TRAFFIC IMPACT ANALYSIS

NORTHWEST OPEN SPACE LEGACY RANCH PROJECT

SAN JUAN CAPISTRANO, CALIFORNIA

June 2026

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Submitted to:

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EXECUTIVE SUMMARY

The purpose of this Traffic Impact Analysis (TIA) is to determine the potential traffic impacts resulting from the proposed Legacy Ranch Project (proposed project). The proposed project site is at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in the city of San Juan Capistrano (City), California (Assessor's Parcel Numbers [APNs] 121-050-03, 121-050-04, 121-050-14, 121-050-17, 121-050-18, -19, -20, and 121-050-29). This TIA analyzes levels of service (LOS) to address the effects of the project on the local circulation system. This TIA also evaluates vehicle miles traveled (VMT) to address potential transportation impacts per the California Environmental Quality Act (CEQA).

LSA has prepared this analysis with the objectives and methodologies set forth in the City's *Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study* (TA Guidelines) (June 21, 2023); the City's General Plan Circulation Element (May 16, 2023) and Growth Management Element (December 14, 1999); the Orange County Transportation Authority's (OCTA) Orange County Congestion Management Program (CMP) (November 2025); and applicable provisions of CEQA.

The project site, approximately 65.5 acres, is bounded by single-family residential uses to the north, Camino Capistrano to the east, multi-family residential (The Groves Apartments, a senior living apartment community) to the south, and an OCTA-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route. The project site is currently developed with the historic Roger Y. Williams/Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village.

The proposed project would develop the project site with the Legacy Ranch, which would consist of seven (7) cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails and Natural Core. The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. The proposed project would also include a new 2,500-square-foot (sf) food service area within the dog park and parking spaces associated with the dog park and the Putuidem Village. It should be noted that the proposed project includes an Amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. Access to the proposed project would be provided by two ingress/egress driveways from Camino Capistrano, including the existing access driveway (Driveway 1) south of the Swanner House and one proposed driveway (Driveway 2) that would provide access to the Community Building Core and entry road parking area. The proposed land use and vehicular access for each core are described below.

- **Equestrian Core:** The Equestrian Core would be located in the center of the project site and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of two main horse barns containing up to 149 horse stalls for full time boarding; a covered ancillary operational barn; an ancillary veterinary and operational barn; two riding pens; covered riding/roping arena; warm-up arena; an approximately 2,300 sf equestrian caretaker residence; equestrian trailer parking and loading area; a stage; and temporary or permanent stands

accommodating a maximum capacity of 1,200 spectators on a regular basis and occasionally up to a maximum capacity of 2,500 spectators. In addition, southwest of the main equestrian facility, the Equestrian Core would include an approximately 6,000 sf barn for use by equine therapy programs provided by Otra Mas Horse Rescue and Equine Assisted Therapy (Otra Mas).

- **Chapel Core:** The Chapel Core would be located northwest of the Equestrian Core and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of an approximately 3,000 sf chapel and associated parking area. The chapel would provide a wedding venue at the project site in addition to the Swanner House. The Chapel Core would also include an approximately 6,300 sf Ranch House for dining and special activities, an approximately 1,000 sf shared restroom building for both the chapel and Ranch House, and a shared event lawn.

- **Swanner House Core:** The Swanner House Core is centered around the existing historic Swanner House. Access to Swanner House Core would continue to be provided by the existing driveway (Driveway 1) from Camino Capistrano. The proposed project would preserve the historic Swanner House, including the associated event space, lawn, and parking.

- **Agricultural Core:** The Agricultural Core would be located at the northern end of the project site and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of an orchard, row crops, windrow (trees), an approximately 3,000 sf agricultural barn, and an approximately 6,000 sf catering facility. During events, the catering facility would operate from 6:00 a.m. to 11:00 p.m.

- **Event Barn Core:** The Event Barn Core would be located within the Equestrian Core, south of the arenas, and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. The Event Barn Core would consist of two event barns of approximately 3,600 sf each (a total of 7,200 sf). Each event barn would include patio space, event space, and associated parking. The Event Barn Core would facilitate events at the project site, including weddings.

- **Community Building Core:** The Community Building Core would be located east of Trabuco Creek and would be accessed by one proposed driveway (Driveway 2) from Camino Capistrano and a pedestrian bridge over Trabuco Creek that connects to the Trails and Natural Core. The Community Building Core would consist of an approximately 10,000 sf building and a parking area south of the proposed Community Building. In order to construct the proposed improvements within the Community Building Core, the existing approximately 1,600 sf barn would be demolished.

- **Trails and Natural Core:** The Trails and Natural Core would be located between Trabuco Creek and the Equestrian Core and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of a native garden area, a program area, several picnic areas, and an overlook deck. The Trails and Natural Core would include the development of a pedestrian bridge across Trabuco Creek, connecting to the Community Building Core. The Trails and Natural Core would also include new trails that would connect the various Legacy Ranch facilities across the project site, including the Swanner House, Dr. Joe Cortese Dog Park, and the Putuidem Village. The new trail network would also include connections to the existing trail system.

This study focuses on the a.m. peak-hour and p.m. peak-hour LOS at seven intersections and daily (24-hour) LOS at five roadway segments. The a.m. and p.m. peak hours are the single highest hours of traffic volume on the local circulation system between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m., respectively. Project impacts were determined based on an analysis of Existing, Existing Plus Project, and Existing Plus Project Plus Cumulative Projects (future near-term year, corresponding to project opening year 2032) conditions.

Based on the results of this TIA, the proposed project can be implemented without impacting the design or operation of the surrounding roadway system. An evaluation of intersection and roadway LOS shows that the addition of project traffic would not measurably affect the study area locations, according to the City's performance criteria.

LSA evaluated sight distance at each project driveway along Camino Capistrano to ensure drivers' visibility and safety. The project applicant would ensure that there are no sight obstructions (e.g., landscaping) within the sight distance triangles at each driveway to provide adequate sight distance for left- and right-turn maneuvers onto Camino Capistrano and to meet the minimum sight distance requirements specified in the California Department of Transportation's (Caltrans) *Highway Design Manual* (HDM).

The proposed project is a mix of miscellaneous service and recreational land uses. Based on the latest City's TA Guidelines, the total City VMT (1,602,833) for the proposed project, which would allow for a maximum of 499 visitors at any given time, is higher than the threshold (1,600,754) and would result in a net increase of 2,079 (0.13 percent). Therefore, the project would have a significant VMT impact. Several feasible VMT reduction measures, identified from the California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (October 2024) (CAPCOA Handbook), may reduce project VMT by 7.71 percent. Although employing CAPCOA Transportation Demand Management (TDM) traffic reduction measures may bring project VMT below the threshold, resulting in a less than significant impact, given the uncertainty of the effectiveness of the identified VMT reduction measures, the project will continue to have a significant transportation impact under CEQA. If implemented, these measures and strategies may need to be monitored for their usage and effectiveness.

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LIST OF ABBREVIATIONS AND ACRONYMS

ADT	average daily traffic
APN	Assessor's Parcel Number
CALGreen	California Green Building Standards
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CAPCOA Handbook	CAPCOA's *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*
CEQA	California Environmental Quality Act
City	City of San Juan Capistrano.
CMP	Congestion Management Program
CTR	commute trip reduction
GHG	greenhouse gas
HCM	TRB's *Highway Capacity Manual*
HDM	Caltrans' *Highway Design Manual*
I-5	Interstate 5
ICU	intersection capacity utilization
ITE	Institute of Transportation Engineers
LOS	level(s) of service
MPAH	Master Plan of Arterial Highways
mph	miles per hour
NOP	Notice of Preparation
NWOS	Northwest Open Space
OCTA	Orange County Transportation Authority

OCTAM	Orange County Transportation Analysis Model
Otra Mas	Otra Mas Horse Rescue and Equine Assisted Therapy
project	Legacy Ranch Project
SB	Senate Bill
sf	square foot/feet
SR-73	State Route 73
TA Guidelines	The City of San Juan Capistrano's Amended Administrative Policy No. 310, *Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study*
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
TIA	Traffic Impact Analysis
TRB	Transportation Research Board
TWLTL	two-way-left-turn lane
v/c	volume-to-capacity
VMT	vehicle miles traveled
vph	vehicles per hour

TRAFFIC IMPACT ANALYSIS
LEGACY RANCH PROJECT

LSA has prepared the following Traffic Impact Analysis (TIA) to identify the potential traffic impacts resulting from the proposed Legacy Ranch Project (proposed project). The proposed project site is at 30291 Camino Capistrano, within the Northwest Open Space (NWOS) Specific Plan Area in the city of San Juan Capistrano (City), California (Assessor's Parcel Numbers [APNs] 121-050-03, 121-050-04, 121-050-14, 121-050-17, 121-050-18, -19, -20, and 121-050-29). Figure 1 shows the location of the project site and the study area intersections for the proposed project. This TIA analyzes levels of service (LOS) to address the effects of the project on the local circulation system. This TIA also evaluates vehicle miles traveled (VMT) to address potential transportation impacts per the California Environmental Quality Act (CEQA).

LSA has prepared this analysis with the objectives and methodologies set forth in the City's *Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study* (TA Guidelines) (June 21, 2023); the City's General Plan Circulation Element (May 16, 2023) and Growth Management Element (December 14, 1999); the Orange County Transportation Authority's (OCTA) Orange County Congestion Management Program (CMP) (November 2025); and applicable provisions of CEQA.

INTRODUCTION

Project Description

The project site, approximately 65.5 acres, is bounded by single-family residential uses to the north, Camino Capistrano to the east, multi-family residential (The Groves Apartments, a senior living apartment community) to the south, and an OCTA-owned rail line to the west utilized by Metrolink commuter rail and Amtrak's Pacific Surfliner route. The project site is currently developed with the historic Roger Y. Williams/Swanner House (Swanner House), the Dr. Joe Cortese Dog Park, and the Putuidem Village, a partial reproduction of a local Native American village.

The proposed project would develop the project site with the Legacy Ranch, which would consist of seven (7) cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails and Natural Core. The proposed project also includes the preservation of the existing uses on the project site, including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. The proposed project would also include a new 2,500-square-foot (sf) food service area within the dog park and parking spaces associated with the dog park and the Putuidem Village. It should be noted that the proposed project includes an amendment to the NWOS Specific Plan to allow for development of the Legacy Ranch on the project site. Access to the proposed project would be provided by two ingress/egress driveways from Camino Capistrano, including the existing access driveway (Driveway 1) south of the Swanner House and one proposed driveway (Driveway 2) that would provide access to the Community Building Core and entry road parking area. Figure 2 shows the conceptual site plan for the proposed project.



LSA

Project Location

Study Intersections

Project Driveway (Existing)

Project Driveway (Proposed)

N

0 229 458

FEET

FIGURE 1

Legacy Ranch Project

Project Location and Study Area Intersections

SOURCE: TIGER Road Map (2021)

\\aznasunifiler2\projects\2025\20252445 San Juan Capistrano - Legacy Ranch\05_Deliverables\Traffic\GIS\Legacy Ranch Project\Legacy Ranch Project.aprx (Study Area Intersections)
5/7/2026 4:00 PM



LSA

FIGURE 2

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SOURCE: Almquist 2025
I:\2025\20252445\G\Site_Plan.ai (4/30/2026)

Legacy Ranch Project
Conceptual Site Plan

The proposed land use and vehicular access for each core are described below.

- **Equestrian Core:** As shown in Figure 2, the Equestrian Core would be located in the center of the project site and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of two main horse barns containing up to 149 horse stalls for full time boarding; a covered ancillary operational barn; an ancillary veterinary and operational barn; two riding pens; covered riding/roping arena; warm-up arena; an approximately 2,300 sf equestrian caretaker residence; equestrian trailer parking and loading area; a stage; and temporary or permanent stands accommodating a maximum capacity of 1,200 spectators on a regular basis and occasionally up to a maximum capacity of 2,500 spectators. In addition, southwest of the main equestrian facility, the Equestrian Core would include an approximately 6,000 sf barn for use by equine therapy programs provided by Otra Mas Horse Rescue and Equine Assisted Therapy (Otra Mas).

- **Chapel Core:** As shown in Figure 2, the Chapel Core would be located northwest of the Equestrian Core and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of an approximately 3,000 sf chapel and associated parking area. The chapel would provide a wedding venue at the project site in addition to the Swanner House. The Chapel Core would also include an approximately 6,300 sf Ranch House for dining and special activities, an approximately 1,000 sf shared restroom building for both the chapel and Ranch House, and a shared event lawn.

- **Swanner House Core:** As shown in Figure 2, the Swanner House Core is centered around the existing historic Swanner House. Access to Swanner House Core would continue to be provided by the existing driveway (Driveway 1) from Camino Capistrano. The proposed project would preserve the historic Swanner House, including the associated event space, lawn, and parking.

- **Agricultural Core:** As shown in Figure 2, the Agricultural Core would be located at the northern end of the project site and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of an orchard, row crops, windrow (trees), an approximately 3,000 sf agricultural barn, and an approximately 6,000 sf catering facility. During events, the catering facility would operate from 6:00 a.m. to 11:00 p.m.

- **Event Barn Core:** As shown in Figure 2, the Event Barn Core would be located within the Equestrian Core, south of the arenas, and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. The Event Barn Core would consist of two event barns of approximately 3,600 sf each (a total of 7,200 sf). Each event barn would include patio space, event space, and associated parking. The Event Barn Core would facilitate events at the project site, including weddings.

- **Community Building Core:** As shown in Figure 2, the Community Building Core would be located east of Trabuco Creek and would be accessed by one proposed driveway (Driveway 2) from Camino Capistrano and a pedestrian bridge over Trabuco Creek that connects to the Trails and Natural Core. The Community Building Core would consist of an approximately 10,000 sf building and a parking area south of the proposed Community Building. In order to construct the

proposed improvements within the Community Building Core, the existing approximately 1,600 sf barn would be demolished.

- **Trails and Natural Core:** The Trails and Natural Core would be located between Trabuco Creek and the Equestrian Core and would be accessed by the existing driveway (Driveway 1) from Camino Capistrano. It consists of a native garden area, a program area, several picnic areas, and an overlook deck. The Trails and Natural Core would include the development of a pedestrian bridge across Trabuco Creek, connecting to the Community Building Core. The Trails and Natural Core would also include new trails that would connect the various Legacy Ranch facilities across the project site, including the Swanner House, Dr. Joe Cortese Dog Park, and the Putuidem Village. The new trail network would also include connections to the existing trail system.

Study Area Intersections

As shown on Figure 1, the study area includes the following intersections:

1. Camino Capistrano/Driveway 1 (Existing NWOS-Farmakis Farms Driveway)
2. Camino Capistrano/Driveway 2 (Proposed New Driveway)
3. Camino Capistrano/Junipero Serra Road
4. Lion Way/Junipero Serra Road
5. Interstate 5 (I-5) Southbound Ramps/Junipero Serra Road
6. I-5 Northbound Ramps/Junipero Serra Road
7. Rancho Viejo Road/Junipero Serra Road

The study area also includes the following roadway segments:

1. Camino Capistrano north of Junipero Serra Road
2. Junipero Serra Road between Camino Capistrano and Lion Way
3. Junipero Serra Road between Lion Way and I-5 Southbound Ramps
4. Junipero Serra Road between I-5 Southbound Ramps and I-5 Northbound Ramps
5. Junipero Serra Road between I-5 Northbound Ramps and Rancho Viejo Road

ANALYSIS METHODOLOGY

Intersection LOS Methodologies

Per the City's TA Guidelines, intersections are evaluated using the intersection capacity utilization (ICU) and the *Highway Capacity Manual* (HCM), 7th Edition (Transportation Research Board [TRB] 2022) methodologies.

Consistent with the City's requirements, LSA used the ICU methodology to determine the LOS for the signalized study area intersections. The resulting ICU is expressed in terms of LOS, where LOS A represents free-flow activity and LOS F represents overcapacity operation. The ICU methodology compares the volume-to-capacity (v/c) ratios of conflicting turn movements at an intersection, sums these critical conflicting v/c ratios for each intersection approach, and determines the overall ICU. The ICU calculations assume a per-lane capacity of 1,700 vehicles per hour (vph) with a clearance interval (or loss time) of 0.05. A clearance interval is the period of time during which vehicles are

allowed to exit an intersection before a conflicting movement is released. The relationship of ICU to LOS is demonstrated in the following table.

Level of Service	ICU
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: *Amended Administrative Policy No. 310, Preparation and Use of Traffic Assessment Guidelines for VMT Analysis and LOS Traffic Impact Study* (City of San Juan Capistrano 2023).
ICU = intersection capacity utilization

In addition to the ICU methodology for calculating intersection LOS, the HCM methodology was used to determine the LOS at both signalized and unsignalized intersections within the study area. LSA utilized Synchro computer software (version 12) for the HCM analysis of study area intersections. The HCM, 7th Edition, intersection methodology presents LOS in terms of total intersection delay (in seconds per vehicle) and approach delay of the major and minor streets (in seconds per vehicle). The resulting delay is expressed in terms of LOS, similar to the ICU methodology. The relationship of delay to LOS is demonstrated in the following table.

Level of Service	Signalized Intersection Delay per vehicle (seconds per vehicle)	Unsignalized Intersection Delay per vehicle (seconds per vehicle)
A	≤10.0	≤10.0
B	>10.0 and ≤20.0	>10.0 and ≤15.0
C	>20.0 and ≤35.0	>15.0 and ≤25.0
D	>35.0 and ≤55.0	>25.0 and ≤35.0
E	>55.0 and ≤80.0	>35.0 and ≤50.0
F	>80.0	>50.0

Source: *Highway Capacity Manual* (Transportation Research Board [TRB] 2022).

The study area intersection LOS analysis was conducted for the weekday a.m. peak hour (the single highest hour of traffic volume on the local circulation system between 7:00 a.m. and 9:00 a.m.) and weekday p.m. peak hour (the single highest hour of traffic volume on the local circulation system between 4:00 p.m. and 6:00 p.m.).

Roadway Segment LOS Methodology

Roadway segment v/c ratios were determined using the daily capacities contained in the 2017 OCTA's *Guidance for Administration of the Orange County Master Plan of Arterial Highways* (MPAH). Facility types were taken from the City's General Plan and the MPAH. The following table illustrates daily capacities for roadways in the study area:

Facility Type	Number of Lanes	Capacity
Major	8	75,000
Major	6	56,300
Primary	4 (Divided)	37,500
Secondary	4 (Undivided)	25,000
Limited Secondary	2 (Divided)	20,000
Local Arterial	2 (Undivided)	12,500

Source: *Guidance for Administration of the Orange County Master Plan of Arterial Highways* (Orange County Transportation Authority [OCTA] 2017).

Threshold of Significance

The City considers LOS D as the upper limit of satisfactory operations for intersections and roadway segments. Based on the City's TA Guidelines, a project impact (direct impact) occurs at a non-hot-spot intersection or roadway segment when (1) the project's increase in ICU (or v/c ratio) is 0.01 or greater and the resulting LOS is E or F (ICU methodology), or (2) the project's increase in delay is 2.0 second or greater and the resulting LOS is E or F (HCM methodology). Within a cumulative traffic setting, a project impact (cumulative impact) occurs if the project has a measurable impact (0.01 or greater for ICU and 2.0 second or greater for HCM) in the Existing condition and the resulting LOS is E or F in the Existing Plus Project Plus Cumulative Projects condition.

PROPOSED PROJECT TRAFFIC

Trip Generation

LSA examined the trip generation of the proposed project by applying the trip generation rates for Land Use Code 495 (Recreational Community Center) from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 12th Edition (ITE 2025), and the trip generation rates for equestrian center from Table 5-3 of the T*raffic Impact Analysis for Distrito La Novia-San Juan Meadows* (LLG, December 2009). Trip generation estimates for the proposed project were reviewed and approved by the City prior to preparation of the TIA.

As previously mentioned, the proposed project would develop the project site with the Legacy Ranch, which would consist of seven (7) cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails and Natural Core while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. Trip generation rates used for each component of the proposed project are described below.

- **Equestrian Core:** Trip generation rates for equestrian center from Table 5-3 of the *Traffic Impact Analysis for Distrito La Novia-San Juan Meadows* (LLG, December 2009) were used to prepare the trip generation for this proposed Equestrian Core.

- **Chapel Core:** Trip generation rates for Land Use Code 495 (Recreational Community Center) from the ITE 2025 *Trip Generation Manual*, were used to prepare the trip generation for this proposed Chapel Core.

- **Swanner House Core:** The Swanner House Core is an existing use and will be preserved as a part of the proposed project. Therefore, no additional trips will be generated for typical weekday operations.

- **Agricultural Core:** The Agricultural Core primarily consists of agricultural uses and a catering facility that would only operate during special events. Therefore, no additional trips will be generated for typical weekday operations.

- **Event Barn Core:** Trip generation rates for Land Use Code 495 (Recreational Community Center) from the ITE 2025 *Trip Generation Manual*, were used to prepare the trip generation for this proposed Event Barn Core.

- **Community Building Core:** Trip generation rates for Land Use Code 495 (Recreational Community Center) from the ITE 2025 *Trip Generation Manual*, were used to prepare the trip generation for this proposed Community Building Core.

- **Trails and Natural Core:** The Trails and Natural Core uses would serve as a connection and amenity to all other cores. Therefore, no additional trips will be generated for typical weekday operations.

For the purposes of this analysis, trip generation was calculated only for the newly proposed land uses of the project, as traffic from existing land uses on site is already captured in the current traffic counts.

Table A summarizes the trip generation for the newly proposed land uses of the project, which also indicates the net increase in trips between the proposed project and the existing uses on site. As shown in Table A, the newly proposed land uses of the project would generate 1,104 daily trips, with 73 trips in the a.m. peak hour (48 inbound and 25 outbound) and 119 trips in the p.m. peak hour (56 inbound and 63 outbound).

LSA

Table A: Project Trip Generation Summary

Land Use	Size	Unit	PCE	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Trip Rates										
Equestrian Center[1]		stable/stall		2.28	69%	31%	0.13	46%	54%	0.28
Recreational Community Center[2]		tsf		28.82	66%	34%	2.02	48%	52%	2.89
Project Trip Generation										
Equestrian Core										
Equestrian	*149*	*stall*	*1.0*	*340*	*13*	*6*	*19*	*19*	*23*	*42*
Chapel Core										
Chapel	3.000	tsf	1.0	86	4	2	6	4	5	9
Ranch House	6.300	tsf	1.0	182	8	5	13	9	9	18
Total	-	-		*268*	*12*	*7*	*19*	*13*	*14*	*27*
Swanner House Core [3]										
Agricultural Core [4]										
Event Barn Core										
Event Barn	*7.200*	*tsf*	*1.0*	*208*	*10*	*5*	*15*	*10*	*11*	*21*
Community Building Core										
Community Building	*10.000*	*tsf*	*1.0*	*288*	*13*	*7*	*20*	*14*	*15*	*29*
Trails and Natural Core [5]										
Grand Total	**-**	**-**	**-**	**1,104**	**48**	**25**	**73**	**56**	**63**	**119**

[1] Trip rates obtained from Table 5-3 of the Traffic Impact Analysis for Distrito La Novia-San Juan Meadows (LLG, December 2009).

[2] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 12th Edition (2025). Land Use Code 495 - Recreational Community Center

[3] Swanner House is an existing use and will be preserved as a part of the proposed project. Therefore, no additional trips will be generated for typical weekday operations.

[4] The Agricultural Core primarily consists of agricultural uses and a catering facility that would only operate during special events. Therefore, no additional trips will be generated for typical weekday operations.

[5] The Trails and Natural Core uses would serve as a connection and an amenity to all other cores. Therefore, no additional trips will be generated for typical weekday operations.

tsf = thousand square feet (or thousand-square-foot)

Trip Distribution

Generalized trip distribution patterns were developed based on the expected travel patterns and minimum time paths, as well as the location of the proposed project in relation to surrounding land uses and the regional roadway network. The anticipated regional trip distribution for the project trips is as follows and has been reviewed and approved by the City prior to preparation of the TIA:

- Approximately 40 percent of project trips to/from the north on Camino Capistrano (visitors from the north/west/northwest/northeast of the project site, using either local roads or north on I-5)
- Approximately 20 percent of project trips to/from the south on Camino Capistrano (visitors from the west/southwest of the project site)
- Approximately 10 percent of project trips to/from the south on Camino Capistrano–Junipero Serra Road–north on I-5 (visitors from the northwest of the project site and using I-5 to State Route 73 [SR-73])
- Approximately 20 percent of project trips to/from the south on Camino Capistrano–Junipero Serra Road–south on I-5 (visitors from the south/southwest/southeast of the project site)
- Approximately 5 percent of project trips to/from the south on Camino Capistrano–Junipero Serra Road–north on Rancho Viejo Road (visitors from the northeast of the project site)
- Approximately 5 percent project trips to/from the south on Camino Capistrano–Junipero Serra Road–south on Rancho Viejo Road (visitors from the southeast of the project site)

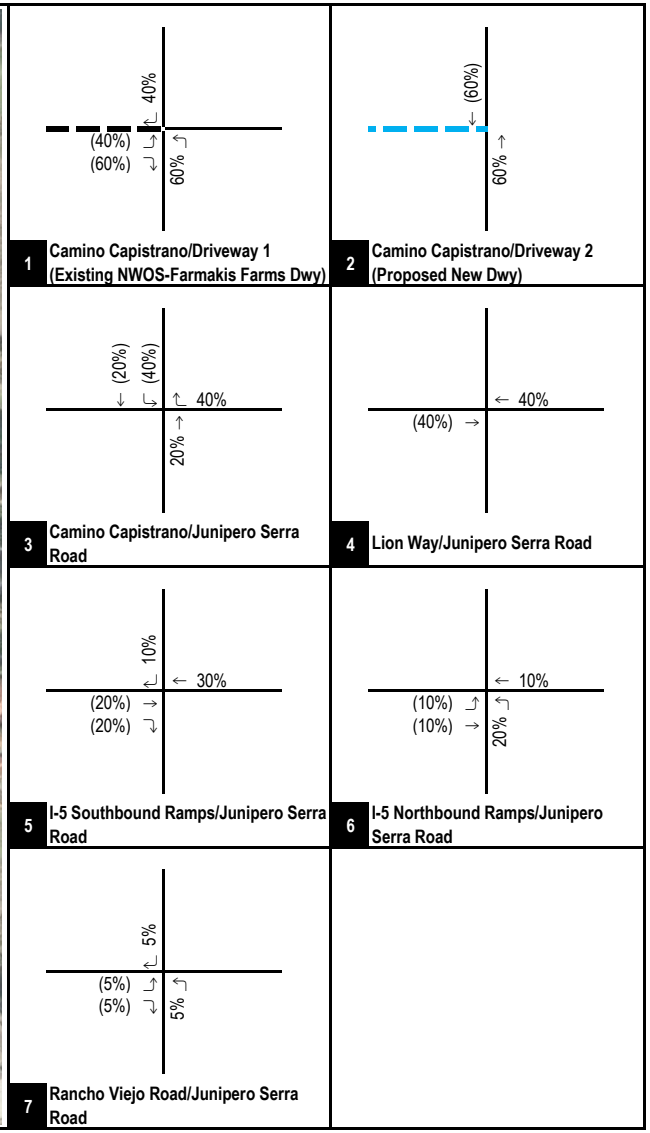
Trip Assignment

Project trips both entering and exiting the project site were distributed and assigned to the adjacent street system accordingly. The project trip assignment is the product of the project trip generation and the trip distribution percentages.

As previously discussed, Driveway 1 (existing NWOS driveway) would be the main access serving the proposed project site. Access to Community Building Core would be provided via the proposed project driveway (Driveway 2). Therefore, the project trip distribution and assignment were prepared separately for the Community Building Core (via Driveway 2) and the other uses of the proposed project (via Driveway 1). It should be noted that the same regional distribution described above applies to the entire project.

Figure 3 illustrates the trip distribution for the proposed project excluding the Community Building Core. Figure 4 illustrates the trip distribution for the Community Building Core only. Figure 5 illustrates the trip assignment for the proposed project excluding the Community Building Core. Figure 6 illustrates the trip assignment for the Community Building Core only. Figure 7 illustrates the total trip assignment for the proposed project.





LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 3

XX% (YY%) Inbound (Outbound) Trip Distribution

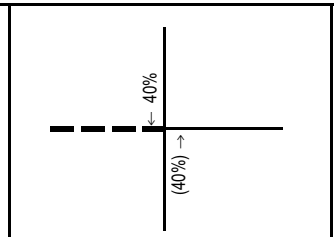
Project Driveway (Existing)

Project Driveway (Proposed New)

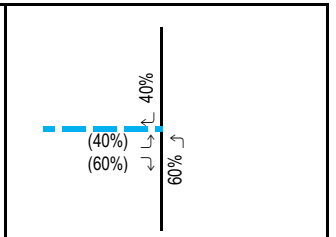
Legacy Ranch Project

Project (Excluding the Community Building Core) Trip Distribution

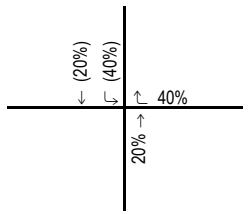




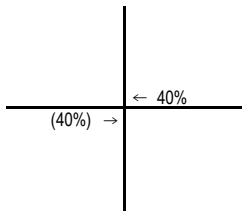
1 Camino Capistrano/Driveway 1 (Existing NWOS-Farmakis Farms Dwy)



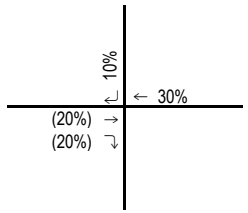
2 Camino Capistrano/Driveway 2 (Proposed New Dwy)



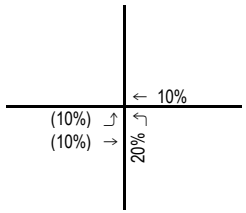
3 Camino Capistrano/Junipero Serra Road



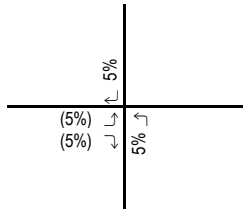
4 Lion Way/Junipero Serra Road



5 I-5 Southbound Ramps/Junipero Serra Road



6 I-5 Northbound Ramps/Junipero Serra Road



7 Rancho Viejo Road/Junipero Serra Road

LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 4

XX% (YY%) Inbound (Outbound) Trip Distribution

Project Driveway (Existing)

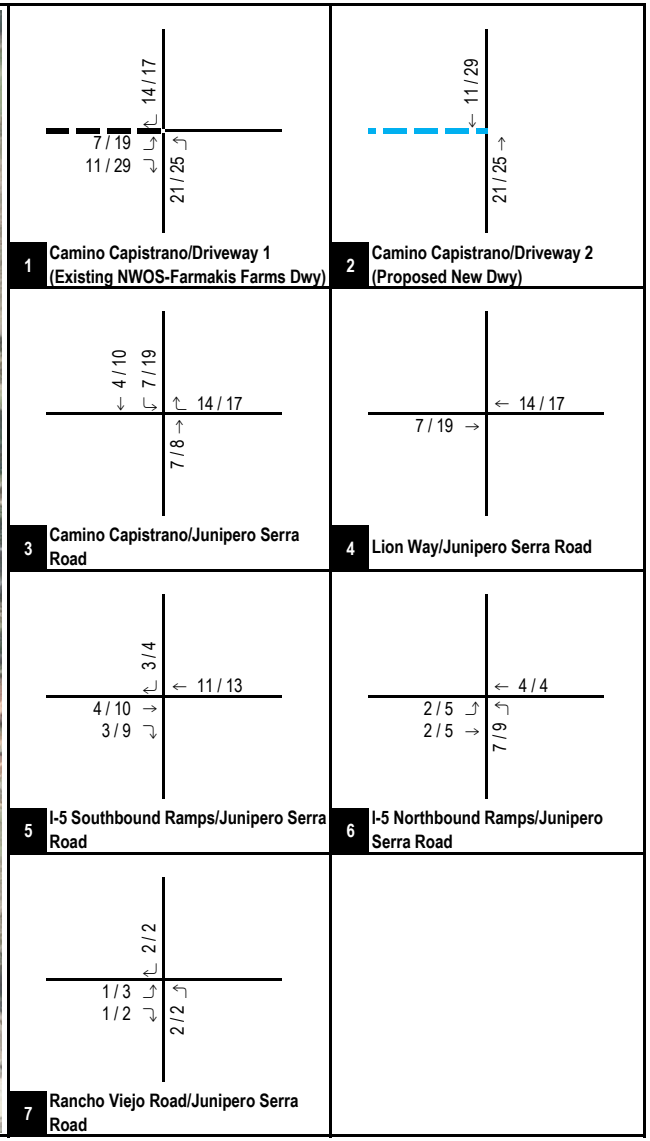
Project Driveway (Proposed New)

Legacy Ranch Project

Project (Community Building Core Only) Trip Distribution

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LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 5

XX / YY AM / PM Peak Hour Traffic Volumes

⇨ Distribution Percentages

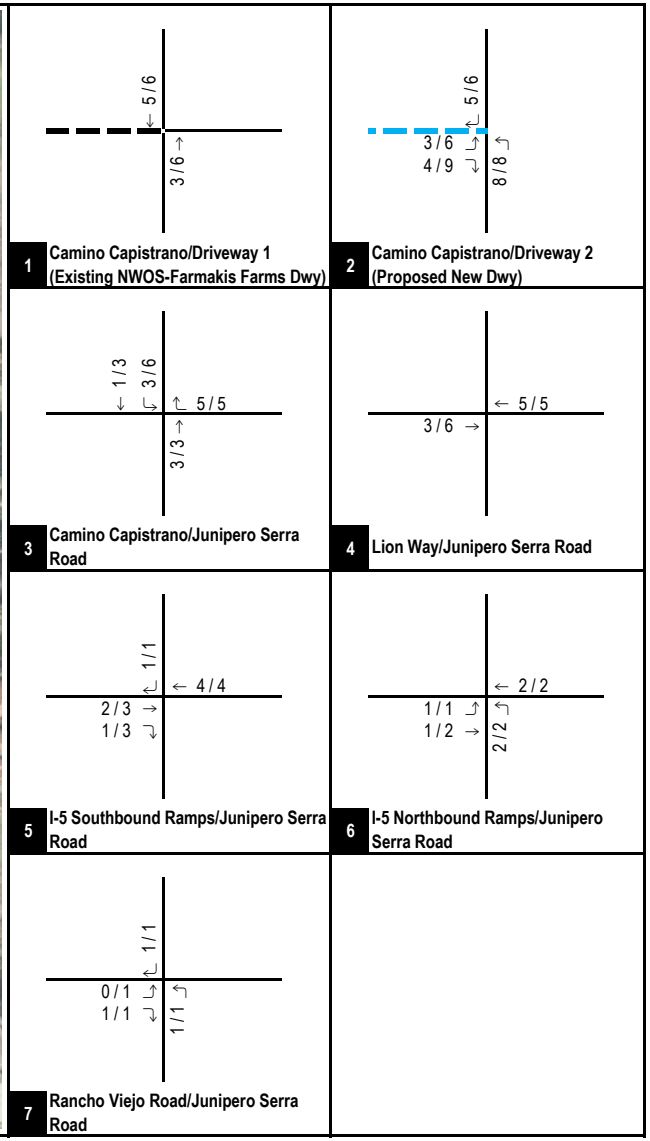
----- Project Driveway (Existing)

----- Project Driveway (Proposed New)

Legacy Ranch Project

Project (Excluding the Community Building Core) Trip Assignment





LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 6

XX / YY AM / PM Peak Hour Traffic Volumes

Distribution Percentages

Project Driveway (Existing)

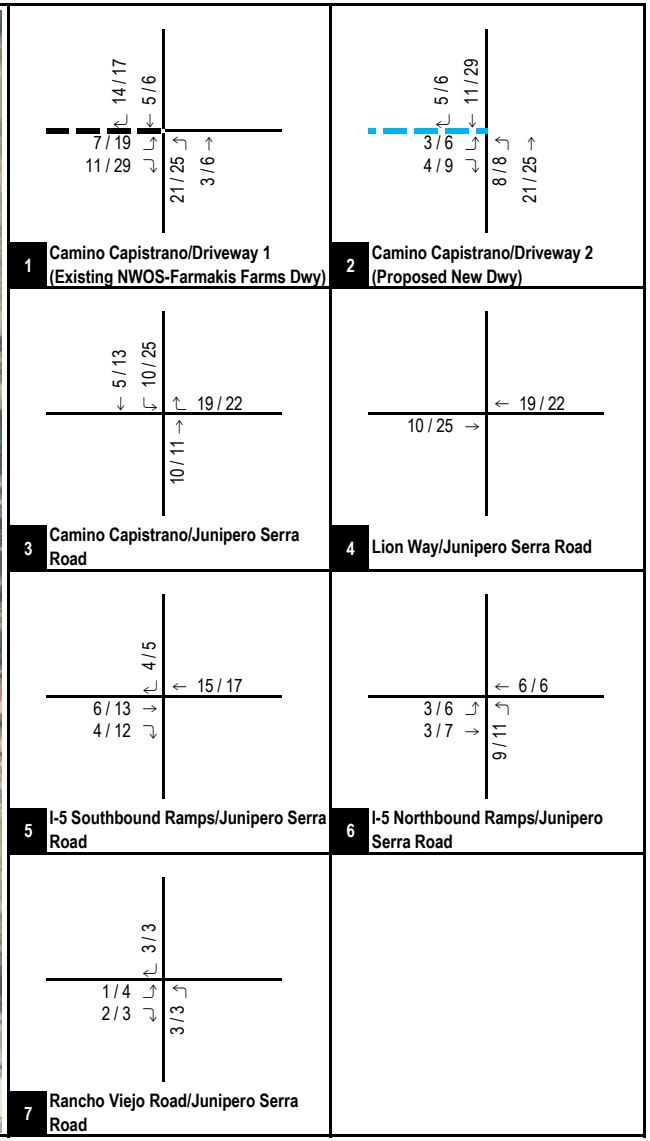
Project Driveway (Proposed New)

Legacy Ranch Project

Project (Community Building Core only) Trip Assignment

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LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 7

XX / YY AM / PM Peak Hour Traffic Volumes

⇨ Distribution Percentages

Project Driveway (Existing)

Project Driveway (Proposed New)

Legacy Ranch Project

Project Total Trip Assignment

EXISTING CONDITIONS

Existing Circulation System

Key roadways in the vicinity of the proposed project are as follows:

- **I-5:** I-5 is a north-south interstate freeway located east of the project site. I-5 has 12-to-14 travel lanes in the project vicinity, of which 5-to-6 lanes are general-purpose lanes and 1 lane is a high-occupancy vehicle lane in each direction.

