0 # Injured 2 Tow Away? N Process Date 20180704
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	33	M	W	HNBD		PROC ST	N	C	0200	HD	2015	-	3	N	-	-	W	DRVR	MINOR	33	M	1	P W 1
2	DRVR	69	M	W	HNBD		SLOWING	N	C	0200	HD	2005	-	3	N	-	-	W	DRVR	MINOR	69	M	1	P W 1

Primary Rd SANTIAGO CANYO Distance (ft) 2181 Direction S Secondary Rd HICKS HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021388 Collision Date 20180704 Time 0038 Day WED
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20180716
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	28	M	W	IMP UNK	IMP UNK	OTHER	N	A	0100	HYUN	2016	-	3	N	-	L	G						

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction S Secondary Rd JACKSON RANCH NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021801 Collision Date 20180106 Time 1935 Day SAT
 Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type BROADSIDE Severity INJURY # Killed 0 # Injured 3 Tow Away? Y Process Date 20180122
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - ST LTS Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	53	M	W	HNBD		LFT TURN	W	A	0100	TOYT	2014	-	3	N	-	L	G	PASS	POSSIBLE	47	F	3	L G 0
2	DRVR	35	M	H	HNBD		PROC ST	N	C	0200	HD	2017	-	3	N	-	-	W	DRVR	SERIOUS	35	M	1	P W 1
																			PASS	SERIOUS	36	F	2	P Y 1

Primary Rd SANTIAGO CANYO Distance (ft) 130 Direction N Secondary Rd SCHOOL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020668 Collision Date 20180401 Time 0810 Day SUN
 Primary Collision Factor TOO CLOSE Violation 21703 Collision Type OTHER Severity INJURY # Killed 0 # Injured 2 Tow Away? N Process Date 20180406
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	BICY	53	M	A	HNBD		PROC ST	N	L	0400	SPECI	1998	-	3	N	-	-	W	BICY	SERIOUS	53	M	1	- W 3
2	BICY	42	M	A	HNBD		PROC ST	N	L	0400	PINAR	2017	-	3	N	-	-	W	BICY	MINOR	42	M	1	- W 0

Primary Rd SANTIAGO CANYO Distance (ft) 187 Direction N Secondary Rd SCHOOL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 018924 Collision Date 20180724 Time 2206 Day TUE
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity FATAL # Killed 1 # Injured 0 Tow Away? Y Process Date 20180822
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	22	F	H	IMP UNK	IMP UNK	OTHER	S	A	0100	HOND	2005	-	3	N	-	L	G	DRVR	KILLED	22	F	1	L G 0

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021941 Collision Date 20181111 Time 1758 Day SUN
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type OVERTURNED Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20181115
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected		
1F	DRVR	42	M	W	HBD-UI		UNS TURN	N	C	0200	HARL	2006	-	3	A	22107	-	-	W	DRVR	MINOR	42	M	1	P W 1

Primary Rd SANTIAGO CANYO Distance (ft) 2110 Direction S Secondary Rd MODJESKA CANYO NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021297 Collision Date 20180120 Time 0016 Day SAT
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type BROADSIDE Severity FATAL # Killed 1 # Injured 2 Tow Away? Y Process Date 20180720
 Weather1 CLOUDY Weather2 Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	17	M	H	HNBD		UNS	TURN	N	A	0100	TOYOT	2009	-	3	N	-	L	G	DRVR	SERIOUS	17	M	1	L	G	0
																				PASS	KILLED	17	M	4	P	G	0
																				PASS	SERIOUS	17	M	3	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 1577 Direction S Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019938 Collision Date 20181211 Time 1620 Day TUE
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20181212
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DUSK/DAWN Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	22	M	H	HNBD		PROC	ST	S	D	2200	DODG	2002	-	3	N	-	M	G						
2	DRVR	26	M	W	HNBD		PROC	ST	S	A	0100	KIA	2015	-	3	N	-	M	G						

Primary Rd SANTIAGO CYN RE Distance (ft) 2000 Direction E Secondary Rd LIMESTONE CANYO NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019942 Collision Date 20181210 Time 1755 Day MON
 Primary Collision Factor NOT DRIVER Violation 22350 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20181213
 Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 OBSTR ON RD Rdwy Cond2 NO UNUSL CND Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1	DRVR	23	M	W	HNBD		PROC	ST	E	A	0100	BMW	2001	-	3	N	-	M	G						

Primary Rd SANTIAGO CYN RE Distance (ft) 2620 Direction S Secondary Rd IRVINE MESA RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021438 Collision Date 20180725 Time 2145 Day WED
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OTHER Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20180730
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLSN Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	36	M	W	HNBD		OTHER		N	C	0200	HARL	2011	-	3	N	-	-	W	DRVR	MINOR	36	M	1	P	W	1

Primary Rd SANTIAGO CYN RE Distance (ft) 1000 Direction S Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? Y Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021394 Collision Date 20181028 Time 0330 Day SUN
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20181106
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	32	M	H	HBD-UI		OTHER		S	A	0100	HYUN	2014	-	3	A	22107	-	L	G					

Primary Rd SANTIAGO CYN. N Distance (ft) 2000 Direction S Secondary Rd SR-241 NORTHBOUI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 015208 Collision Date 20181128 Time 1745 Day WED
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20181210
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	42	M	W	HNBD		PROC	ST	N	D	2200	RAM	2016	-	3	N	-	M	G								
2	DRVR	21	M	A	HNBD		STOPPED		N	A	0100	NISS	2010	-	3	N	-	M	G	PASS	POSSIBLE	28	M	3	M	G	0

Primary Rd		SANTIAGO CANYC		Distance (ft)	50	Direction	N	Secondary Rd	WILLIAMS CANYON		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy											
City		UNINCORP.		County	ORANGE	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans Dist	Badge	018102	Collision Date	20190816	Time	1435	Day	FRI								
Primary Collision Factor		IMPROP TURN		Violation	22107	Collision Type	HIT OBJECT		Severity	INJURY		# Killed	0	# Injured	1	Tow Away?	Y	Process Date	20190827										
Weather1		CLEAR		Weather2		Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2		Spec Cond	0		Hit and Run	Motor Veh Involved With	FIXED OBJ		Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int
PARTY INFO															VICTIM INFO														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected							
1F	DRVR	21	M	H	HNBD		UNS TURN	S	A	0700	JEEP	2001	- 3	F	- M G	DRVR	MINOR	21	M	1	M G	0							

Primary Rd SANTIAGO CANYO Distance (ft) 909 Direction S Secondary Rd JACKSON RANCH R NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy																								
City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019942 Collision Date 20190414 Time 0945 Day SUN																								
Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20190424																								
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 OBSTR ON RD Rdwy Cond2 Spec Cond 0																								
Hit and Run Motor Veh Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																								
PARTY INFO												VICTIM INFO												
Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	BICY	56	M	W	HNBD	PROC ST	N	L	0400	SPECI	-	3	N	-	-	W	BICY	SERIOUS	56	M	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 107 Direction N Secondary Rd HICKS HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 022073 Collision Date 20190311 Time 0300 Day MON
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20190507
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run MSDMNR Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	23	F	H	IMP UNK	IMP UNK	RAN OFF RD	S	A	0100	TOYT	2005	-	3	N	-	L	G			

Primary Rd SANTIAGO CANYO Distance (ft) 380 Direction S Secondary Rd RED ROCK CANYON NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021397 Collision Date 20191122 Time 2500 Day FRI
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20191210
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run MSDMNR Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	998			IMP UNK	IMP UNK	OTHER	S	A	0700	CHEV	2002	-	3	N	-	B	B			

Primary Rd SANTIAGO CANYO Distance (ft) 500 Direction N Secondary Rd BLUE DIAMOND HAI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021749 Collision Date 20190528 Time 2133 Day TUE
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190607
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected						
1F	DRVR	23	F	W	HBD-UI		OTHER	S	A	0700	NISS	2013	-	3	A	22107	-	L	G	DRVR	SERIOUS	23	F	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 398 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 015011 Collision Date 20190103 Time 1210 Day THU
 Primary Collision Factor IMPROP PASS Violation 21755 Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20190107
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	55	M	H	HNBD		PASSING	S	A	0700	JEEP	1999	-	3	N	-	M	G			
2	DRVR	50	M	W	HNBD		RGT TURN	S	D	2200	CHEV	2009	-	3	N	-	M	G			

Primary Rd SANTIAGO CANYO Distance (ft) 1630 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019394 Collision Date 20190129 Time 0630 Day TUE
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20190219
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run MSDMNR Motor Veh Involved With FIXED OBJ Lighting DUSK/DAWN Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	998			IMP UNK	IMP UNK	OTHER	N	A	0100	HOND	1999	-	3	N	-	M	B			

Primary Rd SANTIAGO CANYO Distance (ft) 7500 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021752 Collision Date 20191010 Time 0736 Day THU
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20191021
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected
1F	DRVR	38	F	W	HNBD		PROC ST	S	A	0100	SCIO	2011	-	3	N	-	M	G			
2	DRVR	22	F	H	HNBD		SLOWING	S	A	0100	HOND	2007	-	3	N	-	M	G			
3	DRVR	34	F	W	HNBD		SLOWING	S	A	0100	HYUN	2012	-	3	N	-	M	G			