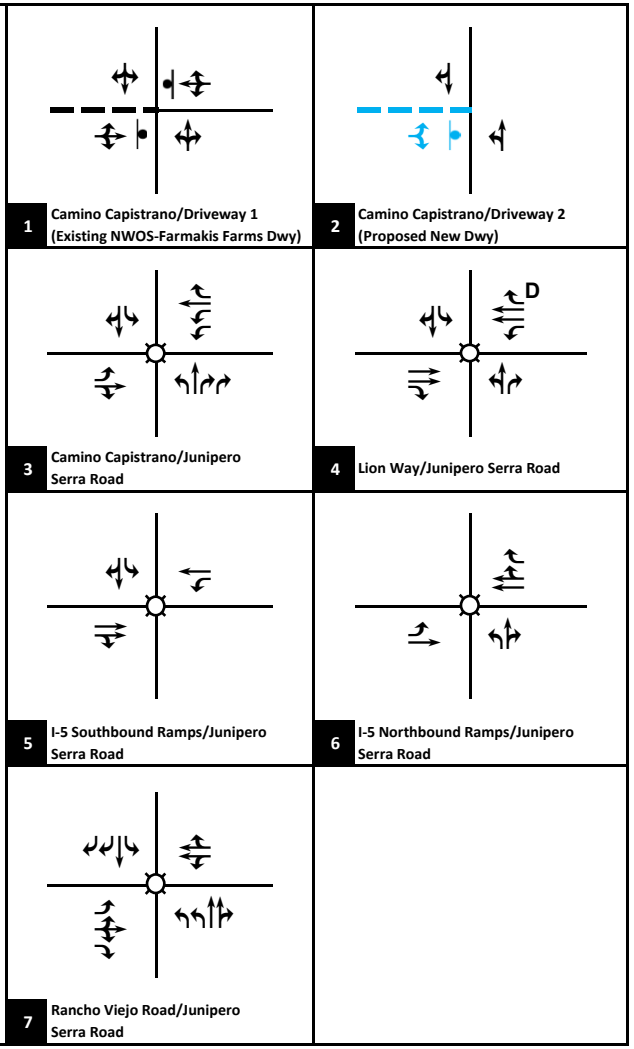
- **Camino Capistrano:** Camino Capistrano is a north-south roadway directly east of the project site and it is designated as a Secondary Arterial in the City's General Plan Circulation Element. Camino Capistrano has two travel lanes and the segment from Junipero Serra Road to approximately 0.3 mile north has a two-way-left-turn lane (TWLTL) center median. The speed limit along Camino Capistrano is 45 miles per hour (mph). Sidewalks are provided on the east side of this roadway for 0.3 mile north of Junipero Serra Road. On-street (Class II) bicycle lanes are provided on both sides of the street; however, the northbound (east side) lane is discontinuous for approximately 0.3 mile north of Junipero Serra Road. On-street parking is prohibited on both sides of this roadway.

- **Rancho Viejo Road:** Rancho Viejo Road is a north-south roadway east of the project site and it is designated as a Secondary Arterial in the City's General Plan Circulation Element. Rancho Viejo Road has four travel lanes divided by a median or left-turn lane. The speed limit along Rancho Viejo Road is 45 mph. An off-street bike path (Class I) is provided on the east side of the street. On-street parking is prohibited on both sides of this roadway.

- **Junipero Serra Road:** Junipero Serra Road is an east-west roadway south of the project site and it is designated as a Primary Arterial in the City's General Plan Circulation Element. Junipero Serra Road has four travel lanes. The speed limit along Junipero Serra Road is 40 mph. Sidewalks are provided on both sides of the street. An on-street (Class II) bicycle lane is provided on the north side of the segment between Camino Capistrano and I-5 southbound off-ramp. On-street parking is prohibited on both sides of this roadway.

The existing geometrics and traffic control devices at the study area intersections are shown on Figure 8.





LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 8

Legend

Signal
Stop Sign
D De-Facto Right Turn
Project Features

Legacy Ranch Project

Existing Intersection Geometrics and Traffic Control

Existing Transit System

The study area is currently served by the OCTA via Route 91, which runs along Junipero Serra Road and Camino Capistrano near the project site. Route 91 provides transportation to and from Laguna Hills to San Clemente. Route 91 has bus stops at the southwest and southeast corners of the intersection of Camino Capistrano/Junipero Serra Road, approximately 0.4 mile from the project site.

Existing Traffic Volumes and Levels of Service

Existing traffic volumes were collected by Counts Unlimited in September 2025 for the study area intersections and roadway segments. Appendix A provides the existing traffic volume data. The Existing (No Project) a.m. and p.m. peak-hour traffic volumes for the study area intersections are shown on Figure 9.

Tables B and C summarize the results of the existing peak-hour LOS analysis for the study area intersections using the ICU and HCM methodologies, respectively. The existing ICU and HCM worksheets are contained in Appendices B and C, respectively. As shown in Table B, all study area intersections currently operate at satisfactory LOS based on the ICU methodology. As shown in Table C, all study area intersections currently operate at satisfactory LOS based on the HCM methodology.

Existing roadway segment average daily traffic (ADT) volumes, v/c ratios, and LOS are presented in Table D. Tables E and F present the existing peak-hour volumes, v/c ratios, and LOS for the roadway segments. As Table D indicates, all study area roadway segments currently operate at satisfactory LOS on a daily basis. As shown on Tables E and F, all study area roadway segments currently operate at satisfactory LOS in both directions during both peak hours.

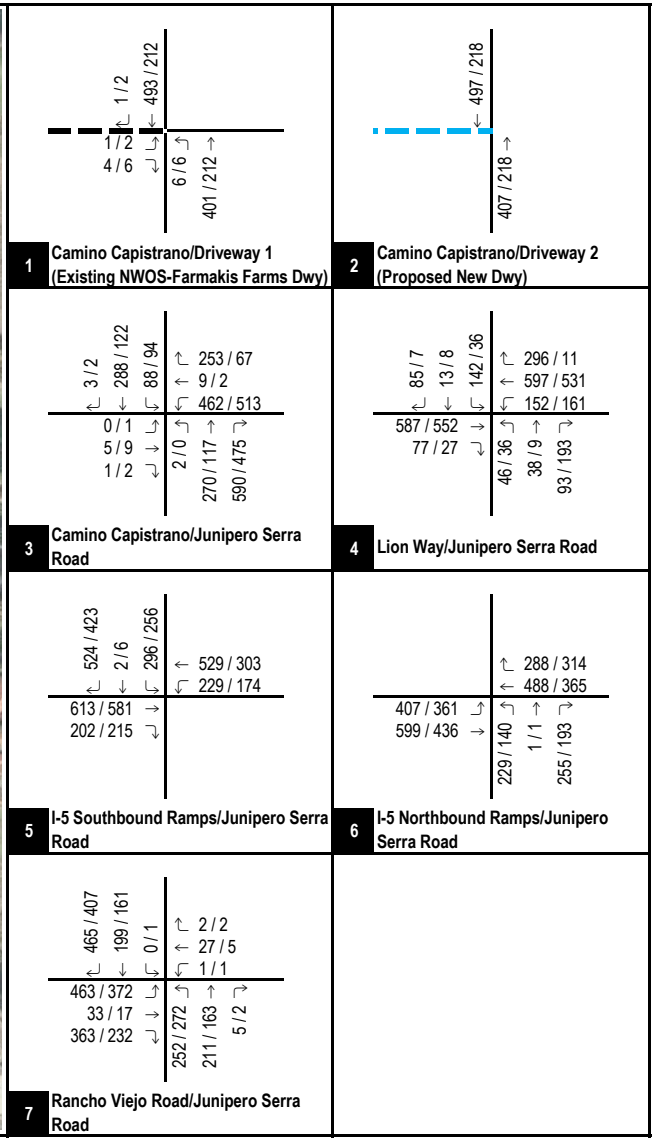
EXISTING PLUS PROJECT CONDITIONS

Existing Plus Project Traffic Volumes and LOS

To determine the Existing Plus Project condition, traffic generated by the proposed project was added to existing baseline traffic volumes at the study area intersections. Figure 10 shows the resulting Existing Plus Project peak-hour traffic volumes.

Tables G and H provide the results of the Existing Plus Project peak-hour LOS analysis for the study area intersections using the ICU and HCM methodologies, respectively. The Existing Plus Project ICU and HCM worksheets are contained in Appendices B and C, respectively. As shown in Table G, all study area intersections are anticipated to operate at satisfactory LOS based on the ICU methodology. As shown in Table H, all study area intersections are anticipated to operate at satisfactory LOS based on the HCM methodology. Therefore, the proposed project would not have a measurable project impact at any study area intersection based on the ICU and HCM methodologies.





LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 9

XX / YY AM / PM Peak Hour Traffic Volumes

Project Driveway (Existing)

Project Driveway (Proposed New)

Legacy Ranch Project

Existing Peak-Hour Traffic Volumes

LSA

Table B: Existing Intersection Level of Service Summary (ICU)

	Intersection	Control	Peak Hour	Existing	
				ICU	LOS
1	Camino Capistrano/Dwy 1 (Existing Swanner-Farmakis Dwy)	TWSC	AM	N/A	-
			PM	N/A	-
2	Camino Capistrano/Dwy 2 (Proposed New Dwy)	OWSC	AM	N/A	-
			PM	N/A	-
3	Camino Capistrano/Junipero Serra Road	Signal	AM	0.51	A
			PM	0.35	A
4	Lion Way/Junipero Serra Road	Signal	AM	0.43	A
			PM	0.39	A
5	I-5 Southbound Ramps/Junipero Serra Road	Signal	AM	0.66	B
			PM	0.61	B
6	I-5 Northbound Ramps/Junipero Serra Road	Signal	AM	0.62	B
			PM	0.50	A
7	Rancho Viejo Road/Junipero Serra Road	Signal	AM	0.44	A
			PM	0.37	A

Dwy = driveway

ICU = Intersection Capacity Utilization

I-5 = Interstate 5

LOS = level of service

N/A = Not applicable (unsignalized intersection)

OWSC = one-way stop control

TWSC = two-way stop control

LSA

Table C: Existing Intersection Level of Service Summary (HCM)

	Intersection	Control	Peak Hour	Existing	
				Delay[1]	LOS
1	Camino Capistrano/Dwy 1 (Existing Swanner-Farmakis Dwy)	TWSC	AM	19.8	C
			PM	10.1	B
2	Camino Capistrano/Dwy 2 (Proposed New Dwy)	OWSC	AM	0.0	A
			PM	0.0	A
3	Camino Capistrano/Junipero Serra Road	Signal	AM	14.6	B
			PM	13.3	B
4	Lion Way/Junipero Serra Road	Signal	AM	44.1	D
			PM	32.3	C
5	I-5 Southbound Ramps/Junipero Serra Road	Signal	AM	40.5	D
			PM	32.6	C
6	I-5 Northbound Ramps/Junipero Serra Road	Signal	AM	27.3	C
			PM	15.0	B
7	Rancho Viejo Road/Junipero Serra Road	Signal	AM	18.5	B
			PM	17.2	B

[1] Delay is reported in seconds/vehicle. For OWSC/TWSC intersections, reported delay is for worst-case movement.

Dwy = driveway

HCM = *Highway Capacity Manual*

I-5 = Interstate 5

LOS = level of service

OWSC = one-way stop control

TWSC = two-way stop control

LSA

Table D: Existing Roadway Segment Level of Service Summary (Daily)

Roadway	Segment	No. of Lanes	LOS E Capacity	Existing		
				ADT	V/C	LOS
Camino Capistrano	North of Junipero Serra Road	2U	12,500	5,679	0.454	A
Junipero Serra Road	Camino Capistrano to Lion Way	4U	25,000	13,754	0.550	A
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	4U	25,000	13,754	0.550	A
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	4U	25,000	16,220	0.649	B
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	4U	25,000	15,403	0.616	B

ADT = average daily traffic

I-5 = Interstate 5

LOS = level of service

U = undivided

V/C = volume-to-capacity ratio

LSA

Table E: Existing Roadway Segment LOS Summary (AM Peak Hour)

Roadway	Segment	Direction	No. of Lanes	LOS E Capacity	Existing		
					AM Vol	V/C	LOS
Camino Capistrano	North of Junipero Serra Road	Northbound	1	1,700	523	0.308	A
		Southbound	1	1,700	379	0.223	A
Junipero Serra Road	Camino Capistrano to Lion Way	Eastbound	2	3,400	683	0.201	A
		Westbound	2	3,400	741	0.218	A
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	Eastbound	2	3,400	683	0.201	A
		Westbound	2	3,400	741	0.218	A
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	Eastbound	2	3,400	1,006	0.296	A
		Westbound	2	3,400	750	0.221	A
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	Eastbound	3	5,100	875	0.172	A
		Westbound	3	5,100	776	0.152	A

AM Vol = a.m. peak-hour volume

I-5 = Interstate 5

LOS = level of service

V/C = volume-to-capacity ratio

LSA

Table F: Existing Roadway Segment LOS Summary (PM Peak Hour)

Roadway	Segment	Direction	No. of Lanes	LOS E Capacity	Existing		
					PM Vol	V/C	LOS
Camino Capistrano	North of Junipero Serra Road	Northbound	1	1,700	361	0.212	A
		Southbound	1	1,700	242	0.142	A
Junipero Serra Road	Camino Capistrano to Lion Way	Eastbound	2	3,400	617	0.181	A
		Westbound	2	3,400	696	0.205	A
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	Eastbound	2	3,400	617	0.181	A
		Westbound	2	3,400	696	0.205	A
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	Eastbound	2	3,400	974	0.286	A
		Westbound	2	3,400	586	0.172	A
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	Eastbound	3	5,100	727	0.143	A
		Westbound	3	5,100	787	0.154	A

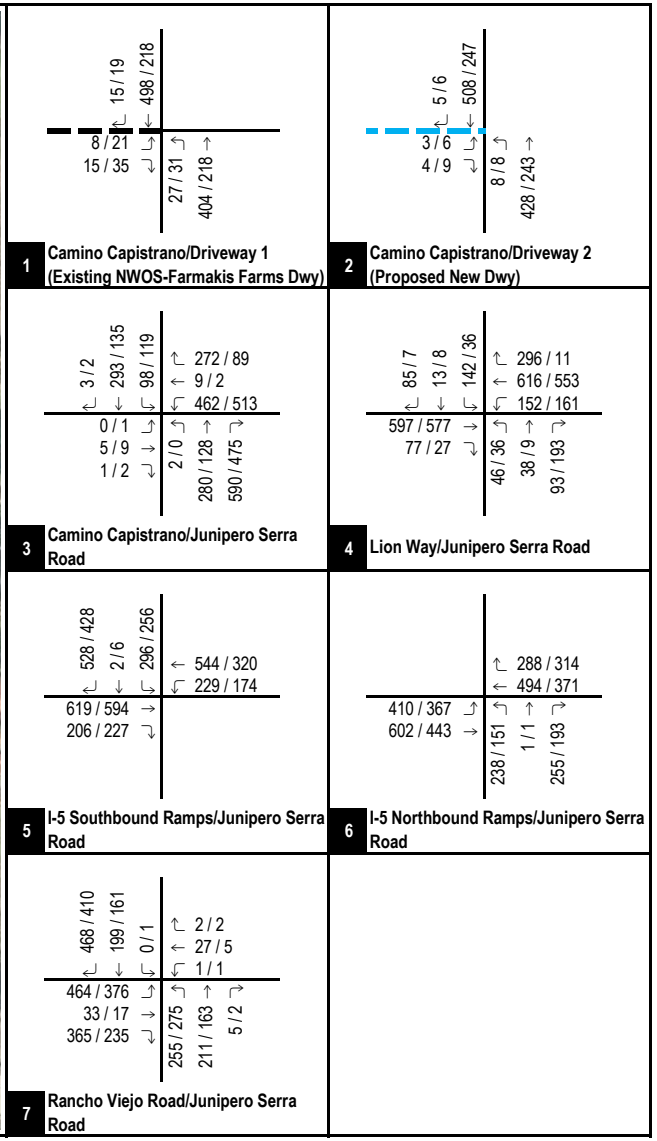
I-5 = Interstate 5

LOS = level of service

PM Vol = p.m. peak-hour volume

V/C = volume-to-capacity ratio





LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 10

XX / YY AM / PM Peak Hour Traffic Volumes

Project Driveway (Existing)

Project Driveway (Proposed New)

Legacy Ranch Project

Existing Plus Project Peak-Hour Traffic Volumes

LSA

Table G: Existing Plus Project Plus Cumulative Projects (Year 2032) Intersection Level of Service Summary (ICU)

	Intersection	Control	Peak Hour	1 Existing ICU	1 Existing LOS	2 Existing Plus Project ICU	2 Existing Plus Project LOS	3 Ex. Plus Proj. Plus Cumul. ICU	3 Ex. Plus Proj. Plus Cumul. LOS	4 Project Impact[1] Δ ICU	4 Project Impact[1] Yes/No	5 Cumulative Impact[2] Δ ICU	5 Cumulative Impact[2] Yes/No
1	Camino Capistrano/Dwy 1 (Existing Swanner-Farmakis Dwy)	TWSC	AM	N/A	-	N/A	-	N/A	-	-	-	-	-
			PM	N/A	-	N/A	-	N/A	-	-	-	-	-
2	Camino Capistrano/Dwy 2 (Proposed New Dwy)	OWSC	AM	N/A	-	N/A	-	N/A	-	-	-	-	-
			PM	N/A	-	N/A	-	N/A	-	-	-	-	-
3	Camino Capistrano/Junipero Serra Road	Signal	AM	0.51	A	0.51	A	0.57	A	0.00	No	0.00	No
			PM	0.35	A	0.36	A	0.38	A	0.01	No	0.01	No
4	Lion Way/Junipero Serra Road	Signal	AM	0.43	A	0.44	A	0.64	B	0.01	No	0.01	No
			PM	0.39	A	0.40	A	0.44	A	0.01	No	0.01	No
5	I-5 Southbound Ramps/Junipero Serra Road	Signal	AM	0.66	B	0.66	B	0.81	D	0.00	No	0.00	No
			PM	0.61	B	0.61	B	0.68	B	0.00	No	0.00	No
6	I-5 Northbound Ramps/Junipero Serra Road	Signal	AM	0.62	B	0.63	B	0.74	C	0.01	No	0.01	No
			PM	0.50	A	0.52	A	0.55	A	0.02	No	0.02	No
7	Rancho Viejo Road/Junipero Serra Road	Signal	AM	0.44	A	0.45	A	0.48	A	0.01	No	0.01	No
			PM	0.37	A	0.37	A	0.40	A	0.00	No	0.00	No

[1] A significant project impact occurs when the ICU in (2) minus the ICU in (1) is 0.01 or greater and the LOS in (2) is E or F.

[2] A significant cumulative impact occurs when the ICU in (2) minus the ICU in (1) is 0.01 or greater, and the LOS in (2) is A, B, C, or D, and LOS in (3) is E or F.

Δ = change

Dwy = driveway

ICU = Intersection Capacity Utilization

I-5 = Interstate 5

LOS = level of service

N/A = Not applicable (unsignalized intersection)

OWSC = one-way stop control

TWSC = two-way stop control

LSA

Table H: Existing Plus Project Plus Cumulative Projects (Year 2032) Intersection Level of Service Summary (HCM)

	Intersection	Control	Peak Hour	1 Existing Delay[1]	1 Existing LOS	2 Existing Plus Project Delay[1]	2 Existing Plus Project LOS	3 Ex. Plus Proj. Plus Cumul. Delay[1]	3 Ex. Plus Proj. Plus Cumul. LOS	4 Project Impact[2] Δ Delay	4 Project Impact[2] Yes/No	5 Cumulative Impact[3] Δ Delay	5 Cumulative Impact[3] Yes/No
1	Camino Capistrano/Dwy 1 (Existing Swanner-Farmakis Dwy)	TWSC	AM	19.8	C	16.6	C	17.5	C	-3.2	No	-3.2	No
			PM	10.1	B	11.4	B	11.6	B	1.3	No	1.3	No
2	Camino Capistrano/Dwy 2 (Proposed New Dwy)	OWSC	AM	0.0	A	15.2	C	15.9	C	15.2	No	15.2	No
			PM	0.0	A	10.9	B	11.0	B	10.9	No	10.9	No
3	Camino Capistrano/Junipero Serra Road	Signal	AM	14.6	B	15.3	B	15.3	B	0.7	No	0.7	No
			PM	13.3	B	14.0	B	13.5	B	0.7	No	0.7	No
4	Lion Way/Junipero Serra Road	Signal	AM	44.1	D	43.7	D	65.0	E	-0.4	No	-0.4	No
			PM	32.3	C	31.8	C	38.8	D	-0.5	No	-0.5	No
5	I-5 Southbound Ramps/Junipero Serra Road	Signal	AM	40.5	D	40.9	D	65.0	E	0.4	No	0.4	No
			PM	32.6	C	33.3	C	38.1	D	0.7	No	0.7	No
6	I-5 Northbound Ramps/Junipero Serra Road	Signal	AM	27.3	C	27.6	C	45.7	D	0.3	No	0.3	No
			PM	15.0	B	15.2	B	16.1	B	0.2	No	0.2	No
7	Rancho Viejo Road/Junipero Serra Road	Signal	AM	18.5	B	18.5	B	18.9	B	0.0	No	0.0	No
			PM	17.2	B	17.3	B	18.1	B	0.1	No	0.1	No

[1] Delay is reported in seconds/vehicle. For OWSC/TWSC intersections, reported delay is for worst-case movement.

[2] A significant project impact occurs when the delay in (2) minus the delay in (1) is 2.0 seconds or greater and the LOS in (2) is E or F.

[3] A significant cumulative impact occurs when the delay in (2) minus the delay in (1) is 2.0 seconds or greater, and the LOS in (2) is A, B, C, or D, and LOS in (3) is E or F.

= exceeds level of service (LOS) criteria

Δ = change

Dwy = driveway

HCM = *Highway Capacity Manual*

I-5 = Interstate 5

OWSC = one-way stop control

TWSC = two-way stop control

Existing Plus Project roadway segment ADT volumes, v/c ratios, and LOS are provided in Table I. Tables J and K provide the Existing Plus Project peak-hour volumes, v/c ratios, and LOS for the roadway segments. As Table I indicates, all study area roadway segments are anticipated to operate at satisfactory LOS with the proposed project on a daily basis. As shown on Tables J and K, all study area roadway segments would operate at satisfactory LOS in both directions during both peak hours. Therefore, the proposed project would not have a measurable project impact at any study area roadway segment.

EXISTING PLUS PROJECT PLUS CUMULATIVE PROJECTS CONDITIONS

Existing Plus Project Plus Cumulative Projects Traffic Volumes and LOS

The anticipated opening year for the proposed project is 2032. As confirmed with City traffic staff in January 2026, a growth rate of 0.5 percent per year was used for the purpose of the future year (Year 2032) traffic analysis. An ambient growth factor of two percent (0.5 percent per year, compounded over seven years from 2025 to 2032) was applied to the 2025 traffic volumes. Then, traffic generated by both the proposed project and the approved and pending (cumulative) developments, within this time frame and in the project vicinity, were added at the study area intersections to develop the Existing Plus Project Plus Cumulative Projects condition.

LSA contacted the City to identify cumulative projects in the project vicinity. The cumulative project list for this TIA includes all proposed, recently approved, under construction, and reasonably foreseeable projects as of the date of the Notice of Preparation (NOP) (November 13, 2025) that could produce a related or cumulative impact on the local environment when considered in conjunction with the proposed project. Twenty-one (21) cumulative projects were identified based on coordination with the Planning Division of the City's Development Services Department. Appendix D provides the cumulative project list and the trip generation for the cumulative projects.

Figure 11 shows the locations of the cumulative projects. Figure 12 shows the anticipated cumulative project trip assignment within the study area. Figure 13 shows the resulting Existing Plus Project Plus Cumulative Projects peak-hour traffic volumes.

Tables G and H provide the results of the Existing Plus Project Plus Cumulative Projects peak-hour LOS analysis for the study area intersections using the ICU and HCM methodologies, respectively. The Existing Plus Project Plus Cumulative Projects ICU and HCM worksheets are contained in Appendices B and C, respectively. As shown in Table G, all study area intersections are anticipated to operate at satisfactory LOS based on the ICU methodology. As shown in Table H, all study area intersections are anticipated to operate at satisfactory LOS based on the HCM methodology, with the exception of Lion Way/Junipero Serra Road (LOS E in the a.m. peak hour) and I-5 Southbound Ramps/Junipero Serra Road (LOS E in the a.m. peak hour). However, the intersection delay increase does not exceed the impact threshold at those locations. Therefore, the proposed project would not have a measurable cumulative impact at any study area intersection based on the ICU and HCM methodologies.

LSA

Table I: Existing Plus Project Plus Cumulative Projects (Year 2032) Roadway Segment Level of Service Summary (Daily)

Roadway	Segment	No. of Lanes	LOS E Capacity	1 Existing ADT	1 Existing V/C	1 Existing LOS	Project ADT	2 Existing Plus Project ADT	2 Existing Plus Project V/C	2 Existing Plus Project LOS	Cumul ADT	3 Existing Plus Project Plus Cumulative ADT	3 Existing Plus Project Plus Cumulative V/C	3 Existing Plus Project Plus Cumulative LOS	4 Project Impact[1] Δ V/C	4 Project Impact[1] Yes/No	5 Cumulative Impact[2] Δ V/C	5 Cumulative Impact[2] Yes/No
Camino Capistrano	North of Junipero Serra Road	2U	12,500	5,679	0.454	A	662	6,341	0.507	A	260	6,803	0.54	A	0.053	No	0.053	No
Junipero Serra Road	Camino Capistrano to Lion Way	4U	25,000	13,754	0.550	A	442	14,196	0.568	A	1,110	15,795	0.63	B	0.018	No	0.018	No
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	4U	25,000	13,754	0.550	A	442	14,196	0.568	A	3,740	18,425	0.74	C	0.018	No	0.018	No
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	4U	25,000	16,220	0.649	B	276	16,496	0.660	B	2,394	19,466	0.78	C	0.011	No	0.011	No
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	4U	25,000	15,403	0.616	B	110	15,513	0.621	B	998	17,058	0.68	B	0.005	No	0.005	No

[1] A significant project impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater and the LOS in (2) is E or F.

[2] A significant cumulative impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater, and the LOS in (2) is A, B, C, or D, and LOS in (3) is E or F.

Δ = change

ADT = average daily traffic

I-5 = Interstate 5

LOS = level of service

U = undivided

V/C = volume-to-capacity ratio

LSA

Table J: Existing Plus Project Plus Cumulative Projects (Year 2032) Roadway Segment LOS Summary (AM Peak Hour)

Roadway	Segment	Direction	No. of Lanes	LOS E Capacity	1 Existing AM Vol	1 Existing V/C	1 Existing LOS	Project AM Vol	2 Existing Plus Project AM Vol	2 Existing Plus Project V/C	2 Existing Plus Project LOS	Cumul AM Vol	Existing Plus Project Plus Cumulative AM Vol	Existing Plus Project Plus Cumulative V/C	Existing Plus Project Plus Cumulative LOS	4 Project Impact[1] Δ V/C	4 Project Impact[1] Yes/No	5 Cumulative Impact[2] Δ V/C	5 Cumulative Impact[2] Yes/No
Camino Capistrano	North of Junipero Serra Road	Northbound	1	1,700	523	0.308	A	29	552	0.325	A	49	620	0.36	A	0.017	No	0.017	No
		Southbound	1	1,700	379	0.223	A	15	394	0.232	A	39	446	0.26	A	0.009	No	0.009	No
Junipero Serra Road	Camino Capistrano to Lion Way	Eastbound	2	3,400	683	0.201	A	10	693	0.204	A	29	746	0.22	A	0.003	No	0.003	No
		Westbound	2	3,400	741	0.218	A	19	760	0.224	A	22	808	0.24	A	0.006	No	0.006	No
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	Eastbound	2	3,400	683	0.201	A	10	693	0.204	A	183	900	0.26	A	0.003	No	0.003	No
		Westbound	2	3,400	741	0.218	A	19	760	0.224	A	228	1,014	0.30	A	0.006	No	0.006	No
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	Eastbound	2	3,400	1,006	0.296	A	6	1,012	0.298	A	118	1,166	0.34	A	0.002	No	0.002	No
		Westbound	2	3,400	750	0.221	A	15	765	0.225	A	140	932	0.27	A	0.004	No	0.004	No
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	Eastbound	3	5,100	875	0.172	A	3	878	0.172	A	56	965	0.19	A	0.000	No	0.000	No
		Westbound	3	5,100	776	0.152	A	6	782	0.153	A	48	810	0.16	A	0.001	No	0.001	No

[1] A significant project impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater and the LOS in (2) is E or F.

[2] A significant cumulative impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater, and the LOS in (2) is A, B, C, or D, and LOS in (3) is E or F.

Δ = change

AM Vol = a.m. peak-hour volume

I-5 = Interstate 5

LOS = level of service

U = undivided

V/C = volume-to-capacity ratio

LSA

Table K: Existing Plus Project Plus Cumulative Projects (Year 2032) Roadway Segment LOS Summary (PM Peak Hour)

Roadway	Segment	Direction	No. of Lanes	LOS E Capacity	1 Existing PM Vol	1 Existing V/C	1 Existing LOS	Project PM Vol	2 Existing Plus Project PM Vol	2 Existing Plus Project V/C	2 Existing Plus Project LOS	Cumul PM Vol	Existing Plus Project Plus Cumulative PM Vol	Existing Plus Project Plus Cumulative V/C	Existing Plus Project Plus Cumulative LOS	4 Project Impact[1] Δ V/C	4 Project Impact[1] Yes/No	5 Cumulative Impact[2] Δ V/C	5 Cumulative Impact[2] Yes/No
Camino Capistrano	North of Junipero Serra Road	Northbound	1	1,700	361	0.212	A	33	394	0.232	A	7	414	0.24	A	0.020	No	0.020	No
		Southbound	1	1,700	242	0.142	A	38	280	0.165	A	10	299	0.18	A	0.023	No	0.023	No
Junipero Serra Road	Camino Capistrano to Lion Way	Eastbound	2	3,400	617	0.181	A	25	642	0.189	A	6	670	0.20	A	0.008	No	0.008	No
		Westbound	2	3,400	696	0.205	A	22	718	0.211	A	8	751	0.22	A	0.006	No	0.006	No
Junipero Serra Road	Lion Way to I-5 Southbound Ramps	Eastbound	2	3,400	617	0.181	A	25	642	0.189	A	50	714	0.21	A	0.008	No	0.008	No
		Westbound	2	3,400	696	0.205	A	22	718	0.211	A	34	777	0.23	A	0.006	No	0.006	No
Junipero Serra Road	I-5 Southbound Ramps and I-5 Northbound Ramps	Eastbound	2	3,400	974	0.286	A	13	987	0.290	A	34	1,056	0.31	A	0.004	No	0.004	No
		Westbound	2	3,400	586	0.172	A	17	603	0.177	A	31	655	0.19	A	0.005	No	0.005	No
Junipero Serra Road	I-5 Northbound Ramps and Rancho Viejo Road	Eastbound	3	5,100	727	0.143	A	7	734	0.144	A	19	779	0.15	A	0.001	No	0.001	No
		Westbound	3	5,100	787	0.154	A	6	793	0.155	A	28	849	0.17	A	0.001	No	0.001	No

[1] A significant project impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater and the LOS in (2) is E or F.

[2] A significant cumulative impact occurs when the V/C in (2) minus the V/C in (1) is 0.01 or greater, and the LOS in (2) is A, B, C, or D, and LOS in (3) is E or F.

Δ = change

I-5 = Interstate 5

LOS = level of service

PM Vol = p.m. peak-hour volume

U = undivided

V/C = volume-to-capacity ratio

Cumulative Project List:

1. CalTrout Trabuco Creek Fish Ladder
2. J. Serra Catholic High School
3. Distrito La Novia
4. San Juan Meadows
5. The River Street Project
6. The Farm on Del Obispo
7. Petra Avelina
8. Mission Place
9. In N Out
10. City Hall/Affordable Housing
11. Swallows Creek
12. St. John Church
13. French Hotel
14. Capistrano Business Park
15. Camino Twelve
16. Performing Arts Center
17. Forster Mixed Use Project
18. San Juan Plaza Mixed Use Project
19. Chipotle
20. Los Rios Theater
21. Saint Margaret's Episcopal Student Commons



LSA

Project Location

Cumulative Projects

FIGURE 11

N

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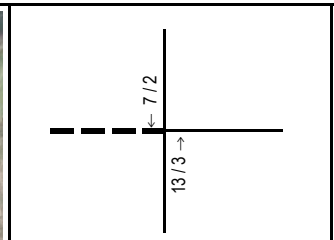
SOURCE: TIGER Road Map (2021)

Legacy Ranch Project

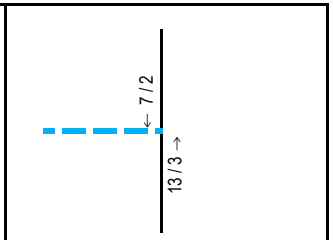
Cumulative Project Locations

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2/25/2026 2:00 PM

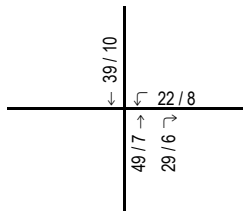




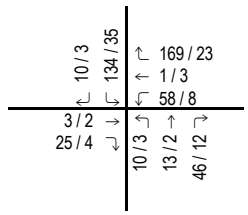
1 Camino Capistrano/Driveway 1 (Existing NWOS-Farmakis Farms Dwy)



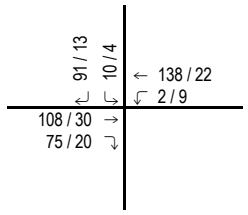
2 Camino Capistrano/Driveway 2 (Proposed New Dwy)



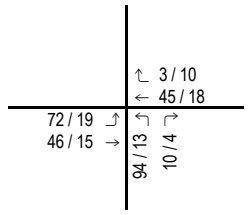
3 Camino Capistrano/Junipero Serra Road



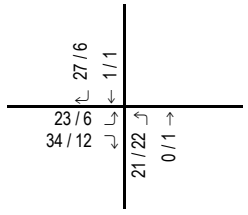
4 Lion Way/Junipero Serra Road



5 I-5 Southbound Ramps/Junipero Serra Road



6 I-5 Northbound Ramps/Junipero Serra Road



7 Rancho Viejo Road/Junipero Serra Road

LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 12

XX / YY AM / PM Peak Hour Traffic Volumes

Project Driveway (Existing)

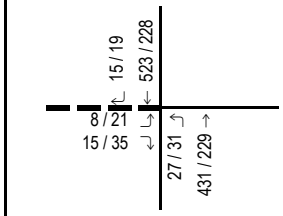
Project Driveway (Proposed New)

Legacy Ranch Project

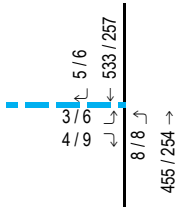
Cumulative Project Trip Assignment

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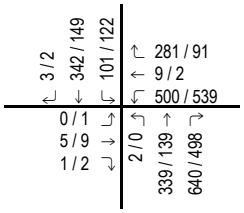




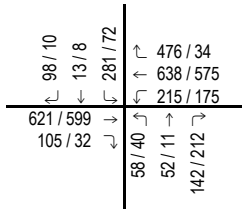
1 Camino Capistrano/Driveway 1 (Existing NWOS-Farmakis Farms Dwy)



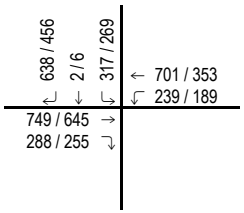
2 Camino Capistrano/Driveway 2 (Proposed New Dwy)



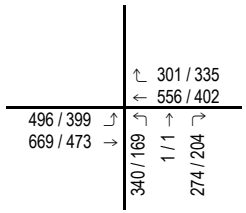
3 Camino Capistrano/Junipero Serra Road



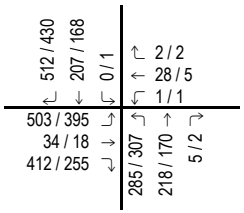
4 Lion Way/Junipero Serra Road



5 I-5 Southbound Ramps/Junipero Serra Road



6 I-5 Northbound Ramps/Junipero Serra Road



7 Rancho Viejo Road/Junipero Serra Road

LSA

Note: 1) Driveway 1, the existing driveway, would provide access to the proposed Legacy Ranch project.
2) Driveway 2 is proposed to provide access to the Community Building Core and entry road parking area only.

FIGURE 13

XX / YY AM / PM Peak Hour Traffic Volumes

Project Driveway (Existing)

Project Driveway (Proposed New)

Legacy Ranch Project

Existing Plus Project Plus Cumulative Projects (Opening Year 2032) Peak-Hour Traffic Volumes

Existing Plus Project Plus Cumulative Projects roadway segment ADT volumes, v/c ratios, and LOS are provided in Table I. Tables J and K provide the Existing Plus Project Plus Cumulative Projects peak-hour volumes, v/c ratios, and LOS for the roadway segments. As Table I indicates, all study area roadway segments are anticipated to operate at satisfactory LOS with the proposed project on a daily basis. As shown on Tables J and K, all study area roadway segments would operate at satisfactory LOS in both directions during both peak hours. Therefore, the proposed project would not have a measurable cumulative impact at any study area roadway segment.

SIGHT DISTANCE ANALYSIS

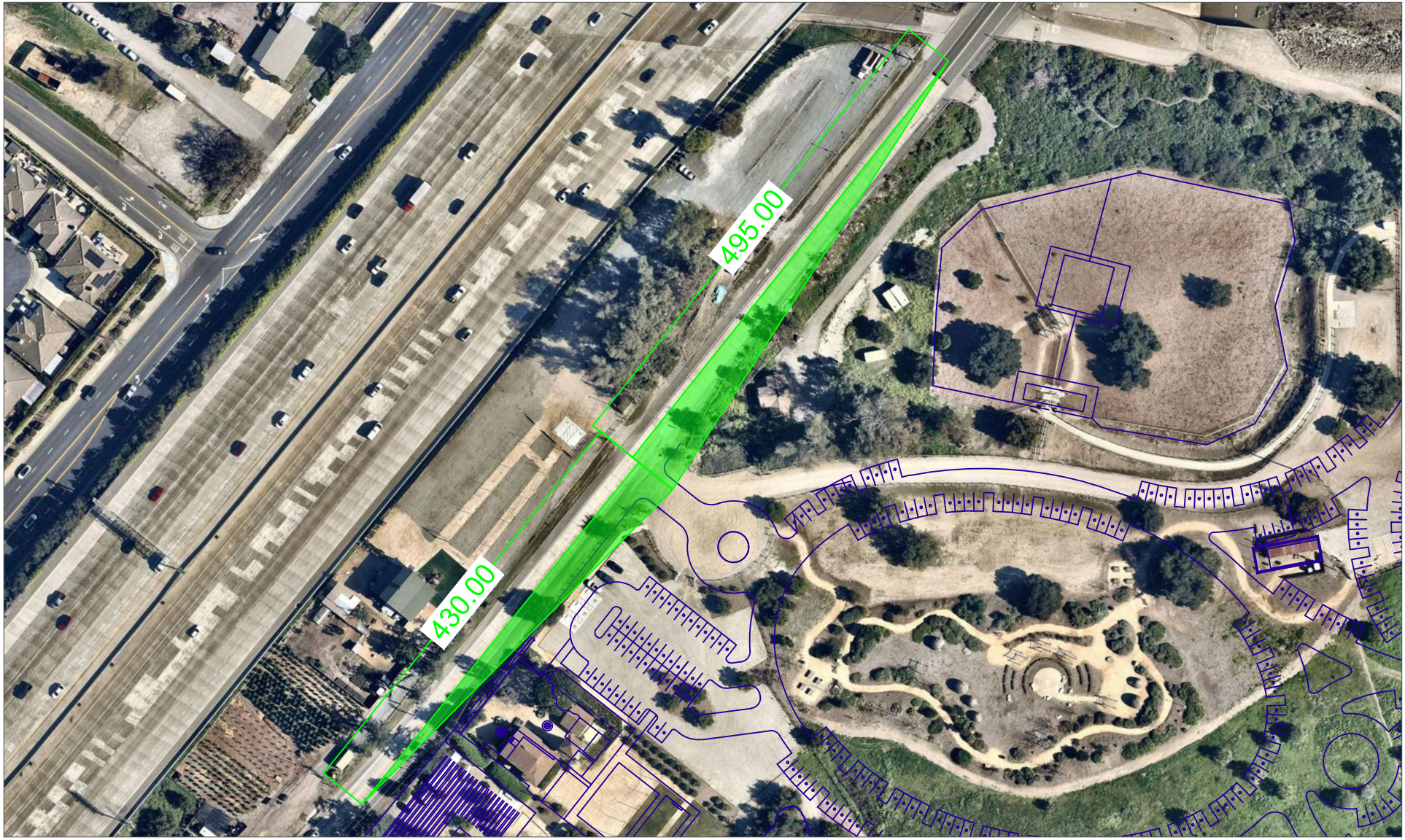
A sight distance analysis was conducted at each project driveway along Camino Capistrano. Sight distance is the length of the visible roadway a driver can see approaching vehicles before their line of sight is blocked by any object. For purposes of this analysis, only the stopping sight distance and corner sight distance have been evaluated. That is because those are the only two sight distance issues that would affect safe maneuver of ingress/egress traffic from the project driveways.

According to the California Department of Transportation (Caltrans) *Highway Design Manual* (HDM) (dated July 2020), the stopping sight distance is the minimum sight distance along a roadway required to allow a driver to decrease their speed from the design speed to a complete stop. The corner sight distance is the minimum sight distance in which a driver at a stop-controlled approach can see oncoming traffic on the major street to safely maneuver onto the roadway.

The stopping sight distance was evaluated on the major roadway abutting the site (i.e., Camino Capistrano). In the project vicinity, the speed limit along Camino Capistrano is 45 mph. As stated in Table 201.1 of the HDM, the minimum stopping sight distance is 360 feet for a design speed of 45 mph. Therefore, the minimum stopping sight distance has been considered as 360 feet for two project driveways (Driveways 1 and 2) along Camino Capistrano.

As for corner sight distance, Section 405.1 of the HDM states that corner sight distance requirements are not applicable for urban driveways unless signalized. However, as a conservative approach, corner sight distance was also evaluated for the project driveways. The minimum corner sight distance was based on design speed, time gap, and type of vehicles from the minor roads (project driveways) to enter the major roads (Camino Capistrano). Based on the requirements established in the HDM, it was determined that a minimum corner sight distance of 495 feet would be required for left-turn maneuvers coming out Driveways 1 and 2 along Camino Capistrano; a minimum corner sight distance of 430 feet would be required for right-turn maneuvers coming out Driveways 1 and 2 along Camino Capistrano.

Since the corner sight distance required at the project driveways would be greater than the stopping sight distance, sight triangle figures were created using the corner sight distance. Figures 14 and 15 illustrate the sight distance, required by the HDM, at Driveways 1 and 2, respectively. The project applicant would ensure that there are no sight obstructions (i.e., landscaping) within the sight distance triangles at each driveway, depicted in Figures 14 and 15, to provide adequate sight distance for left- and right-turn maneuvers onto Camino Capistrano and to meet the minimum sight distance requirements specified in the HDM.



LSA

LEGEND

Intersection Sight Distance Triangle

FIGURE 14

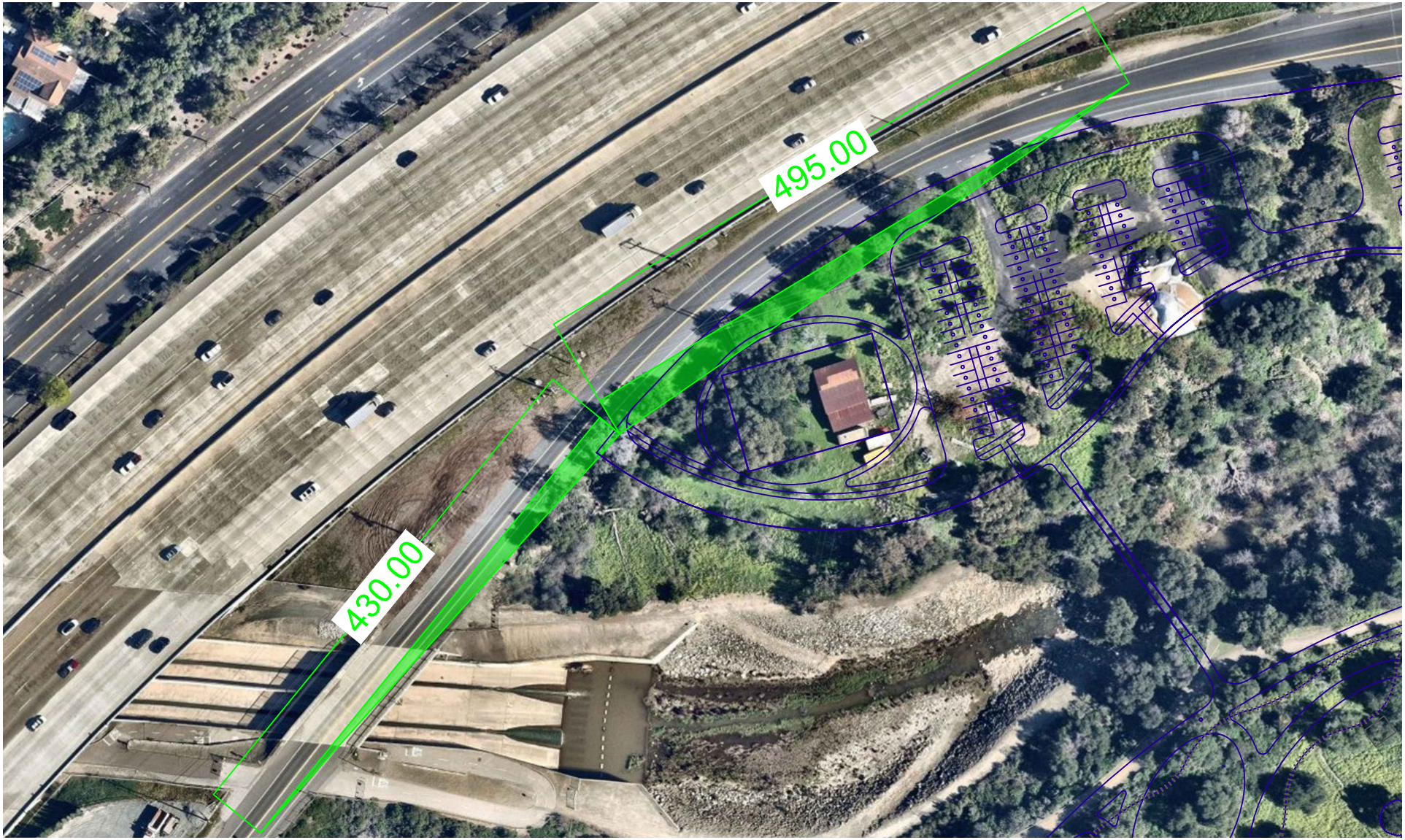
0 65 130
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Legacy Ranch Project

Driveway Sight Distance - Driveway 1

SOURCE: Almquist , 2025

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LSA

LEGEND

Intersection Sight Distance Triangle

FIGURE 15

0 55 110
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SOURCE: Almquist , 2025

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Legacy Ranch Project

Driveway Sight Distance - Driveway 2

VEHICLE MILES TRAVELED ANALYSIS

Senate Bill (SB) 743 mandates that VMT replace LOS as the transportation metric under CEQA. As a result, the City amended its TA Guidelines to require a VMT analysis for CEQA documents.

Screening Criteria

Per the City's TA Guidelines, there are five types of screening that lead agencies can apply to effectively screen projects from project-level assessment. These are summarized below:

- The project generates 200 or less weekday daily trips based on the current ITE *Trip Generation Manual*.
- The project is located within 0.5 mile of an existing major transit stop or a stop along an existing high-quality transit corridor.
- The project is a local serving retail use of 50,000 sf or less.
- The project is a locally serving public facility.
- The project consists of 100 percent affordable housing units.

As mentioned before, the proposed project is located at 30291 Camino Capistrano, and there are no existing major transit stops along an existing high-quality transit corridor within 0.5 mile of the project site. The proposed project would develop the project site with the Legacy Ranch, which would consist of seven (7) cores: Equestrian Core, Chapel Core, Swanner House Core, Agricultural Core, Event Barn Core, Community Building Core, and Trails and Natural Core while preserving the existing uses on site including the Swanner House, the Dr. John Cortese Dog Park, and the Putuidem Village. The proposed project is estimated to generate 1,104 new daily trips based on the ITE trip rates. The proposed project cannot be screened out based on any of the adopted screening criteria.

Analysis

Since the proposed project does not screen out based on any of the above criteria, a VMT analysis is required. Per the City's TA Guidelines, LSA has prepared a VMT analysis for the proposed project using the latest version (version 5.1) of the Orange County Transportation Analysis Model (OCTAM).

Project Traffic Analysis Zone Update

OCTAM is a socioeconomic data-based model. Based on the operations information, the proposed project would create up to 60 full-time jobs, with additional part-time employment opportunities associated with future events at the project site. For VMT assessment purposes, only 60 full-time employees are considered and modeled for the proposed project.

The first step in the preparation of this analysis was to update the Traffic Analysis Zone (TAZ) in the OCTAM that includes the project site. The proposed project needs to be isolated in its own TAZ 1602 to estimate/determine the project VMT. OCTAM does not have the ability to split/add new TAZs. Therefore, to isolate the proposed project in its own TAZ 1602, non-project socioeconomic data in the project TAZ were moved from the project TAZ 1602 to the adjacent TAZ 1610. Only 60 full-time employees were included in the project TAZ 1602 for modeling.

Analysis Metrics and Thresholds

The City's TA Guidelines recommend using "Total VMT" for retail, private school/university, hotel/motel/inn land uses or transportation projects. The proposed project is a mix of miscellaneous service and recreational land uses and the majority of project VMT is expected to be generated by visitors and employees, which is similar to service oriented land uses (i.e., retail). Therefore, "Total VMT" was used as the matrix for the VMT analysis for this proposed project. Also, the TA Guidelines indicate that a project will have a significant VMT impact if the project generates a net increase in total City VMT.

VMT Analysis

As recommended in the City's TA Guidelines, model runs were conducted for both OCTAM base year (2019) and OCTAM future year (2050) without and with the proposed project by using the latest version of the OCTAM (version 5.1). Because an NOP for the proposed project was issued on November 13, 2025, and existing traffic counts for the proposed project were collected in September 2025, 2025 was considered as the project base year for purposes of the VMT analysis. Since the OCTAM base year (2019) is not consistent with the proposed project base year (2025), per the City's TA Guidelines, linear interpolation between the OCTAM base year (2019) and OCTAM future year (2050) was conducted to determine the VMT results for the project base year (2025). In addition, no circulation/network modifications were included in the OCTAM network, except for the centroid connectors for the project TAZ 1602 under the "With Project" scenarios. To represent project-site-specific access, LSA inactivated the centroid connector on Camino Los Padres for the project TAZ 1602, while keeping the centroid connector on Camino Capistrano.

Appendix E provides the VMT analysis results for a typical weekday under the proposed project using the latest version of OCTAM (version 5.1). The VMT results indicate that, on a typical weekday, 60 project employees would attract 269 visitors in the model base year 2019 and 253 visitors in the model future year 2050. OCTAM model outputs show that 269 visitors in the model base year 2019 would generate 1,921 visitor VMT and 253 visitors in the model future year 2050 would generate 1,701 visitor VMT.

However, the project would allow for a maximum of 499 visitors to the project site at any given time. In order to disclose the project VMT with up to 499 visitors, a scaling adjustment was performed outside the model. A scaling adjustment factor was calculated based on the OCTAM-estimated visitors associated with 60 project employees on a typical weekday and the anticipated up to 499 visitors. As mentioned above, in the model base year 2019, 60 project employees per OCTAM would attract 269 visitors and generate 1,921 visitor VMT. After applying a scaling adjustment factor of 1.86 (499 visitors/269 visitors), 499 visitors are expected to generate 3,563 visitor VMT in the model base year 2019. Similarly, in the model future year 2050, 60 project employees per OCTAM would attract 253 visitors and generate 1,701 visitor VMT. After applying a scaling adjustment factor of 1.97 (499 visitors/253 visitors), 499 visitors are expected to generate 3,355 visitor VMT in the model future year 2050. Appendix E provides detailed VMT calculation.

Table L below shows the VMT results for the proposed project with up to 499 visitors, after incorporating visitor VMT associated with 499 visitors in the OCTAM model outputs. As shown in Table L, in the project base year of 2025, the total City VMT for the proposed project with 499

visitors (1,602,833) is higher than the threshold (1,600,754) and would result in a net increase of 2,079 (0.13 percent). Therefore, the proposed project with up to 499 visitors would have a significant VMT impact and would be required to implement feasible Traffic Demand Management (TDM) measures to reduce project VMT.

Table L: Project and City Total VMT Comparison

VMT Analysis Scenario	VMT Rate	
	Weekday No Project	**Metric**
OCTAM Base Year (2019) No Project Total City VMT[1]	1,549,339	Total VMT
OCTAM Future Year (2050) No Project Total City VMT[1]	1,814,982	Total VMT
VMT Threshold: Project Base Year (2025) No Project Total City VMT[2]	**1,600,754**	Total VMT
	Weekday with Project (Up to 499 Visitors)[3]	**Metric**
Adjusted OCTAM Base Year (2019) Plus Project Total City VMT	1,551,390	Total VMT
Adjusted OCTAM Future Year (2050) Plus Project Total City VMT	1,817,180	Total VMT
Project VMT Rate: Project Base Year (2025) Plus Project Total City VMT[2]	**1,602,833**	Total VMT
Above or Below VMT Threshold	**Above**	
Significant Impact?	**Yes**	
VMT Reduction Required	**2,079 (0.13%)**	

Source: Compiled by LSA (2026).
[1] Obtained using "No project" LSA model runs (OCTAM Version 5.1).
[2] Linearly interpolated between OCTAM base year (2019) and OCTAM future year (2050) model runs.
[3] A scaling adjustment was made to "With Project" LSA model outputs (OCTAM Version 5.1) to reflect 499 visitors, as included in Appendix E.
OCTAM = Orange County Transportation Analysis Model
VMT = vehicle miles traveled

VMT Mitigation Measures

Since a significant VMT impact (0.13 percent) has been identified for the proposed project, potential mitigation measures should be identified to reduce the project's VMT impact to a level at or below the City's threshold.

The California Air Pollution Control Officers Association's (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (October 2024) (CAPCOA Handbook) is utilized for identifying various VMT mitigation measures that are feasible and applicable. The following is a detailed description of potential VMT reduction that could be achieved with implementation of feasible and applicable mitigation measures. Table M provides methodology, assumptions, and parameters used in the estimation/calculation of VMT reduction for the project along with the potential amount of VMT reduction that can be achieved.

Proposed Vehicle Miles Traveled Mitigation

Implement Commute Trip Reduction Program (Voluntary)

The project can implement a voluntary commute trip reduction (CTR) program. The CTR programs discourage single-occupancy vehicle trips and encourage alternative modes of transportation (e.g., carpooling, taking transit, walking, and bicycling), thereby reducing VMT and greenhouse gas (GHG) emissions. CAPCOA Handbook transportation measure **"T-5. Implement Commute Trip Reduction Program (Voluntary)"** can be used to quantify VMT reduction. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the following parameter that would be required to quantify the VMT reduction for this measure is not available:

- Parameter B: Percent of employees eligible for program.

Due to lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

Implement Commute Trip Reduction Marketing

The project can implement a marketing strategy that promotes a CTR program. Information sharing and marketing promote and educate employees about alternative travel choices (e.g., carpooling, taking transit, walking, and biking), thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure **"T-7. Implement Commute Trip Reduction Marketing"** can be used to quantify VMT reduction. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the following parameter that would be required to quantify the VMT reduction for this measure is not available:

- Parameter B: Percent of employees eligible for program.

Due to lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

Provide Ridesharing Program

The project can implement and fund a ridesharing program and establish a permanent transportation management association. Ridesharing encourages carpooled vehicle trips, replacing single-occupancy vehicle trips, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure **"T-8. Provide Ride Sharing Program"** can be used to quantify VMT reduction. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the following parameter that would be required to quantify the VMT reduction for this measure is not available:

- Parameter B: Percent of employees eligible for program.

Due to lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

Implement Subsidized or Discounted Transit Program

The project can provide subsidized or discounted, or free transit passes for employees. This measure would encourage the use of transit by reducing the cost for choosing transit, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure "**T-9. Implement Subsidized or Discounted Transit Program**" can be used to quantify VMT reduction. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the following parameters that would be required to quantify the VMT reduction for this measure is not available:

- Parameter C: Subsidy amount ($).
- Parameter D: Percent of employees eligible for subsidy.

Due to lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

Provide End-of-Trip Bicycle Facilities

The project will install and maintain end-of-trip facilities (e.g., bike parking, bike, lockers, showers, and personal lockers) to encourage commuting by bicycle, thereby reducing VMT and GHG emissions. CAPCOA Handbook transportation measure **"T-10. Provide End-of-Trip Bicycle Facilities"** can be used to quantify VMT reduction. Based on the data compiled in Table M, this measure may reduce the project's VMT by 0.07 percent.

Provide Employer-Sponsored Vanpool

The project will implement an employer-sponsored vanpool service. Vanpooling is a flexible form of public transportation that provides groups of 5 to 15 people with a cost-effective and convenient rideshare option for commuting. This measure would shift from long-distance, single-occupied vehicles to shared vehicles, reducing overall commute VMT and reducing GHG emissions. CAPCOA Handbook transportation measure **"T-11. Provide Employer-Sponsored Vanpool"** can be used to quantify VMT reduction. Based on the data compiled in Table M, this measure may reduce the project's VMT by 7.65 percent.

Provide Additional Electric Vehicle Charging Infrastructure

The project can install onsite electric vehicle chargers in an amount beyond what is required by the latest California Green Building Standards (CALGreen). Electric vehicle chargers enable Plugin-Hybrid Electric Vehicles to drive a larger share of VMT in electric mode. The latest CALGreen, California Building Code, requires provision of infrastructure to accommodate electric vehicle chargers for land use developments. Additional electric charging stations, beyond CALGreen requirements, can be considered as a GHG mitigation measure according to CAPCOA. Although it is understood that provision of electric charging stations would not reduce VMT, it would reduce GHG, which can be considered equivalent to reduction in VMT. CAPCOA Handbook measure **"T-14. Provide Electric Vehicle Charging Infrastructure"** can be used to quantify GHG reduction. While implementation of this measure may potentially help in some reduction in project VMT, data regarding the following parameters that would be required to quantify the VMT reduction for this measure is not available:

- Parameter B: Number of chargers installed at site.
- Parameter C: Total vehicles accessing the site per day.

Due to lack of substantial data, no VMT reduction has been attributed to this mitigation measure.

Provide Pedestrian Network Improvement

The project can install new pedestrian paths/sidewalks along Camino Capistrano along the entire length of the project frontage, which results in approximately 0.61 mile of new sidewalk/pedestrian access. The integration of sidewalks and pedestrian paths within the project to the external pedestrian around the project can allow for connection with the surrounding community for easy access without vehicular dependency and enhancing the city's active transportation network. CAPCOA Handbook measure **"T-18. Provide Pedestrian Network Improvement"** can be used to quantify VMT reduction. Based on the data compiled in Table M, this measure may reduce the project's VMT by 0.19 percent.

VMT mitigation measures and strategies aim to promote overall mobility with the goal of reducing VMT and GHG emissions. As indicated previously, the above VMT mitigation measures may reduce the project's VMT by approximately 7.71 percent. The above-listed VMT reduction measures demonstrate the project's best-faith effort to reduce its VMT impact. A significant VMT impact (0.13 percent) has been identified for the proposed project with up to 499 visitors. Although the VMT reduction measures may achieve an approximately 7.71 percent reduction and may bring the project down to less than significant, the project will continue to have a significant transportation impact under CEQA given the uncertainty of the effectiveness of the above-listed VMT reduction measures. If implemented, these measures and strategies may need to be monitored for their usage and effectiveness.

Table M: Calculated VMT Reduction

Mitigation Measure	Formula	Comments	Calculated Reduction in VMT (%)
Proposed VMT Mitigation – Trip Reduction Program (Maximum Reduction 45%)			
T-5. Implement Commute Trip Reduction Program (Voluntary)	$A = B \times C$ B = Percent of employees eligible for program (0-100%, information not available) C = Percent reduction in commute VMT from eligible Employees (-4%)	Must also include CAPCOA Handbook measures: T-7 – CTR Marketing T-8 – Ridesharing T-9 – Discounted Transit T-10 – Bicycle Facilities T-11 – Vanpool	Up to 4.0% (Reduction not applied due to lack of adequate data)
T-7. Implement Commute Trip Reduction Marketing	$A = B \times C \times D$ B = Percent of employees eligible for program (0-100%, information not available) C = Percent reduction in commute VMT from eligible Employees (-4%) D = Adjustment from vehicle trips to VMT (1)	The following features (or similar alternatives) of the marketing strategy are essential for effectiveness: • On-site or online commuter information services • Employee transportation coordinators • Onsite or online transit pass sales • Guaranteed ride home service	Up to 4.0% (Reduction not applied due to lack of adequate data). If the project decides to select T-5 as the VMT measure, no VMT reduction can be applied from this measure.
T-8. Provide Ridesharing Program	$A = B \times C$ • B = Percent of employees eligible for program (0-100%, information not available) • C = Percent reduction in commute VMT (-4% for 'suburban' from Table T-8.1)	Ridesharing must be promoted through a multifaceted approach; examples include the following: • Designating a certain percentage of desirable parking spaces for ridesharing vehicles • Designating adequate passenger loading and unloading and waiting areas for ridesharing vehicles • Providing an app or website for coordinating rides	Up to 4.0% (Reduction not applied due to lack of adequate data). If the project decides to select T-5 as the VMT measure, no VMT reduction can be applied from this measure.

Table M: Calculated VMT Reduction

Mitigation Measure	Formula	Comments	Calculated Reduction in VMT (%)
T-9. Implement Subsidized or Discounted Transit Program	$A = \frac{C}{B} \times G \times D \times E \times F \times H \times I$ B = Average transit fare without subsidy ($2 one way) C = Subsidy amount ($, information not available) D= Percent of employees eligible for subsidy (0–100%, information not available) E = Percent of project-generated VMT from employees (41% from OCTAM) F = Transit mode share of all trips or work trips (0.77% for 'Orange County' all trips from OCTAM) G = Elasticity of transit boardings with respect to transit fare price (-0.43) H = Percent of transit trips that would otherwise be made in a vehicle (50%) I = Conversion factor of vehicle trips to VMT (1.0)	The project is within 0.5 mile of OCTA Route 91.	Up to 5.5% (Reduction not applied due to lack of adequate data). If the project decides to select T-5 as the VMT measure, no VMT reduction can be applied from this measure.
T-10. Provide End-of-Trip Bicycle Facilities	$A = \frac{C \times (E - (B \times E))}{D \times F}$ • B = Bike mode adjustment factor (1.78 – bike parking only, assumed no showers and lockers at the workplace) • C = Existing bicycle trip length for all trips in region (2.0 miles for 'San Diego-Carlsbad' from T-10.1) • D = Existing vehicle trip length for all trips in region (8.02 miles for 'Orange County' from OCTAM) • E = Existing bicycle mode share for work trips in region (0.36% for 'Orange County' from OCTAM) • F = Existing vehicle mode share for work trips in region (94.21% for 'Orange County' from OCTAM)	End-of-trip facilities should be installed at a size proportional to the number of commuting bicyclists and regularly maintained.	Estimated 0.07% reduction in VMT If the project decides to select T-5 as the VMT measure, no VMT reduction can be applied from this measure.
T-11. Provide Employer-Sponsored Vanpool	$A = \frac{\left((1-B) \times C \times F\right) + \left(B \times \frac{D}{E} \times G\right)}{\left((1-B) \times C \times F\right) + (B \times D \times F)} - 1$ • B = Percent of employees that participate in vanpool program (2.7%) • C = Average length of one-way vehicle commute trip in region (8.02 miles per trip for 'Orange County' from OCTAM) • D = Average length of one-way vanpool commute trip (42.0 miles per trip) • E = Average vanpool occupancy (including driver) (6.25 occupants) • F = Average emission factor of average employee vehicle (307.5 g CO_{2e} per mile) • G = Vanpool emission factor (763.4 g CO_{2e} per mile)	Vanpool programs are more appropriate for the building occupant or tenant (i.e., employer) to implement.	Estimated 7.65% reduction in VMT If the project decides to select T-5 as the VMT measure, no VMT reduction can be applied from this measure.

Table M: Calculated VMT Reduction

Mitigation Measure	Formula	Comments	Calculated Reduction in VMT (%)
Proposed VMT Mitigation – Parking or Road Pricing/ Management (Maximum Reduction 35%)			
T-14. Provide Electric Vehicle Charging Infrastructure	$A = \frac{B \times D \times (F - E) \times (G - (H \times I \times K \times L))}{-C \times J}$ • B = Number of chargers installed at site (information not available) • C = Total vehicles accessing the site per day (information not available) • D = Average number of PHEVs served per day per charger installed (2) • E = Percent of PHEV miles in electric mode without measure (46%) • F = Percent of PHEV miles in electric mode with measure (80%) • G = Average emission factor of PHEV in gasoline mode (205.1 g CO_2e per mile) • H = Energy efficiency of PHEV in electric mode (0.327 kWh per mile) • I = Carbon intensity of local electricity provider (541 lb CO_2e per MWh 'San Diego Gas & Electric' from Table E-4.3, Year 2025) • J = Average emission factor of non-electric vehicles accessing the site (205.1 g CO_2e per mile) • K = conversion from lb to g (454 g per lb) • L = Conversion from kWh to MWh (0.001 MWh per kWh)	Parking at the chargers must be limited to electric vehicles.	Up to 11.9% (Reduction not applied due to lack of adequate data)
Proposed VMT Mitigation – Neighborhood Design			
T-18. Provide Pedestrian Network Improvement	$A = \left(\frac{C}{B} - 1\right) \times D$ B = Existing sidewalk length in study area, 16.01 (miles) C = Sidewalk length in study area with measure, 16.62 (miles) D = Elasticity of household VMT with respect to the ratio of sidewalks-to-streets (-0.05)	Per CAPCOA Handbook, the recommended study area is 0.6 mile around the project site, which represents 6-to-10-minute walking distance. The project can install new sidewalk along Camino Capistrano along the entire length of the project frontage, which results in approximately 0.61 mile of new sidewalk/ pedestrian access.	Estimated 0.19% reduction in VMT
		Total VMT Reduction[1]	7.71%

Table M: Calculated VMT Reduction

Mitigation Measure	Formula	Comments	Calculated Reduction in VMT (%)

Source: California Air Pollution Control Officers Association (CAPCOA). 2024. *Handbook for Analyzing Greenhouse Gas Emission Reduction, Assessing Climate Vulnerabilities, and Advancing Health and Equity, California Air Pollution Control Officers Association*. October.

Note: Number of mitigation measure corresponds to the CAPCOA Handbook.

[1] Per CAPCOA, total VMT reduction for multiple strategies within same subsector is calculated using the equation: 1-(1-A)*(1-B)*(1-C)... where A, B, C are equal to individual mitigation strategy reduction percentages.

CTR = commute trip reduction

OCTAM = Orange County Transportation Analysis Model

VMT = vehicle miles traveled

CONCLUSIONS

Based on the results of this TIA, the proposed project can be implemented without impacting the design or operation of the surrounding roadway system. An evaluation of intersection and roadway LOS shows that the addition of project traffic would not measurable impact the study area locations, according to the City's performance criteria.

LSA evaluated sight distance at each project driveway along Camino Capistrano to ensure drivers' visibility and safety. The project applicant would ensure that there are no sight obstructions (e.g., landscaping) within the sight distance triangles at each driveway to provide adequate sight distance for left- and right-turn maneuvers onto Camino Capistrano and to meet the minimum sight distance requirements specified in the HDM.

The proposed project is a mix of miscellaneous service and recreational land uses. Based on the latest City's TA Guidelines, the total City VMT for the proposed project with 499 visitors (1,602,833) is higher than the threshold (1,600,754) and would result in a net increase of 2,079 (0.13 percent). Therefore, the project would have a significant VMT impact. Several feasible VMT reduction measures identified from the CAPCOA Handbook may reduce project VMT by 7.71 percent. Although the VMT reduction measures may bring the project down to less than significant, the project will continue to have a significant transportation impact under CEQA given the uncertainty of the effectiveness of the above-listed VMT reduction measures. If implemented, these measures and strategies may need to be monitored for their usage and effectiveness.