Primary Rd SANTIAGO CANYO Distance (ft) 5583 Direction S Secondary Rd HICKS HAUL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020699 Collision Date 20190707 Time 1632 Day SUN
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HEAD-ON Severity FATAL # Killed 4 # Injured 0 Tow Away? Y Process Date 20200323
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	50	M	W	HBD-UI		WRONG WY	N	C	0200	HARLE	2011	- 3	A 21460A	-	-	W	DRVR KILLED	50	M	1	P	W	1
																		PASS KILLED	48	F	2	P	Y	1
2	DRVR	59	M	W	HNBD		PROC ST	S	C	0200	HONDA	2009	- 3	N	-	-	W	DRVR KILLED	59	M	1	P	W	2
																		PASS KILLED	62	F	2	P	Y	1

Primary Rd SANTIAGO CANYO Distance (ft) 5287 Direction W Secondary Rd JACKSON RANCH R NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019018 Collision Date 20190604 Time 1950 Day TUE
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190614
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	32	M	W	HBD-UI		UNS TURN	S	D	2200	DODG	1999	- 3	A 22107	N	L	G	DRVR MINOR	32	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 500 Direction N Secondary Rd MODJESKA CYN RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 035 Type 2 CalTrans Dist Badge 018733 Collision Date 20190121 Time 1935 Day MON
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190125
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	34	M	H	HNBD		RAN OFF RD	N	A	0100	TSMR	2018	- 3	F	-	L	G	DRVR MINOR	34	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 1500 Direction N Secondary Rd RED ROCK RIDGE R NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019394 Collision Date 20190903 Time 0740 Day TUE
 Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190910
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	26	F	W	HNBD		PROC ST	S	A	0700	TOYT	2015	- 3	N	-	M	G							
2	DRVR	57	M	O	HNBD		STOPPED	S	A	0100	MIT	2003	- 3	N	-	M	G	DRVR POSSIBLE	57	M	1	M	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 2000 Direction N Secondary Rd RIDGELINE RD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 030 Type 2 CalTrans Dist Badge 020469 Collision Date 20190919 Time 0230 Day THU
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20191031
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run MSDMNR Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	39	M	W	IMP UNK	IMP UNK	RAN OFF RD	S	A	0700	INFI	2010	- 3	N	-	M	G							

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction N Secondary Rd RIDGELINE ROAD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 030 Type 2 CalTrans Dist Badge 018526 Collision Date 20190810 Time 0735 Day SAT
 Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type BROADSIDE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190903
 Weather1 CLEAR Weather2 RdwY Surface DRY RdwY Cond1 NO UNUSL CND RdwY Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	30	F	W	HNBD		LFT TURN	E	A	0100	TOYT	2008	- 3	N	-	M	G							
2	BICY	67	M	W	HNBD		PROC ST	S	L	0400	DE RO	2019	- 3	N	-	-	W	BICY MINOR	67	M	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 375 Direction N Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020544 Collision Date 20191226 Time 0030 Day THU
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20200103
 Weather1 RAINING Weather2 Rdwly Surface WET Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	19	M	O	HNBD		RAN OFF RD	N	D		2200	TOYO	2010	-	3	N	-	L	G	DRVR	MINOR	19	M	1	L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction S Secondary Rd SR-241 NORTHBUI NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020027 Collision Date 20190901 Time 1310 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20190909
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1	DRVR	29	F	O	HNBD		LFT TURN	W	A		0100	MERZ	2017	-	3	N	-	M	G								
2	DRVR	63	F	W	HNBD		LFT TURN	W	A		0700	CHEV	2004	-	3	N	-	M	G								

Primary Rd SANTIAGO CANYO Distance (ft) 85 Direction S Secondary Rd WILLIAMS CANYON NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020550 Collision Date 20190602 Time 0020 Day SUN
 Primary Collision Factor R-O-W AUTO Violation 21800B Collision Type SIDESWIPE Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190612
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	58	F	W	HNBD		LFT TURN	S	A		0700	CHEV	2004	-	3	N	-	M	G								
2	DRVR	25	M	W	HNBD		PROC ST	S	C		0200	HARL	2001	-	3	N	-	-	W	DRVR	SERIOUS	25	M	1	P	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 1 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021752 Collision Date 20190711 Time 0659 Day THU
 Primary Collision Factor R-O-W AUTO Violation 21801A Collision Type OTHER Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20190723
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	DRVR	58	M	W	HNBD		LFT TURN	E	D		2200	FORD	1994	-	3	E	-	M	G								
2	BICY	35	M	W	HNBD		PROC ST	N	L		0400	SALSA	2019	-	3	N	-	-	W	BICY	POSSIBLE	35	M	1	-	W	0

Primary Rd SANTIAGO CANYO Distance (ft) 2100 Direction N Secondary Rd RIDGE TOP ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020131 Collision Date 20191005 Time 1020 Day SAT
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity INJURY # Killed 0 # Injured 2 Tow Away? N Process Date 20191016
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected			
1F	BICY	44	M	H	HNBD		UNS TURN	N	L		0400	CERVE	-	3	N	-	-	W	BICY	MINOR	44	M	1	-	W	1	
2	BICY	44	M	A	HNBD		PROC ST	N	L		0400	FELT	-	3	N	-	-	W									
3	BICY	39	M	A	HNBD		PROC ST	N	L		0400	CERVE	-	3	A	22350	-	-	W	BICY	MINOR	39	M	1	-	W	1

Primary Rd SANTIAGO CANYO Distance (ft) 2350 Direction N Secondary Rd RED ROCK CYN RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021397 Collision Date 20191109 Time 0530 Day SAT
 Primary Collision Factor NOT DRIVER Violation HIT OBJECT Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20191119
 Weather1 CLEAR Weather2 Rdwly Surface DRY Rdwly Cond1 NO UNUSL CND Rdwly Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1	DRVR	35	M	H	HNBD		PROC ST	S	A		0100	HOND	2007	-	3	N	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 3650 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021633 Collision Date 20191005 Time 2054 Day SAT
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HEAD-ON Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20191015
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With NON-CLS Lighting DARK - NO ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected
1F	BICY	43	M	W	HNBD		UNS	TURN	N	L	0400	TECHN				-	3	L		-	V		BICY	MINOR	43	M	1		-	V	1

Primary Rd SANTIAGO CANYO Distance (ft) 150 Direction N Secondary Rd JACKSON RANCH R NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021941 Collision Date 20190921 Time 1444 Day SAT
 Primary Collision Factor IMPROP PASS Violation 21755A Collision Type OTHER Severity INJURY # Killed 0 # Injured 1 Tow Away? N Process Date 20191016
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run FELONY Motor Veh Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected	
1F	DRVR	998			IMP	UNK	IMP	UNK	OTHER	N	-	9900	-			-	3	N		-	-											
2	BICY	55	M	W	HNBD		PROC	ST	N	L	0400	SPECL				-	3	N		-	W		BICY	SERIOUS	55	M	1		-	W	1	

Primary Rd SANTIAGO CANYO Distance (ft) 1200 Direction S Secondary Rd JACKSON RANCH R NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021691 Collision Date 20190413 Time 0923 Day SAT
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 1 Tow Away? Y Process Date 20190423
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected
1F	DRVR	63	M	W	HNBD		RAN	OFF	RD	N	A	0700	BMW	2017	-	3	N		-	L	G		DRVR	SERIOUS	63	M	1		L	G	0

Primary Rd SANTIAGO CANYO Distance (ft) 3696 Direction S Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 020131 Collision Date 20190309 Time 1250 Day SAT
 Primary Collision Factor R-O-W AUTO Violation 21801A Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20190318
 Weather1 CLOUDY Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected	
1F	DRVR	26	M	H	HNBD		U-TURN		S	D	2200	TOYT	2015	-	3	N		-	M	G												
2	DRVR	64	M	W	HNBD		PROC	ST	N	C	0200	HOND	2005	-	3	N		-	-	W												

Primary Rd SANTIAGO CANYO Distance (ft) 1500 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021633 Collision Date 20191219 Time 1813 Day THU
 Primary Collision Factor DRVR ALC|DRG Violation 23152A Collision Type HEAD-ON Severity PDO # Killed 0 # Injured 0 Tow Away? Y Process Date 20191230
 Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DARK - ST LTS Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected	
1F	DRVR	26	F	H	HBD-UI		WRONG	WY	N	A	0100	NISS	2020	-	3	A	21651B		-	M	G											
2	DRVR	60	M	W	HNBD		PROC	ST	S	A	0700	ALFR	2019	-	3	N		-	L	G												
3	DRVR	34	F	W	HNBD		PROC	ST	S	A	0700	HOND	2016	-	3	N		-	M	G												