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APPENDIX A

EXISTING TRAFFIC VOLUMES

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of San Juan Capistrano
N/S: Camino Capistrano
E/W: The Swanner House Driveway
Weather: Clear

File Name : 01_SJO_Cap_SH DW AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

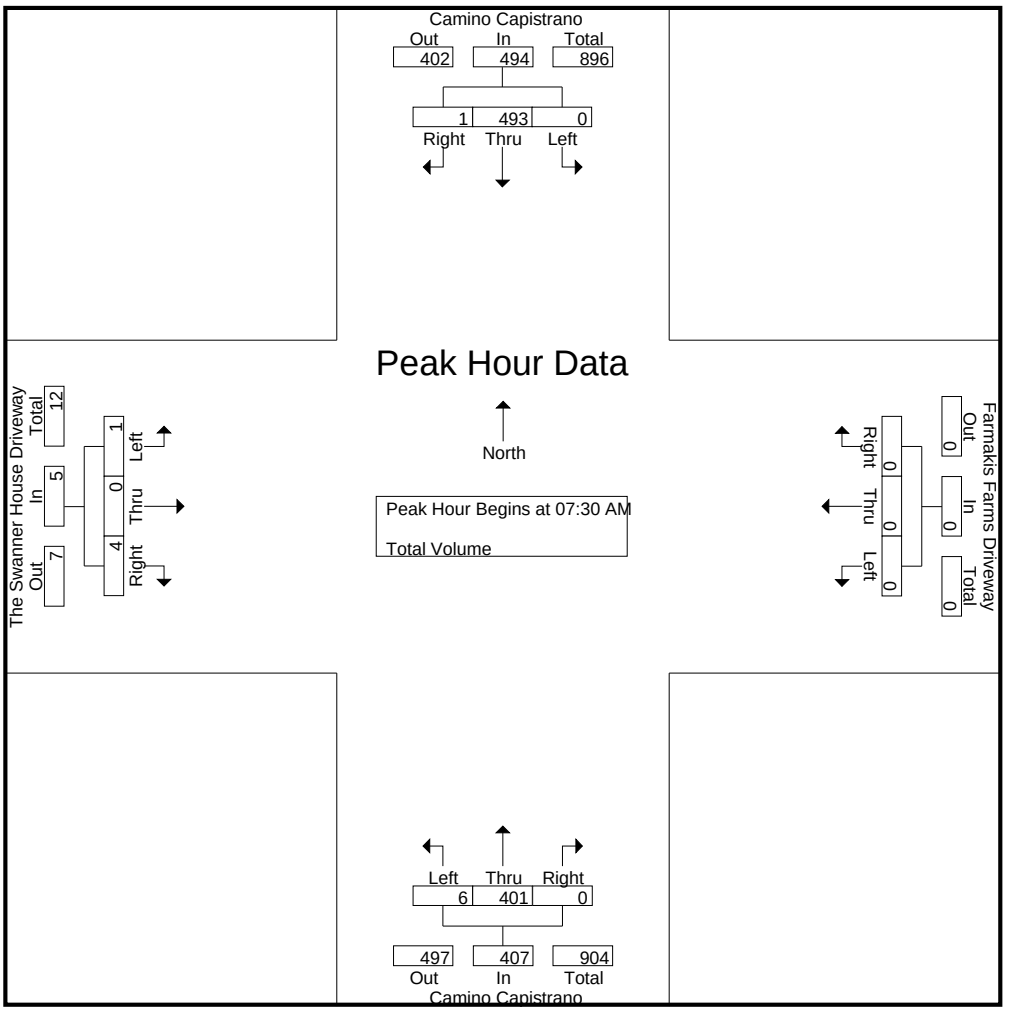
	Camino Capistrano Southbound				Farmakis Farms Driveway Westbound				Camino Capistrano Northbound				The Swanner House Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	27	0	27	0	0	0	0	2	14	0	16	0	0	1	1	44
07:15 AM	0	49	0	49	0	0	0	0	2	38	0	40	1	0	0	1	90
07:30 AM	0	137	0	137	0	0	0	0	2	61	0	63	0	0	3	3	203
07:45 AM	0	211	0	211	0	0	0	0	2	153	0	155	0	0	1	1	367
Total	0	424	0	424	0	0	0	0	8	266	0	274	1	0	5	6	704
08:00 AM	0	90	1	91	0	0	0	0	2	110	0	112	1	0	0	1	204
08:15 AM	0	55	0	55	0	0	0	0	0	77	0	77	0	0	0	0	132
08:30 AM	0	24	2	26	0	0	0	0	1	37	0	38	1	0	1	2	66
08:45 AM	0	38	0	38	0	0	0	0	0	29	0	29	0	0	0	0	67
Total	0	207	3	210	0	0	0	0	3	253	0	256	2	0	1	3	469
Grand Total	0	631	3	634	0	0	0	0	11	519	0	530	3	0	6	9	1173
Apprch %	0	99.5	0.5		0	0	0		2.1	97.9	0		33.3	0	66.7		
Total %	0	53.8	0.3	54	0	0	0	0	0.9	44.2	0	45.2	0.3	0	0.5	0.8	

	Camino Capistrano Southbound				Farmakis Farms Driveway Westbound				Camino Capistrano Northbound				The Swanner House Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	137	0	137	0	0	0	0	**2**	61	0	63	0	0	**3**	**3**	203
07:45 AM	0	**211**	0	**211**	0	0	0	0	2	**153**	0	**155**	0	0	1	1	**367**
08:00 AM	0	90	**1**	91	0	0	0	0	2	110	0	112	**1**	0	0	1	204
08:15 AM	0	55	0	55	0	0	0	0	0	77	0	77	0	0	0	0	132
Total Volume	0	493	1	494	0	0	0	0	6	401	0	407	1	0	4	5	906
% App. Total	0	99.8	0.2		0	0	0		1.5	98.5	0		20	0	80		
PHF	.000	.584	.250	.585	.000	.000	.000	.000	.750	.655	.000	.656	.250	.000	.333	.417	.617

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City of San Juan Capistrano
N/S: Camino Capistrano
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File Name : 01_SJO_Cap_SH DW AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:30 AM				07:00 AM			
+0 mins.	0	137	0	137	0	0	0	0	**2**	61	0	63	0	0	1	1
+15 mins.	0	**211**	0	**211**	0	0	0	0	2	**153**	0	**155**	**1**	0	0	1
+30 mins.	0	90	**1**	91	0	0	0	0	2	110	0	112	0	0	**3**	**3**
+45 mins.	0	55	0	55	0	0	0	0	0	77	0	77	0	0	1	1
Total Volume	0	493	1	494	0	0	0	0	6	401	0	407	1	0	5	6
% App. Total	0	99.8	0.2		0	0	0		1.5	98.5	0		16.7	0	83.3	
PHF	.000	.584	.250	.585	.000	.000	.000	.000	.750	.655	.000	.656	.250	.000	.417	.500

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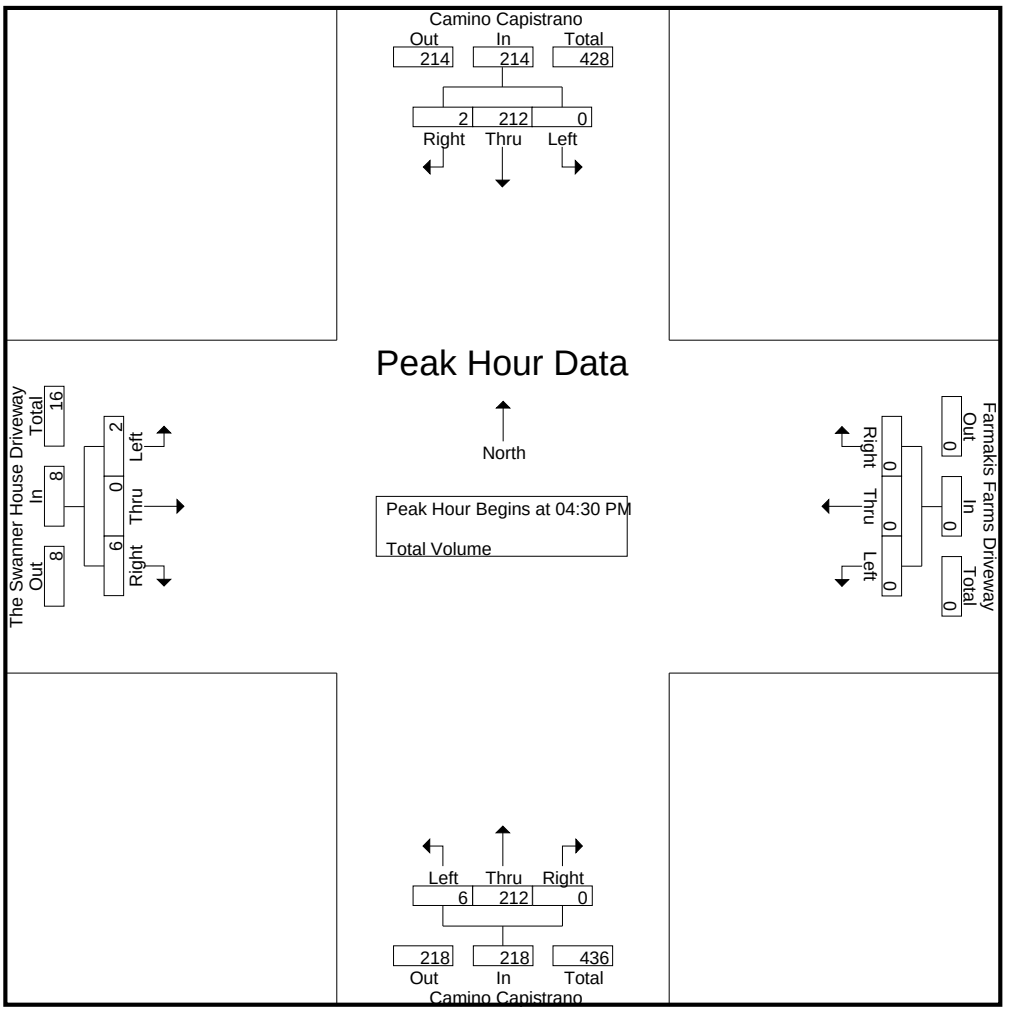
	Camino Capistrano Southbound				Farmakis Farms Driveway Westbound				Camino Capistrano Northbound				The Swanner House Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	28	3	31	0	0	0	0	0	57	0	57	0	0	0	0	88
04:15 PM	0	34	0	34	0	0	0	0	0	51	0	51	0	0	1	1	86
04:30 PM	0	57	0	57	0	0	0	0	1	56	0	57	0	0	1	1	115
04:45 PM	0	47	1	48	0	0	0	0	3	45	0	48	1	0	0	1	97
Total	0	166	4	170	0	0	0	0	4	209	0	213	1	0	2	3	386
05:00 PM	0	52	1	53	0	0	0	0	0	59	0	59	0	0	2	2	114
05:15 PM	0	56	0	56	0	0	0	0	2	52	0	54	1	0	3	4	114
05:30 PM	0	26	2	28	0	0	0	0	0	58	0	58	1	0	2	3	89
05:45 PM	0	47	2	49	0	0	0	0	3	33	0	36	0	0	1	1	86
Total	0	181	5	186	0	0	0	0	5	202	0	207	2	0	8	10	403
Grand Total	0	347	9	356	0	0	0	0	9	411	0	420	3	0	10	13	789
Apprch %	0	97.5	2.5		0	0	0		2.1	97.9	0		23.1	0	76.9		
Total %	0	44	1.1	45.1	0	0	0	0	1.1	52.1	0	53.2	0.4	0	1.3	1.6	

	Camino Capistrano Southbound				Farmakis Farms Driveway Westbound				Camino Capistrano Northbound				The Swanner House Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**57**	0	**57**	0	0	0	0	1	56	0	57	0	0	1	1	**115**
04:45 PM	0	47	**1**	48	0	0	0	0	**3**	45	0	48	**1**	0	0	1	97
05:00 PM	0	52	1	53	0	0	0	0	0	**59**	0	**59**	0	0	2	2	114
05:15 PM	0	56	0	56	0	0	0	0	2	52	0	54	1	0	**3**	**4**	114
Total Volume	0	212	2	214	0	0	0	0	6	212	0	218	2	0	6	8	440
% App. Total	0	99.1	0.9		0	0	0		2.8	97.2	0		25	0	75		
PHF	.000	.930	.500	.939	.000	.000	.000	.000	.500	.898	.000	.924	.500	.000	.500	.500	.957

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City of San Juan Capistrano
N/S: Camino Capistrano
E/W: The Swanner House Driveway
Weather: Clear

File Name : 01_SJO_Cap_SH DW PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:45 PM				04:45 PM			
+0 mins.	0	**57**	0	**57**	0	0	0	0	**3**	45	0	48	**1**	0	0	1
+15 mins.	0	47	**1**	48	0	0	0	0	0	**59**	0	**59**	0	0	2	2
+30 mins.	0	52	1	53	0	0	0	0	2	52	0	54	1	0	**3**	**4**
+45 mins.	0	56	0	56	0	0	0	0	0	58	0	58	1	0	2	3
Total Volume	0	212	2	214	0	0	0	0	5	214	0	219	3	0	7	10
% App. Total	0	99.1	0.9		0	0	0		2.3	97.7	0		30	0	70	
PHF	.000	.930	.500	.939	.000	.000	.000	.000	.417	.907	.000	.928	.750	.000	.583	.625

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City of San Juan Capistrano
N/S: Camino Capistrano
E/W: Junipero Serra Road
Weather: Clear

File Name : 02_SJO_Cap_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

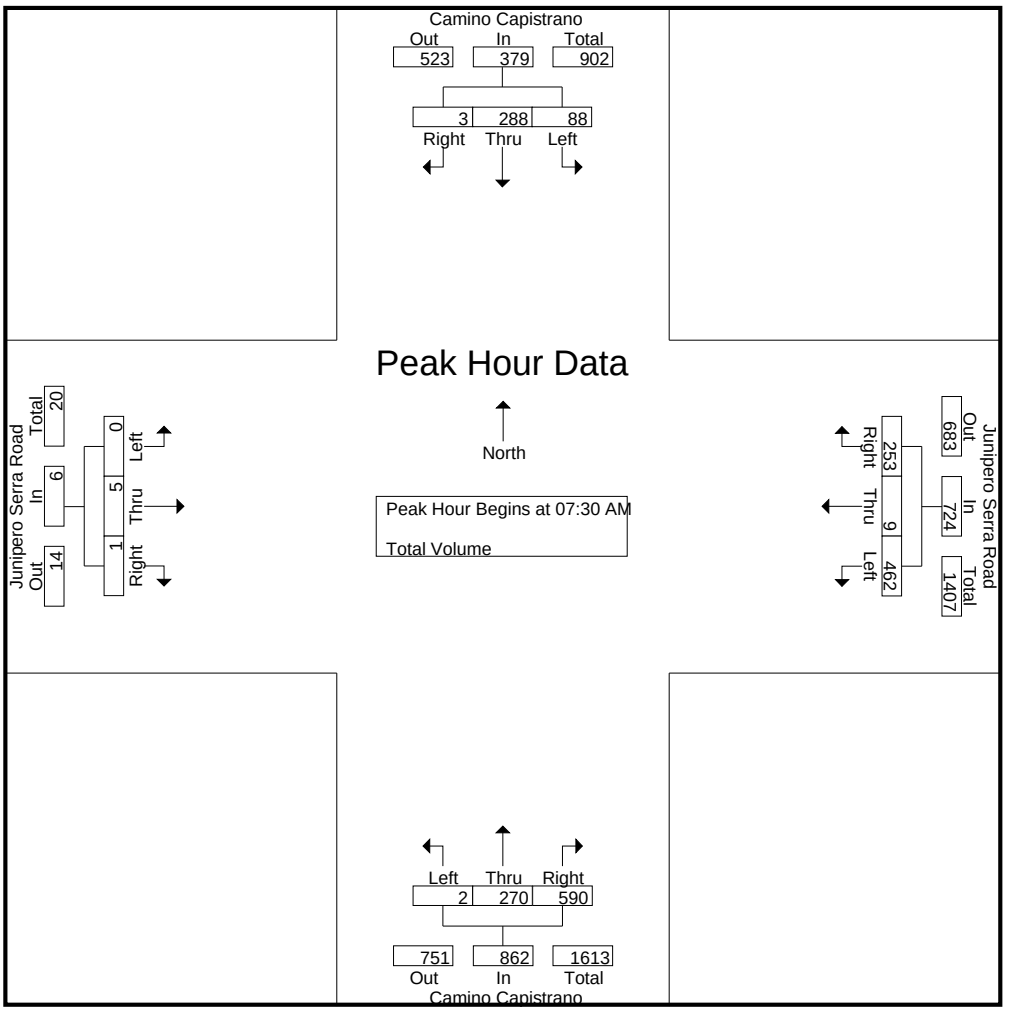
	Camino Capistrano Southbound				Junipero Serra Road Westbound				Camino Capistrano Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	21	0	25	71	0	10	81	0	12	115	127	0	0	0	0	233
07:15 AM	11	30	0	41	109	3	21	133	0	28	130	158	0	1	0	1	333
07:30 AM	34	63	0	97	128	0	59	187	0	41	165	206	0	0	0	0	490
07:45 AM	31	91	1	123	101	3	123	227	2	82	150	234	0	1	0	1	585
Total	80	205	1	286	409	6	213	628	2	163	560	725	0	2	0	2	1641
08:00 AM	13	93	1	107	148	3	43	194	0	82	144	226	0	1	1	2	529
08:15 AM	10	41	1	52	85	3	28	116	0	65	131	196	0	3	0	3	367
08:30 AM	11	20	1	32	51	2	16	69	1	26	90	117	0	0	0	0	218
08:45 AM	17	27	0	44	56	4	24	84	0	23	93	116	0	2	0	2	246
Total	51	181	3	235	340	12	111	463	1	196	458	655	0	6	1	7	1360
Grand Total	131	386	4	521	749	18	324	1091	3	359	1018	1380	0	8	1	9	3001
Apprch %	25.1	74.1	0.8		68.7	1.6	29.7		0.2	26	73.8		0	88.9	11.1		
Total %	4.4	12.9	0.1	17.4	25	0.6	10.8	36.4	0.1	12	33.9	46	0	0.3	0	0.3	

	Camino Capistrano Southbound				Junipero Serra Road Westbound				Camino Capistrano Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**34**	63	0	97	128	0	59	187	0	41	**165**	206	0	0	0	0	490
07:45 AM	31	91	**1**	**123**	101	**3**	**123**	**227**	**2**	**82**	150	**234**	0	1	0	1	**585**
08:00 AM	13	**93**	1	107	**148**	3	43	194	0	82	144	226	0	1	**1**	2	529
08:15 AM	10	41	1	52	85	3	28	116	0	65	131	196	0	**3**	0	**3**	367
Total Volume	88	288	3	379	462	9	253	724	2	270	590	862	0	5	1	6	1971
% App. Total	23.2	76	0.8		63.8	1.2	34.9		0.2	31.3	68.4		0	83.3	16.7		
PHF	.647	.774	.750	.770	.780	.750	.514	.797	.250	.823	.894	.921	.000	.417	.250	.500	.842

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City of San Juan Capistrano
N/S: Camino Capistrano
E/W: Junipero Serra Road
Weather: Clear

File Name : 02_SJO_Cap_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:30 AM				08:00 AM			
+0 mins.	**34**	63	0	97	109	**3**	21	133	0	41	**165**	206	0	1	**1**	2
+15 mins.	31	91	**1**	**123**	128	0	59	187	**2**	**82**	150	**234**	0	**3**	0	**3**
+30 mins.	13	**93**	1	107	101	3	**123**	**227**	0	82	144	226	0	0	0	0
+45 mins.	10	41	1	52	**148**	3	43	194	0	65	131	196	0	2	0	2
Total Volume	88	288	3	379	486	9	246	741	2	270	590	862	0	6	1	7
% App. Total	23.2	76	0.8		65.6	1.2	33.2		0.2	31.3	68.4		0	85.7	14.3	
PHF	.647	.774	.750	.770	.821	.750	.500	.816	.250	.823	.894	.921	.000	.500	.250	.583

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City of San Juan Capistrano
N/S: Camino Capistrano
E/W: Junipero Serra Road
Weather: Clear

File Name : 02_SJO_Cap_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

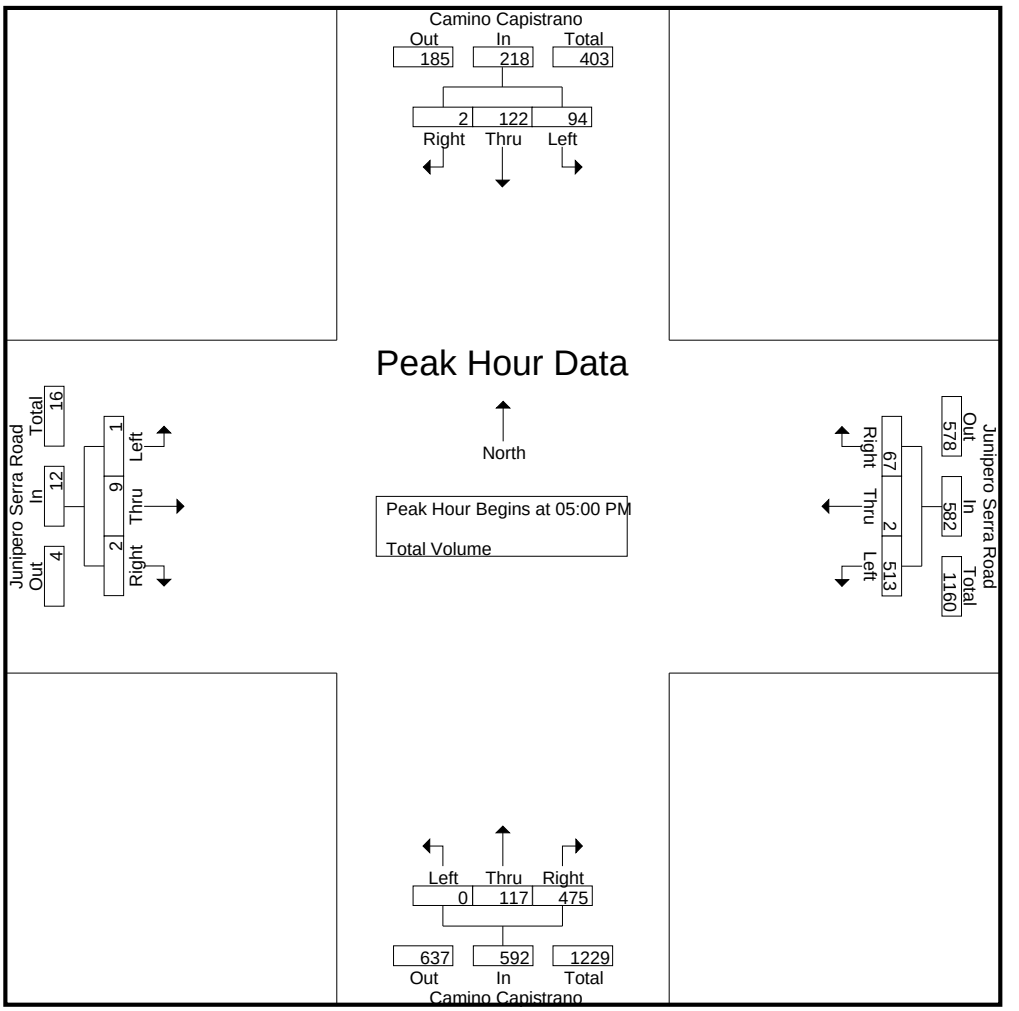
	Camino Capistrano Southbound				Junipero Serra Road Westbound				Camino Capistrano Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	15	28	0	43	128	3	25	156	5	32	122	159	0	5	3	8	366
04:15 PM	18	27	0	45	136	1	17	154	2	33	93	128	0	1	3	4	331
04:30 PM	29	39	0	68	117	0	23	140	0	39	115	154	0	1	0	1	363
04:45 PM	14	16	0	30	114	1	13	128	0	35	97	132	0	4	2	6	296
Total	76	110	0	186	495	5	78	578	7	139	427	573	0	11	8	19	1356
05:00 PM	13	24	0	37	120	1	14	135	0	30	105	135	0	0	0	0	307
05:15 PM	34	54	0	88	167	1	15	183	0	33	119	152	1	3	2	6	429
05:30 PM	22	19	0	41	107	0	16	123	0	41	137	178	0	5	0	5	347
05:45 PM	25	25	2	52	119	0	22	141	0	13	114	127	0	1	0	1	321
Total	94	122	2	218	513	2	67	582	0	117	475	592	1	9	2	12	1404
Grand Total	170	232	2	404	1008	7	145	1160	7	256	902	1165	1	20	10	31	2760
Apprch %	42.1	57.4	0.5		86.9	0.6	12.5		0.6	22	77.4		3.2	64.5	32.3		
Total %	6.2	8.4	0.1	14.6	36.5	0.3	5.3	42	0.3	9.3	32.7	42.2	0	0.7	0.4	1.1	

	Camino Capistrano Southbound				Junipero Serra Road Westbound				Camino Capistrano Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	13	24	0	37	120	**1**	14	135	0	30	105	135	0	0	0	0	307
05:15 PM	**34**	**54**	0	**88**	**167**	1	15	**183**	0	33	119	152	**1**	3	**2**	**6**	**429**
05:30 PM	22	19	0	41	107	0	16	123	0	**41**	**137**	**178**	0	**5**	0	5	347
05:45 PM	25	25	**2**	52	119	0	**22**	141	0	13	114	127	0	1	0	1	321
Total Volume	94	122	2	218	513	2	67	582	0	117	475	592	1	9	2	12	1404
% App. Total	43.1	56	0.9		88.1	0.3	11.5		0	19.8	80.2		8.3	75	16.7		
PHF	.691	.565	.250	.619	.768	.500	.761	.795	.000	.713	.867	.831	.250	.450	.250	.500	.818

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City of San Juan Capistrano
N/S: Camino Capistrano
E/W: Junipero Serra Road
Weather: Clear

File Name : 02_SJO_Cap_JS PM
Site Code : 00325885
Start Date : 9/16/2025



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:45 PM				04:00 PM			
+0 mins.	29	39	0	68	117	0	**23**	140	0	35	97	132	0	**5**	**3**	**8**
+15 mins.	14	16	0	30	114	**1**	13	128	0	30	105	135	0	1	3	4
+30 mins.	13	24	0	37	120	1	14	135	0	33	119	152	0	1	0	1
+45 mins.	**34**	**54**	0	**88**	**167**	1	15	**183**	0	**41**	**137**	**178**	0	4	2	6
Total Volume	90	133	0	223	518	3	65	586	0	139	458	597	0	11	8	19
% App. Total	40.4	59.6	0		88.4	0.5	11.1		0	23.3	76.7		0	57.9	42.1	
PHF	.662	.616	.000	.634	.775	.750	.707	.801	.000	.848	.836	.838	.000	.550	.667	.594

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City of San Juan Capistrano
N/S: Lions Way
E/W: Junipero Serra Road
Weather: Clear

File Name : 03_SJO_Lion_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

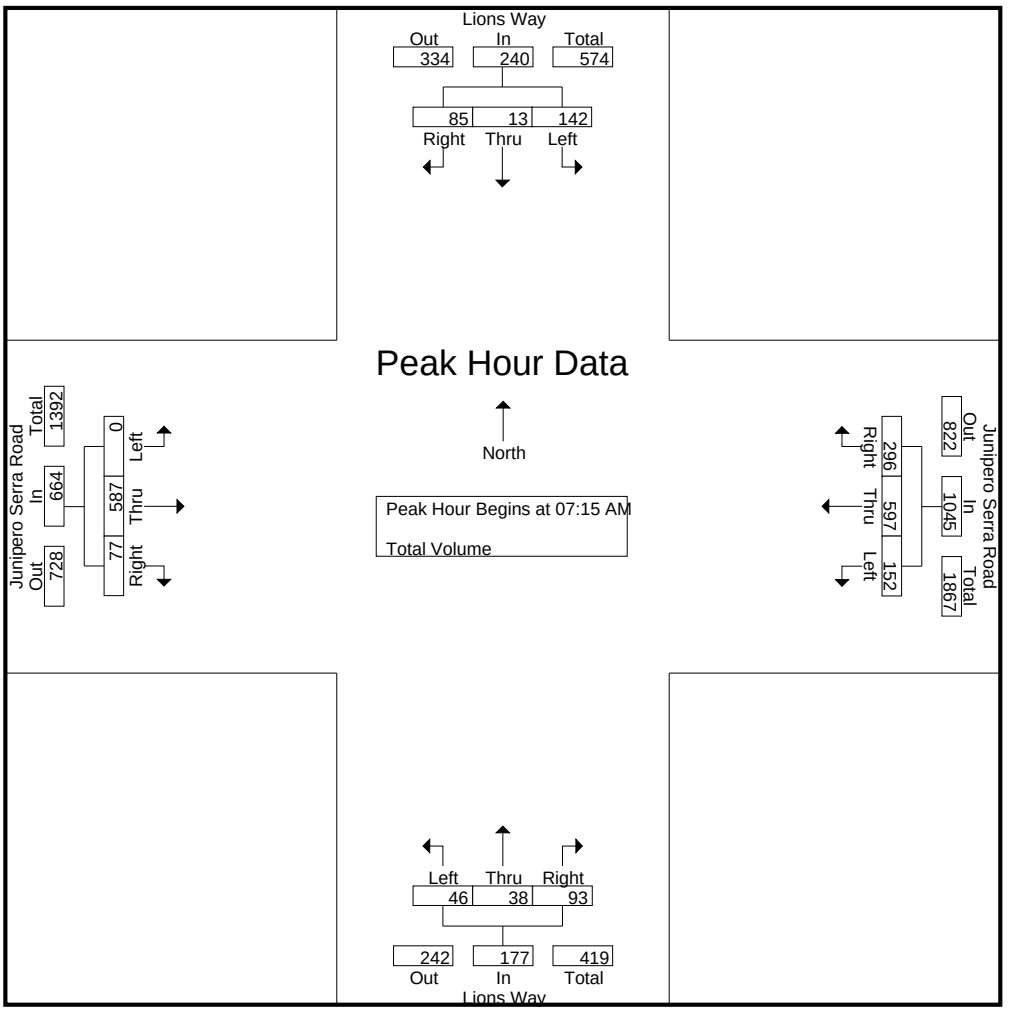
	Lions Way Southbound				Junipero Serra Road Westbound				Lions Way Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	2	1	8	10	79	31	120	1	4	4	9	0	120	1	121	258
07:15 AM	17	1	2	20	42	129	59	230	4	5	12	21	0	136	6	142	413
07:30 AM	36	2	12	50	54	169	94	317	10	11	27	48	0	143	31	174	589
07:45 AM	45	3	54	102	43	136	113	292	28	19	39	86	0	141	34	175	655
Total	103	8	69	180	149	513	297	959	43	39	82	164	0	540	72	612	1915
08:00 AM	44	7	17	68	13	163	30	206	4	3	15	22	0	167	6	173	469
08:15 AM	0	0	1	1	13	110	8	131	2	1	5	8	0	158	1	159	299
08:30 AM	3	2	0	5	4	71	5	80	1	2	3	6	0	105	0	105	196
08:45 AM	3	2	0	5	3	86	5	94	0	1	1	2	0	109	1	110	211
Total	50	11	18	79	33	430	48	511	7	7	24	38	0	539	8	547	1175
Grand Total	153	19	87	259	182	943	345	1470	50	46	106	202	0	1079	80	1159	3090
Apprch %	59.1	7.3	33.6		12.4	64.1	23.5		24.8	22.8	52.5		0	93.1	6.9		
Total %	5	0.6	2.8	8.4	5.9	30.5	11.2	47.6	1.6	1.5	3.4	6.5	0	34.9	2.6	37.5	

	Lions Way Southbound				Junipero Serra Road Westbound				Lions Way Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	1	2	20	42	129	59	230	4	5	12	21	0	136	6	142	413
07:30 AM	36	2	12	50	**54**	**169**	94	**317**	10	11	27	48	0	143	31	174	589
07:45 AM	**45**	3	**54**	**102**	43	136	**113**	292	**28**	**19**	**39**	**86**	0	141	**34**	**175**	**655**
08:00 AM	44	**7**	17	68	13	163	30	206	4	3	15	22	0	**167**	6	173	469
Total Volume	142	13	85	240	152	597	296	1045	46	38	93	177	0	587	77	664	2126
% App. Total	59.2	5.4	35.4		14.5	57.1	28.3		26	21.5	52.5		0	88.4	11.6		
PHF	.789	.464	.394	.588	.704	.883	.655	.824	.411	.500	.596	.515	.000	.879	.566	.949	.811

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City of San Juan Capistrano
N/S: Lions Way
E/W: Junipero Serra Road
Weather: Clear

File Name : 03_SJO_Lion_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	17	1	2	20	42	129	59	230	4	5	12	21	0	143	31	174
+15 mins.	36	2	12	50	**54**	**169**	94	**317**	10	11	27	48	0	141	**34**	**175**
+30 mins.	**45**	3	**54**	**102**	43	136	**113**	292	**28**	**19**	**39**	**86**	0	**167**	6	173
+45 mins.	44	**7**	17	68	13	163	30	206	4	3	15	22	0	158	1	159
Total Volume	142	13	85	240	152	597	296	1045	46	38	93	177	0	609	72	681
% App. Total	59.2	5.4	35.4		14.5	57.1	28.3		26	21.5	52.5		0	89.4	10.6	
PHF	.789	.464	.394	.588	.704	.883	.655	.824	.411	.500	.596	.515	.000	.912	.529	.973

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City of San Juan Capistrano
N/S: Lions Way
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Weather: Clear

File Name : 03_SJO_Lion_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

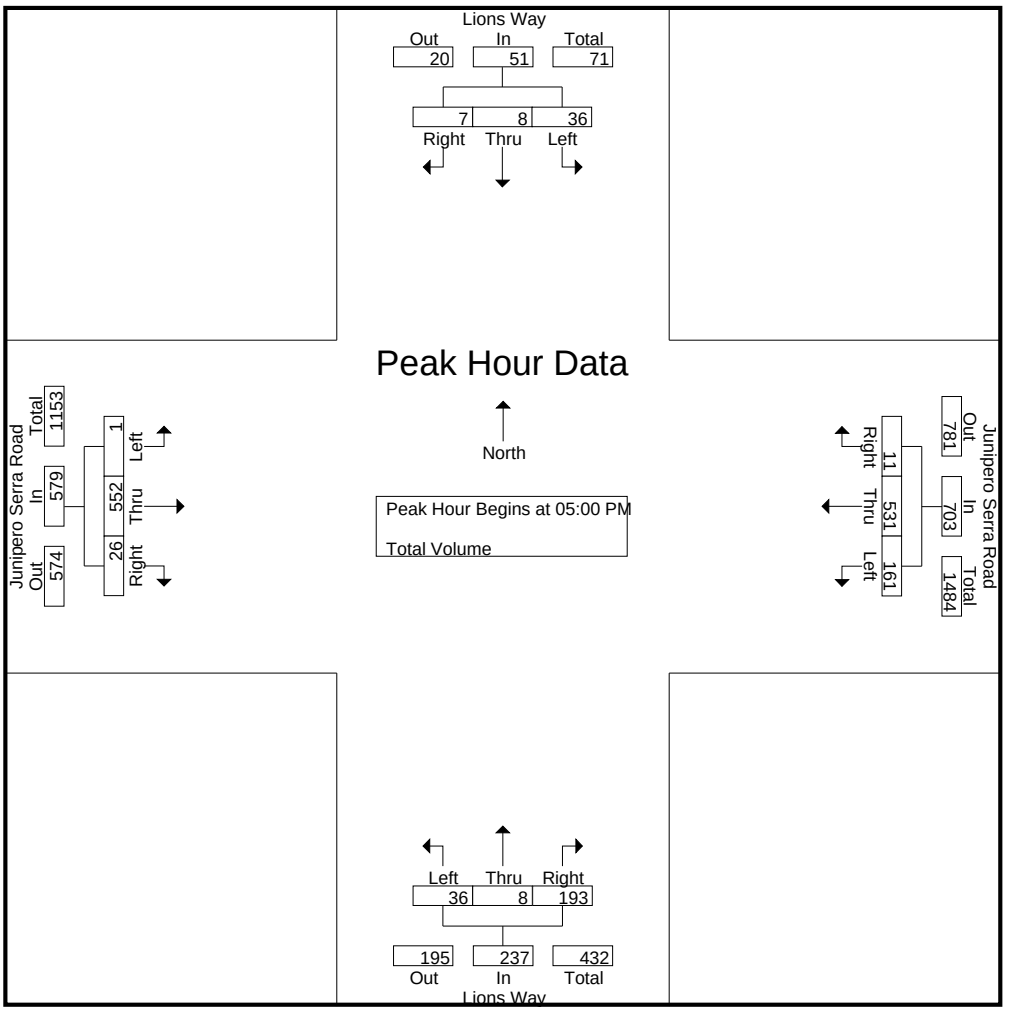
	Lions Way Southbound				Junipero Serra Road Westbound				Lions Way Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	22	2	2	26	16	150	4	170	3	1	10	14	0	144	1	145	355
04:15 PM	16	3	0	19	18	150	2	170	3	0	18	21	0	113	3	116	326
04:30 PM	9	0	0	9	19	136	3	158	3	1	25	29	0	133	5	138	334
04:45 PM	0	1	1	2	41	132	4	177	4	0	34	38	0	127	6	133	350
Total	47	6	3	56	94	568	13	675	13	2	87	102	0	517	15	532	1365
05:00 PM	8	2	2	12	50	128	2	180	5	3	24	32	0	129	2	131	355
05:15 PM	4	4	1	9	47	166	4	217	11	1	37	49	0	144	9	153	428
05:30 PM	7	1	1	9	26	114	2	142	12	3	65	80	1	150	8	159	390
05:45 PM	17	1	3	21	38	123	3	164	8	1	67	76	0	129	7	136	397
Total	36	8	7	51	161	531	11	703	36	8	193	237	1	552	26	579	1570
Grand Total	83	14	10	107	255	1099	24	1378	49	10	280	339	1	1069	41	1111	2935
Apprch %	77.6	13.1	9.3		18.5	79.8	1.7		14.5	2.9	82.6		0.1	96.2	3.7		
Total %	2.8	0.5	0.3	3.6	8.7	37.4	0.8	47	1.7	0.3	9.5	11.6	0	36.4	1.4	37.9	

	Lions Way Southbound				Junipero Serra Road Westbound				Lions Way Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	8	2	2	12	**50**	128	2	180	5	**3**	24	32	0	129	2	131	355
05:15 PM	4	**4**	1	9	47	**166**	**4**	**217**	11	1	37	49	0	144	**9**	153	**428**
05:30 PM	7	1	1	9	26	114	2	142	**12**	3	65	**80**	**1**	**150**	8	**159**	390
05:45 PM	**17**	1	**3**	**21**	38	123	3	164	8	1	**67**	76	0	129	7	136	397
Total Volume	36	8	7	51	161	531	11	703	36	8	193	237	1	552	26	579	1570
% App. Total	70.6	15.7	13.7		22.9	75.5	1.6		15.2	3.4	81.4		0.2	95.3	4.5		
PHF	.529	.500	.583	.607	.805	.800	.688	.810	.750	.667	.720	.741	.250	.920	.722	.910	.917

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City of San Juan Capistrano
N/S: Lions Way
E/W: Junipero Serra Road
Weather: Clear

File Name : 03_SJO_Lion_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				05:00 PM				05:00 PM			
+0 mins.	**22**	2	**2**	**26**	19	136	3	158	5	**3**	24	32	0	129	2	131
+15 mins.	16	**3**	0	19	41	132	**4**	177	11	1	37	49	0	144	**9**	153
+30 mins.	9	0	0	9	**50**	128	2	180	**12**	3	65	**80**	**1**	**150**	8	**159**
+45 mins.	0	1	1	2	47	**166**	4	**217**	8	1	**67**	76	0	129	7	136
Total Volume	47	6	3	56	157	562	13	732	36	8	193	237	1	552	26	579
% App. Total	83.9	10.7	5.4		21.4	76.8	1.8		15.2	3.4	81.4		0.2	95.3	4.5	
PHF	.534	.500	.375	.538	.785	.846	.813	.843	.750	.667	.720	.741	.250	.920	.722	.910

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City of San Juan Capistrano
N/S: I-15 Southbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 04_SJO_15S_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

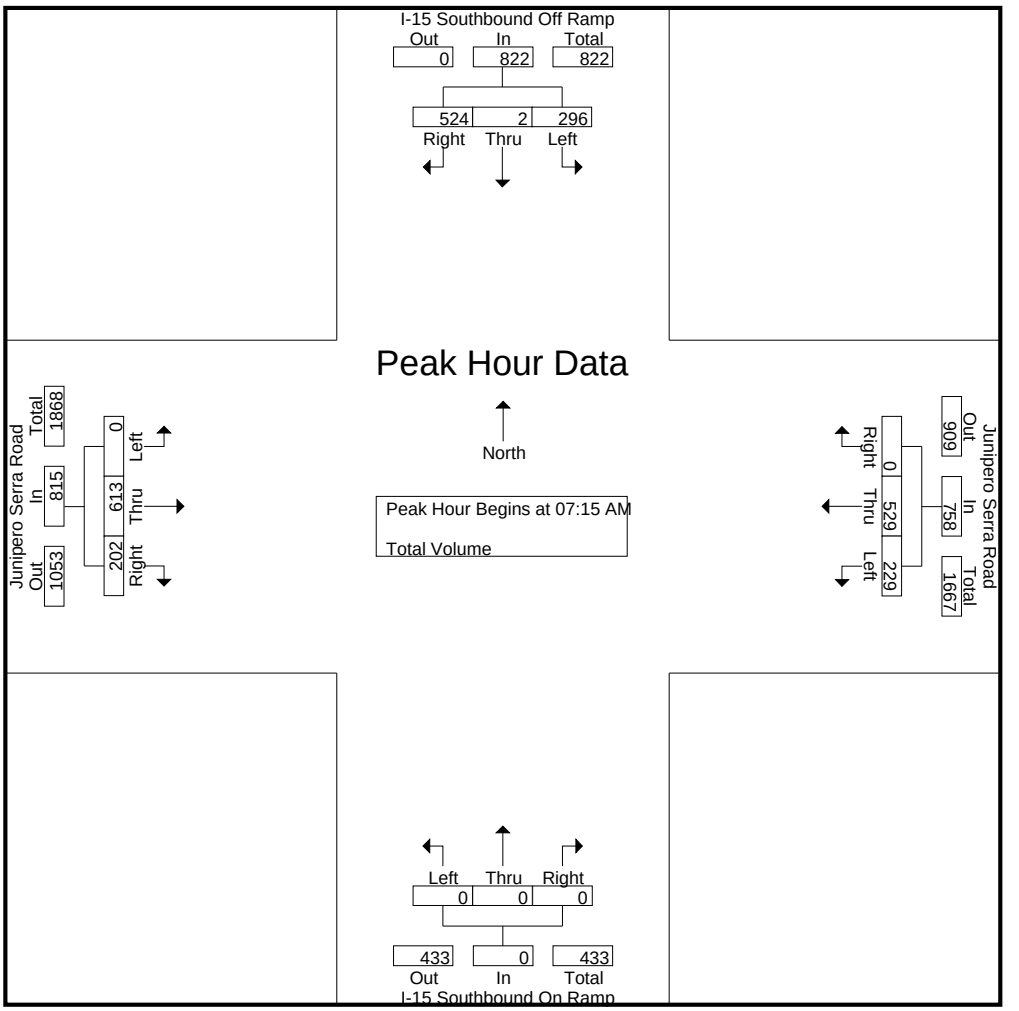
	I-15 Southbound Off Ramp Southbound				Junipero Serra Road Westbound				I-15 Southbound On Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	37	0	72	109	51	61	0	112	0	0	0	0	0	106	31	137	358
07:15 AM	54	0	140	194	58	101	0	159	0	0	0	0	0	115	53	168	521
07:30 AM	67	0	150	217	58	177	0	235	0	0	0	0	0	156	45	201	653
07:45 AM	65	1	104	170	46	172	0	218	0	0	0	0	0	167	66	233	621
Total	223	1	466	690	213	511	0	724	0	0	0	0	0	544	195	739	2153
08:00 AM	110	1	130	241	67	79	0	146	0	0	0	0	0	175	38	213	600
08:15 AM	95	0	52	147	56	77	0	133	0	0	0	0	0	155	25	180	460
08:30 AM	91	3	46	140	48	47	0	95	0	0	0	0	0	88	32	120	355
08:45 AM	72	1	51	124	47	42	0	89	0	0	0	0	0	82	32	114	327
Total	368	5	279	652	218	245	0	463	0	0	0	0	0	500	127	627	1742
Grand Total	591	6	745	1342	431	756	0	1187	0	0	0	0	0	1044	322	1366	3895
Apprch %	44	0.4	55.5		36.3	63.7	0		0	0	0		0	76.4	23.6		
Total %	15.2	0.2	19.1	34.5	11.1	19.4	0	30.5	0	0	0	0	0	26.8	8.3	35.1	

	I-15 Southbound Off Ramp Southbound				Junipero Serra Road Westbound				I-15 Southbound On Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	54	0	140	194	58	101	0	159	0	0	0	0	0	115	53	168	521
07:30 AM	67	0	**150**	217	58	**177**	0	**235**	0	0	0	0	0	156	45	201	**653**
07:45 AM	65	**1**	104	170	46	172	0	218	0	0	0	0	0	167	**66**	**233**	621
08:00 AM	**110**	1	130	**241**	**67**	79	0	146	0	0	0	0	0	**175**	38	213	600
Total Volume	296	2	524	822	229	529	0	758	0	0	0	0	0	613	202	815	2395
% App. Total	36	0.2	63.7		30.2	69.8	0		0	0	0		0	75.2	24.8		
PHF	.673	.500	.873	.853	.854	.747	.000	.806	.000	.000	.000	.000	.000	.876	.765	.874	.917

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City of San Juan Capistrano
N/S: I-15 Southbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 04_SJO_15S_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:00 AM				07:30 AM			
+0 mins.	54	0	140	194	58	101	0	159	0	0	0	0	0	156	45	201
+15 mins.	67	0	**150**	217	58	**177**	0	**235**	0	0	0	0	0	167	**66**	**233**
+30 mins.	65	**1**	104	170	46	172	0	218	0	0	0	0	0	**175**	38	213
+45 mins.	**110**	1	130	**241**	**67**	79	0	146	0	0	0	0	0	155	25	180
Total Volume	296	2	524	822	229	529	0	758	0	0	0	0	0	653	174	827
% App. Total	36	0.2	63.7		30.2	69.8	0		0	0	0		0	79	21	
PHF	.673	.500	.873	.853	.854	.747	.000	.806	.000	.000	.000	.000	.000	.933	.659	.887

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City of San Juan Capistrano
N/S: I-15 Southbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 04_SJO_15S_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

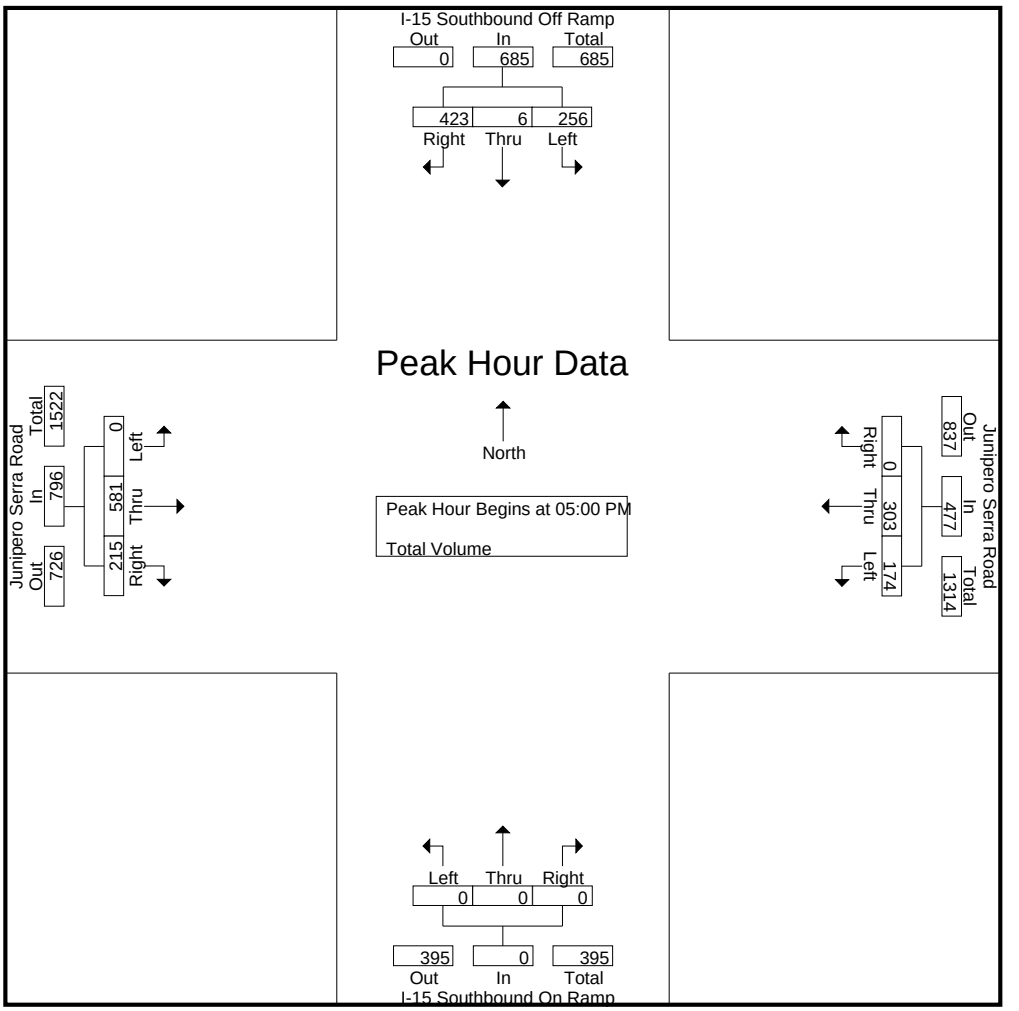
	I-15 Southbound Off Ramp Southbound				Junipero Serra Road Westbound				I-15 Southbound On Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	73	0	104	177	59	74	0	133	0	0	0	0	0	139	41	180	490
04:15 PM	72	0	109	181	39	73	0	112	0	0	0	0	0	127	36	163	456
04:30 PM	78	1	85	164	42	80	0	122	0	0	0	0	0	125	44	169	455
04:45 PM	63	2	102	167	58	80	0	138	0	0	0	0	0	113	47	160	465
Total	286	3	400	689	198	307	0	505	0	0	0	0	0	504	168	672	1866
05:00 PM	74	0	115	189	53	69	0	122	0	0	0	0	0	120	46	166	477
05:15 PM	64	2	127	193	54	87	0	141	0	0	0	0	0	145	42	187	521
05:30 PM	64	2	80	146	29	77	0	106	0	0	0	0	0	159	58	217	469
05:45 PM	54	2	101	157	38	70	0	108	0	0	0	0	0	157	69	226	491
Total	256	6	423	685	174	303	0	477	0	0	0	0	0	581	215	796	1958
Grand Total	542	9	823	1374	372	610	0	982	0	0	0	0	0	1085	383	1468	3824
Apprch %	39.4	0.7	59.9		37.9	62.1	0		0	0	0		0	73.9	26.1		
Total %	14.2	0.2	21.5	35.9	9.7	16	0	25.7	0	0	0	0	0	28.4	10	38.4	

	I-15 Southbound Off Ramp Southbound				Junipero Serra Road Westbound				I-15 Southbound On Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 05:00 PM																	
05:00 PM	**74**	0	115	189	53	69	0	122	0	0	0	0	0	120	46	166	477
05:15 PM	64	**2**	**127**	**193**	**54**	**87**	0	**141**	0	0	0	0	0	145	42	187	**521**
05:30 PM	64	2	80	146	29	77	0	106	0	0	0	0	0	**159**	58	217	469
05:45 PM	54	2	101	157	38	70	0	108	0	0	0	0	0	157	**69**	**226**	491
Total Volume	256	6	423	685	174	303	0	477	0	0	0	0	0	581	215	796	1958
% App. Total	37.4	0.9	61.8		36.5	63.5	0		0	0	0		0	73	27		
PHF	.865	.750	.833	.887	.806	.871	.000	.846	.000	.000	.000	.000	.000	.914	.779	.881	.940

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City of San Juan Capistrano
N/S: I-15 Southbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 04_SJO_15S_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:00 PM				05:00 PM			
+0 mins.	**78**	1	85	164	42	80	0	122	0	0	0	0	0	120	46	166
+15 mins.	63	**2**	102	167	**58**	80	0	138	0	0	0	0	0	145	42	187
+30 mins.	74	0	115	189	53	69	0	122	0	0	0	0	0	**159**	58	217
+45 mins.	64	2	**127**	**193**	54	**87**	0	**141**	0	0	0	0	0	157	**69**	**226**
Total Volume	279	5	429	713	207	316	0	523	0	0	0	0	0	581	215	796
% App. Total	39.1	0.7	60.2		39.6	60.4	0		0	0	0		0	73	27	
PHF	.894	.625	.844	.924	.892	.908	.000	.927	.000	.000	.000	.000	.000	.914	.779	.881

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City of San Juan Capistrano
N/S: I-15 Northbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 05_SJO_15N_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

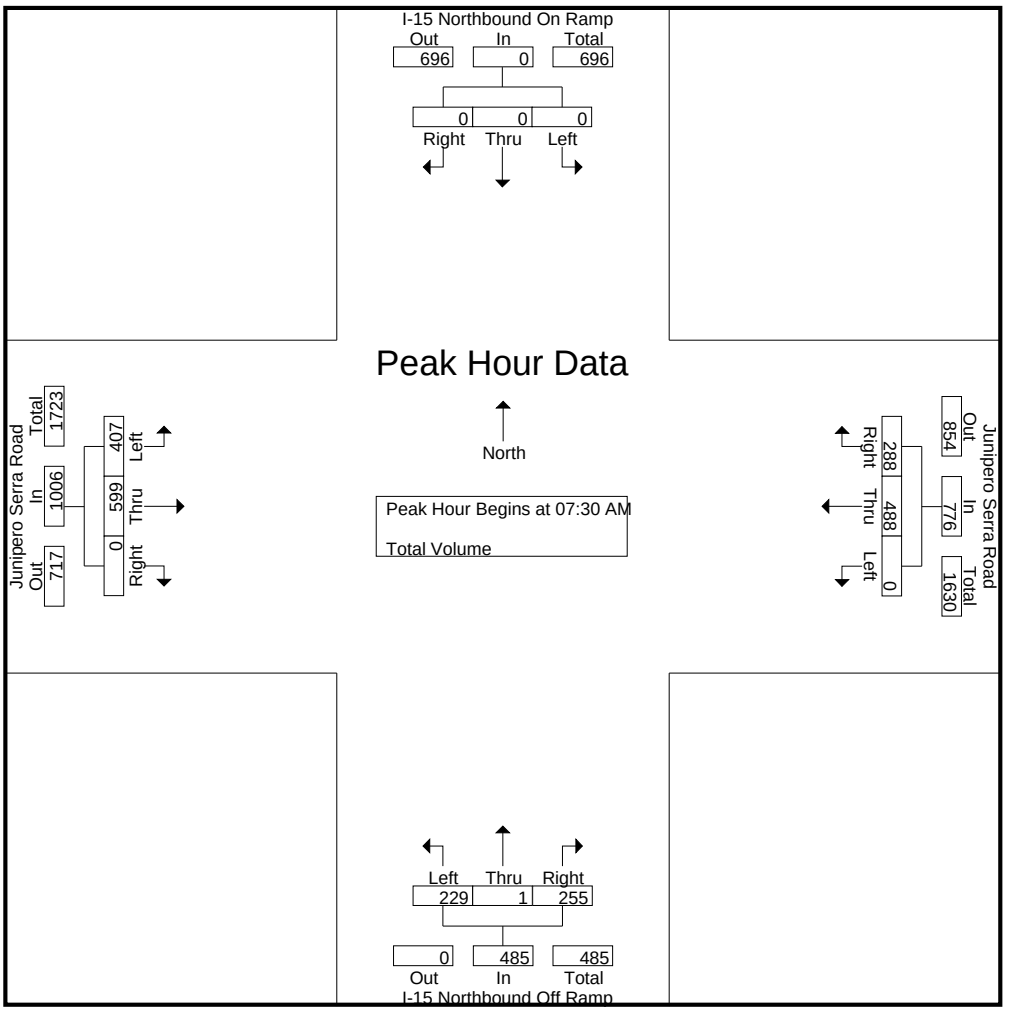
	I-15 Northbound On Ramp Southbound				Junipero Serra Road Westbound				I-15 Northbound Off Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	85	52	137	34	0	28	62	81	63	0	144	343
07:15 AM	0	0	0	0	0	118	53	171	46	0	23	69	73	85	0	158	398
07:30 AM	0	0	0	0	0	127	63	190	105	1	38	144	98	128	0	226	560
07:45 AM	0	0	0	0	0	151	64	215	67	0	86	153	85	132	0	217	585
Total	0	0	0	0	0	481	232	713	252	1	175	428	337	408	0	745	1886
08:00 AM	0	0	0	0	0	107	72	179	29	0	61	90	117	177	0	294	563
08:15 AM	0	0	0	0	0	103	89	192	28	0	70	98	107	162	0	269	559
08:30 AM	0	0	0	0	0	74	87	161	24	1	67	92	73	120	0	193	446
08:45 AM	0	0	0	0	0	63	74	137	24	0	51	75	59	105	0	164	376
Total	0	0	0	0	0	347	322	669	105	1	249	355	356	564	0	920	1944
Grand Total	0	0	0	0	0	828	554	1382	357	2	424	783	693	972	0	1665	3830
Apprch %	0	0	0		0	59.9	40.1		45.6	0.3	54.2		41.6	58.4	0		
Total %	0	0	0	0	0	21.6	14.5	36.1	9.3	0.1	11.1	20.4	18.1	25.4	0	43.5	

	I-15 Northbound On Ramp Southbound				Junipero Serra Road Westbound				I-15 Northbound Off Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	127	63	190	**105**	**1**	38	144	98	128	0	226	560
07:45 AM	0	0	0	0	0	**151**	64	**215**	67	0	**86**	**153**	85	132	0	217	**585**
08:00 AM	0	0	0	0	0	107	72	179	29	0	61	90	**117**	**177**	0	**294**	563
08:15 AM	0	0	0	0	0	103	**89**	192	28	0	70	98	107	162	0	269	559
Total Volume	0	0	0	0	0	488	288	776	229	1	255	485	407	599	0	1006	2267
% App. Total	0	0	0		0	62.9	37.1		47.2	0.2	52.6		40.5	59.5	0		
PHF	.000	.000	.000	.000	.000	.808	.809	.902	.545	.250	.741	.792	.870	.846	.000	.855	.969

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City of San Juan Capistrano
N/S: I-15 Northbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 05_SJO_15N_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	127	63	190	**105**	**1**	38	144	98	128	0	226
+15 mins.	0	0	0	0	0	**151**	64	**215**	67	0	**86**	**153**	85	132	0	217
+30 mins.	0	0	0	0	0	107	72	179	29	0	61	90	**117**	**177**	0	**294**
+45 mins.	0	0	0	0	0	103	**89**	192	28	0	70	98	107	162	0	269
Total Volume	0	0	0	0	0	488	288	776	229	1	255	485	407	599	0	1006
% App. Total	0	0	0		0	62.9	37.1		47.2	0.2	52.6		40.5	59.5	0	
PHF	.000	.000	.000	.000	.000	.808	.809	.902	.545	.250	.741	.792	.870	.846	.000	.855

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City of San Juan Capistrano
N/S: I-15 Northbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 05_SJO_15N_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

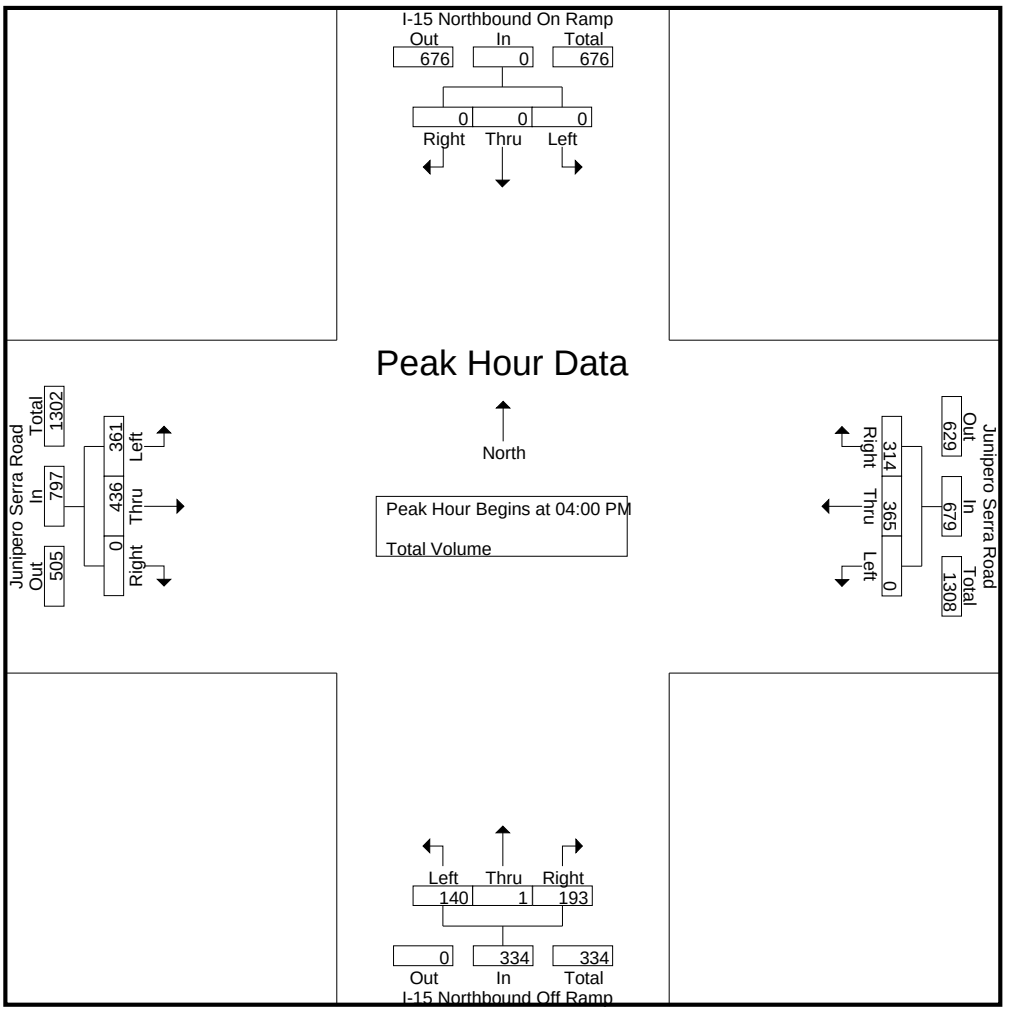
	I-15 Northbound On Ramp Southbound				Junipero Serra Road Westbound				I-15 Northbound Off Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	103	81	184	34	0	52	86	95	114	0	209	479
04:15 PM	0	0	0	0	0	82	69	151	31	1	50	82	96	113	0	209	442
04:30 PM	0	0	0	0	0	92	80	172	31	0	39	70	93	112	0	205	447
04:45 PM	0	0	0	0	0	88	84	172	44	0	52	96	77	97	0	174	442
Total	0	0	0	0	0	365	314	679	140	1	193	334	361	436	0	797	1810
05:00 PM	0	0	0	0	0	82	74	156	37	1	32	70	99	98	0	197	423
05:15 PM	0	0	0	0	0	102	64	166	35	0	51	86	109	112	0	221	473
05:30 PM	0	0	0	0	0	73	55	128	34	0	38	72	110	116	0	226	426
05:45 PM	0	0	0	0	0	74	54	128	36	0	42	78	111	102	0	213	419
Total	0	0	0	0	0	331	247	578	142	1	163	306	429	428	0	857	1741
Grand Total	0	0	0	0	0	696	561	1257	282	2	356	640	790	864	0	1654	3551
Apprch %	0	0	0		0	55.4	44.6		44.1	0.3	55.6		47.8	52.2	0		
Total %	0	0	0	0	0	19.6	15.8	35.4	7.9	0.1	10	18	22.2	24.3	0	46.6	

	I-15 Northbound On Ramp Southbound				Junipero Serra Road Westbound				I-15 Northbound Off Ramp Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**103**	81	**184**	34	0	**52**	86	95	**114**	0	**209**	**479**
04:15 PM	0	0	0	0	0	82	69	151	31	**1**	50	82	**96**	113	0	209	442
04:30 PM	0	0	0	0	0	92	80	172	31	0	39	70	93	112	0	205	447
04:45 PM	0	0	0	0	0	88	**84**	172	**44**	0	52	**96**	77	97	0	174	442
Total Volume	0	0	0	0	0	365	314	679	140	1	193	334	361	436	0	797	1810
% App. Total	0	0	0		0	53.8	46.2		41.9	0.3	57.8		45.3	54.7	0		
PHF	.000	.000	.000	.000	.000	.886	.935	.923	.795	.250	.928	.870	.940	.956	.000	.953	.945

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City of San Juan Capistrano
N/S: I-15 Northbound Ramps
E/W: Junipero Serra Road
Weather: Clear

File Name : 05_SJO_15N_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	0	0	0	0	0	**103**	81	**184**	34	0	**52**	86	99	98	0	197
+15 mins.	0	0	0	0	0	82	69	151	31	**1**	50	82	109	112	0	221
+30 mins.	0	0	0	0	0	92	80	172	31	0	39	70	110	**116**	0	**226**
+45 mins.	0	0	0	0	0	88	**84**	172	**44**	0	52	**96**	**111**	102	0	213
Total Volume	0	0	0	0	0	365	314	679	140	1	193	334	429	428	0	857
% App. Total	0	0	0		0	53.8	46.2		41.9	0.3	57.8		50.1	49.9	0	
PHF	.000	.000	.000	.000	.000	.886	.935	.923	.795	.250	.928	.870	.966	.922	.000	.948

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(951) 268-6268

City of San Juan Capistrano
N/S: Rancho Viejo Road
E/W: Junipero Serra Road
Weather: Clear

File Name : 06_SJO_RV_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

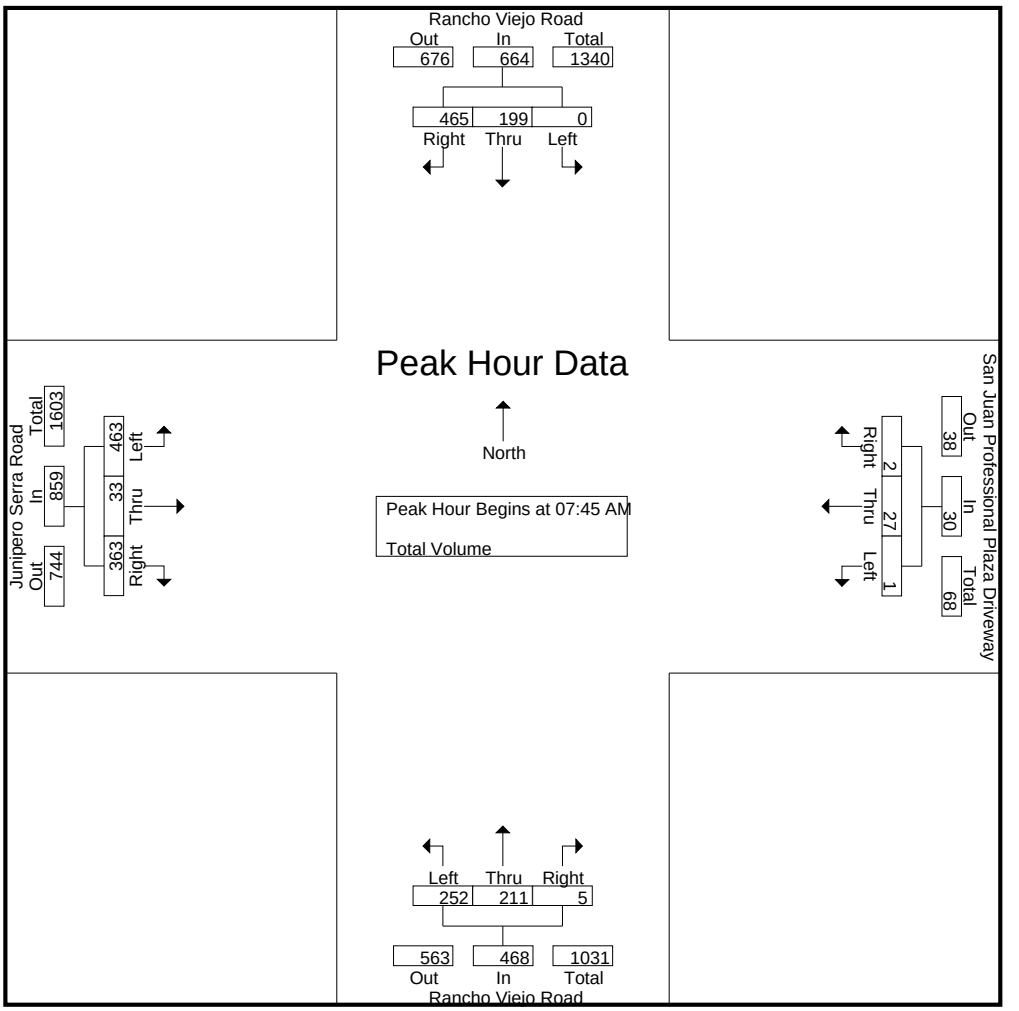
	Rancho Viejo Road Southbound				San Juan Professional Plaza Driveway Westbound				Rancho Viejo Road Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	26	97	123	0	0	0	0	42	25	0	67	50	0	35	85	275
07:15 AM	0	52	130	182	0	0	0	0	48	15	0	63	42	2	58	102	347
07:30 AM	0	34	115	149	0	2	0	2	75	37	0	112	86	3	73	162	425
07:45 AM	0	67	121	188	0	19	1	20	72	63	3	138	112	16	75	203	549
Total	0	179	463	642	0	21	1	22	237	140	3	380	290	21	241	552	1596
08:00 AM	0	47	124	171	1	3	1	5	62	61	1	124	109	9	119	237	537
08:15 AM	0	42	122	164	0	3	0	3	59	39	0	98	139	7	87	233	498
08:30 AM	0	43	98	141	0	2	0	2	59	48	1	108	103	1	82	186	437
08:45 AM	0	32	92	124	0	0	0	0	45	32	0	77	92	0	59	151	352
Total	0	164	436	600	1	8	1	10	225	180	2	407	443	17	347	807	1824
Grand Total	0	343	899	1242	1	29	2	32	462	320	5	787	733	38	588	1359	3420
Apprch %	0	27.6	72.4		3.1	90.6	6.2		58.7	40.7	0.6		53.9	2.8	43.3		
Total %	0	10	26.3	36.3	0	0.8	0.1	0.9	13.5	9.4	0.1	23	21.4	1.1	17.2	39.7	

	Rancho Viejo Road Southbound				San Juan Professional Plaza Driveway Westbound				Rancho Viejo Road Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**67**	121	**188**	0	**19**	**1**	**20**	**72**	**63**	**3**	**138**	112	**16**	75	203	**549**
08:00 AM	0	47	**124**	171	**1**	3	1	5	62	61	1	124	109	9	**119**	**237**	537
08:15 AM	0	42	122	164	0	3	0	3	59	39	0	98	**139**	7	87	233	498
08:30 AM	0	43	98	141	0	2	0	2	59	48	1	108	103	1	82	186	437
Total Volume	0	199	465	664	1	27	2	30	252	211	5	468	463	33	363	859	2021
% App. Total	0	30	70		3.3	90	6.7		53.8	45.1	1.1		53.9	3.8	42.3		
PHF	.000	.743	.938	.883	.250	.355	.500	.375	.875	.837	.417	.848	.833	.516	.763	.906	.920

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City of San Juan Capistrano
N/S: Rancho Viejo Road
E/W: Junipero Serra Road
Weather: Clear

File Name : 06_SJO_RV_JS AM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:45 AM			
+0 mins.	0	52	**130**	182	0	2	0	2	**75**	37	0	112	112	**16**	75	203
+15 mins.	0	34	115	149	0	**19**	**1**	**20**	72	**63**	**3**	**138**	109	9	**119**	**237**
+30 mins.	0	**67**	121	**188**	**1**	3	1	5	62	61	1	124	**139**	7	87	233
+45 mins.	0	47	124	171	0	3	0	3	59	39	0	98	103	1	82	186
Total Volume	0	200	490	690	1	27	2	30	268	200	4	472	463	33	363	859
% App. Total	0	29	71		3.3	90	6.7		56.8	42.4	0.8		53.9	3.8	42.3	
PHF	.000	.746	.942	.918	.250	.355	.500	.375	.893	.794	.333	.855	.833	.516	.763	.906

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City of San Juan Capistrano
N/S: Rancho Viejo Road
E/W: Junipero Serra Road
Weather: Clear

File Name : 06_SJO_RV_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 1

Groups Printed- Total Volume

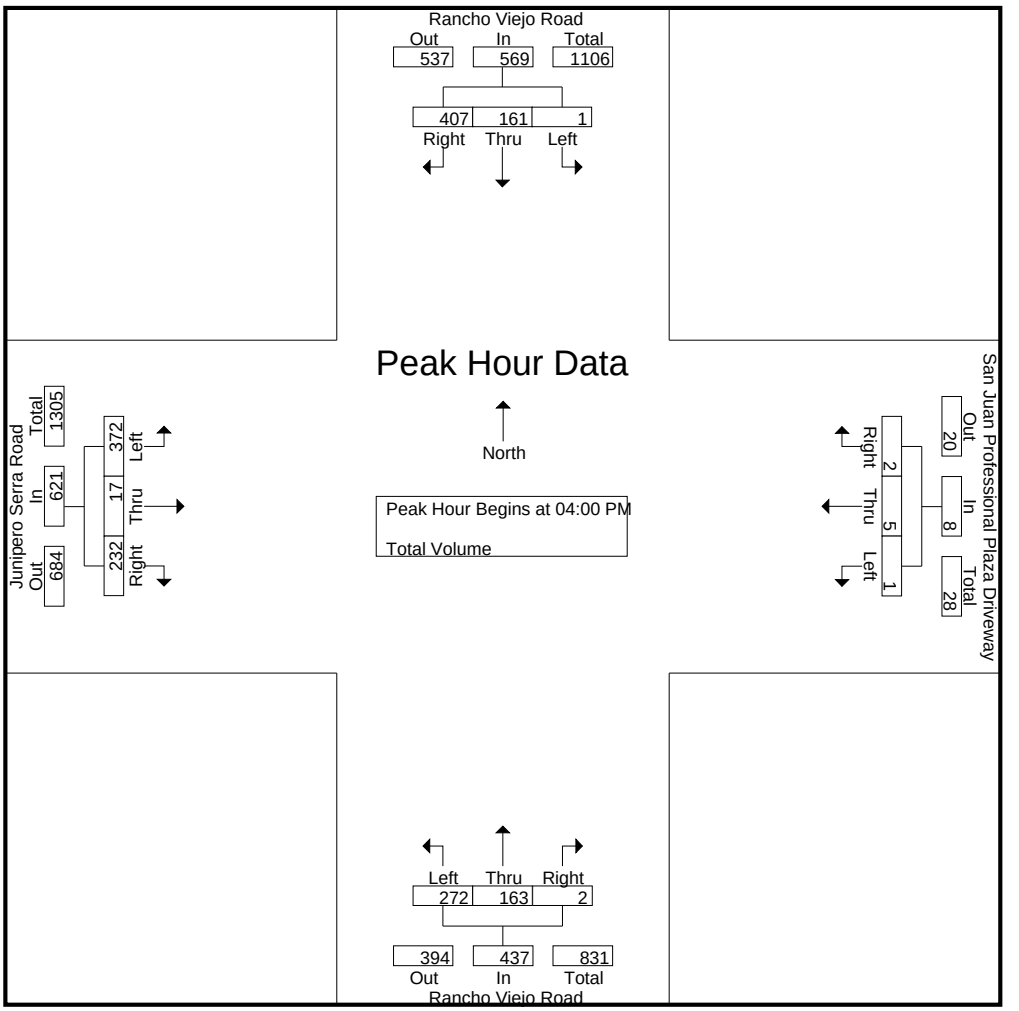
	Rancho Viejo Road Southbound				San Juan Professional Plaza Driveway Westbound				Rancho Viejo Road Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	41	99	140	0	0	2	2	87	47	0	134	94	16	56	166	442
04:15 PM	0	38	101	139	1	2	0	3	48	36	0	84	101	1	54	156	382
04:30 PM	1	32	99	132	0	2	0	2	77	38	1	116	83	0	68	151	401
04:45 PM	0	50	108	158	0	1	0	1	60	42	1	103	94	0	54	148	410
Total	1	161	407	569	1	5	2	8	272	163	2	437	372	17	232	621	1635
05:00 PM	0	52	100	152	0	2	0	2	57	38	0	95	72	0	58	130	379
05:15 PM	0	46	102	148	0	2	0	2	67	41	0	108	107	0	51	158	416
05:30 PM	0	40	82	122	0	0	0	0	45	26	0	71	90	0	60	150	343
05:45 PM	0	28	88	116	0	3	0	3	34	36	0	70	84	1	53	138	327
Total	0	166	372	538	0	7	0	7	203	141	0	344	353	1	222	576	1465
Grand Total	1	327	779	1107	1	12	2	15	475	304	2	781	725	18	454	1197	3100
Apprch %	0.1	29.5	70.4		6.7	80	13.3		60.8	38.9	0.3		60.6	1.5	37.9		
Total %	0	10.5	25.1	35.7	0	0.4	0.1	0.5	15.3	9.8	0.1	25.2	23.4	0.6	14.6	38.6	

	Rancho Viejo Road Southbound				San Juan Professional Plaza Driveway Westbound				Rancho Viejo Road Northbound				Junipero Serra Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	41	99	140	0	0	**2**	2	**87**	**47**	0	**134**	94	**16**	56	**166**	**442**
04:15 PM	0	38	101	139	**1**	**2**	0	**3**	48	36	0	84	**101**	1	54	156	382
04:30 PM	**1**	32	99	132	0	2	0	2	77	38	**1**	116	83	0	**68**	151	401
04:45 PM	0	**50**	**108**	**158**	0	1	0	1	60	42	1	103	94	0	54	148	410
Total Volume	1	161	407	569	1	5	2	8	272	163	2	437	372	17	232	621	1635
% App. Total	0.2	28.3	71.5		12.5	62.5	25		62.2	37.3	0.5		59.9	2.7	37.4		
PHF	.250	.805	.942	.900	.250	.625	.250	.667	.782	.867	.500	.815	.921	.266	.853	.935	.925

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City of San Juan Capistrano
N/S: Rancho Viejo Road
E/W: Junipero Serra Road
Weather: Clear

File Name : 06_SJO_RV_JS PM
Site Code : 00325885
Start Date : 9/16/2025
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**1**	32	99	132	0	0	**2**	2	**87**	**47**	0	**134**	94	**16**	56	**166**
+15 mins.	0	50	**108**	**158**	**1**	**2**	0	**3**	48	36	0	84	**101**	1	54	156
+30 mins.	0	**52**	100	152	0	2	0	2	77	38	**1**	116	83	0	**68**	151
+45 mins.	0	46	102	148	0	1	0	1	60	42	1	103	94	0	54	148
Total Volume	1	180	409	590	1	5	2	8	272	163	2	437	372	17	232	621
% App. Total	0.2	30.5	69.3		12.5	62.5	25		62.2	37.3	0.5		59.9	2.7	37.4	
PHF	.250	.865	.947	.934	.250	.625	.250	.667	.782	.867	.500	.815	.921	.266	.853	.935

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City of San Juan Capistrano
Camino Capistrano
N/ Junipero Serra Road
24 Hour Directional Volume Count

SJO001
Site Code: 003-25885

Start	9/16/2025	Northbound		Hour Totals		Southbound		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		4	45			3	33				
12:15		1	39			2	57				
12:30		3	35			2	42				
12:45		0	52	8	171	0	41	7	173	15	344
01:00		2	58			0	45				
01:15		0	47			0	41				
01:30		0	51			1	35				
01:45		3	47	5	203	1	44	2	165	7	368
02:00		1	30			3	44				
02:15		0	40			1	46				
02:30		0	46			2	**50**				
02:45		0	**61**	1	177	1	**73**	7	213	8	390
03:00		1	**114**			0	**64**				
03:15		0	**115**			2	**55**				
03:30		1	**71**			1	45				
03:45		1	60	3	360	1	48	4	212	7	572
04:00		0	57			0	43				
04:15		3	50			3	45				
04:30		2	62			3	68				
04:45		0	48	5	217	3	30	9	186	14	403
05:00		4	44			1	37				
05:15		1	49			2	88				
05:30		3	57			6	41				
05:45		7	35	15	185	12	52	21	218	36	403
06:00		8	48			7	38				
06:15		14	25			9	34				
06:30		20	31			8	34				
06:45		20	28	62	132	19	28	43	134	105	266
07:00		22	25			25	26				
07:15		49	26			41	22				
07:30		**100**	19			**97**	26				
07:45		**205**	16	376	86	**123**	21	286	95	662	181
08:00		**125**	22			**107**	20				
08:15		**93**	20			**52**	28				
08:30		42	20			32	24				
08:45		47	14	307	76	44	18	235	90	542	166
09:00		49	21			47	15				
09:15		39	6			41	11				
09:30		44	7			38	7				
09:45		44	8	176	42	33	10	159	43	335	85
10:00		40	9			34	11				
10:15		43	9			42	9				
10:30		33	7			52	12				
10:45		46	11	162	36	35	10	163	42	325	78
11:00		45	5			37	4				
11:15		38	2			40	5				
11:30		41	4			49	7				
11:45		44	4	168	15	40	2	166	18	334	33
Total		1288	1700	1288	1700	1102	1589	1102	1589	2390	3289
Combined Total		2988		2988		2691		2691		5679	
AM Peak	-	07:30	-	-	-	07:30	-	-	-	-	-
Vol.	-	523	-	-	-	379	-	-	-	-	-
P.H.F.		0.638				0.770					
PM Peak	-	-	02:45	-	-	-	02:30	-	-	-	-
Vol.	-	-	361	-	-	-	242	-	-	-	-
P.H.F.			0.785				0.829				
Percentage		43.1%	56.9%			41.0%	59.0%				
ADT/AADT		ADT 5,679		AADT 5,679							

Counts Unlimited, Inc.