Primary Rd SANTIAGO CANYO Distance (ft) 215 Direction N Secondary Rd LIMESTONE SPUR NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 019652 Collision Date 20190525 Time 1210 Day SAT
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY # Killed 0 # Injured 2 Tow Away? Y Process Date 20190603
 Weather1 CLOUDY Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move	Pre Coll	Dir	SW	Veh	CHP	Veh	Make	Year	Sp	Info	OAF1	Viol	OAF2	Safety	Equip	Role	Ext of Inj	Age	Sex	Seat	Pos	Safety	Equip	Ejected
1F	DRVR	35	M	W	HNBD		OTHER		S	A	0100	HOND	2016	-	3	N		-	L	G		DRVR	SERIOUS	35	M	1		L	G	0	
																						PASS	SERIOUS	24	F	3		L	G	0	

Primary Rd SANTIAGO CANYO Distance (ft) 1600 Direction N Secondary Rd LOMA RIDGE ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021691 Collision Date 20190421 Time 0600 Day SUN
 Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20190430
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	65	M	H	HNBD		U-TURN	S	D	2200	CHEV	2001	- 3	N	-	M	G						
2	DRVR	55	F	H	HNBD		PROC ST	S	A	0100	TOYT	2012	- 3	N	-	M	G						

Primary Rd SANTIAGO CANYO Distance (ft) 21 Direction N Secondary Rd SILVERADO CANYO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
 City UNINCORP. County ORANGE Population 9 Rpt Dist Beat 034 Type 2 CalTrans Dist Badge 021691 Collision Date 20190421 Time 0912 Day SUN
 Primary Collision Factor IMPED TRAFFIC Violation 22400A Collision Type REAR END Severity PDO # Killed 0 # Injured 0 Tow Away? N Process Date 20190430
 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
 Hit and Run Motor Veh Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

PARTY INFO

VICTIM INFO

Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre Coll	Dir	SW Veh	CHP Veh	Make	Year	Sp Info	OAF1 Viol	OAF2 Safety Equip	Role	Ext of Inj	Age	Sex	Seat Pos	Safety Equip	Ejected	
1F	DRVR	61	F	A	HNBD		SLOWING	S	A	0800	TOYO	2017	- 3	N	-	M	G						
2	DRVR	49	M	H	HNBD		PROC ST	S	A	0700	GMC	2004	- 3	N	-	M	G						

Does not include State Highway cases

2	DRVR	71	F	W	HNBD	PROC ST	E	A	0100	HYUN	2010	-	3	N	-	M	G
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Primary Rd		SANTIAGO		Distance (ft)	1584	Direction	N	Secondary Rd	SILVERADO		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORPORATED		County	Orange	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans	Badge	021960	Collision Date	20201023	Time	0330	Day	FRI					
Primary Collision Factor		NOT DRIVER		Violation		Collision Type	HIT OBJECT	Severity	PDO	#Killed	0	#Injured	0	Tow Away?	N	Process Date	20201029									
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	LOOSE MATRL		Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	FIXED OBJ		Lighting	DARK - NO		Ped Action		Cntrl Dev	NT PRS/FCTR		Loc Type		Ramp/Int									
Party Info																				Victim Info						
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1	DRVR	22	M	W	HNBD		PROC ST	S	A	0700	HONDA	1998	-	3	N	-	L	G								
Primary Rd		SANTIAGO		Distance (ft)	0.00	Direction		Secondary Rd	SILVERADO		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORPORATED		County	Orange	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans	Badge	021274	Collision Date	20200813	Time	1635	Day	THU					
Primary Collision Factor		R-O-W AUTO		Violation	21802A	Collision Type	BROADSIDE	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20200820									
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND		Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	OTHER MV		Lighting	DAYLIGHT		Ped Action		Cntrl Dev	NT PRS/FCTR		Loc Type		Ramp/Int									
Party Info																				Victim Info						
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	24	M	W	HNBD		LFT TURN	W	A	0100	FORD	2013	-	3	N	-	M	G								
2	DRVR	69	M	W	HNBD		PROC ST	N	C	0200	BMW	2019	-	3	N	-	-	W	DRVR	SERIOUS	69	M	1	1	P	W

Does not include State Highway cases

Report Run On: 10/28/2021

Primary Rd SANTIAGO Distance (ft) 2000 Direction N Secondary Rd SCHOOL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 018102 Collision Date 20201007 Time 1720 Day WED Primary Collision Factor (NORTHBOUND) PROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20201008 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 26 M A HNBD FATG UNS TURN N A 0700 FORD 2016 - 3 N - L G														
Primary Rd SANTIAGO Distance (ft) 200. Direction N Secondary Rd HICKS HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021752 Collision Date 20200324 Time 1309 Day TUE Primary Collision Factor DRVR ALC DRG Violation 23152A Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20200326 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 31 M W HBD-UI UNS TURN S A 0700 NISS 2002 - 3 A 22107 - M G														

Primary Rd		SANTIAGO CANYON		Distance (ft)	422.	Direction	N	Secondary Rd	SILVERADO	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP.		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	021960	Collision Date	20200510	Time	1440 Day SUN							
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	REAR END	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20200629								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info															Victim Info										
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	20	F	W	HNBD		PASSING	N	A	0100	MAZD	2001	- 3	N	-	L	G	PASS	POSSIBL	53	F	3	0	L	G
2	DRVR	54	M	A	HNBD		U-TURN	N	A	0100	NISS	2014	- 3	N	-	M	G								
Primary Rd		SANTIAGO CANYON		Distance (ft)	50.0	Direction	N	Secondary Rd	MODJESKA CYN	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP.		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	021690	Collision Date	20200828	Time	1855 Day FRI							
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	REAR END	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20200901								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info															Victim Info										
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	47	M	O	HNBD		PROC ST	S	C	0200	DUCAT	2020	- 3	N	-	-	W	DRVR	POSSIBL	47	M	1	1	P	W
2	DRVR	45	F	W	HNBD		CHANG LN	S	A	0100	HYUN	2011	- 3	N	-	M	G								
Primary Rd		SANTIAGO CANYON		Distance (ft)	2000	Direction	S	Secondary Rd	HICKS HAUL	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP./B		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	021834	Collision Date	20200712	Time	1641 Day SUN							
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	OVERTURNED	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20200722								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	NON-CLSN	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info															Victim Info										
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	45	M	H	HNBD		PROC ST	N	C	0200	HARL	2002	- 3	N	-	-	W	DRVR	MINOR	45	M	1	2	P	W
2	DRVR	42	M	H	HNBD		PROC ST	S	D	2200	FORD	2012	- 3	N	-	M	G								
Primary Rd		SANTIAGO CANYON		Distance (ft)	1300	Direction	S	Secondary Rd	HICKS HAUL	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP./B		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	021834	Collision Date	20200712	Time	1350 Day SUN							
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	HIT OBJECT	Severity	INJURY	#Killed	0	#Injured	2	Tow Away?	Y	Process Date	20200722								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	FIXED OBJ	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info															Victim Info										
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	M	W	HNBD		PHYS RAN OFF RD	N	A	0100	MERB	2009	- 3	N	-	L	G	DRVR	MINOR	18	M	1	0	L	G
																		PASS	MINOR	19	F	3	0	L	G

Does not include State Highway cases

Report Run On: 10/28/2021

Primary Rd SANTIAGO CANYON Distance (ft) 1750 Direction S Secondary Rd HICKS HAUL NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021752 Collision Date 20200507 Time 1506 Day THU Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HEAD-ON Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20200518 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 26 M H HNBD UNS TURN N A 0100 TOYT 2003 - 3 F - L G 2 DRVR 37 M O HNBD PROC ST S A 0100 HOND 2008 - 3 N - L G DRVR POSSIBL 37 M 1 0 L G														
Primary Rd SANTIAGO CANYON Distance (ft) 2000 Direction S Secondary Rd IRVINE MESA DR. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 002 Type 3 CalTrans Badge 020699 Collision Date 20201107 Time 1735 Day SAT Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20201116 Weather1 CLEAR Weather2 Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 18 M A HNBD PROC ST S A 0100 NISS 2006 - 3 N - M G														
Primary Rd SANTIAGO CANYON Distance (ft) 1041 Direction S Secondary Rd MODJESKA CYN NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020544 Collision Date 20200718 Time 1102 Day SAT Primary Collision Factor IMPROP TURN Violation 22107 Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20200727 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 16 M H HNBD U-TURN S A 0700 PORS 2013 - 3 N - M G 2 DRVR 70 M W HNBD PROC ST S C 0200 HD 2004 - 3 N - - W DRVR SERIOUS 70 M 1 0 P W														
Primary Rd SANTIAGO CANYON Distance (ft) 8315 Direction E Secondary Rd SR-241 NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019942 Collision Date 20201105 Time 2155 Day THU Primary Collision Factor DRVR ALC DRG Violation 23152F Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20201112 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 22 M H HNBD DRUG PROC ST E A 0700 TOYT 2008 - 3 A 22350 - L H DRVR MINOR 22 M 1 0 L H														
Primary Rd SANTIAGO CANYON Distance (ft) 1848 Direction S Secondary Rd EOC RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED (N/B) County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020027 Collision Date 20200322 Time 1200 Day SUN Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20200327 Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 21 M H HNBD OTHER N A 0100 BMW 1999 - 3 N - L G														