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City of San Juan Capistrano
Junipero Serra Road
B/ Caminio Capistrano - Interstate 5 Southbound
24 Hour Directional Volume Count

SJO002
Site Code: 003-25885

Start Time	9/16/2025 Tue	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		5	72			9	85				
12:15		4	84			10	77				
12:30		7	97			12	84				
12:45		4	69	20	322	6	102	37	348	57	670
01:00		5	111			4	116				
01:15		4	95			3	118				
01:30		4	86			3	85				
01:45		7	82	20	374	4	90	14	409	34	783
02:00		4	75			6	95				
02:15		5	108			6	92				
02:30		2	104			3	146				
02:45		2	**136**	13	423	3	147	18	480	31	903
03:00		1	**182**			5	**189**				
03:15		6	**173**			3	**143**				
03:30		9	**126**			1	**176**				
03:45		9	130	25	611	2	**188**	11	696	36	1307
04:00		10	142			3	156				
04:15		14	112			14	154				
04:30		24	145			5	140				
04:45		27	115	75	514	3	128	25	578	100	1092
05:00		26	118			5	135				
05:15		32	156			12	183				
05:30		63	164			19	123				
05:45		48	140	169	578	26	141	62	582	231	1160
06:00		44	112			22	125				
06:15		82	110			40	107				
06:30		117	103			54	89				
06:45		117	85	360	410	64	92	180	413	540	823
07:00		119	128			81	69				
07:15		142	90			**133**	83				
07:30		**199**	62			**187**	83				
07:45		**182**	80	642	360	**227**	75	628	310	1270	670
08:00		**158**	69			**194**	65				
08:15		**144**	66			116	65				
08:30		101	68			69	52				
08:45		112	52	515	255	84	59	463	241	978	496
09:00		85	43			75	51				
09:15		71	41			83	48				
09:30		70	28			78	38				
09:45		70	32	296	144	79	32	315	169	611	313
10:00		88	34			88	43				
10:15		90	22			68	32				
10:30		98	25			70	25				
10:45		81	30	357	111	75	28	301	128	658	239
11:00		65	28			71	20				
11:15		75	17			73	10				
11:30		94	13			92	18				
11:45		83	7	317	65	77	9	313	57	630	122
Total		2809	4167	2809	4167	2367	4411	2367	4411	5176	8578
Combined Total		6976		6976		6778		6778		13754	
AM Peak	-	07:30	-	-	-	07:15	-	-	-	-	-
Vol.	-	683	-	-	-	741	-	-	-	-	-
P.H.F.		0.858				0.816					
PM Peak	-	-	02:45	-	-	-	03:00	-	-	-	-
Vol.	-	-	617	-	-	-	696	-	-	-	-
P.H.F.			0.848				0.921				
Percentage		40.3%	59.7%			34.9%	65.1%				
ADT/AADT		ADT 13,754		AADT 13,754							

Counts Unlimited, Inc.

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City of San Juan Capistrano
Junipero Serra Road
B/ Interstate 5 Northbound - Rancho Viejo Road
24 Hour Directional Volume Count

SJO004
Site Code: 003-25885

Start	9/16/2025	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Tue	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		8	103			8	128				
12:15		12	137			5	108				
12:30		4	99			4	123				
12:45		2	113	26	452	2	116	19	475	45	927
01:00		2	135			2	149				
01:15		1	132			1	105				
01:30		2	121			1	107				
01:45		3	111	8	499	3	128	7	489	15	988
02:00		4	99			5	99				
02:15		0	162			3	103				
02:30		1	134			0	125				
02:45		1	159	6	554	3	143	11	470	17	1024
03:00		0	**204**			3	179				
03:15		4	**185**			0	**182**				
03:30		4	**170**			4	**237**				
03:45		6	**168**	14	727	5	**184**	12	782	26	1509
04:00		7	166			10	**184**				
04:15		10	163			6	151				
04:30		3	151			6	172				
04:45		6	149	26	629	18	172	40	679	66	1308
05:00		13	130			11	156				
05:15		17	163			29	166				
05:30		21	154			43	128				
05:45		30	144	81	591	52	128	135	578	216	1169
06:00		29	111			33	150				
06:15		42	136			56	124				
06:30		49	89			68	89				
06:45		99	110	219	446	109	94	266	457	485	903
07:00		91	78			137	77				
07:15		108	88			171	66				
07:30		166	89			**190**	63				
07:45		**218**	75	583	330	**215**	61	713	267	1296	597
08:00		**238**	59			**179**	60				
08:15		**232**	51			**192**	33				
08:30		**187**	66			161	28				
08:45		156	47	813	223	137	36	669	157	1482	380
09:00		108	38			121	40				
09:15		97	37			88	33				
09:30		106	45			101	23				
09:45		121	37	432	157	102	19	412	115	844	272
10:00		114	26			106	18				
10:15		107	24			89	14				
10:30		94	20			104	15				
10:45		102	26	417	96	93	17	392	64	809	160
11:00		83	16			92	11				
11:15		98	14			97	2				
11:30		96	11			91	6				
11:45		113	10	390	51	118	7	398	26	788	77
Total		3015	4755	3015	4755	3074	4559	3074	4559	6089	9314
Combined Total		7770		7770		7633		7633		15403	
AM Peak	-	07:45	-	-	-	07:30	-	-	-	-	-
Vol.	-	875	-	-	-	776	-	-	-	-	-
P.H.F.		0.919				0.902					
PM Peak	-	-	03:00	-	-	-	03:15	-	-	-	-
Vol.	-	-	727	-	-	-	787	-	-	-	-
P.H.F.			0.891				0.830				
Percentage		38.8%	61.2%			40.3%	59.7%				
ADT/AADT		ADT 15,403		AADT 15,403							

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City of San Juan Capistrano
Junipero Serra Road
B/ Interstate 5 Southbound - Interstate 5 Northbound
24 Hour Directional Volume Count

SJO003
Site Code: 003-25885

Start Time	9/16/2025 Tue	Eastbound Morning	Eastbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Westbound Morning	Westbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		12	116			1	98				
12:15		9	145			8	83				
12:30		9	123			3	95				
12:45		5	113	35	497	4	90	16	366	51	863
01:00		7	166			1	108				
01:15		4	177			4	91				
01:30		4	154			3	76				
01:45		6	120	21	617	4	95	12	370	33	987
02:00		8	123			4	81				
02:15		4	160			5	81				
02:30		4	148			0	112				
02:45		4	192	20	623	2	138	11	412	31	1035
03:00		1	**261**			0	**150**				
03:15		7	**253**			0	**126**				
03:30		11	**236**			1	**171**				
03:45		11	**224**	30	974	4	**139**	5	586	35	1560
04:00		10	209			6	137				
04:15		14	209			5	113				
04:30		26	205			2	123				
04:45		24	174	74	797	11	132	24	505	98	1302
05:00		29	197			12	119				
05:15		32	221			21	137				
05:30		65	226			36	107				
05:45		95	213	221	857	72	110	141	473	362	1330
06:00		54	167			27	111				
06:15		81	177			43	97				
06:30		110	122			53	66				
06:45		133	142	378	608	74	68	197	342	575	950
07:00		144	134			119	55				
07:15		158	143			**164**	49				
07:30		**226**	116			**232**	59				
07:45		**217**	101	745	494	**218**	54	733	217	1478	711
08:00		**294**	92			**136**	41				
08:15		**269**	78			131	30				
08:30		193	78			98	38				
08:45		164	77	920	325	87	32	452	141	1372	466
09:00		132	58			81	39				
09:15		128	44			73	29				
09:30		124	42			86	20				
09:45		131	43	515	187	80	24	320	112	835	299
10:00		138	41			71	24				
10:15		132	29			71	7				
10:30		126	27			63	10				
10:45		126	31	522	128	84	16	289	57	811	185
11:00		102	20			66	9				
11:15		118	21			68	1				
11:30		121	13			80	4				
11:45		124	7	465	61	89	8	303	22	768	83
Total		3946	6168	3946	6168	2503	3603	2503	3603	6449	9771
Combined Total		10114		10114		6106		6106		16220	
AM Peak	-	07:30	-	-	-	07:15	-	-	-	-	-
Vol.	-	1006	-	-	-	750	-	-	-	-	-
P.H.F.		0.855				0.808					
PM Peak	-	-	03:00	-	-	-	03:00	-	-	-	-
Vol.	-	-	974	-	-	-	586	-	-	-	-
P.H.F.			0.933				0.857				
Percentage		39.0%	61.0%			41.0%	59.0%				
ADT/AADT		ADT 16,220		AADT 16,220							

APPENDIX B

ICU WORKSHEETS

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **3**
NORTH/SOUTH: **Camino Capistrano**
EAST/WEST: **Junipero Serra Road**

Move-ment	Lane		Capacity	Existing No Project Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL	1.0		1,700	2	0	0.00 *	0.00 *
NBT	1.0		1,700	270	117	0.16	0.07
NBR	2.0	P	3,400	590	475	0.01 *	0.07 *
SBL	1.0		1,700	88	94	0.05	0.06
SBT	0.5		850	288	122	0.34 *	0.14 *
SBR	0.5	U	850	3	2	0.00	0.00
EB	2		3,400	6	12	0.00 *	0.00 *
WB	4		6,800	724	582	0.11 *	0.09 *
N/S Critical Movements						0.34	0.14
E/W Critical Movements						0.11	0.09
Right Turn Critical Movement						0.01	0.07
Clearance Interval						0.05	0.05
ICU						0.51	0.35
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **4**
NORTH/SOUTH: **Lion Way**
EAST/WEST: **Junipero Serra Road**

				Existing No Project			
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL							
NBT	2.0		3,400	177	238	0.05	0.07 *
NBR							
SBL							
SBT	2.0		3,400	240	51	0.07 *	0.02
SBR							
EBL	0.0		0	0	0	0.00	0.00
EBT	2.0		3,400	587	552	0.17 *	0.16 *
EBR	1.0	U	1,700	77	27	0.00	0.00
WBL	1.0		1,700	152	161	0.09 *	0.09 *
WBT	2.0		3,400	597	531	0.18	0.16
WBR	1.0	D	1,700	296	11	0.00	0.00
N/S Critical Movements						0.12	0.09
E/W Critical Movements						0.26	0.25
Right Turn Critical Movement						0.00	0.00
Clearance Interval						0.05	0.05
ICU						0.43	0.39
Level of Service (LOS)						A	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **5**
NORTH/SOUTH: **I-5 Southbound Ramps**
EAST/WEST: **Junipero Serra Road**

	Existing No Project					
Move-ment	Lane	Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL						
NBT	0.0	0	0	0	0.00	0.00
NBR						
SBL						
SBT	2.0	3,400	822	685	0.24 *	0.20 *
SBR						
EBL	0.0	0	0	0	0.00	0.00
EBT	1.5	2,550	613	581	0.24 *	0.23 *
EBR	0.5 U	850	202	215	0.00	0.03 *
WBL	1.0	1,700	229	174	0.13 *	0.10 *
WBT	1.0	1,700	529	303	0.31	0.18
WBR	0.0	0	0	0	0.00	0.00
N/S Critical Movements					0.24	0.20
E/W Critical Movements					0.37	0.33
Right Turn Critical Movement					0.00	0.03
Clearance Interval					0.05	0.05
ICU					0.66	0.61
Level of Service (LOS)					B	B

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **6**
NORTH/SOUTH: **I-5 Northbound Ramps**
EAST/WEST: **Junipero Serra Road**

	Existing No Project					
Move-ment	Lane	Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL						
NBT	2.0	3,400	485	334	0.14 *	0.10 *
NBR						
SBL						
SBT	0.0	0	0	0	0.00	0.00
SBR						
EBL	1.0	1,700	407	361	0.24 *	0.21 *
EBT	1.0	1,700	599	436	0.35	0.26
EBR	0.0	0	0	0	0.00	0.00
WBL	0.0	0	0	0	0.00	0.00
WBT	1.5	2,550	488	365	0.19 *	0.14 *
WBR	1.5 U	2,550	288	314	0.00	0.00
N/S Critical Movements					0.14	0.10
E/W Critical Movements					0.43	0.35
Right Turn Critical Movement					0.00	0.00
Clearance Interval					0.05	0.05
ICU					0.62	0.50
Level of Service (LOS)					B	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **7**
NORTH/SOUTH: **Rancho Viejo Road**
EAST/WEST: **Junipero Serra Road**

	Existing No Project						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL	2.0		3,400	252	272	0.07 *	0.08 *
NBT	1.5		2,550	211	163	0.08	0.06
NBR	0.5	U	850	5	2	0.00	0.00
SBL	1.0		1,700	0	1	0.00	0.00
SBT	1.0		1,700	199	161	0.12 *	0.09 *
SBR	2.0	P	3,400	465	407	0.02 *	0.03 *
EB	3		5,100	859	621	0.17 *	0.12 *
WB	2		3,400	30	8	0.01 *	0.00 *
N/S Critical Movements						0.19	0.17
E/W Critical Movements						0.18	0.12
Right Turn Critical Movement						0.02	0.03
Clearance Interval						0.05	0.05
ICU						0.44	0.37
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **3**
NORTH/SOUTH: **Camino Capistrano**
EAST/WEST: **Junipero Serra Road**

	Existing Plus Project						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL	1.0		1,700	2	0	0.00 *	0.00 *
NBT	1.0		1,700	280	128	0.16	0.08
NBR	2.0	P	3,400	590	475	0.01 *	0.06 *
SBL	1.0		1,700	98	119	0.06	0.07
SBT	0.5		850	293	135	0.34 *	0.16 *
SBR	0.5	U	850	3	2	0.00	0.00
EB	2		3,400	6	12	0.00 *	0.00 *
WB	4		6,800	743	604	0.11 *	0.09 *
N/S Critical Movements						0.34	0.16
E/W Critical Movements						0.11	0.09
Right Turn Critical Movement						0.01	0.06
Clearance Interval						0.05	0.05
ICU						0.51	0.36
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **4**
NORTH/SOUTH: **Lion Way**
EAST/WEST: **Junipero Serra Road**

	Existing Plus Project						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL							
NBT	2.0		3,400	177	238	0.05	0.07 *
NBR							
SBL							
SBT	2.0		3,400	240	51	0.07 *	0.02
SBR							
EBL	0.0		0	0	0	0.00	0.00
EBT	2.0		3,400	597	577	0.18 *	0.17 *
EBR	1.0	U	1,700	77	27	0.00	0.00
WBL	1.0		1,700	152	161	0.09 *	0.09 *
WBT	2.0		3,400	616	553	0.18	0.16
WBR	1.0	D	1,700	296	11	0.00	0.00
N/S Critical Movements						0.12	0.09
E/W Critical Movements						0.27	0.26
Right Turn Critical Movement						0.00	0.00
Clearance Interval						0.05	0.05
ICU						0.44	0.40
Level of Service (LOS)						A	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **5**
NORTH/SOUTH: **I-5 Southbound Ramps**
EAST/WEST: **Junipero Serra Road**

	Existing Plus Project					
Move-ment	Lane	Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL						
NBT	0.0	0	0	0	0.00	0.00
NBR						
SBL						
SBT	2.0	3,400	826	690	0.24 *	0.20 *
SBR						
EBL	0.0	0	0	0	0.00	0.00
EBT	1.5	2,550	619	594	0.24 *	0.23 *
EBR	0.5 U	850	206	227	0.00	0.03 *
WBL	1.0	1,700	229	174	0.13 *	0.10 *
WBT	1.0	1,700	544	320	0.32	0.19
WBR	0.0	0	0	0	0.00	0.00
N/S Critical Movements					0.24	0.20
E/W Critical Movements					0.37	0.33
Right Turn Critical Movement					0.00	0.03
Clearance Interval					0.05	0.05
ICU					0.66	0.61
Level of Service (LOS)					B	B

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **6**
NORTH/SOUTH: **I-5 Northbound Ramps**
EAST/WEST: **Junipero Serra Road**

	Existing Plus Project					
Move-ment	Lane	Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL						
NBT	2.0	3,400	494	345	0.15 *	0.10 *
NBR						
SBL						
SBT	0.0	0	0	0	0.00	0.00
SBR						
EBL	1.0	1,700	410	367	0.24 *	0.22 *
EBT	1.0	1,700	602	443	0.35	0.26
EBR	0.0	0	0	0	0.00	0.00
WBL	0.0	0	0	0	0.00	0.00
WBT	1.5	2,550	494	371	0.19 *	0.15 *
WBR	1.5 U	2,550	288	314	0.00	0.00
N/S Critical Movements					0.15	0.10
E/W Critical Movements					0.43	0.37
Right Turn Critical Movement					0.00	0.00
Clearance Interval					0.05	0.05
ICU					0.63	0.52
Level of Service (LOS)					B	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **7**
NORTH/SOUTH: **Rancho Viejo Road**
EAST/WEST: **Junipero Serra Road**

	Existing Plus Project						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL	2.0		3,400	255	275	0.08 *	0.08 *
NBT	1.5		2,550	211	163	0.08	0.06
NBR	0.5	U	850	5	2	0.00	0.00
SBL	1.0		1,700	0	1	0.00	0.00
SBT	1.0		1,700	199	161	0.12 *	0.09 *
SBR	2.0	P	3,400	468	410	0.02 *	0.03 *
EB	3		5,100	862	628	0.17 *	0.12 *
WB	2		3,400	30	8	0.01 *	0.00 *
N/S Critical Movements						0.20	0.17
E/W Critical Movements						0.18	0.12
Right Turn Critical Movement						0.02	0.03
Clearance Interval						0.05	0.05
ICU						0.45	0.37
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: 3
NORTH/SOUTH: Camino Capistrano
EAST/WEST: Junipero Serra Road

	Existing Plus Project Plus Cumulative Projects (Opening Year 2032)						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL	1.0		1,700	2	0	0.00 *	0.00 *
NBT	1.0		1,700	339	139	0.20	0.08
NBR	2.0	P	3,400	640	498	0.00	0.06 *
SBL	1.0		1,700	101	122	0.06	0.07
SBT	0.5		850	342	149	0.40 *	0.18 *
SBR	0.5	U	850	3	2	0.00	0.00
EB	2		3,400	6	12	0.00 *	0.00 *
WB	4		6,800	790	632	0.12 *	0.09 *
N/S Critical Movements						0.40	0.18
E/W Critical Movements						0.12	0.09
Right Turn Critical Movement						0.00	0.06
Clearance Interval						0.05	0.05
ICU						0.57	0.38
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **4**
NORTH/SOUTH: **Lion Way**
EAST/WEST: **Junipero Serra Road**

Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
				Existing Plus Project Plus Cumulative Projects (Opening Year 2032)			
NBL							
NBT	2.0		3,400	252	263	0.07	0.08 *
NBR							
SBL							
SBT	2.0		3,400	392	90	0.12 *	0.03
SBR							
EBL	0.0		0	0	0	0.00	0.00
EBT	2.0		3,400	621	599	0.18 *	0.18 *
EBR	1.0	U	1,700	105	32	0.00	0.00
WBL	1.0		1,700	215	175	0.13 *	0.10 *
WBT	2.0		3,400	638	575	0.19	0.17
WBR	1.0	D	1,700	476	34	0.09 *	0.00
N/S Critical Movements						0.19	0.11
E/W Critical Movements						0.31	0.28
Right Turn Critical Movement						0.09	0.00
Clearance Interval						0.05	0.05
ICU						0.64	0.44
Level of Service (LOS)						B	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:

- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: **5**
NORTH/SOUTH: **I-5 Southbound Ramps**
EAST/WEST: **Junipero Serra Road**

Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
			Existing Plus Project Plus Cumulative Projects (Opening Year 2032)				
NBL							
NBT	0.0		0	0	0	0.00	0.00
NBR							
SBL							
SBT	2.0		3,400	957	731	0.28 *	0.22 *
SBR							
EBL	0.0		0	0	0	0.00	0.00
EBT	1.5		2,550	749	645	0.29 *	0.25 *
EBR	0.5	U	850	288	255	0.05 *	0.05 *
WBL	1.0		1,700	239	189	0.14 *	0.11 *
WBT	1.0		1,700	701	353	0.41	0.21
WBR	0.0		0	0	0	0.00	0.00
N/S Critical Movements						0.28	0.22
E/W Critical Movements						0.43	0.36
Right Turn Critical Movement						0.05	0.05
Clearance Interval						0.05	0.05
ICU						0.81	0.68
Level of Service (LOS)						D	B

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:

- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: 6
NORTH/SOUTH: I-5 Northbound Ramps
EAST/WEST: Junipero Serra Road

	Existing Plus Project Plus Cumulative Projects (Opening Year 2032)						
Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
NBL							
NBT	2.0		3,400	615	374	0.18 *	0.11 *
NBR							
SBL							
SBT	0.0		0	0	0	0.00	0.00
SBR							
EBL	1.0		1,700	496	399	0.29 *	0.23 *
EBT	1.0		1,700	669	473	0.39	0.28
EBR	0.0		0	0	0	0.00	0.00
WBL	0.0		0	0	0	0.00	0.00
WBT	1.5		2,550	556	402	0.22 *	0.16 *
WBR	1.5	U	2,550	301	335	0.00	0.00
N/S Critical Movements						0.18	0.11
E/W Critical Movements						0.51	0.39
Right Turn Critical Movement						0.00	0.00
Clearance Interval						0.05	0.05
ICU						0.74	0.55
Level of Service (LOS)						C	A

Notes: **NB/SB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

LSA

INTERSECTION CAPACITY UTILIZATION

INTERSECTION NO.: 7
NORTH/SOUTH: Rancho Viejo Road
EAST/WEST: Junipero Serra Road

Move-ment	Lane		Capacity	Volume AM	Volume PM	V/C Ratio AM	V/C Ratio PM
	Existing Plus Project Plus Cumulative Projects (Opening Year 2032)						
NBL	2.0		3,400	285	307	0.08 *	0.09 *
NBT	1.5		2,550	218	170	0.09	0.07
NBR	0.5	U	850	5	2	0.00	0.00
SBL	1.0		1,700	0	1	0.00	0.00
SBT	1.0		1,700	207	168	0.12 *	0.10 *
SBR	2.0	P	3,400	512	430	0.03 *	0.03 *
EB	3		5,100	949	668	0.19 *	0.13 *
WB	2		3,400	31	8	0.01 *	0.00 *
N/S Critical Movements						0.20	0.19
E/W Critical Movements						0.20	0.13
Right Turn Critical Movement						0.03	0.03
Clearance Interval						0.05	0.05
ICU						0.48	0.40
Level of Service (LOS)						A	A

Notes: **EB/WB has the split phasing, so the volume has been combined.**
ICU - Intersection Capacity Utilization
V/C - Volume to Capacity Ratio
Right Turn Conditions:
- P - Protected right turn movement
- U - Unprotected right turn movement
- D - Defacto right turn movement
- N - No right turn on red
- F - Free right turn lane

APPENDIX C

HCM WORKSHEETS

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	0	4	0	0	0	6	401	0	0	493	1
Future Vol, veh/h	1	0	4	0	0	0	6	401	0	0	493	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	62	62	62	62	62	62	62	62	62	62	62	62
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	6	0	0	0	10	647	0	0	795	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1462	1462	796	1461	1463	647	797	0	0	647	0	0
Stage 1	796	796	-	666	666	-	-	-	-	-	-	-
Stage 2	666	666	-	795	797	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	107	129	387	107	129	471	825	-	-	939	-	-
Stage 1	381	399	-	449	457	-	-	-	-	-	-	-
Stage 2	449	457	-	381	399	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	105	126	387	103	126	471	825	-	-	939	-	-
Mov Cap-2 Maneuver	105	126	-	103	126	-	-	-	-	-	-	-
Stage 1	381	399	-	440	449	-	-	-	-	-	-	-
Stage 2	440	449	-	375	399	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	19.79	0	0.14	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	27	-	-	251	-	939	-	-
HCM Lane V/C Ratio	0.012	-	-	0.032	-	-	-	-
HCM Ctrl Dly (s/v)	9.4	0	-	19.8	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	407	497	0
Future Vol, veh/h	0	0	0	407	497	0
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	-	-	-	-	-
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	0	0	0	442	540	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	983	540	540	0	-	0
Stage 1	540	-	-	-	-	-
Stage 2	442	-	-	-	-	-
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	276	542	1028	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	276	542	1028	-	-	-
Mov Cap-2 Maneuver	276	-	-	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	648	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1028	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	5	1	462	9	253	2	270	590	88	288	3
Future Volume (veh/h)	0	5	1	462	9	253	2	270	590	88	288	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	6	1	550	11	301	2	321	702	105	343	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	12	2	1030	557	472	3	508	1589	136	639	7
Arrive On Green	0.00	0.01	0.01	0.30	0.30	0.30	0.00	0.27	0.27	0.08	0.35	0.35
Sat Flow, veh/h	1781	1563	260	3456	1870	1585	1781	1870	2790	1781	1845	22
Grp Volume(v), veh/h	0	0	7	550	11	301	2	321	702	105	0	347
Grp Sat Flow(s),veh/h/ln	1781	0	1823	1728	1870	1585	1781	1870	1395	1781	0	1866
Q Serve(g_s), s	0.0	0.0	0.2	7.1	0.2	8.8	0.1	8.1	7.8	3.1	0.0	8.0
Cycle Q Clear(g_c), s	0.0	0.0	0.2	7.1	0.2	8.8	0.1	8.1	7.8	3.1	0.0	8.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	13	0	13	1030	557	472	3	508	1589	136	0	646
V/C Ratio(X)	0.00	0.00	0.52	0.53	0.02	0.64	0.60	0.63	0.44	0.77	0.00	0.54
Avail Cap(c_a), veh/h	531	0	544	2261	1224	1037	531	673	1835	531	0	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	26.5	15.7	13.3	16.3	26.8	17.2	6.6	24.3	0.0	14.1
Incr Delay (d2), s/veh	0.0	0.0	27.7	0.6	0.0	2.0	51.2	1.9	0.3	3.5	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	0.2	2.4	0.1	2.8	0.1	3.1	3.5	1.3	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	54.2	16.3	13.3	18.4	78.0	19.0	6.9	27.8	0.0	15.1
LnGrp LOS			D	B	B	B	E	B	A	C		B
Approach Vol, veh/h		7			862			1025			452	
Approach Delay, s/veh		54.2			17.0			10.9			18.1	
Approach LOS		D			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	4.4	4.1	24.3	20.9	8.1	20.3
Change Period (Y+Rc), s	4.0	4.0	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	16.0	19.3	35.1	16.0	19.3
Max Q Clear Time (g_c+I1), s	2.2	2.1	10.0	10.8	5.1	10.1
Green Ext Time (p_c), s	0.0	0.0	1.7	5.2	0.1	4.5

Intersection Summary	
HCM 7th Control Delay, s/veh	14.6
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	587	77	152	597	296	46	38	93	142	13	85
Future Volume (veh/h)	0	587	77	152	597	296	46	38	93	142	13	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	725	95	188	737	365	57	47	115	175	16	105
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1788	797	116	2174	970	97	80	258	230	28	182
Arrive On Green	0.00	0.50	0.50	0.02	0.20	0.20	0.10	0.10	0.10	0.13	0.13	0.13
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	998	823	1585	1781	214	1404
Grp Volume(v), veh/h	0	725	95	188	737	365	104	0	115	175	0	121
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1820	0	1585	1781	0	1618
Q Serve(g_s), s	0.0	10.2	2.5	5.2	14.2	15.9	4.4	0.0	5.2	7.6	0.0	5.6
Cycle Q Clear(g_c), s	0.0	10.2	2.5	5.2	14.2	15.9	4.4	0.0	5.2	7.6	0.0	5.6
Prop In Lane	0.00		1.00	1.00		1.00	0.55		1.00	1.00		0.87
Lane Grp Cap(c), veh/h	0	1788	797	116	2174	970	178	0	258	230	0	209
V/C Ratio(X)	0.00	0.41	0.12	1.62	0.34	0.38	0.59	0.00	0.45	0.76	0.00	0.58
Avail Cap(c_a), veh/h	0	1788	797	116	2174	970	398	0	450	401	0	364
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	0.83	0.83	0.83	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.4	10.5	39.1	18.1	18.7	34.5	0.0	30.2	33.6	0.0	32.8
Incr Delay (d2), s/veh	0.0	0.7	0.3	311.0	0.4	0.9	3.0	0.0	1.2	5.1	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	0.8	12.3	6.7	6.8	2.0	0.0	2.0	3.5	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.1	10.8	350.1	18.4	19.7	37.6	0.0	31.5	38.7	0.0	35.3
LnGrp LOS		B	B	F	B	B	D		C	D		D
Approach Vol, veh/h		820			1290			219			296	
Approach Delay, s/veh		12.8			67.1			34.4			37.3	
Approach LOS		B			E			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.7	45.1		14.3		53.8		11.8				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.2	22.9		18.0		31.6		17.5				
Max Q Clear Time (g_c+I1), s	7.2	12.2		9.6		17.9		7.2				
Green Ext Time (p_c), s	0.0	5.8		0.8		8.4		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	44.1
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	613	202	229	529	0	0	0	0	296	2	524
Future Volume (veh/h)	0	613	202	229	529	0	0	0	0	296	2	524
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	666	220	249	575	0				322	2	570
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	0				2	2	2
Cap, veh/h	0	863	285	243	965	0				679	2	603
Arrive On Green	0.00	0.11	0.11	0.09	0.35	0.00				0.38	0.38	0.38
Sat Flow, veh/h	0	2718	867	1781	1870	0				1781	6	1580
Grp Volume(v), veh/h	0	451	435	249	575	0				322	0	572
Grp Sat Flow(s),veh/h/ln	0	1777	1714	1781	1870	0				1781	0	1586
Q Serve(g_s), s	0.0	19.7	19.8	10.9	20.3	0.0				10.9	0.0	27.9
Cycle Q Clear(g_c), s	0.0	19.7	19.8	10.9	20.3	0.0				10.9	0.0	27.9
Prop In Lane	0.00		0.51	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	584	563	243	965	0				679	0	605
V/C Ratio(X)	0.00	0.77	0.77	1.03	0.60	0.00				0.47	0.00	0.95
Avail Cap(c_a), veh/h	0	584	563	243	965	0				688	0	613
HCM Platoon Ratio	1.00	0.33	0.33	0.67	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.79	0.79	0.82	0.82	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	32.7	32.8	36.3	19.3	0.0				18.7	0.0	23.9
Incr Delay (d2), s/veh	0.0	7.7	8.0	59.1	2.2	0.0				0.6	0.0	23.7
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	10.5	10.1	8.7	9.5	0.0				4.4	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	40.4	40.7	95.5	21.5	0.0				19.3	0.0	47.7
LnGrp LOS		D	D	F	C					B		D
Approach Vol, veh/h		886			824						894	
Approach Delay, s/veh		40.6			43.9						37.5	
Approach LOS		D			D						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	30.4		34.6		45.4
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	10.9	25.9		30.9		40.9
Max Q Clear Time (g_c+I1), s	12.9	21.8		29.9		22.3
Green Ext Time (p_c), s	0.0	1.5		0.6		2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	40.5
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	407	599	0	0	488	288	229	1	255	0	0	0
Future Volume (veh/h)	407	599	0	0	488	288	229	1	255	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	420	618	0	0	549	267	236	1	263			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	421	1284	0	0	1493	633	376	1	333			
Arrive On Green	0.08	0.23	0.00	0.00	0.80	0.80	0.21	0.21	0.21			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	6	1580			
Grp Volume(v), veh/h	420	618	0	0	549	267	236	0	264			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	18.9	22.9	0.0	0.0	3.4	4.1	9.6	0.0	12.6			
Cycle Q Clear(g_c), s	18.9	22.9	0.0	0.0	3.4	4.1	9.6	0.0	12.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	421	1284	0	0	1493	633	376	0	335			
V/C Ratio(X)	1.00	0.48	0.00	0.00	0.37	0.42	0.63	0.00	0.79			
Avail Cap(c_a), veh/h	421	1284	0	0	1493	633	577	0	513			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.68	0.68	0.00	0.00	0.95	0.95	1.00	0.00	1.00			
Uniform Delay (d), s/veh	36.9	18.6	0.0	0.0	5.2	5.3	28.7	0.0	29.9			
Incr Delay (d2), s/veh	35.6	0.9	0.0	0.0	0.7	2.0	2.1	0.0	5.4			
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	18.0	11.5	0.0	0.0	1.1	1.3	4.2	0.0	5.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	72.5	19.5	0.0	0.0	5.9	7.2	30.8	0.0	35.2			
LnGrp LOS	E	B			A	A	C		D			
Approach Vol, veh/h		1038			816			500				
Approach Delay, s/veh		40.9			6.3			33.1				
Approach LOS		D			A			C				

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		59.0			23.0	36.0		21.0				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		45.9			18.9	22.9		25.9				
Max Q Clear Time (g_c+I1), s		24.9			20.9	6.1		14.6				
Green Ext Time (p_c), s		2.8			0.0	3.0		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.3
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	463	33	363	1	27	2	252	211	5	0	199	465
Future Volume (veh/h)	463	33	363	1	27	2	252	211	5	0	199	465
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	640	0	275	1	29	2	274	229	5	0	216	505
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1777	0	791	2	64	4	373	1092	24	2	286	1818
Arrive On Green	0.50	0.00	0.50	0.02	0.02	0.02	0.11	0.31	0.31	0.00	0.15	0.15
Sat Flow, veh/h	3563	0	1585	116	3348	229	3456	3556	77	1781	1870	2790
Grp Volume(v), veh/h	640	0	275	16	0	16	274	114	120	0	216	505
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1865	0	1829	1728	1777	1856	1781	1870	1395
Q Serve(g_s), s	8.8	0.0	8.4	0.7	0.0	0.7	6.1	3.8	3.8	0.0	8.8	6.2
Cycle Q Clear(g_c), s	8.8	0.0	8.4	0.7	0.0	0.7	6.1	3.8	3.8	0.0	8.8	6.2
Prop In Lane	1.00		1.00	0.06		0.13	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	1777	0	791	36	0	35	373	545	570	2	286	1818
V/C Ratio(X)	0.36	0.00	0.35	0.45	0.00	0.46	0.73	0.21	0.21	0.00	0.76	0.28
Avail Cap(c_a), veh/h	1777	0	791	135	0	133	821	593	620	140	327	1880
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.87	0.00	0.87	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	12.2	38.8	0.0	38.8	34.6	20.5	20.5	0.0	32.5	5.9
Incr Delay (d2), s/veh	0.5	0.0	1.1	3.3	0.0	3.4	2.1	0.3	0.3	0.0	9.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	2.7	0.3	0.0	0.3	2.5	1.5	1.6	0.0	4.5	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.7	0.0	13.2	42.1	0.0	42.3	36.7	20.8	20.8	0.0	41.9	6.0
LnGrp LOS	B		B	D		D	D	C	C		D	A
Approach Vol, veh/h		915			32			508			721	
Approach Delay, s/veh		12.9			42.2			29.4			16.8	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	44.4	12.3	17.5		5.7	0.0	29.9
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	19.0	14.0		5.8	6.3	26.7
Max Q Clear Time (g_c+I1), s	10.8	8.1	10.8		2.7	0.0	5.8
Green Ext Time (p_c), s	2.9	0.5	1.4		0.0	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	0	6	0	0	0	6	212	0	0	212	2
Future Vol, veh/h	2	0	6	0	0	0	6	212	0	0	212	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	0	6	0	0	0	6	221	0	0	221	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	455	455	222	454	456	221	223	0	0	221	0	0
Stage 1	222	222	-	233	233	-	-	-	-	-	-	-
Stage 2	233	233	-	221	223	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	515	501	818	516	500	819	1346	-	-	1348	-	-
Stage 1	781	720	-	770	712	-	-	-	-	-	-	-
Stage 2	770	712	-	782	719	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	513	498	818	509	498	819	1346	-	-	1348	-	-
Mov Cap-2 Maneuver	513	498	-	509	498	-	-	-	-	-	-	-
Stage 1	781	720	-	766	708	-	-	-	-	-	-	-
Stage 2	766	708	-	776	719	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.12	0	0.21	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	50	-	-	712	-	1348	-	-
HCM Lane V/C Ratio	0.005	-	-	0.012	-	-	-	-
HCM Ctrl Dly (s/v)	7.7	0	-	10.1	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	218	218	0
Future Vol, veh/h	0	0	0	218	218	0
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	-	-	-	-	-
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	0	0	0	237	237	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	474	237	237	0	-	0
Stage 1	237	-	-	-	-	-
Stage 2	237	-	-	-	-	-
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	549	802	1330	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	802	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	549	802	1330	-	-	-
Mov Cap-2 Maneuver	549	-	-	-	-	-
Stage 1	802	-	-	-	-	-
Stage 2	802	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1330	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Ctrl Dly (s/v)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	2	513	2	67	0	117	475	94	122	2
Future Volume (veh/h)	1	9	2	513	2	67	0	117	475	94	122	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	11	2	626	2	82	0	143	579	115	149	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	22	4	986	534	452	4	444	1458	149	741	10
Arrive On Green	0.01	0.01	0.01	0.29	0.29	0.29	0.00	0.24	0.24	0.08	0.40	0.40
Sat Flow, veh/h	1781	1540	280	3456	1870	1585	1781	1870	2790	1781	1841	25
Grp Volume(v), veh/h	1	0	13	626	2	82	0	143	579	115	0	151
Grp Sat Flow(s),veh/h/ln	1781	0	1820	1728	1870	1585	1781	1870	1395	1781	0	1866
Q Serve(g_s), s	0.0	0.0	0.3	7.7	0.0	1.9	0.0	3.1	6.1	3.1	0.0	2.6
Cycle Q Clear(g_c), s	0.0	0.0	0.3	7.7	0.0	1.9	0.0	3.1	6.1	3.1	0.0	2.6
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	25	0	26	986	534	452	4	444	1458	149	0	751
V/C Ratio(X)	0.04	0.00	0.50	0.63	0.00	0.18	0.00	0.32	0.40	0.77	0.00	0.20
Avail Cap(c_a), veh/h	582	0	594	2476	1340	1136	582	737	1895	582	0	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	24.0	15.3	12.5	13.2	0.0	15.4	7.0	22.0	0.0	9.5
Incr Delay (d2), s/veh	0.6	0.0	14.4	1.0	0.0	0.3	0.0	0.6	0.3	3.2	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	0.2	2.6	0.0	0.6	0.0	1.1	2.5	1.2	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.5	0.0	38.4	16.3	12.5	13.5	0.0	16.0	7.3	25.1	0.0	9.7
LnGrp LOS	C		D	B	B	B		B	A	C		A
Approach Vol, veh/h		14			710			722			266	
Approach Delay, s/veh		37.4			15.9			9.0			16.4	
Approach LOS		D			B			A			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	4.7	0.0	25.4	18.9	8.1	17.3
Change Period (Y+Rc), s	4.0	4.0	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	16.0	19.3	35.1	16.0	19.3
Max Q Clear Time (g_c+I1), s	2.3	0.0	4.6	9.7	5.1	8.1
Green Ext Time (p_c), s	0.0	0.0	0.8	4.2	0.1	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	13.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	552	27	161	531	11	36	9	193	36	8	7
Future Volume (veh/h)	0	552	27	161	531	11	36	9	193	36	8	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	600	29	175	577	12	39	10	210	39	9	8
Peak Hour Factor	0.92	0.92	0.92	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	2	2	2
Cap, veh/h	0	1737	775	140	2194	979	216	55	364	84	43	38
Arrive On Green	0.00	0.49	0.49	0.05	0.41	0.41	0.15	0.15	0.15	0.05	0.05	0.05
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1432	367	1585	1781	913	811
Grp Volume(v), veh/h	0	600	29	175	577	12	49	0	210	39	0	17
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1799	0	1585	1781	0	1724
Q Serve(g_s), s	0.0	7.3	0.7	5.5	7.5	0.3	1.7	0.0	8.2	1.5	0.0	0.7
Cycle Q Clear(g_c), s	0.0	7.3	0.7	5.5	7.5	0.3	1.7	0.0	8.2	1.5	0.0	0.7
Prop In Lane	0.00		1.00	1.00		1.00	0.80		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	0	1737	775	140	2194	979	272	0	364	84	0	82
V/C Ratio(X)	0.00	0.35	0.04	1.25	0.26	0.01	0.18	0.00	0.58	0.46	0.00	0.21
Avail Cap(c_a), veh/h	0	1737	775	140	2194	979	385	0	464	458	0	443
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.97	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	9.3	33.2	10.0	7.9	25.9	0.0	23.9	32.5	0.0	32.1
Incr Delay (d2), s/veh	0.0	0.5	0.1	157.3	0.3	0.0	0.3	0.0	1.4	3.9	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	2.5	0.2	8.4	2.5	0.1	0.7	0.0	3.1	0.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.5	9.4	190.4	10.3	8.0	26.3	0.0	25.4	36.4	0.0	33.3
LnGrp LOS		B	A	F	B	A	C		C	D		C
Approach Vol, veh/h		629			764			259			56	
Approach Delay, s/veh		11.4			51.6			25.6			35.4	
Approach LOS		B			D			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.0	39.1		7.3		48.1		14.6				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.5	15.1		18.0		24.1		15.0				
Max Q Clear Time (g_c+I1), s	7.5	9.3		3.5		9.5		10.2				
Green Ext Time (p_c), s	0.0	2.9		0.1		5.4		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	32.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	581	215	174	303	0	0	0	0	256	6	423
Future Volume (veh/h)	0	581	215	174	303	0	0	0	0	256	6	423
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	618	229	185	322	0				272	6	450
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	1005	372	232	1093	0				532	6	468
Arrive On Green	0.00	0.13	0.13	0.04	0.19	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	2632	940	1781	1870	0				1781	21	1567
Grp Volume(v), veh/h	0	432	415	185	322	0				272	0	456
Grp Sat Flow(s),veh/h/ln	0	1777	1701	1781	1870	0				1781	0	1588
Q Serve(g_s), s	0.0	16.1	16.1	7.2	10.3	0.0				8.8	0.0	19.8
Cycle Q Clear(g_c), s	0.0	16.1	16.1	7.2	10.3	0.0				8.8	0.0	19.8
Prop In Lane	0.00		0.55	1.00		0.00				1.00		0.99
Lane Grp Cap(c), veh/h	0	703	673	232	1093	0				532	0	474
V/C Ratio(X)	0.00	0.61	0.62	0.80	0.29	0.00				0.51	0.00	0.96
Avail Cap(c_a), veh/h	0	703	673	532	1093	0				532	0	474
HCM Platoon Ratio	1.00	0.33	0.33	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.94	0.92	0.92	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.4	25.4	32.6	15.9	0.0				20.3	0.0	24.2
Incr Delay (d2), s/veh	0.0	3.8	3.9	2.2	0.6	0.0				1.0	0.0	31.7
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	8.2	7.9	3.3	4.6	0.0				3.6	0.0	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	29.1	29.3	34.8	16.5	0.0				21.3	0.0	55.8
LnGrp LOS		C	C	C	B					C		E
Approach Vol, veh/h		847			507						728	
Approach Delay, s/veh		29.2			23.2						42.9	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.2	31.8		25.0		45.0
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	20.9	15.9		20.9		40.9
Max Q Clear Time (g_c+I1), s	12.2	18.1		21.8		12.3
Green Ext Time (p_c), s	0.2	0.0		0.0		1.1

Intersection Summary	
HCM 7th Control Delay, s/veh	32.6
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	361	436	0	0	365	314	140	1	193	0	0	0
Future Volume (veh/h)	361	436	0	0	365	314	140	1	193	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	384	464	0	0	528	241	149	1	205			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	423	1332	0	0	1557	660	304	1	269			
Arrive On Green	0.32	0.95	0.00	0.00	0.83	0.83	0.17	0.17	0.17			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	8	1579			
Grp Volume(v), veh/h	384	464	0	0	528	241	149	0	206			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	14.5	1.4	0.0	0.0	2.3	2.6	5.3	0.0	8.7			
Cycle Q Clear(g_c), s	14.5	1.4	0.0	0.0	2.3	2.6	5.3	0.0	8.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	423	1332	0	0	1557	660	304	0	271			
V/C Ratio(X)	0.91	0.35	0.00	0.00	0.34	0.37	0.49	0.00	0.76			
Avail Cap(c_a), veh/h	481	1332	0	0	1557	660	481	0	428			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.77	0.77	0.00	0.00	0.94	0.94	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	0.6	0.0	0.0	3.6	3.6	26.3	0.0	27.7			
Incr Delay (d2), s/veh	15.0	0.6	0.0	0.0	0.6	1.5	1.5	0.0	5.3			
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	6.7	0.4	0.0	0.0	0.8	0.8	2.3	0.0	3.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.2	1.1	0.0	0.0	4.2	5.1	27.7	0.0	32.9			
LnGrp LOS	D	A			A	A	C		C			
Approach Vol, veh/h		848			769			355				
Approach Delay, s/veh		17.9			4.5			30.8				
Approach LOS		B			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		54.0			20.7	33.2		16.0				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		42.9			18.9	19.9		18.9				
Max Q Clear Time (g_c+I1), s		3.4			16.5	4.6		10.7				
Green Ext Time (p_c), s		2.1			0.2	2.7		1.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.0
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	17	232	1	5	2	272	163	2	1	161	407
Future Volume (veh/h)	372	17	232	1	5	2	272	163	2	1	161	407
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	490	0	174	1	5	2	296	177	2	1	175	442
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1723	0	767	3	14	5	390	923	10	3	270	1752
Arrive On Green	0.48	0.00	0.48	0.01	0.01	0.01	0.11	0.26	0.26	0.00	0.14	0.14
Sat Flow, veh/h	3563	0	1585	462	2243	858	3456	3599	41	1781	1870	2790
Grp Volume(v), veh/h	490	0	174	4	0	4	296	87	92	1	175	442
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1847	0	1716	1728	1777	1863	1781	1870	1395
Q Serve(g_s), s	5.8	0.0	4.5	0.2	0.0	0.2	5.8	2.7	2.7	0.0	6.2	4.9
Cycle Q Clear(g_c), s	5.8	0.0	4.5	0.2	0.0	0.2	5.8	2.7	2.7	0.0	6.2	4.9
Prop In Lane	1.00		1.00	0.25		0.50	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	1723	0	767	11	0	11	390	456	478	3	270	1752
V/C Ratio(X)	0.28	0.00	0.23	0.35	0.00	0.38	0.76	0.19	0.19	0.39	0.65	0.25
Avail Cap(c_a), veh/h	1723	0	767	153	0	142	444	457	479	127	374	1907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	10.5	34.6	0.0	34.6	30.1	20.3	20.3	34.9	28.3	5.7
Incr Delay (d2), s/veh	0.4	0.0	0.6	6.7	0.0	8.0	6.1	0.3	0.3	32.7	3.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.4	0.1	0.0	0.1	2.5	1.0	1.1	0.0	2.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.2	0.0	11.1	41.3	0.0	42.7	36.2	20.6	20.6	67.7	31.9	5.9
LnGrp LOS	B		B	D		D	D	C	C	E	C	A
Approach Vol, veh/h		664			8			475			618	
Approach Delay, s/veh		11.2			42.0			30.3			13.3	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	38.4	11.6	15.4		4.6	3.8	23.3
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	9.0	14.0		5.8	5.0	18.0
Max Q Clear Time (g_c+I1), s	7.8	7.8	8.2		2.2	2.0	4.7
Green Ext Time (p_c), s	2.1	0.1	1.9		0.0	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	17.2
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	0	15	0	0	0	27	404	0	0	498	15
Future Vol, veh/h	8	0	15	0	0	0	27	404	0	0	498	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	62	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	16	0	0	0	29	439	0	0	541	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1047	1047	549	1039	1055	439	558	0	0	439	0	0
Stage 1	549	549	-	498	498	-	-	-	-	-	-	-
Stage 2	498	498	-	541	558	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	206	228	535	209	225	618	1013	-	-	1121	-	-
Stage 1	520	516	-	554	544	-	-	-	-	-	-	-
Stage 2	554	544	-	525	512	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	219	535	195	217	618	1013	-	-	1121	-	-
Mov Cap-2 Maneuver	198	219	-	195	217	-	-	-	-	-	-	-
Stage 1	520	516	-	533	523	-	-	-	-	-	-	-
Stage 2	533	523	-	509	512	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	16.57	0	0.54	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	113	-	-	336	-	1121	-	-
HCM Lane V/C Ratio	0.029	-	-	0.074	-	-	-	-
HCM Ctrl Dly (s/v)	8.7	0	-	16.6	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.2	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	8	428	508	5
Future Vol, veh/h	3	4	8	428	508	5
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	-	-	-	-	-
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	3	4	9	465	552	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1038	555	558	0	-	0
Stage 1	555	-	-	-	-	-
Stage 2	483	-	-	-	-	-
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	256	531	1013	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	253	531	1013	-	-	-
Mov Cap-2 Maneuver	253	-	-	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.18	0.16	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	33	-	361	-	-
HCM Lane V/C Ratio	0.009	-	0.021	-	-
HCM Ctrl Dly (s/v)	8.6	0	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	5	1	462	9	272	2	280	590	98	293	3
Future Volume (veh/h)	0	5	1	462	9	272	2	280	590	98	293	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	6	1	550	11	324	2	333	702	117	349	4
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	13	12	2	1061	574	487	3	504	1608	152	651	7
Arrive On Green	0.00	0.01	0.01	0.31	0.31	0.31	0.00	0.27	0.27	0.09	0.35	0.35
Sat Flow, veh/h	1781	1563	260	3456	1870	1585	1781	1870	2790	1781	1845	21
Grp Volume(v), veh/h	0	0	7	550	11	324	2	333	702	117	0	353
Grp Sat Flow(s),veh/h/ln	1781	0	1823	1728	1870	1585	1781	1870	1395	1781	0	1867
Q Serve(g_s), s	0.0	0.0	0.2	7.4	0.2	10.0	0.1	8.9	8.0	3.6	0.0	8.5
Cycle Q Clear(g_c), s	0.0	0.0	0.2	7.4	0.2	10.0	0.1	8.9	8.0	3.6	0.0	8.5
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	13	0	13	1061	574	487	3	504	1608	152	0	659
V/C Ratio(X)	0.00	0.00	0.52	0.52	0.02	0.67	0.63	0.66	0.44	0.77	0.00	0.54
Avail Cap(c_a), veh/h	507	0	519	2159	1168	990	507	642	1815	507	0	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	27.8	16.0	13.6	17.0	28.0	18.2	6.7	25.2	0.0	14.5
Incr Delay (d2), s/veh	0.0	0.0	27.9	0.6	0.0	2.2	57.8	2.3	0.3	3.1	0.0	1.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	0.2	2.5	0.1	3.3	0.1	3.5	3.7	1.5	0.0	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	55.7	16.6	13.6	19.2	85.8	20.5	7.0	28.3	0.0	15.6
LnGrp LOS			E	B	B	B	F	C	A	C		B
Approach Vol, veh/h		7			885			1037			470	
Approach Delay, s/veh		55.7			17.5			11.5			18.8	
Approach LOS		E			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	4.4	4.1	25.5	22.2	8.8	20.8
Change Period (Y+Rc), s	4.0	4.0	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	16.0	19.3	35.1	16.0	19.3
Max Q Clear Time (g_c+I1), s	2.2	2.1	10.5	12.0	5.6	10.9
Green Ext Time (p_c), s	0.0	0.0	1.7	5.3	0.1	4.2

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	597	77	152	616	296	46	38	93	142	13	85
Future Volume (veh/h)	0	597	77	152	616	296	46	38	93	142	13	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	737	95	188	760	365	57	47	115	175	16	105
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1788	797	116	2174	970	97	80	258	230	28	182
Arrive On Green	0.00	0.50	0.50	0.02	0.20	0.20	0.10	0.10	0.10	0.13	0.13	0.13
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	998	823	1585	1781	214	1404
Grp Volume(v), veh/h	0	737	95	188	760	365	104	0	115	175	0	121
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1820	0	1585	1781	0	1618
Q Serve(g_s), s	0.0	10.4	2.5	5.2	14.7	15.9	4.4	0.0	5.2	7.6	0.0	5.6
Cycle Q Clear(g_c), s	0.0	10.4	2.5	5.2	14.7	15.9	4.4	0.0	5.2	7.6	0.0	5.6
Prop In Lane	0.00		1.00	1.00		1.00	0.55		1.00	1.00		0.87
Lane Grp Cap(c), veh/h	0	1788	797	116	2174	970	178	0	258	230	0	209
V/C Ratio(X)	0.00	0.41	0.12	1.62	0.35	0.38	0.59	0.00	0.45	0.76	0.00	0.58
Avail Cap(c_a), veh/h	0	1788	797	116	2174	970	398	0	450	401	0	364
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.95	0.95	0.82	0.82	0.82	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.5	10.5	39.1	18.3	18.7	34.5	0.0	30.2	33.6	0.0	32.8
Incr Delay (d2), s/veh	0.0	0.7	0.3	310.7	0.4	0.9	3.0	0.0	1.2	5.1	0.0	2.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.7	0.8	12.3	6.9	6.8	2.0	0.0	2.0	3.5	0.0	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.1	10.8	349.8	18.6	19.7	37.6	0.0	31.5	38.7	0.0	35.3
LnGrp LOS		B	B	F	B	B	D		C	D		D
Approach Vol, veh/h		832			1313			219			296	
Approach Delay, s/veh		12.9			66.3			34.4			37.3	
Approach LOS		B			E			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.7	45.1		14.3		53.8		11.8				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.2	22.9		18.0		31.6		17.5				
Max Q Clear Time (g_c+I1), s	7.2	12.4		9.6		17.9		7.2				
Green Ext Time (p_c), s	0.0	5.8		0.8		8.6		0.6				

Intersection Summary	
HCM 7th Control Delay, s/veh	43.7
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	619	206	229	544	0	0	0	0	296	2	528
Future Volume (veh/h)	0	619	206	229	544	0	0	0	0	296	2	528
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	673	224	249	591	0				322	2	574
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	0				2	2	2
Cap, veh/h	0	857	285	243	963	0				682	2	605
Arrive On Green	0.00	0.11	0.11	0.09	0.34	0.00				0.38	0.38	0.38
Sat Flow, veh/h	0	2712	871	1781	1870	0				1781	6	1580
Grp Volume(v), veh/h	0	457	440	249	591	0				322	0	576
Grp Sat Flow(s),veh/h/ln	0	1777	1714	1781	1870	0				1781	0	1586
Q Serve(g_s), s	0.0	20.0	20.0	10.9	21.0	0.0				10.9	0.0	28.2
Cycle Q Clear(g_c), s	0.0	20.0	20.0	10.9	21.0	0.0				10.9	0.0	28.2
Prop In Lane	0.00		0.51	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	582	561	243	963	0				682	0	607
V/C Ratio(X)	0.00	0.78	0.79	1.03	0.61	0.00				0.47	0.00	0.95
Avail Cap(c_a), veh/h	0	582	561	243	963	0				688	0	613
HCM Platoon Ratio	1.00	0.33	0.33	0.67	0.67	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.78	0.78	0.81	0.81	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	32.9	32.9	36.3	19.6	0.0				18.6	0.0	23.9
Incr Delay (d2), s/veh	0.0	8.1	8.4	58.8	2.4	0.0				0.6	0.0	24.4
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	0.0	10.7	10.3	8.7	9.9	0.0				4.4	0.0	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	41.1	41.4	95.2	22.0	0.0				19.2	0.0	48.3
LnGrp LOS		D	D	F	C					B		D
Approach Vol, veh/h		897			840						898	
Approach Delay, s/veh		41.2			43.7						37.9	
Approach LOS		D			D						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	30.3		34.7		45.3
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	10.9	25.9		30.9		40.9
Max Q Clear Time (g_c+I1), s	12.9	22.0		30.2		23.0
Green Ext Time (p_c), s	0.0	1.4		0.4		2.2

Intersection Summary	
HCM 7th Control Delay, s/veh	40.9
HCM 7th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	602	0	0	494	288	238	1	255	0	0	0
Future Volume (veh/h)	410	602	0	0	494	288	238	1	255	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	423	621	0	0	552	269	245	1	263			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	421	1283	0	0	1491	632	376	1	334			
Arrive On Green	0.08	0.23	0.00	0.00	0.80	0.80	0.21	0.21	0.21			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	6	1580			
Grp Volume(v), veh/h	423	621	0	0	552	269	245	0	264			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	18.9	23.1	0.0	0.0	3.4	4.2	10.1	0.0	12.6			
Cycle Q Clear(g_c), s	18.9	23.1	0.0	0.0	3.4	4.2	10.1	0.0	12.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	421	1283	0	0	1491	632	376	0	335			
V/C Ratio(X)	1.01	0.48	0.00	0.00	0.37	0.43	0.65	0.00	0.79			
Avail Cap(c_a), veh/h	421	1283	0	0	1491	632	577	0	513			
HCM Platoon Ratio	0.33	0.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.67	0.67	0.00	0.00	0.94	0.94	1.00	0.00	1.00			
Uniform Delay (d), s/veh	36.9	18.6	0.0	0.0	5.2	5.3	28.9	0.0	29.9			
Incr Delay (d2), s/veh	37.2	0.9	0.0	0.0	0.7	2.0	2.3	0.0	5.3			
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	18.2	11.6	0.0	0.0	1.1	1.3	4.4	0.0	5.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	74.1	19.5	0.0	0.0	5.9	7.3	31.1	0.0	35.2			
LnGrp LOS	F	B			A	A	C		D			
Approach Vol, veh/h		1044			821			509				
Approach Delay, s/veh		41.6			6.3			33.2				
Approach LOS		D			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		59.0			23.0	36.0		21.0				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		45.9			18.9	22.9		25.9				
Max Q Clear Time (g_c+I1), s		25.1			20.9	6.2		14.6				
Green Ext Time (p_c), s		2.8			0.0	3.0		2.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	27.6
HCM 7th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	464	33	365	1	27	2	255	211	5	0	199	468
Future Volume (veh/h)	464	33	365	1	27	2	255	211	5	0	199	468
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	642	0	277	1	29	2	277	229	5	0	216	509
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1774	0	789	2	64	4	376	1095	24	2	286	1816
Arrive On Green	0.50	0.00	0.50	0.02	0.02	0.02	0.11	0.31	0.31	0.00	0.15	0.15
Sat Flow, veh/h	3563	0	1585	116	3348	229	3456	3556	77	1781	1870	2790
Grp Volume(v), veh/h	642	0	277	16	0	16	277	114	120	0	216	509
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1865	0	1829	1728	1777	1856	1781	1870	1395
Q Serve(g_s), s	8.8	0.0	8.5	0.7	0.0	0.7	6.2	3.8	3.8	0.0	8.8	6.2
Cycle Q Clear(g_c), s	8.8	0.0	8.5	0.7	0.0	0.7	6.2	3.8	3.8	0.0	8.8	6.2
Prop In Lane	1.00		1.00	0.06		0.13	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	1774	0	789	36	0	35	376	547	572	2	286	1816
V/C Ratio(X)	0.36	0.00	0.35	0.45	0.00	0.46	0.74	0.21	0.21	0.00	0.76	0.28
Avail Cap(c_a), veh/h	1774	0	789	135	0	133	821	593	620	140	327	1877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.86	0.00	0.86	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	12.2	38.8	0.0	38.8	34.5	20.5	20.5	0.0	32.4	6.0
Incr Delay (d2), s/veh	0.5	0.0	1.1	3.3	0.0	3.4	2.1	0.3	0.3	0.0	9.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	2.8	0.3	0.0	0.3	2.5	1.5	1.6	0.0	4.5	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.8	0.0	13.3	42.1	0.0	42.3	36.6	20.7	20.7	0.0	41.9	6.1
LnGrp LOS	B		B	D		D	D	C	C		D	A
Approach Vol, veh/h		919			32			511			725	
Approach Delay, s/veh		12.9			42.2			29.4			16.8	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	44.3	12.4	17.5		5.7	0.0	29.9
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	19.0	14.0		5.8	6.3	26.7
Max Q Clear Time (g_c+I1), s	10.8	8.2	10.8		2.7	0.0	5.8
Green Ext Time (p_c), s	2.9	0.5	1.4		0.0	0.0	1.5

Intersection Summary	
HCM 7th Control Delay, s/veh	18.5
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	21	0	35	0	0	0	31	218	0	0	218	19
Future Vol, veh/h	21	0	35	0	0	0	31	218	0	0	218	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	36	0	0	0	32	227	0	0	227	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	529	529	237	519	539	227	247	0	0	227	0	0
Stage 1	237	237	-	292	292	-	-	-	-	-	-	-
Stage 2	292	292	-	227	247	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	461	455	802	468	449	812	1319	-	-	1341	-	-
Stage 1	766	709	-	716	671	-	-	-	-	-	-	-
Stage 2	716	671	-	776	702	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	448	443	802	434	437	812	1319	-	-	1341	-	-
Mov Cap-2 Maneuver	448	443	-	434	437	-	-	-	-	-	-	-
Stage 1	766	709	-	696	652	-	-	-	-	-	-	-
Stage 2	696	652	-	740	702	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.43	0	0.97	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	224	-	-	618	-	1341	-	-
HCM Lane V/C Ratio	0.024	-	-	0.094	-	-	-	-
HCM Ctrl Dly (s/v)	7.8	0	-	11.4	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	8	243	247	6
Future Vol, veh/h	6	9	8	243	247	6
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	-	-	-	-	-
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	7	10	9	264	268	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	553	272	275	0	-	0
Stage 1	272	-	-	-	-	-
Stage 2	282	-	-	-	-	-
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	494	767	1288	-	-	-
Stage 1	774	-	-	-	-	-
Stage 2	766	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	490	767	1288	-	-	-
Mov Cap-2 Maneuver	490	-	-	-	-	-
Stage 1	768	-	-	-	-	-
Stage 2	766	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.91	0.25	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	57	-	626	-	-
HCM Lane V/C Ratio	0.007	-	0.026	-	-
HCM Ctrl Dly (s/v)	7.8	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	2	513	2	89	0	128	475	119	135	2
Future Volume (veh/h)	1	9	2	513	2	89	0	128	475	119	135	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	11	2	626	2	109	0	156	579	145	165	2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	25	22	4	979	530	449	3	437	1443	188	770	9
Arrive On Green	0.01	0.01	0.01	0.28	0.28	0.28	0.00	0.23	0.23	0.11	0.42	0.42
Sat Flow, veh/h	1781	1540	280	3456	1870	1585	1781	1870	2790	1781	1844	22
Grp Volume(v), veh/h	1	0	13	626	2	109	0	156	579	145	0	167
Grp Sat Flow(s),veh/h/ln	1781	0	1820	1728	1870	1585	1781	1870	1395	1781	0	1866
Q Serve(g_s), s	0.0	0.0	0.4	8.1	0.0	2.7	0.0	3.6	6.5	4.1	0.0	2.9
Cycle Q Clear(g_c), s	0.0	0.0	0.4	8.1	0.0	2.7	0.0	3.6	6.5	4.1	0.0	2.9
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	25	0	26	979	530	449	3	437	1443	188	0	779
V/C Ratio(X)	0.04	0.00	0.51	0.64	0.00	0.24	0.00	0.36	0.40	0.77	0.00	0.21
Avail Cap(c_a), veh/h	557	0	569	2370	1283	1087	557	705	1842	557	0	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	25.1	16.1	13.2	14.1	0.0	16.4	7.5	22.3	0.0	9.5
Incr Delay (d2), s/veh	0.6	0.0	14.6	1.0	0.0	0.4	0.0	0.7	0.3	2.6	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	0.2	2.8	0.0	0.8	0.0	1.3	2.7	1.6	0.0	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	0.0	39.6	17.0	13.2	14.5	0.0	17.1	7.8	24.9	0.0	9.7
LnGrp LOS	C		D	B	B	B		B	A	C		A
Approach Vol, veh/h		14			737			735			312	
Approach Delay, s/veh		38.6			16.7			9.8			16.8	
Approach LOS		D			B			A			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	4.7	0.0	27.1	19.4	9.4	17.7
Change Period (Y+Rc), s	4.0	4.0	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	16.0	19.3	35.1	16.0	19.3
Max Q Clear Time (g_c+I1), s	2.4	0.0	4.9	10.1	6.1	8.5
Green Ext Time (p_c), s	0.0	0.0	0.9	4.4	0.1	3.5

Intersection Summary	
HCM 7th Control Delay, s/veh	14.0
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	577	27	161	553	11	36	9	193	36	8	7
Future Volume (veh/h)	0	577	27	161	553	11	36	9	193	36	8	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	627	29	175	601	12	39	10	210	39	9	8
Peak Hour Factor	0.92	0.92	0.92	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	2	2	2
Cap, veh/h	0	1737	775	140	2194	979	216	55	364	84	43	38
Arrive On Green	0.00	0.49	0.49	0.05	0.41	0.41	0.15	0.15	0.15	0.05	0.05	0.05
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1432	367	1585	1781	913	811
Grp Volume(v), veh/h	0	627	29	175	601	12	49	0	210	39	0	17
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1799	0	1585	1781	0	1724
Q Serve(g_s), s	0.0	7.7	0.7	5.5	7.8	0.3	1.7	0.0	8.2	1.5	0.0	0.7
Cycle Q Clear(g_c), s	0.0	7.7	0.7	5.5	7.8	0.3	1.7	0.0	8.2	1.5	0.0	0.7
Prop In Lane	0.00		1.00	1.00		1.00	0.80		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	0	1737	775	140	2194	979	272	0	364	84	0	82
V/C Ratio(X)	0.00	0.36	0.04	1.25	0.27	0.01	0.18	0.00	0.58	0.46	0.00	0.21
Avail Cap(c_a), veh/h	0	1737	775	140	2194	979	385	0	464	458	0	443
HCM Platoon Ratio	1.00	1.00	1.00	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	0.97	0.97	0.97	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.1	9.3	33.2	10.1	7.9	25.9	0.0	23.9	32.5	0.0	32.1
Incr Delay (d2), s/veh	0.0	0.6	0.1	157.3	0.3	0.0	0.3	0.0	1.4	3.9	0.0	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	2.6	0.2	8.4	2.6	0.1	0.7	0.0	3.1	0.7	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	11.7	9.4	190.4	10.4	8.0	26.3	0.0	25.4	36.4	0.0	33.3
LnGrp LOS		B	A	F	B	A	C		C	D		C
Approach Vol, veh/h		656			788			259			56	
Approach Delay, s/veh		11.6			50.4			25.6			35.4	
Approach LOS		B			D			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.0	39.1		7.3		48.1		14.6				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.5	15.1		18.0		24.1		15.0				
Max Q Clear Time (g_c+I1), s	7.5	9.7		3.5		9.8		10.2				
Green Ext Time (p_c), s	0.0	2.8		0.1		5.5		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	31.8
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	594	227	174	320	0	0	0	0	256	6	428
Future Volume (veh/h)	0	594	227	174	320	0	0	0	0	256	6	428
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	632	241	185	340	0				272	6	455
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	996	379	232	1093	0				532	6	468
Arrive On Green	0.00	0.13	0.13	0.04	0.19	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	2609	959	1781	1870	0				1781	21	1568
Grp Volume(v), veh/h	0	446	427	185	340	0				272	0	461
Grp Sat Flow(s),veh/h/ln	0	1777	1698	1781	1870	0				1781	0	1588
Q Serve(g_s), s	0.0	16.7	16.7	7.2	10.9	0.0				8.8	0.0	20.1
Cycle Q Clear(g_c), s	0.0	16.7	16.7	7.2	10.9	0.0				8.8	0.0	20.1
Prop In Lane	0.00		0.56	1.00		0.00				1.00		0.99
Lane Grp Cap(c), veh/h	0	703	672	232	1093	0				532	0	474
V/C Ratio(X)	0.00	0.63	0.64	0.80	0.31	0.00				0.51	0.00	0.97
Avail Cap(c_a), veh/h	0	703	672	532	1093	0				532	0	474
HCM Platoon Ratio	1.00	0.33	0.33	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.94	0.94	0.91	0.91	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.6	25.6	32.6	16.2	0.0				20.3	0.0	24.3
Incr Delay (d2), s/veh	0.0	4.1	4.3	2.2	0.7	0.0				1.0	0.0	34.1
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	8.5	8.1	3.3	5.0	0.0				3.6	0.0	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	29.7	29.9	34.8	16.8	0.0				21.3	0.0	58.4
LnGrp LOS		C	C	C	B					C		E
Approach Vol, veh/h		873			525						733	
Approach Delay, s/veh		29.8			23.2						44.6	
Approach LOS		C			C						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.2	31.8		25.0		45.0
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	20.9	15.9		20.9		40.9
Max Q Clear Time (g_c+I1), s	9.2	18.7		22.1		12.9
Green Ext Time (p_c), s	0.2	0.0		0.0		1.2

Intersection Summary	
HCM 7th Control Delay, s/veh	33.3
HCM 7th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	367	443	0	0	371	314	151	1	193	0	0	0
Future Volume (veh/h)	367	443	0	0	371	314	151	1	193	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	390	471	0	0	532	243	161	1	205			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	428	1331	0	0	1543	654	305	1	270			
Arrive On Green	0.32	0.95	0.00	0.00	0.83	0.83	0.17	0.17	0.17			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	8	1579			
Grp Volume(v), veh/h	390	471	0	0	532	243	161	0	206			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	14.7	1.4	0.0	0.0	2.4	2.7	5.8	0.0	8.7			
Cycle Q Clear(g_c), s	14.7	1.4	0.0	0.0	2.4	2.7	5.8	0.0	8.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	428	1331	0	0	1543	654	305	0	272			
V/C Ratio(X)	0.91	0.35	0.00	0.00	0.34	0.37	0.53	0.00	0.76			
Avail Cap(c_a), veh/h	481	1331	0	0	1543	654	481	0	428			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.76	0.76	0.00	0.00	0.93	0.93	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.1	0.6	0.0	0.0	3.8	3.8	26.4	0.0	27.6			
Incr Delay (d2), s/veh	15.3	0.6	0.0	0.0	0.6	1.5	1.7	0.0	5.2			
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	6.8	0.4	0.0	0.0	0.8	0.9	2.5	0.0	3.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	38.4	1.1	0.0	0.0	4.4	5.3	28.1	0.0	32.8			
LnGrp LOS	D	A			A	A	C		C			
Approach Vol, veh/h		861			775			367				
Approach Delay, s/veh		18.0			4.7			30.8				
Approach LOS		B			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		53.9			20.9	33.0		16.1				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		42.9			18.9	19.9		18.9				
Max Q Clear Time (g_c+I1), s		3.4			16.7	4.7		10.7				
Green Ext Time (p_c), s		2.1			0.1	2.7		1.3				