Does not include State Highway cases

Report Run On: 10/28/2021

Primary Rd		SANTIAGO CANYON		Distance (ft)	1900	Direction	S	Secondary Rd		HICKS HAUL RD.		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORP	County	Orange	Population	9	Rpt Dist	010	Type	2	CalTrans	Badge	021272	Collision Date	20201002	Time	1320	Day	FRI									
Primary Collision Factor		NORTHBOUND IMPROPER TURN		Violation	22107	Collision Type	HIT OBJECT	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20201006										
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0	Hit and Run	Motor Vehicle Involved With							FIXED OBJ	Lighting	DAYLIGHT	Ped Action	Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int
Party Info													Victim Info														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	22	M	W	HNBD		OTHER	N	A	0100	MAZD	2016	-	1	F	-	L	G	DRVR	MINOR	22	M	1	0	L	G	

Primary Rd		SANTIAGO CANYON		Distance (ft)	2.00	Direction	S	Secondary Rd		IRVINE MESA RD.		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORP	County	Orange	Population	9	Rpt Dist	034	Type	2	CalTrans	Badge	018733	Collision Date	20201216	Time	1340	Day	WED									
Primary Collision Factor		NORTHBOUND IMPROPER TURN		Violation	22107	Collision Type	HIT OBJECT	Severity	PDO	#Killed	0	#Injured	0	Tow Away?	N	Process Date	20201221										
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0	Hit and Run	Motor Vehicle Involved With							OTHER OBJ	Lighting	DAYLIGHT	Ped Action	Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int
Party Info													Victim Info														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	33	M	H	HNBD		RGT TURN	N	F	2700	PTRB	2016	-	3	N	-	M	G	DRVR	MINOR	22	M	1	0	L	G	

Primary Rd		SANTIAGO CANYON		Distance (ft)	25.0	Direction	S	Secondary Rd		CANYON HEIGHTS		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORP	County	Orange	Population	9	Rpt Dist	034	Type	2	CalTrans	Badge	020131	Collision Date	20201121	Time	1320	Day	SAT									
Primary Collision Factor		SOUTHBOUND IMPROPER TURN		Violation	22107	Collision Type	SIDESWIPE	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20201130										
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0	Hit and Run	Motor Vehicle Involved With							OTHER MV	Lighting	DAYLIGHT	Ped Action	Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int
Party Info													Victim Info														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	61	F	A	HNBD		ENT TRAF	S	A	0100	HON	2012	-	3	N	-	M	G	DRVR	SERIOUS	28	M	1	1	P	W	
2	DRVR	28	M	W	HNBD		PROC ST	S	C	0200	KAWK	2020	-	3	N	-	-	W	DRVR	SERIOUS	28	M	1	1	P	W	

Primary Rd		SANTIAGO CANYON		Distance (ft)	130.	Direction	S	Secondary Rd		JACKSON RANCH		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORP	County	Orange	Population	9	Rpt Dist	034	Type	2	CalTrans	Badge	021752	Collision Date	20200319	Time	1355	Day	THU									
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	HIT OBJECT	Severity	FATAL	#Killed	1	#Injured	1	Tow Away?	Y	Process Date	20200727										
Weather1	CLOUDY	Weather2	RAINING	Rdwy Surface	WET	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0	Hit and Run	Motor Vehicle Involved With							FIXED OBJ	Lighting	DAYLIGHT	Ped Action	Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int
Party Info													Victim Info														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	54	M	H	HNBD		RAN OFF RD	N	D	2200	NISS	2008	-	3	N	-	M	G	DRVR	KILLED	54	M	1	0	M	G	
																			PASS	MINOR	52	M	3	0	M	G	

Primary Rd		SANTIAGO CANYON		Distance (ft)	900.	Direction	S	Secondary Rd		RIDGETOP ROAD		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORP	County	Orange	Population	9	Rpt Dist	034	Type	2	CalTrans	Badge	019420	Collision Date	20200116	Time	1750	Day	THU									
Primary Collision Factor		NOT DRIVER		Violation		Collision Type	BROADSIDE	Severity	PDO	#Killed	0	#Injured	0	Tow Away?	Y	Process Date	20200123										
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0	Hit and Run	Motor Vehicle Involved With							ANIMAL	Lighting	DARK - NO	Ped Action	Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int
Party Info													Victim Info														
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1	DRVR	24	M	H	HNBD		PROC ST	N	A	0100	HOND	2018	-	2	N	-	M	G	DRVR	MINOR	24	M	1	0	M	G	

Does not include State Highway cases

Report Run On: 10/28/2021

Primary Rd SANTIAGO CANYON Distance (ft) 400 Direction S Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP N/B County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 018102 Collision Date 20201116 Time 1745 Day MON Primary Collision Factor DRVR ALC DRG Violation 23152A Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20201123 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																									
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	65	F	W	HBD-UI		UNS TURN	N	A	0100	TOYT	2018	- 3	A	22107	-	L G	DRVR	MINOR	65	F	1	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 5000 Direction S Secondary Rd LOMA RIDAGE NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP S/B County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 018102 Collision Date 20200318 Time 1624 Day WED Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 3 Tow Away? Y Process Date 20200324 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																									
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	17	M	H	HNBD		RAN OFF RD	S	A	0100	HYUND	2007	- 3	N		-	L H	DRVR	SERIOUS	17	M	1	0	L	H
																		PASS	MINOR	18	M	6	0	P	G
																		PASS	MINOR	17	M	3	0	L	G
Primary Rd SANTIAGO CYN RD Distance (ft) 2000 Direction S Secondary Rd BLUE DIAMOND NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021982 Collision Date 20200202 Time 1525 Day SUN Primary Collision Factor WRONG SIDE Violation 21460A Collision Type SIDESWIPE Severity INJURY #Killed 0 #Injured 3 Tow Away? Y Process Date 20200210 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																									
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	28	M	W	HNBD		WRONG WY	N	C	0200	HARL	1997	- 3	N		-	- W	DRVR	SERIOUS	28	M	1	0	P	W
																		PASS	SERIOUS	28	F	0	0	P	Y
2	DRVR	41	M	W	HNBD		PROC ST	S	C	0200	TRIU	2014	- 3	N		-	- W	DRVR	SERIOUS	41	M	1	0	P	W

Primary Rd		E SANTIAGO		Distance (ft)	0.00	Direction	Secondary Rd		RIDGELINE ROAD		NCIC	9690	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City	UNINCORPORATED	County	Orange	Population	9	Rpt Dist	Beat	030	Type	2	CalTrans	Badge	014552	Collision Date	20210717	Time	1227	Day	SAT							
Primary Collision Factor	R-O-W AUTO		Violation	21802A		Collision Type	BROADSIDE		Severity	INJURY		#Killed	0	#Injured	1	Tow Away?	N	Process Date	20210727							
Weather1	CLEAR		Weather2	RDWY SURFACE DRY		Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0										
Hit and Run			Motor Vehicle Involved With	BICYCLE		Lighting	DAYLIGHT		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int										
Party Info														Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	77	M	O	HNBD		LFT TURN	E	A	0700	LEXS	2019	- 3	N	-	M	G									
2	BICY	40	M	H	HNBD		PROC ST	S	L	0400	SPECI	2019	- 3	N	-	-	Y	BICY	SERIOUS	40	M	0	1	P	Y	

Primary Rd		E SANTIAGO		Distance (ft)	0.00	Direction	Secondary Rd		RIDGELINE ROAD		NCIC	9690	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy							
City	UNINCORPORATED	County	Orange	Population	9	Rpt Dist	Beat	030	Type	2	CalTrans	Badge	014552	Collision Date	20210828	Time	0845	Day	SAT						
Primary Collision Factor	R-O-W AUTO		Violation	21801A		Collision Type	BROADSIDE		Severity	INJURY		#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20210908						
Weather1	CLOUDY		Weather2	RDWY SURFACE DRY		Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0									
Hit and Run	FELONY		Motor Vehicle Involved With	BICYCLE		Lighting	DAYLIGHT		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int									
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	U-TURN	N	A	0100	-	-	4	N	-	B	B								
2	BICY	35	M	A	HNBD		PROC ST	S	L	0498	FELT	-	3	N	-	-	P	BICY	SERIOUS	35	M	0	2	P	P

Does not include State Highway cases

Report Run On: 08/11/2022

2 DRVR 54 M H HNBD PROC ST E D 2200 TOYT 2006 - 3 N - M G

Primary Rd SANTIAGO CANYON Distance (ft) 1000 Direction S Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021691 Collision Date 20210712 Time 0001 Day MON
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210719
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected
1F DRVR 25 M H HNBD UNS TURN N C 0300 NISS 2014 - 3 N - - G

Primary Rd SANTIAGO CANYON Distance (ft) 500. Direction N Secondary Rd JACKSON RANCH NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020027 Collision Date 20211010 Time 1310 Day SUN
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20211020
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected
1F DRVR 27 M W HNBD OTHER N C 0200 RS 2011 - 3 N - - W DRVR MINOR 27 M 1 1 P W

Primary Rd SANTIAGO CANYON Distance (ft) 4000 Direction N Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020923 Collision Date 20210613 Time 1331 Day SUN
Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20210624
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected
1F DRVR 35 M O HNBD PROC ST S C 0200 SUZI 2008 - 3 N - - W DRVR SERIOUS 35 M 1 1 P W
2 DRVR 27 M O HNBD PROC ST N A 0100 AUDI 2016 - 3 N - L G

Primary Rd SANTIAGO CANYON Distance (ft) 5280 Direction W Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy
City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021690 Collision Date 20210727 Time 1830 Day TUE
Primary Collision Factor HAZ PARKING Violation 22515B Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210802
Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0
Hit and Run Motor Vehicle Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int

Party Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected
1F DRVR 66 F W HNBD PARKED E A 0700 JEEP 2021 - 3 O - M G

Does not include State Highway cases

Report Run On: 08/11/2022

Primary Rd SANTIAGO CANYON Distance (ft) 230. Direction S Secondary Rd HICKS HAUL RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy															City UNINCORP/B County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 022023 Collision Date 20210108 Time 0010 Day FRI		Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20210108		Weather1 CLEAR Weather2 Rdry Surface DRY Rdry Cond1 NO UNUSL CND Rdry Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int			
Party Info										Victim Info																
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	19	M	W	HNBD		UNS TURN	N	A	0700	MERB	2000	-	3	N	-	L	G	PASS	POSSIBL	19	F	3	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 2112 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy															City UNINCORPAD County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020544 Collision Date 20210107 Time 0800 Day THU		Primary Collision Factor NOT DRIVER Violation Collision Type OTHER Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20210107		Weather1 CLEAR Weather2 Rdry Surface DRY Rdry Cond1 NO UNUSL CND Rdry Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With ANIMAL Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int			
Party Info										Victim Info																
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1	DRVR	31	F	W	HNBD		PROC ST	S	D	2200	TOYT	2020	-	3	N	-	M	G								
Primary Rd SANTIAGO CANYON Distance (ft) 3168 Direction N Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy															City UNINCORPAD County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020550 Collision Date 20210708 Time 1355 Day THU		Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20211101		Weather1 CLEAR Weather2 Rdry Surface DRY Rdry Cond1 NO UNUSL CND Rdry Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int			
Party Info										Victim Info																
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1	DRVR	52	M	W	HNBD		PROC ST	S	A	0100	TOYT	2005	-	3	N	-	M	G								
2	DRVR	47	F	H	HNBD		PROC ST	N	A	0100	NISS	2015	-	3	N	-	M	G								
Primary Rd SANTIAGO CANYON Distance (ft) 1056 Direction S Secondary Rd HICKS HAUL RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy															City UNINCORPAD County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019942 Collision Date 20210221 Time 2230 Day SUN		Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210302		Weather1 CLEAR Weather2 Rdry Surface DRY Rdry Cond1 NO UNUSL CND Rdry Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int			
Party Info										Victim Info																
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	23	M	W	HNBD	FATG	UNS TURN	N	D	2200	CHEVR	1996	-	3	N	-	M	G								
Primary Rd SANTIAGO CANYON Distance (ft) 1214 Direction N Secondary Rd LIMESTONE SPUR NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy															City UNINCORPAD County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020131 Collision Date 20210803 Time 0848 Day TUE		Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20210917		Weather1 CLEAR Weather2 Rdry Surface DRY Rdry Cond1 NO UNUSL CND Rdry Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int			
Party Info										Victim Info																
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1	DRVR	32	F	B	HNBD		LFT TURN	N	A	0100	HYUN	2013	-	3	N	-	M	G	DRVR	MINOR	32	F	1	0	M	G
2F	DRVR	63	M	W	HNBD		PROC ST	N	E	2235	FORD	1999	-	3	N	-	M	G								

Does not include State Highway cases

Report Run On: 08/11/2022

Primary Rd		SANTIAGO CANYON										Distance (ft)	750.		Direction	E		Secondary Rd		LIVE OAK CANYON										NCIC	9690		State Hwy?	N		Route	Postmile Prefix		Postmile		Side of Hwy			
City		UNINCORP										Population	9		Rpt Dist	030		Type	2		CalTrans		Badge		016128		Collision Date	20210321		Time	1233		Day	SUN										
Primary Collision Factor		UNSAFE SPEED										Violation	22350		Collision Type	HIT OBJECT		Severity	INJURY		#Killed	0		#Injured	1		Tow Away?	Y		Process Date	20210324													
Weather1		CLEAR										Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0		Hit and Run		Motor Vehicle Involved With		FIXED OBJ		Lighting	DAYLIGHT		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int	
Party		Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected																		
1F	DRVR	64	M	W	HNBD			PROC ST	W	C	0200	HARL	2009	-	3	N	-	-	W	DRVR	SERIOUS	64	M	1	2	P	W																	
Primary Rd		SANTIAGO CANYON										Distance (ft)	1400		Direction	N		Secondary Rd		LIVE OAK CANYON										NCIC	9690		State Hwy?	N		Route	Postmile Prefix		Postmile		Side of Hwy			
City		UNINCORP										Population	9		Rpt Dist	037		Type	2		CalTrans		Badge		020086		Collision Date	20211019		Time	2015		Day	TUE										
Primary Collision Factor		IMPROP TURN										Violation	22107		Collision Type	HEAD-ON		Severity	PDO		#Killed	0		#Injured	0		Tow Away?	Y		Process Date	20211026													
Weather1		CLEAR										Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0		Hit and Run		Motor Vehicle Involved With		OTHER MV		Lighting	DARK - NO		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int	
Party		Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected																		
1F	DRVR	54	M	W	HNBD	FATG		UNS TURN	N	D	2200	FORD	2011	-	3	N	-	M	G																									
2	DRVR	38	M	W	HNBD			PROC ST	S	A	0100	HOND	2013	-	3	N	-	L	G																									
Primary Rd		SANTIAGO CANYON										Distance (ft)	1350		Direction	S		Secondary Rd		MODJESKA										NCIC	9675		State Hwy?	N		Route	Postmile Prefix		Postmile		Side of Hwy			
City		UNINCORP										Population	9		Rpt Dist	034		Type	2		CalTrans		Badge		021225		Collision Date	20211211		Time	0150		Day	SAT										
Primary Collision Factor		DRVR ALC DRG										Violation	23152A		Collision Type	HIT OBJECT		Severity	INJURY		#Killed	0		#Injured	1		Tow Away?	Y		Process Date	20211220													
Weather1		CLEAR										Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0		Hit and Run		Motor Vehicle Involved With		FIXED OBJ		Lighting	DARK - NO		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int	
Party		Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected																		
1F	DRVR	21	F	W	HBD-UI			UNS TURN	N	A	0100	KIA	2010	-	3	A	22107	-	L	G	DRVR	POSSIBL	21	F	1	0	L	G																
Primary Rd		SANTIAGO CANYON										Distance (ft)	750.		Direction	S		Secondary Rd		MODJESKA CYN										NCIC	9675		State Hwy?	N		Route	Postmile Prefix		Postmile		Side of Hwy			
City		UNINCORP										Population	9		Rpt Dist	034		Type	2		CalTrans		Badge		020131		Collision Date	20210414		Time	0605		Day	WED										
Primary Collision Factor		IMPROP TURN										Violation	22107		Collision Type	HIT OBJECT		Severity	PDO		#Killed	0		#Injured	0		Tow Away?	N		Process Date	20210416													
Weather1		CLOUDY										Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0		Hit and Run		Motor Vehicle Involved With		FIXED OBJ		Lighting	DUSK/DAWN		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int	
Party		Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected																		
1F	DRVR	36	M	H	HNBD	FATG		UNS TURN	S	D	2200	GMC	2006	-	3	N	-	M	G																									
Primary Rd		SANTIAGO CANYON										Distance (ft)	1650		Direction	S		Secondary Rd		MODJESKA CYN										NCIC	9675		State Hwy?	N		Route	Postmile Prefix		Postmile		Side of Hwy			
City		UNINCORP										Population	9		Rpt Dist	034		Type	2		CalTrans		Badge		022023		Collision Date	20210717		Time	0248		Day	SAT										
Primary Collision Factor		UNSAFE SPEED										Violation	22350		Collision Type	HIT OBJECT		Severity	INJURY		#Killed	0		#Injured	2		Tow Away?	Y		Process Date	20210729													
Weather1		CLEAR										Weather2			Rdwy Surface	DRY		Rdwy Cond1	NO UNUSL CND		Rdwy Cond2			Spec Cond	0		Hit and Run		Motor Vehicle Involved With		OTHER OBJ		Lighting	DARK - ST		Ped Action			Cntrl Dev	NT PRS/FCTR		Loc Type	Ramp/Int	
Party		Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected																		
1F	DRVR	19	M	H	HNBD			UNS TURN	N	A	0100	INFI	2009	-	3	N	-	L	G	DRVR	SERIOUS	19	M	1	0	L	G																	
																			PASS	POSSIBL	20	F	3	0	L	G																		