Intersection Summary	
HCM 7th Control Delay, s/veh	15.2
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	17	235	1	5	2	275	163	2	1	161	410
Future Volume (veh/h)	376	17	235	1	5	2	275	163	2	1	161	410
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	496	0	176	1	5	2	299	177	2	1	175	446
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1720	0	765	3	14	5	393	927	10	3	271	1750
Arrive On Green	0.48	0.00	0.48	0.01	0.01	0.01	0.11	0.26	0.26	0.00	0.14	0.14
Sat Flow, veh/h	3563	0	1585	462	2243	858	3456	3599	41	1781	1870	2790
Grp Volume(v), veh/h	496	0	176	4	0	4	299	87	92	1	175	446
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1847	0	1716	1728	1777	1863	1781	1870	1395
Q Serve(g_s), s	5.9	0.0	4.5	0.2	0.0	0.2	5.9	2.7	2.7	0.0	6.2	5.0
Cycle Q Clear(g_c), s	5.9	0.0	4.5	0.2	0.0	0.2	5.9	2.7	2.7	0.0	6.2	5.0
Prop In Lane	1.00		1.00	0.25		0.50	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	1720	0	765	11	0	11	393	458	480	3	271	1750
V/C Ratio(X)	0.29	0.00	0.23	0.35	0.00	0.38	0.76	0.19	0.19	0.39	0.65	0.25
Avail Cap(c_a), veh/h	1720	0	765	153	0	142	444	458	480	127	374	1904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.94	0.00	0.94	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.9	0.0	10.5	34.6	0.0	34.6	30.1	20.3	20.3	34.9	28.2	5.8
Incr Delay (d2), s/veh	0.4	0.0	0.7	6.7	0.0	8.0	6.2	0.3	0.3	32.7	3.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.4	0.1	0.0	0.1	2.6	1.0	1.1	0.0	2.8	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	11.3	0.0	11.2	41.3	0.0	42.7	36.3	20.6	20.6	67.7	31.9	5.9
LnGrp LOS	B		B	D		D	D	C	C	E	C	A
Approach Vol, veh/h		672			8			478			622	
Approach Delay, s/veh		11.3			42.0			30.4			13.3	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	38.3	11.7	15.4		4.6	3.8	23.3
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	9.0	14.0		5.8	5.0	18.0
Max Q Clear Time (g_c+I1), s	7.9	7.9	8.2		2.2	2.0	4.7
Green Ext Time (p_c), s	2.2	0.1	1.9		0.0	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	17.3
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	0	15	0	0	0	27	431	0	0	523	15
Future Vol, veh/h	8	0	15	0	0	0	27	431	0	0	523	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	16	0	0	0	29	468	0	0	568	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1104	1104	577	1096	1112	468	585	0	0	468	0	0
Stage 1	577	577	-	527	527	-	-	-	-	-	-	-
Stage 2	527	527	-	568	585	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	188	211	516	191	209	595	990	-	-	1093	-	-
Stage 1	502	502	-	534	528	-	-	-	-	-	-	-
Stage 2	534	528	-	507	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	181	203	516	177	200	595	990	-	-	1093	-	-
Mov Cap-2 Maneuver	181	203	-	177	200	-	-	-	-	-	-	-
Stage 1	502	502	-	513	507	-	-	-	-	-	-	-
Stage 2	513	507	-	491	498	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	17.46	0	0.52	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	106	-	-	314	-	1093	-	-
HCM Lane V/C Ratio	0.03	-	-	0.08	-	-	-	-
HCM Ctrl Dly (s/v)	8.7	0	-	17.5	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	4	8	455	533	5
Future Vol, veh/h	3	4	8	455	533	5
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	-	-	-	-	-
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	3	4	9	495	579	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1094	582	585	0	-	0
Stage 1	582	-	-	-	-	-
Stage 2	512	-	-	-	-	-
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	237	513	990	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	234	513	990	-	-	-
Mov Cap-2 Maneuver	234	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.85	0.15	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	31	-	339	-	-
HCM Lane V/C Ratio	0.009	-	0.022	-	-
HCM Ctrl Dly (s/v)	8.7	0	15.9	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	5	1	500	9	281	2	339	640	101	342	3
Future Volume (veh/h)	0	5	1	500	9	281	2	339	640	101	342	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	5	1	543	10	305	2	368	696	110	372	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	11	10	2	1021	553	468	3	531	1616	143	671	5
Arrive On Green	0.00	0.01	0.01	0.30	0.30	0.30	0.00	0.28	0.28	0.08	0.36	0.36
Sat Flow, veh/h	1781	1513	303	3456	1870	1585	1781	1870	2790	1781	1853	15
Grp Volume(v), veh/h	0	0	6	543	10	305	2	368	696	110	0	375
Grp Sat Flow(s),veh/h/ln	1781	0	1816	1728	1870	1585	1781	1870	1395	1781	0	1868
Q Serve(g_s), s	0.0	0.0	0.2	7.3	0.2	9.3	0.1	9.8	7.8	3.4	0.0	8.9
Cycle Q Clear(g_c), s	0.0	0.0	0.2	7.3	0.2	9.3	0.1	9.8	7.8	3.4	0.0	8.9
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	11	0	12	1021	553	468	3	531	1616	143	0	676
V/C Ratio(X)	0.00	0.00	0.52	0.53	0.02	0.65	0.62	0.69	0.43	0.77	0.00	0.55
Avail Cap(c_a), veh/h	512	0	522	2180	1180	1000	512	649	1792	512	0	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	27.6	16.4	13.9	17.1	27.8	17.8	6.6	25.1	0.0	14.2
Incr Delay (d2), s/veh	0.0	0.0	31.7	0.6	0.0	2.2	56.3	3.0	0.3	3.3	0.0	1.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	2.5	0.1	3.0	0.1	3.9	3.5	1.4	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	0.0	59.2	17.0	13.9	19.3	84.1	20.8	6.8	28.4	0.0	15.4
LnGrp LOS			E	B	B	B	F	C	A	C		B
Approach Vol, veh/h		6			858			1066			485	
Approach Delay, s/veh		59.2			17.8			11.8			18.4	
Approach LOS		E			B			B			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	4.4	4.1	25.9	21.3	8.5	21.5
Change Period (Y+Rc), s	4.0	4.0	5.7	4.9	4.0	5.7
Max Green Setting (Gmax), s	16.0	16.0	19.3	35.1	16.0	19.3
Max Q Clear Time (g_c+I1), s	2.2	2.1	10.9	11.3	5.4	11.8
Green Ext Time (p_c), s	0.0	0.0	1.7	5.1	0.1	4.0

Intersection Summary	
HCM 7th Control Delay, s/veh	15.3
HCM 7th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	621	105	215	638	476	58	52	142	281	13	98
Future Volume (veh/h)	0	621	105	215	638	476	58	52	142	281	13	98
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	675	114	234	693	517	63	57	154	305	14	107
Peak Hour Factor	0.92	0.92	0.92	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	2	2	2
Cap, veh/h	0	1463	652	116	1849	825	116	105	295	351	37	281
Arrive On Green	0.00	0.41	0.41	0.02	0.17	0.17	0.12	0.12	0.12	0.20	0.20	0.20
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	957	866	1585	1781	187	1427
Grp Volume(v), veh/h	0	675	114	234	693	517	120	0	154	305	0	121
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1823	0	1585	1781	0	1614
Q Serve(g_s), s	0.0	11.0	3.6	5.2	13.8	24.2	5.0	0.0	7.0	13.3	0.0	5.2
Cycle Q Clear(g_c), s	0.0	11.0	3.6	5.2	13.8	24.2	5.0	0.0	7.0	13.3	0.0	5.2
Prop In Lane	0.00		1.00	1.00		1.00	0.52		1.00	1.00		0.88
Lane Grp Cap(c), veh/h	0	1463	652	116	1849	825	221	0	295	351	0	318
V/C Ratio(X)	0.00	0.46	0.17	2.02	0.37	0.63	0.54	0.00	0.52	0.87	0.00	0.38
Avail Cap(c_a), veh/h	0	1463	652	116	1849	825	399	0	450	401	0	363
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.96	0.96	0.50	0.50	0.50	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.1	14.9	39.1	21.6	25.9	33.1	0.0	29.3	31.1	0.0	27.9
Incr Delay (d2), s/veh	0.0	1.0	0.6	474.4	0.3	1.8	2.1	0.0	1.4	16.6	0.0	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	4.3	1.3	17.5	6.5	10.4	2.3	0.0	2.7	7.1	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	18.1	15.5	513.5	21.9	27.7	35.1	0.0	30.7	47.7	0.0	28.6
LnGrp LOS		B	B	F	C	C	D		C	D		C
Approach Vol, veh/h		789			1444			274			426	
Approach Delay, s/veh		17.7			103.7			32.7			42.3	
Approach LOS		B			F			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	8.7	37.8		19.8		46.5		13.7				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.2	22.9		18.0		31.6		17.5				
Max Q Clear Time (g_c+I1), s	7.2	13.0		15.3		26.2		9.0				
Green Ext Time (p_c), s	0.0	5.2		0.5		4.1		0.7				

Intersection Summary	
HCM 7th Control Delay, s/veh	65.0
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	749	288	239	701	0	0	0	0	317	2	638
Future Volume (veh/h)	0	749	288	239	701	0	0	0	0	317	2	638
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	814	313	260	762	0				345	2	693
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	0				2	2	2
Cap, veh/h	0	813	312	243	956	0				688	2	611
Arrive On Green	0.00	0.11	0.11	0.04	0.17	0.00				0.39	0.39	0.39
Sat Flow, veh/h	0	2604	964	1781	1870	0				1781	5	1581
Grp Volume(v), veh/h	0	576	551	260	762	0				345	0	695
Grp Sat Flow(s),veh/h/ln	0	1777	1697	1781	1870	0				1781	0	1586
Q Serve(g_s), s	0.0	25.9	25.9	10.9	31.3	0.0				11.8	0.0	30.9
Cycle Q Clear(g_c), s	0.0	25.9	25.9	10.9	31.3	0.0				11.8	0.0	30.9
Prop In Lane	0.00		0.57	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	575	549	243	956	0				688	0	612
V/C Ratio(X)	0.00	1.00	1.00	1.07	0.80	0.00				0.50	0.00	1.13
Avail Cap(c_a), veh/h	0	575	549	243	956	0				688	0	612
HCM Platoon Ratio	1.00	0.33	0.33	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.68	0.68	0.59	0.59	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	35.7	35.7	38.2	29.3	0.0				18.7	0.0	24.6
Incr Delay (d2), s/veh	0.0	31.2	32.5	64.7	4.2	0.0				0.7	0.0	79.5
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	0.0	17.0	16.5	9.4	16.4	0.0				4.7	0.0	24.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	66.9	68.2	102.9	33.4	0.0				19.4	0.0	104.0
LnGrp LOS		F	F	F	C					B		F
Approach Vol, veh/h		1127			1022						1040	
Approach Delay, s/veh		67.5			51.1						76.0	
Approach LOS		E			D						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	30.0		35.0		45.0
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	10.9	25.9		30.9		40.9
Max Q Clear Time (g_c+I1), s	12.9	27.9		32.9		33.3
Green Ext Time (p_c), s	0.0	0.0		0.0		2.1

Intersection Summary	
HCM 7th Control Delay, s/veh	65.0
HCM 7th LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	496	669	0	0	556	301	340	1	274	0	0	0
Future Volume (veh/h)	496	669	0	0	556	301	340	1	274	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	511	690	0	0	597	294	351	1	282			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	421	1226	0	0	1376	583	431	1	383			
Arrive On Green	0.16	0.44	0.00	0.00	0.25	0.25	0.24	0.24	0.24			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	6	1580			
Grp Volume(v), veh/h	511	690	0	0	597	294	351	0	283			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	18.9	22.0	0.0	0.0	10.8	12.8	14.9	0.0	13.2			
Cycle Q Clear(g_c), s	18.9	22.0	0.0	0.0	10.8	12.8	14.9	0.0	13.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	421	1226	0	0	1376	583	431	0	384			
V/C Ratio(X)	1.21	0.56	0.00	0.00	0.43	0.50	0.81	0.00	0.74			
Avail Cap(c_a), veh/h	421	1226	0	0	1376	583	577	0	513			
HCM Platoon Ratio	0.67	0.67	1.00	1.00	0.67	0.67	1.00	1.00	1.00			
Upstream Filter(I)	0.37	0.37	0.00	0.00	0.93	0.93	1.00	0.00	1.00			
Uniform Delay (d), s/veh	33.7	13.9	0.0	0.0	23.1	23.9	28.6	0.0	28.0			
Incr Delay (d2), s/veh	104.7	0.7	0.0	0.0	0.9	2.9	7.1	0.0	4.3			
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	20.5	9.6	0.0	0.0	4.9	5.3	7.0	0.0	5.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	138.3	14.6	0.0	0.0	24.0	26.7	35.7	0.0	32.2			
LnGrp LOS	F	B			C	C	D		C			
Approach Vol, veh/h		1201			891			634				
Approach Delay, s/veh		67.2			24.9			34.2				
Approach LOS		E			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		56.5			23.0	33.5		23.5				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		45.9			18.9	22.9		25.9				
Max Q Clear Time (g_c+I1), s		24.0			20.9	14.8		16.9				
Green Ext Time (p_c), s		3.3			0.0	2.4		2.5				

Intersection Summary	
HCM 7th Control Delay, s/veh	45.7
HCM 7th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	34	412	1	28	2	285	218	5	0	207	512
Future Volume (veh/h)	503	34	412	1	28	2	285	218	5	0	207	512
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	701	0	311	1	30	2	310	237	5	0	225	557
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1723	0	766	2	65	4	411	1146	24	2	294	1787
Arrive On Green	0.48	0.00	0.48	0.02	0.02	0.02	0.12	0.32	0.32	0.00	0.16	0.16
Sat Flow, veh/h	3563	0	1585	113	3360	222	3456	3559	75	1781	1870	2790
Grp Volume(v), veh/h	701	0	311	17	0	16	310	118	124	0	225	557
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1865	0	1830	1728	1777	1857	1781	1870	1395
Q Serve(g_s), s	10.1	0.0	10.1	0.7	0.0	0.7	6.9	3.9	3.9	0.0	9.2	7.2
Cycle Q Clear(g_c), s	10.1	0.0	10.1	0.7	0.0	0.7	6.9	3.9	3.9	0.0	9.2	7.2
Prop In Lane	1.00		1.00	0.06		0.12	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	1723	0	766	36	0	36	411	572	598	2	294	1787
V/C Ratio(X)	0.41	0.00	0.41	0.45	0.00	0.46	0.76	0.21	0.21	0.00	0.77	0.31
Avail Cap(c_a), veh/h	1723	0	766	135	0	133	821	593	620	140	327	1837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.78	0.00	0.78	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	13.3	38.8	0.0	38.8	34.1	19.7	19.7	0.0	32.3	6.5
Incr Delay (d2), s/veh	0.6	0.0	1.2	3.3	0.0	3.4	2.1	0.3	0.2	0.0	10.4	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	3.3	0.3	0.0	0.3	2.8	1.5	1.6	0.0	4.7	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.8	0.0	14.5	42.1	0.0	42.2	36.2	19.9	19.9	0.0	42.7	6.6
LnGrp LOS	B		B	D		D	D	B	B		D	A
Approach Vol, veh/h		1012			33			552			782	
Approach Delay, s/veh		14.1			42.2			29.1			17.0	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	43.2	13.2	17.9		5.8	0.0	31.1
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	19.0	14.0		5.8	6.3	26.7
Max Q Clear Time (g_c+I1), s	12.1	8.9	11.2		2.7	0.0	5.9
Green Ext Time (p_c), s	3.1	0.6	1.3		0.0	0.0	1.6

Intersection Summary	
HCM 7th Control Delay, s/veh	18.9
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	21	0	35	0	0	0	31	229	0	0	228	19
Future Vol, veh/h	21	0	35	0	0	0	31	229	0	0	228	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	0	36	0	0	0	32	239	0	0	238	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	551	551	247	541	560	239	257	0	0	239	0	0
Stage 1	247	247	-	303	303	-	-	-	-	-	-	-
Stage 2	303	303	-	238	257	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	445	442	791	452	437	800	1307	-	-	1328	-	-
Stage 1	756	702	-	706	663	-	-	-	-	-	-	-
Stage 2	706	663	-	766	695	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	433	430	791	419	424	800	1307	-	-	1328	-	-
Mov Cap-2 Maneuver	433	430	-	419	424	-	-	-	-	-	-	-
Stage 1	756	702	-	686	645	-	-	-	-	-	-	-
Stage 2	686	645	-	730	695	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	11.6	0	0.93	0
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	215	-	-	604	-	1328	-	-
HCM Lane V/C Ratio	0.025	-	-	0.097	-	-	-	-
HCM Ctrl Dly (s/v)	7.8	0	-	11.6	0	0	-	-
HCM Lane LOS	A	A	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	-	0	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	8	254	257	6
Future Vol, veh/h	6	9	8	254	257	6
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	-	-	-	-	-
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	7	10	9	276	279	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	576	283	286	0	-	0
Stage 1	283	-	-	-	-	-
Stage 2	293	-	-	-	-	-
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	479	756	1276	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	475	756	1276	-	-	-
Mov Cap-2 Maneuver	475	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	757	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.05	0.24	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	55	-	612	-	-
HCM Lane V/C Ratio	0.007	-	0.027	-	-
HCM Ctrl Dly (s/v)	7.8	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	9	2	539	2	91	0	139	498	122	149	2
Future Volume (veh/h)	1	9	2	539	2	91	0	139	498	122	149	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	10	2	586	2	99	0	151	541	133	162	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	24	20	4	947	512	434	4	432	1409	173	757	9
Arrive On Green	0.01	0.01	0.01	0.27	0.27	0.27	0.00	0.23	0.23	0.10	0.41	0.41
Sat Flow, veh/h	1781	1513	303	3456	1870	1585	1781	1870	2790	1781	1844	23
Grp Volume(v), veh/h	1	0	12	586	2	99	0	151	541	133	0	164
Grp Sat Flow(s),veh/h/ln	1781	0	1816	1728	1870	1585	1781	1870	1395	1781	0	1866
Q Serve(g_s), s	0.0	0.0	0.3	7.2	0.0	2.3	0.0	3.3	5.8	3.5	0.0	2.7
Cycle Q Clear(g_c), s	0.0	0.0	0.3	7.2	0.0	2.3	0.0	3.3	5.8	3.5	0.0	2.7
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	24	0	24	947	512	434	4	432	1409	173	0	766
V/C Ratio(X)	0.04	0.00	0.50	0.62	0.00	0.23	0.00	0.35	0.38	0.77	0.00	0.21
Avail Cap(c_a), veh/h	590	0	601	2510	1359	1151	590	747	1878	590	0	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.5	0.0	23.7	15.3	12.8	13.6	0.0	15.5	7.3	21.3	0.0	9.2
Incr Delay (d2), s/veh	0.7	0.0	15.1	0.9	0.0	0.4	0.0	0.7	0.2	2.7	0.0	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	0.2	2.4	0.0	0.7	0.0	1.2	2.3	1.4	0.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	24.3	0.0	38.7	16.3	12.8	14.0	0.0	16.2	7.6	24.0	0.0	9.4
LnGrp LOS	C		D	B	B	B		B	A	C		A
Approach Vol, veh/h		13			687			692			297	
Approach Delay, s/veh		37.6			15.9			9.5			15.9	
Approach LOS		D			B			A			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		4.6	0.0	25.5		18.1	8.7	16.9				
Change Period (Y+Rc), s		4.0	4.0	5.7		4.9	4.0	5.7				
Max Green Setting (Gmax), s		16.0	16.0	19.3		35.1	16.0	19.3				
Max Q Clear Time (g_c+I1), s		2.3	0.0	4.7		9.2	5.5	7.8				
Green Ext Time (p_c), s		0.0	0.0	0.9		4.1	0.1	3.4				

Intersection Summary												
HCM 7th Control Delay, s/veh			13.5									
HCM 7th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	599	32	175	575	34	40	11	212	72	8	10
Future Volume (veh/h)	0	599	32	175	575	34	40	11	212	72	8	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	0	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	651	35	190	625	37	43	12	230	78	9	11
Peak Hour Factor	0.92	0.92	0.92	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	2	2	2
Cap, veh/h	0	1640	731	140	2097	935	229	64	382	113	48	59
Arrive On Green	0.00	0.46	0.46	0.03	0.19	0.19	0.16	0.16	0.16	0.06	0.06	0.06
Sat Flow, veh/h	0	3647	1585	1781	3554	1585	1407	393	1585	1781	766	936
Grp Volume(v), veh/h	0	651	35	190	625	37	55	0	230	78	0	20
Grp Sat Flow(s),veh/h/ln	0	1777	1585	1781	1777	1585	1800	0	1585	1781	0	1702
Q Serve(g_s), s	0.0	8.5	0.9	5.5	10.5	1.3	1.8	0.0	9.0	3.0	0.0	0.8
Cycle Q Clear(g_c), s	0.0	8.5	0.9	5.5	10.5	1.3	1.8	0.0	9.0	3.0	0.0	0.8
Prop In Lane	0.00		1.00	1.00		1.00	0.78		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	0	1640	731	140	2097	935	292	0	382	113	0	108
V/C Ratio(X)	0.00	0.40	0.05	1.36	0.30	0.04	0.19	0.00	0.60	0.69	0.00	0.19
Avail Cap(c_a), veh/h	0	1640	731	140	2097	935	386	0	464	458	0	438
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.97	0.97	0.96	0.96	0.96	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	12.4	10.4	34.1	15.8	12.1	25.3	0.0	23.6	32.1	0.0	31.1
Incr Delay (d2), s/veh	0.0	0.7	0.1	198.8	0.3	0.1	0.3	0.0	1.5	7.4	0.0	0.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	3.0	0.3	10.1	4.4	0.4	0.8	0.0	3.4	1.5	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	13.1	10.5	232.9	16.1	12.2	25.6	0.0	25.1	39.5	0.0	31.9
LnGrp LOS		B	B	F	B	B	C		C	D		C
Approach Vol, veh/h		686			852			285			98	
Approach Delay, s/veh		13.0			64.3			25.2			37.9	
Approach LOS		B			E			C			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.0	37.2		8.4		46.2		15.4				
Change Period (Y+Rc), s	3.5	4.9		4.0		4.9		4.0				
Max Green Setting (Gmax), s	5.5	15.1		18.0		24.1		15.0				
Max Q Clear Time (g_c+I1), s	7.5	10.5		5.0		12.5		11.0				
Green Ext Time (p_c), s	0.0	2.6		0.2		5.1		0.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	38.8
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	645	255	189	353	0	0	0	0	269	6	456
Future Volume (veh/h)	0	645	255	189	353	0	0	0	0	269	6	456
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
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	0	1870	1870	1870	1870	0				1870	1870	1870
Adj Flow Rate, veh/h	0	686	271	201	376	0				286	6	485
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	2	2	2	2	0				2	2	2
Cap, veh/h	0	960	379	249	1093	0				532	6	468
Arrive On Green	0.00	0.13	0.13	0.05	0.19	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	2581	983	1781	1870	0				1781	19	1569
Grp Volume(v), veh/h	0	490	467	201	376	0				286	0	491
Grp Sat Flow(s),veh/h/ln	0	1777	1693	1781	1870	0				1781	0	1588
Q Serve(g_s), s	0.0	18.5	18.5	7.8	12.2	0.0				9.4	0.0	20.9
Cycle Q Clear(g_c), s	0.0	18.5	18.5	7.8	12.2	0.0				9.4	0.0	20.9
Prop In Lane	0.00		0.58	1.00		0.00				1.00		0.99
Lane Grp Cap(c), veh/h	0	686	653	249	1093	0				532	0	474
V/C Ratio(X)	0.00	0.71	0.71	0.81	0.34	0.00				0.54	0.00	1.04
Avail Cap(c_a), veh/h	0	686	653	532	1093	0				532	0	474
HCM Platoon Ratio	1.00	0.33	0.33	0.33	0.33	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.90	0.90	0.87	0.87	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	26.8	26.8	32.4	16.7	0.0				20.5	0.0	24.6
Incr Delay (d2), s/veh	0.0	5.7	5.9	2.1	0.7	0.0				1.2	0.0	50.8
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	9.6	9.2	3.6	5.9	0.0				3.8	0.0	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	0.0	32.5	32.8	34.5	17.4	0.0				21.8	0.0	75.4
LnGrp LOS		C	C	C	B					C		F
Approach Vol, veh/h		957			577						777	
Approach Delay, s/veh		32.6			23.4						55.6	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	13.9	31.1		25.0		45.0
Change Period (Y+Rc), s	4.1	4.1		4.1		4.1
Max Green Setting (Gmax), s	20.9	15.9		20.9		40.9
Max Q Clear Time (g_c+I1), s	9.8	20.5		22.9		14.2
Green Ext Time (p_c), s	0.2	0.0		0.0		1.3

Intersection Summary	
HCM 7th Control Delay, s/veh	38.1
HCM 7th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	473	0	0	402	335	169	1	204	0	0	0
Future Volume (veh/h)	399	473	0	0	402	335	169	1	204	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
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	0	0	1870	1870	1870	1870	1870			
Adj Flow Rate, veh/h	424	503	0	0	570	261	180	1	217			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	460	1316	0	0	1447	613	319	1	283			
Arrive On Green	0.34	0.94	0.00	0.00	0.77	0.77	0.18	0.18	0.18			
Sat Flow, veh/h	1781	1870	0	0	3741	1585	1781	7	1579			
Grp Volume(v), veh/h	424	503	0	0	570	261	180	0	218			
Grp Sat Flow(s),veh/h/ln	1781	1870	0	0	1870	1585	1781	0	1586			
Q Serve(g_s), s	16.0	1.9	0.0	0.0	3.5	3.9	6.5	0.0	9.2			
Cycle Q Clear(g_c), s	16.0	1.9	0.0	0.0	3.5	3.9	6.5	0.0	9.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	460	1316	0	0	1447	613	319	0	284			
V/C Ratio(X)	0.92	0.38	0.00	0.00	0.39	0.43	0.56	0.00	0.77			
Avail Cap(c_a), veh/h	481	1316	0	0	1447	613	481	0	428			
HCM Platoon Ratio	1.33	1.33	1.00	1.00	2.00	2.00	1.00	1.00	1.00			
Upstream Filter(I)	0.68	0.68	0.00	0.00	0.92	0.92	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.3	0.7	0.0	0.0	5.3	5.3	26.2	0.0	27.3			
Incr Delay (d2), s/veh	16.7	0.6	0.0	0.0	0.7	2.0	1.9	0.0	5.4			
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	7.4	0.5	0.0	0.0	1.1	1.2	2.8	0.0	3.7			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.0	1.3	0.0	0.0	6.0	7.3	28.1	0.0	32.8			
LnGrp LOS	D	A			A	A	C		C			
Approach Vol, veh/h		927			831			398				
Approach Delay, s/veh		18.5			6.4			30.7				
Approach LOS		B			A			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		53.4			22.2	31.2		16.6				
Change Period (Y+Rc), s		4.1			4.1	4.1		4.1				
Max Green Setting (Gmax), s		42.9			18.9	19.9		18.9				
Max Q Clear Time (g_c+I1), s		3.9			18.0	5.9		11.2				
Green Ext Time (p_c), s		2.3			0.1	2.9		1.4				

Intersection Summary	
HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	18	255	1	5	2	307	170	2	1	168	430
Future Volume (veh/h)	395	18	255	1	5	2	307	170	2	1	168	430
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	523	0	191	1	5	2	334	185	2	1	183	467
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	1671	0	744	3	14	5	425	976	11	3	279	1724
Arrive On Green	0.47	0.00	0.47	0.01	0.01	0.01	0.12	0.27	0.27	0.00	0.15	0.15
Sat Flow, veh/h	3563	0	1585	462	2243	858	3456	3601	39	1781	1870	2790
Grp Volume(v), veh/h	523	0	191	4	0	4	334	91	96	1	183	467
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1847	0	1716	1728	1777	1863	1781	1870	1395
Q Serve(g_s), s	6.4	0.0	5.1	0.2	0.0	0.2	6.6	2.8	2.8	0.0	6.5	5.4
Cycle Q Clear(g_c), s	6.4	0.0	5.1	0.2	0.0	0.2	6.6	2.8	2.8	0.0	6.5	5.4
Prop In Lane	1.00		1.00	0.25		0.50	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	1671	0	744	11	0	11	425	482	505	3	279	1724
V/C Ratio(X)	0.31	0.00	0.26	0.35	0.00	0.38	0.79	0.19	0.19	0.39	0.66	0.27
Avail Cap(c_a), veh/h	1671	0	744	153	0	142	444	482	505	127	374	1867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.93	0.00	0.93	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	11.2	34.6	0.0	34.6	29.8	19.6	19.6	34.9	28.1	6.1
Incr Delay (d2), s/veh	0.5	0.0	0.8	6.7	0.0	8.0	8.4	0.3	0.3	32.7	3.7	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	1.6	0.1	0.0	0.1	3.0	1.1	1.1	0.0	2.9	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	12.0	0.0	12.0	41.3	0.0	42.7	38.2	19.9	19.9	67.7	31.8	6.3
LnGrp LOS	B		B	D		D	D	B	B	E	C	A
Approach Vol, veh/h		714			8			521			651	
Approach Delay, s/veh		12.0			42.0			31.6			13.5	
Approach LOS		B			D			C			B	

Timer - Assigned Phs	2	3	4		6	7	8
Phs Duration (G+Y+Rc), s	37.3	12.3	15.7		4.6	3.8	24.3
Change Period (Y+Rc), s	4.5	3.7	5.3		4.2	3.7	5.3
Max Green Setting (Gmax), s	23.5	9.0	14.0		5.8	5.0	18.0
Max Q Clear Time (g_c+I1), s	8.4	8.6	8.5		2.2	2.0	4.8
Green Ext Time (p_c), s	2.3	0.0	2.0		0.0	0.0	0.9

Intersection Summary	
HCM 7th Control Delay, s/veh	18.1
HCM 7th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.
User approved volume balancing among the lanes for turning movement.

APPENDIX D

CUMULATIVE PROJECTS

	Project	Location	Land Use	Description	Status	Environmental Document	Traffic Study?	LSA Review Notes
1	CalTrout Trabuco Creek Fish Ladder	Trabuco Creek in NWOS	Natural Resources/Conservation Infrastructure	Construction of engineered hydraulic fishway structures and channel improvements within Trabuco Creek in order to restore aquatic connectivity and remediate fish-passage barriers.	Design Phase, No Application	Likely EIR		Based on LSA's review, it would not generate new trips.
2	J. Serra Catholic High School	North and south of J. Serra Road, west of I-5	Institutional (school)	Expansion of the existing private high school to accommodate up to 2,000 new students.	64% occupied (1,289 students)	EIR	Yes	
3	Distrito La Novia	North of La Novia Avenue and east of Valle Road	Industrial and Residential	Construction of up to 96 residential units and 65,000 square feet of quasi-industrial uses.	Rough Grading Under Construction	EIR (with San Juan Meadows)	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
4	San Juan Meadows	South of La Novia Avenue and east of Valle Road	Equestrian and Residential	Construction of up to 94 single-family detached residential lots and an equestrian center for up to 500 horses.	Rough Grading Under Construction	EIR (with Distrito La Novia)	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
5	The River Street Project	North of Del Obispo Street on Paseo Adelanto through to Los Rios	Commercial	Construction of 56,067 square feet of new commercial uses.	Completed 12/2024	EIR	Yes	The project has been completed prior to the date when the existing traffic counts were collected (September 2025). No new trips are expected to approach/depart the study intersections identified for the proposed project.
6	The Farm on Del Obispo	32382 Del Obispo	Residential	Construction of 169 new residential units.	Compelted 3/2024	MND Addendum	Yes	The project has been completed prior to the date when the existing traffic counts were collected (September 2025). No new trips are expected to approach/depart the study intersections identified for the proposed project.
7	Petra Avelina	Terminus of Callee Arroyo	Residential	Construction of up to 132 new residential units, including townhome and detached single-family residential units.	Completed 9/2024	EIR	Yes	The project has been completed prior to the date when the existing traffic counts were collected (September 2025). No new trips are expected to approach/depart the study intersections identified for the proposed project.
8	Mission Place	26874 Old Mission Road	Retail/Restaurant and Office	Construction of 14,977 square feet of retail/restaurant space and 12,480 square feet of office uses.	Under Construction	--	No	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
9	In N Out	31791 Del Obispo Street	Restaurant	Construction of a 3,879 square foot sit-down and drive-through restaurant.	Completed 12/2023	--	Yes	The project has been completed prior to the date when the existing traffic counts were collected (September 2025). No new trips are expected to approach/depart the study intersections identified for the proposed project.
10	City Hall/Affordable Housing	32400 Paseo Adelanto	Residential and Municipal Office	Construction of 50 multi-family residential uses and the expansion of City Hall to provide an additional 16,021 square feet of municipal office uses.	City Hall completed 1/2025, housing completed 8/2025	--	No	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
11	Swallows Creek	30700 Rancho Viejo Road	Industrial	Construction of 136,308 square feet of industrial uses.	Under Construction	--	Yes	
12	St. John Church	29742 Rosenbaum Road	Religious	Construction of an additional 21,358 square feet of religious space at St. John Church.	Under Review	--	Yes	
13	French Hotel	31861-31871 Camino Capistrano	Hotel	Development of a 70-room boutique hotel, including the restoration and rehabilitation of the Domingo Yorba and Casa Manual Garcia Adobes for guest rooms and dining, an event space, on-site valet parking, and related amenities.	Under Review	--	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
14	Capistrano Business Park	27122, 27124, 27126, 27128, 27130 27132, 27134, & 27136 Paseo Espada and 27121, 27123, 27125, 17127, 27129, & 27131 Calle	Residential	Creation of a new Specific Plan area, which would facilitate construction of up to 200 single-family residential units and 50 multi-family residential uses on 15-acre previously zoned for industrial uses.	Under Review	--	Yes (forthcoming)	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
15	Camino Twelve	25642 Camino Del Avion	Residential	Construction of 12 residential uses on approximately 0.61-acre of the land.	Permits in Plan Check		Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
16	Performing Arts Center	31872 El Camino Real	Commercial	Construction of a new approximately 49,000 square foot performing arts center.	Under Review		Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
17	Forster Mixed Use Project	31878 El Camino Real	Commercial and Residential	Construction of approximately 7,000 square feet of commercial space and up to 95 new apartment units.	Entitlement Approved, Pending Plan Check	EIR	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
18	San Juan Plaza Mixed Use Project	32211-32281 Camino Capistrano	Commercial and Residential	Construction of a mixed-use development consisting of 278 dwelling units, 14,881 square feet of neighborhood-servicing commercial, retail, and restaurant uses, and 400 on-site parking spaces.	Entitlement Approved, Pending Plan Check	EIR	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
19	Chipotle	31787 Del Obispo Street	Restaurant	Construction of a 2,592 square foot sit-down and drive-through restaurant.	Entitlement Approved, Pending Plan Check	--	Yes	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
20	Los Rios Theater	26762 Verdugo Street	Entertainment Venue	Construction of a 23,930 square foot theater for live entertainment.	Entitlement Approved, Pending Plan Check	--	No	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.
21	Saint Margaret's Episcopal Student Commons	31732 Rancho Viejo Road	Institutional (school)	Construction of a 35,400 square foot student commons area at the existing Saint Margaret's Episcopal Private School	Under Construction	--	No	Based on LSA's review, no new trips are expected to approach/depart the study intersections identified for the proposed project.

LSA

Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour In	A.M. Peak Hour Out	A.M. Peak Hour Total	P.M. Peak Hour In	P.M. Peak Hour Out	P.M. Peak Hour Total	Daily
2.	**J. Serra Catholic High School**[1]								
	North and south of J. Serra Road, west of I-5								
	Private High School	200 Students							
	New Trip Generation[1]		867	711	1,578	117	32	149	5,253
11.	**Swallows Creek**								
	30700 Rancho Viejo Road								
	Warehouse	136.308 TSF							
	Trip Generation (PCE)[2]		26	7	33	11	26	37	332
12.	**St. John Church**								
	29742 Rosenbaum Road								
	Church	21.358 TSF							
	Trips/Unit[3]		0.23	0.14	0.37	0.18	0.25	0.43	6.78
	Trip Generation		5	3	8	4	5	9	145
	TotalTrip Generation (PCE)		**898**	**721**	**1,619**	**132**	**63**	**195**	**5,730**

Notes:

TSF = Thousand Square Feet, PCE = passenger car equivalent

[1] Trip generation taken from "JSerra High School" Traffic Analysis by Austin-Foust Associates, Inc (March 2004). It should be noted that the J. Serra Catholic High School project is currently 64% occupied (1,289 students). Therefore, only 36% of the new trip generation was assigned to the study area intersections identified for the proposed Legacy Ranch project.

[2] Trip generation taken from "30700 Rancho Viejo Road Redevelopment" Traffic Impact Analysis by EPD Solutions, Inc (May 2022).

[3] Trip rates referenced from the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 12th Edition (2025).

Land Use 560 - "Church", Setting/Location - 'General Urban/Suburban'.

APPENDIX E

VMT CALCULATION WORKSHEET

Appendix E - San Juan Capistrano Legacy Ranch OCTAM VMT Calculation (Based on 60 employees)

OCTAM Version 5.1 (No Project)	**Weekday from OCTAM**
2019 Base Year Total City VMT:	1,549,339
2050 Future Year Total City VMT:	1,814,982
Project Base Year:	2025
2025 Project Base Year Total City VMT:	1,600,754

OCTAM Version 5.1 (With Project)	**Visitors per OCTAM Output**	**Visitor VMT per OCTAM Output**	**Weekday from OCTAM**	**Weekday Based on 499 Visitors**
2019 Base Year Total City VMT:	269	1,921	1,549,748	1,551,390
2050 Future Year Total City VMT:	253	1,701	1,815,526	1,817,180
Project Base Year:			2025	2025
2025 Project Base Year Total City VMT:			1,601,189	1,602,833

Change in VMT	2,079	0.13%