Does not include State Highway cases

Report Run On: 08/11/2022

Primary Rd SANTIAGO CANYON Distance (ft) 500. Direction N Secondary Rd MODJESKA CYN NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021397 Collision Date 20211226 Time 1010 Day SUN Primary Collision Factor IMPROP TURN Violation 22107 Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20220104 Weather1 CLEAR Weather2 Rdwy Surface WET Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																										
Party Info															Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	70	M	W	HNBD		UNS TURN	N	C	0200	BMW	2017	-	3	N	-	-	W	DRVR	MINOR	70	M	1	1	P	W
Primary Rd SANTIAGO CANYON Distance (ft) 1075 Direction N Secondary Rd RANCHO WAY NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021982 Collision Date 20210803 Time 2300 Day TUE Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210813 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																										
Party Info															Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	20	M	W	HNBD		PROC ST	S	A	0100	DODG	2016	-	3	N	-	L	G	DRVR	MINOR	70	M	1	1	P	W
Primary Rd SANTIAGO CANYON Distance (ft) 463. Direction N Secondary Rd RIDGELINE ROAD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP County Orange Population 9 Rpt Dist Beat 030 Type 2 CalTrans Badge 014552 Collision Date 20210115 Time 0520 Day FRI Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20210118 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 CONS ZONE Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																										
Party Info															Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	20	M	H	HNBD		UNS TURN	S	D	2200	TOYT	2020	-	3	N	-	L	G	DRVR	MINOR	20	M	1	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 0.00 Direction Secondary Rd RIDGELINE ROAD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP County Orange Population 9 Rpt Dist Beat 030 Type 2 CalTrans Badge 020086 Collision Date 20211217 Time 1740 Day FRI Primary Collision Factor R-O-W AUTO Violation 21804A Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 3 Tow Away? Y Process Date 20211228 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DARK - ST Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																										
Party Info															Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	63	M	W	HNBD		LFT TURN	E	A	0100	HOND	1993	-	3	N	-	L	G	DRVR	SERIOUS	64	M	1	0	L	G
2	DRVR	20	F	W	HNBD		PROC ST	S	A	0700	JEEP	2001	-	3	N	-	L	G	DRVR	MINOR	20	F	1	0	L	G
																			PASS	MINOR	18	F	3	0	M	G
Primary Rd SANTIAGO CANYON Distance (ft) 600. Direction S Secondary Rd SCHOOL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 022222 Collision Date 20210611 Time 2200 Day FRI Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210617 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																										
Party Info															Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected	
1F	DRVR	18	M	A	HNBD		UNS TURN	N	A	0100	HOND	2004	-	3	N	-	L	G	DRVR	MINOR	18	M	1	0	L	G

Does not include State Highway cases

Report Run On: 08/11/2022

Primary Rd SANTIAGO CANYON Distance (ft) 0.00 Direction Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														
City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019938 Collision Date 20210609 Time 1341 Day WED														
Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20210616														
Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0														
Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int														
Party Info														
Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected														
1F DRVR 60 M W HNBD STOPPED W D 2200 FORD 2017 - 3 N - M G														
2 DRVR 52 F A HNBD PROC ST N A 0700 TOYT 2018 - 3 N - M G PASS POSSIBL 69 F 3 0 M G														
Victim Info														
Primary Rd SANTIAGO CANYON Distance (ft) 0.00 Direction Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														
City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020131 Collision Date 20210724 Time 0940 Day SAT														
Primary Collision Factor R-O-W AUTO Violation 21802A Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20210803														
Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0														
Hit and Run Motor Vehicle Involved With BICYCLE Lighting DAYLIGHT Ped Action Cntrl Dev FNCTNG Loc Type Ramp/Int														
Party Info														
Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected														
1F DRVR 22 M W HNBD STOPPED W A 0100 FORD 2016 - 3 N - M G														
2 BICY 38 M O HNBD PROC ST N L 0400 CANYO - 3 N - - W BICY MINOR 38 M 0 0 P W														
Victim Info														
Primary Rd SANTIAGO CANYON Distance (ft) 1000 Direction S Secondary Rd SR-241 NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														
City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 018733 Collision Date 20210420 Time 2007 Day TUE														
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type SIDESWIPE Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20210511														
Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0														
Hit and Run MSDMNR Motor Vehicle Involved With OTHER MV Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info														
Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected														
1 DRVR 55 M W HNBD PROC ST N A 0700 AUDI 2018 - 3 N - M G														
2F DRVR 998 - IMP UNK IMP UNK UNS TURN N - 9900 - - 3 N - B B														
Victim Info														
Primary Rd SANTIAGO CANYON Distance (ft) 3960 Direction N Secondary Rd HAUL RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														
City UNINCORP County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021225 Collision Date 20210914 Time 0225 Day TUE														
Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20210917														
Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0														
Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info														
Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected														
1F DRVR 19 M H HNBD OTHER S A 0100 VOLK 2003 - 3 N - L G														
Victim Info														
Primary Rd SANTIAGO CYN RD. Distance (ft) 570. Direction S Secondary Rd SR-241 NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														
City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020699 Collision Date 20210624 Time 1522 Day THU														
Primary Collision Factor DRVR ALC DRG Violation 23152A Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20210706														
Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0														
Hit and Run Motor Vehicle Involved With OTHER OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int														
Party Info														
Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected														
1F DRVR 30 F O HBD-UI UNS TURN N A 0100 VOLK 2017 - 3 A 22107 - M G														



REPORT 8 - TOTAL COLLISIONS

01/01/2022 thru 12/31/2022

Total Count: 561

Jurisdiction(s): ALL

Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd		SANTIAGO		Distance (ft)	2000	Direction	N	Secondary Rd		BLUE DIAMOND		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy						
City		UNINCORPORATED		County	Orange	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans	Badge	018102	Collision Date	20220916	Time	1604	Day	FRI				
Primary Collision Factor		IMPROP TURN		Violation	22107	Collision Type	OVERTURNED	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20220923								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run		Motor Vehicle Involved With		NON-CLSN		Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	18	M	W	HNBD		PROC ST	S	C	0200	BMW	2004	- 3	N	-	P	W	DRVR	MINOR	18	M	1	1	P	W

Primary Rd		SANTIAGO		Distance (ft)	3000	Direction	N	Secondary Rd		SCHOOL ROAD		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy						
City		UNINCORPORATED		County	Orange	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans	Badge	018102	Collision Date	20220923	Time	1955	Day	FRI				
Primary Collision Factor		NOT DRIVER		Violation		Collision Type	HIT OBJECT	Severity	INJURY	#Killed	0	#Injured	2	Tow Away?	N	Process Date	20221005								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run		Motor Vehicle Involved With		ANIMAL		Lighting	DARK - NO	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	25	M	W	HNBD		PROC ST	S	C	0200	HD	2011	- 3	N	-	P	W	DRVR	SERIOUS	25	M	1	1	P	W
2	DRVR	27	M	W	HNBD		PROC ST	S	C	0200	HD	2008	- 3	N	-	P	W	DRVR	SERIOUS	27	M	1	1	P	W

Primary Rd		SANTIAGO CANYON		Distance (ft)	1000	Direction	N	Secondary Rd		HAUL RD		NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy						
City		UNINCORP.		County	Orange	Population	9	Rpt Dist	Beat	034	Type	2	CalTrans	Badge	020027	Collision Date	20220116	Time	1300	Day	SUN				
Primary Collision Factor		WRONG SIDE		Violation	21651A	Collision Type	SIDESWIPE	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	N	Process Date	20220128								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run		Motor Vehicle Involved With		OTHER MV		Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type	Ramp/Int												
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	53	M	H	HNBD		WRONG WY	N	C	0200	HD	2006	- 3	N	-	P	W	DRVR	POSSIBL	53	M	1	0	P	W
2	DRVR	62	M	A	HNBD		PROC ST	S	D	2200	FORD	2002	- 3	N	-	M	G								

Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd SANTIAGO CANYON Distance (ft) 1695 Direction N Secondary Rd HAUL RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021690 Collision Date 20220220 Time 1640 Day SUN Primary Collision Factor DRVR ALC DRG Violation 23152A Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 2 Tow Away? Y Process Date 20220304 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int													
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 31 M H HBD-UI UNS TURN N A 0700 JEEP 2013 - 3 A 22107 L L G DRVR SERIOUS 31 M 1 0 L G PASS POSSIBL 43 M 3 0 L G													
Primary Rd SANTIAGO CANYON Distance (ft) 2700 Direction N Secondary Rd IRVINE LAKE NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020027 Collision Date 20220723 Time 0825 Day SAT Primary Collision Factor UNKNOWN Violation Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20220801 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int													
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1 BICY 64 M W HNBD PROC ST S L 0400 SPECI - 3 N - - W BICY SERIOUS 64 M 0 1 P W													
Primary Rd SANTIAGO CANYON Distance (ft) 1600 Direction S Secondary Rd SANTIAGO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020027 Collision Date 20220521 Time 0610 Day SAT Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20220531 Weather1 CLOUDY Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int													
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 21 M W HNBD FATG PROC ST S A 0700 TOYT 2006 - 3 N - L G DRVR MINOR 21 M 1 0 L G													
Primary Rd SANTIAGO CANYON Distance (ft) 0.00 Direction Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020544 Collision Date 20220207 Time 1246 Day MON Primary Collision Factor R-O-W AUTO Violation 21801A Collision Type HEAD-ON Severity INJURY #Killed 0 #Injured 3 Tow Away? Y Process Date 20220216 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int													
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 16 M W HNBD LFT TURN S A 0100 HOND 2010 - 3 N - L G DRVR POSSIBL 16 M 1 0 L G 2 DRVR 52 M W HNBD PROC ST N A 0100 KIA 2020 - 3 N - L G DRVR POSSIBL 52 M 1 0 L G 3 DRVR 56 M W HNBD STOPPED W D 2200 NISS 1998 - 3 N - M G DRVR POSSIBL 56 M 1 0 M G													
Primary Rd SANTIAGO CANYON Distance (ft) 341. Direction S Secondary Rd HAUL RD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORP. County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019652 Collision Date 20221106 Time 1210 Day SUN Primary Collision Factor IMPROP TURN Violation 22107 Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20221118 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int													
Party Info Victim Info Party Type Age Sex Race Sobriety1 Sobriety2 Move Pre Dir SW Veh CHP Veh Make Year SP Info OAF1 Viol OAF2 Safety Equip ROLE Ext Of Inj AGE Sex Seat Pos Safety EQUIP Ejected 1F DRVR 34 F W HNBD U-TURN S A 0700 FORD 2013 - 3 N - L G DRVR SERIOUS 29 M 1 1 P W 2 DRVR 29 M W HNBD PROC ST S C 0200 HD 2020 - 3 N - P W													

Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd SANTIAGO CANYON Distance (ft) 3696 Direction N Secondary Rd HAUL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021834 Collision Date 20220626 Time 1530 Day SUN Primary Collision Factor IMPROP PASS Violation 21755 Collision Type SIDESWIPE Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20220706 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run FELONY Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																											
Party Info															Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	998	-		IMP UNK	IMP UNK	UNS TURN	W	-	9900	-	-	4	N	-	B	B										
2	DRVR	25	M	W	IMP UNK	IMP UNK	PROC ST	W	C	0200	HD	2021	-	3	N	-	P	W	DRVR	POSSIBL	25	M	1	0	P	W	
Primary Rd SANTIAGO CANYON Distance (ft) 1320 Direction N Secondary Rd HAUL ROAD NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020627 Collision Date 20220815 Time 2500 Day MON Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity PDO #Killed 0 #Injured 0 Tow Away? N Process Date 20220819 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																											
Party Info															Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	998	-		IMP UNK	IMP UNK	UNS TURN	S	D	2200	TOYT	2021	-	4	N	-	M	B									
Primary Rd SANTIAGO CANYON Distance (ft) 683 Direction N Secondary Rd HICKS HAUL NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021388 Collision Date 20220107 Time 2030 Day FRI Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type HIT OBJECT Severity FATAL #Killed 1 #Injured 0 Tow Away? Y Process Date 20221107 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																											
Party Info															Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	17	M	W	HNBD		UNS TURN	N	A	0100	HOND	2018	-	4	A	22107	-	L	G	DRVR	KILLED	18	M	1	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 2000 Direction S Secondary Rd IRVINE LAKE NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020131 Collision Date 20220626 Time 1255 Day SUN Primary Collision Factor IMPROP TURN Violation 22105 Collision Type BROADSIDE Severity INJURY #Killed 0 #Injured 2 Tow Away? N Process Date 20220706 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																											
Party Info															Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	42	M	W	HNBD		U-TURN	N	C	0200	HD	2009	-	3	N	-	P	W	DRVR	MINOR	42	M	1	1	P	W	
2	DRVR	60	M	H	HNBD		PROC ST	N	C	0200	YAMA	1993	-	3	N	-	P	W	DRVR	MINOR	61	M	1	1	P	W	
Primary Rd SANTIAGO CANYON Distance (ft) 7920 Direction S Secondary Rd LOMA RIDGE RD. NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy City UNINCORPORATED County Orange Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019979 Collision Date 20220416 Time 1100 Day SAT Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type REAR END Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20220426 Weather1 CLEAR Weather2 Rdwy Surface DRY Rdwy Cond1 NO UNUSL CND Rdwy Cond2 Spec Cond 0 Hit and Run Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int																											
Party Info															Victim Info												
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected		
1F	DRVR	26	F	H	HNBD		PROC ST	N	A	0800	CHEV	2005	-	3	N	-	M	G									
2	DRVR	83	M	W	HNBD		STOPPED	N	A	0100	KIA	2009	-	3	N	-	M	G	DRVR	POSSIBL	83	M	1	0	M	G	

Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd SANTIAGO CANYON Distance (ft) 3000 Direction S Secondary Rd LOMA RIDGE NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														City UNINCORP		County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 019979 Collision Date 20221008 Time 0600 Day SAT		Primary Collision Factor IMPROP TURN Violation 22107 Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20221018		Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DUSK/DAWN Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int	
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	34	M	H	HNBD	FATG	UNS TURN	S	A	0700	MERZ	2010	- 3	N	-	L	G	DRVR	POSSIBL	34	M	1	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 1584 Direction S Secondary Rd MODJESKA CYN NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														City UNINCORP		County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 020544 Collision Date 20220522 Time 0842 Day SUN		Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? N Process Date 20220530		Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With NON-CLSN Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int	
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	BICY	28	M	A	HNBD		PROC ST	N	L	0400	SPECI	2012	- 3	N	-	-	P	BICY	MINOR	28	M	0	1	P	P
Primary Rd SANTIAGO CANYON Distance (ft) 350. Direction S Secondary Rd RIDGELINE ROAD NCIC 9690 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														City UNINCORP		County Orange		Population 9 Rpt Dist Beat 030 Type 2 CalTrans Badge 021894 Collision Date 20220130 Time 0120 Day SUN		Primary Collision Factor UNSAFE SPEED Violation 22350 Collision Type OVERTURNED Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20220203		Weather1 CLEAR Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int	
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	24	M	A	HNBD		RAN OFF RD	S	C	0200	KAWK	2020	- 3	N	-	P	W	DRVR	MINOR	24	M	1	1	P	W
Primary Rd SANTIAGO CANYON Distance (ft) 5755 Direction S Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														City UNINCORP		County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021305 Collision Date 20221212 Time 0555 Day MON		Primary Collision Factor NOT DRIVER Violation Collision Type HIT OBJECT Severity INJURY #Killed 0 #Injured 1 Tow Away? Y Process Date 20221222		Weather1 CLOUDY Weather2 RAINING Rdw Surface WET Rdw Cond1 OBSTR ON RD Rdw Cond2 Spec Cond 0		Hit and Run Motor Vehicle Involved With FIXED OBJ Lighting DARK - NO Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int	
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	57	F	H	HNBD		PROC ST	S	A	0100	HOND	2022	- 3	N	-	L	G	DRVR	POSSIBL	57	F	1	0	L	G
Primary Rd SANTIAGO CANYON Distance (ft) 5000 Direction N Secondary Rd SILVERADO NCIC 9675 State Hwy? N Route Postmile Prefix Postmile Side of Hwy														City UNINCORP		County Orange		Population 9 Rpt Dist Beat 034 Type 2 CalTrans Badge 021691 Collision Date 20220305 Time 1635 Day SAT		Primary Collision Factor IMPROP PASS Violation 21750A Collision Type SIDESWIPE Severity PDO #Killed 0 #Injured 0 Tow Away? Y Process Date 20220324		Weather1 CLOUDY Weather2 Rdw Surface DRY Rdw Cond1 NO UNUSL CND Rdw Cond2 Spec Cond 0		Hit and Run MSDMNR Motor Vehicle Involved With OTHER MV Lighting DAYLIGHT Ped Action Cntrl Dev NT PRS/FCTR Loc Type Ramp/Int	
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	998	-		IMP UNK	IMP UNK	PASSING	S	C	0200	KAWK	2006	- 4	N	-	P	P								
2	DRVR	64	M	O	HNBD		PASSING	S	A	0700	TESL	2021	- 3	N	-	M	G								

Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd		SANTIAGO CANYON		Distance (ft)	600.	Direction	S	Secondary Rd	SILVERADO	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	022993	Collision Date	20220907	Time	0815 Day WED							
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	OVERTURNED	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	N	Process Date	20220916								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	NON-CLSN	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info																	Victim Info								
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	24	M	W	HNBD		PROC ST	S	C	0200	HOND	2007	- 3	N		-	P W	DRVR	MINOR	24	M	1	1	P	W
Primary Rd		SANTIAGO CANYON		Distance (ft)	5280	Direction	N	Secondary Rd	WILLIAMS	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	019018	Collision Date	20221003	Time	1910 Day MON							
Primary Collision Factor		IMPROP TURN		Violation	22107	Collision Type	HIT OBJECT	Severity	PDO	#Killed	0	#Injured	0	Tow Away?	N	Process Date	20221013								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	FIXED OBJ	Lighting	DARK - NO	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info																	Victim Info								
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	82	M	A	HNBD		UNS TURN	N	A	0700	CHEV	2006	- 3	N		-	M G	DRVR	MINOR	24	M	1	1	P	W
Primary Rd		SANTIAGO CANYON		Distance (ft)	2405	Direction	N	Secondary Rd	RED ROCK	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	019779	Collision Date	20220920	Time	1825 Day TUE							
Primary Collision Factor		(SOUTHBOUND) LANE CHANGE		Violation	21658A	Collision Type	HIT OBJECT	Severity	FATAL	#Killed	1	#Injured	0	Tow Away?	N	Process Date	20221013								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	FIXED OBJ	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info																	Victim Info								
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	37	F	W	IMP UNK	IMP UNK	RAN OFF RD	S	C	0200	HOND	2006	- 3	N		-	P W	DRVR	KILLED	37	F	1	1	P	W
Primary Rd		SANTIAGO CANYON		Distance (ft)	2000	Direction	N	Secondary Rd	LOMA RIDGE RD	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP N/B		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	022052	Collision Date	20220513	Time	2224 Day FRI							
Primary Collision Factor		IMPROP TURN		Violation	22107	Collision Type	OVERTURNED	Severity	INJURY	#Killed	0	#Injured	2	Tow Away?	Y	Process Date	20220523								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run				Motor Vehicle Involved With	NON-CLSN	Lighting	DARK - ST	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info																	Victim Info								
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	17	M	H	HNBD		UNS TURN	N	A	0100	NISS	2018	- 3	N		-	L G	PASS	MINOR	16	F	6	0	P	G
																		PASS	POSSIBL	18	F	3	0	L	G
Primary Rd		SANTIAGO CANYON		Distance (ft)	140.	Direction	N	Secondary Rd	LOMA RIDGE	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy								
City		UNINCORP N/B		County	Orange	Population	9	Rpt Dist	Beat 034	Type	2	CalTrans	Badge	021274	Collision Date	20220626	Time	1705 Day SUN							
Primary Collision Factor		IMPROP TURN		Violation	22107	Collision Type	AUTO/PED	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	N	Process Date	20220817								
Weather1		CLEAR		Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0												
Hit and Run		FELONY		Motor Vehicle Involved With	PED	Lighting	DAYLIGHT	Ped Action	IN RD,	Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int											
Party Info																	Victim Info								
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	28	M	W	HBD-UNK		UNS TURN	N	C	0200	HD	2014	- 3	N		-	P W								
2	PED	27	M	H				N	N	6000	-	-	- 3	N		-	- -	PED	MINOR	27	M	0	0	P	P
3	PRKD	998	-				PARKED	N	C	0200	HD	2021	- 3	N		-	- -								

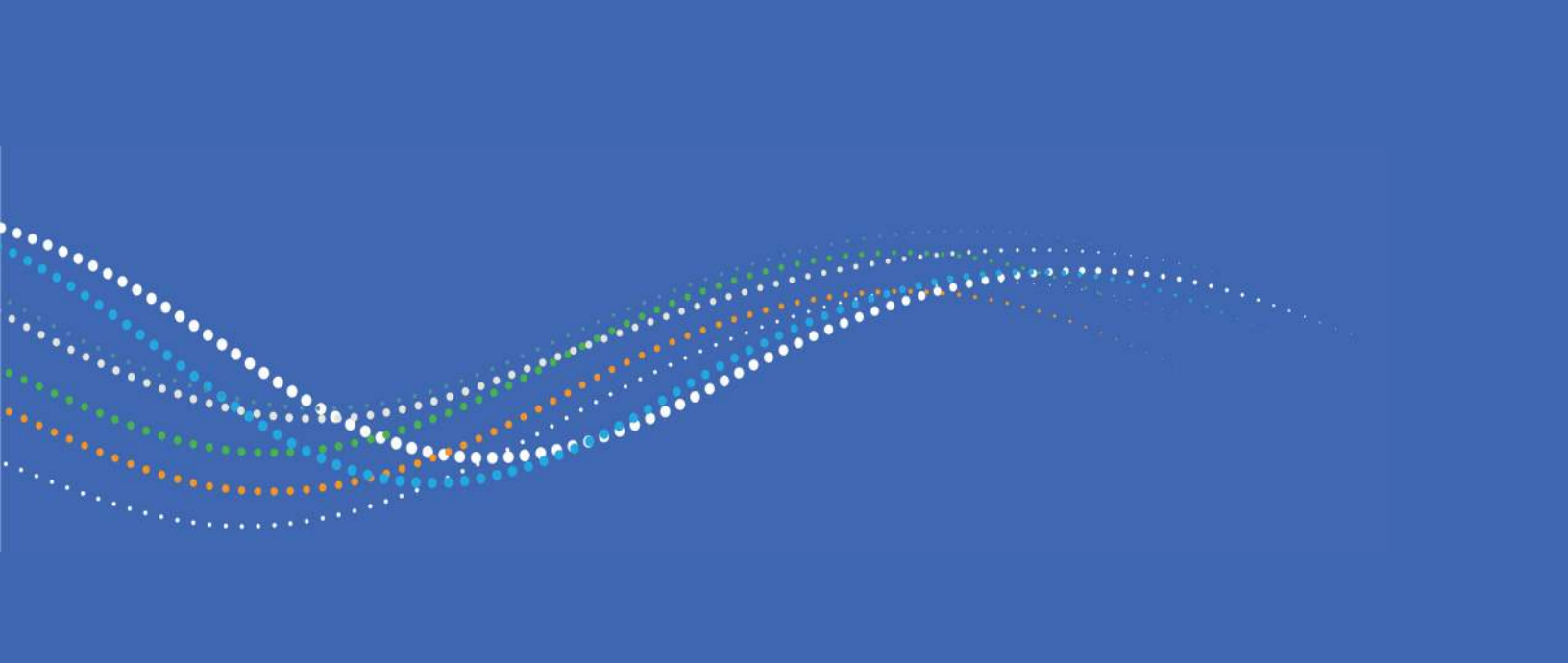
Does not include State Highway cases

Report Run On: 08/23/2023

Primary Rd		SANTIAGO CANYON		Distance (ft)	1950	Direction	N	Secondary Rd		SR-241	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy							
City	UNINCORP	County	Orange	Population	9	Rpt Dist		Beat	002	Type	3	CalTrans	Badge	018714	Collision Date	20220514	Time	1043	Day	SAT					
Primary Collision Factor		NORTHBOUND/UNKNOWN		Violation		Collision Type	REAR END	Severity	INJURY	#Killed	0	#Injured	2	Tow Away?	N	Process Date	20220520								
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0														
Hit and Run		Motor Vehicle Involved With	BICYCLE	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int													
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	BICY	68	M	W	HNBD		PROC ST	N	L	0400	SPECI	2019	- 3	N	-	-	V	BICY	MINOR	68	M	0	0	P	V
2	BICY	51	M	W	HNBD		SLOWING	N	L	0400	CANYO	2019	- 3	N	-	-	V	BICY	MINOR	51	M	0	0	P	V

Primary Rd		SANTIAGO CANYON		Distance (ft)	150.	Direction	S	Secondary Rd		WILLIAMS	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy							
City	UNINCORP	County	Orange	Population	9	Rpt Dist		Beat	010	Type	2	CalTrans	Badge	021694	Collision Date	20220904	Time	1455	Day	SUN					
Primary Collision Factor		UNSAFE SPEED		Violation	22350	Collision Type	REAR END	Severity	PDO	#Killed	0	#Injured	0	Tow Away?	N	Process Date	20220919								
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	NO UNUSL CND	Rdwy Cond2		Spec Cond	0														
Hit and Run	MSDMNR	Motor Vehicle Involved With	OTHER MV	Lighting	DAYLIGHT	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int													
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1	DRVR	64	M	W	IMP UNK	IMP UNK	SLOWING	S	A	0700	FORD	2001	- 3	N	-	M	G								
2F	DRVR	50	M	W	HNBD		PASSING	S	A	0100	HYUN	2013	- 3	N	-	M	G								

Primary Rd		SANTIAGON		Distance (ft)	1500	Direction	S	Secondary Rd		HUAL ROAD	NCIC	9675	State Hwy?	N	Route	Postmile Prefix	Postmile	Side of Hwy							
City	UNINCORP	County	Orange	Population	9	Rpt Dist		Beat	034	Type	2	CalTrans	Badge	019018	Collision Date	20220628	Time	1910	Day	TUE					
Primary Collision Factor		IMPROP PASS		Violation	21750A	Collision Type	OVERTURNED	Severity	INJURY	#Killed	0	#Injured	1	Tow Away?	Y	Process Date	20220816								
Weather1	CLEAR	Weather2		Rdwy Surface	DRY	Rdwy Cond1	HOLES	Rdwy Cond2		Spec Cond	0														
Hit and Run		Motor Vehicle Involved With	NON-CLSN	Lighting	DUSK/DAWN	Ped Action		Cntrl Dev	NT PRS/FCTR	Loc Type		Ramp/Int													
Party Info														Victim Info											
Party	Type	Age	Sex	Race	Sobriety1	Sobriety2	Move Pre	Dir	SW Veh	CHP Veh	Make	Year	SP Info	OAF1	Viol	OAF2	Safety Equip	ROLE	Ext Of Inj	AGE	Sex	Seat Pos	Safety	EQUIP	Ejected
1F	DRVR	60	M	W	HNBD		PASSING	S	C	0200	HD	2015	- 3	N	-	P	W	DRVR	SERIOUS	60	M	1	1	P	W



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1700 Carnegie Avenue, Suite 100
Santa Ana, CA 92705

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