(FINAL)
IN-N-OUT BURGER (972 EL CAMINO REAL) TRANSPORTATION IMPACT ASSESSMENT

City of South San Francisco

April 18, 2025

gandhi

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

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prepared by

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Project No. 19710

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EXECUTIVE SUMMARY

The 1.5-acre project site is located east of El Camino Real (State Route 82) approximately mid-block between Westborough Boulevard/Chestnut Avenue and Southwood Drive/1st Street in the City of South San Francisco, California. The overall project site consists of two parcels: The northern parcel has an address of 972 El Camino Real, and the southern parcel has an address of 934 El Camino Real. The northern parcel is currently a retail use occupied by a 3,000 square foot fast food restaurant with drive-through lane (Burger King – to be demolished). The southern parcel is currently occupied by a 1,224 square foot commercial office building ("Psychic Boutique" – to be demolished).

The proposed project involves redevelopment of the project site with a new 3,887 square foot In-N-Out Burger restaurant with drive through window and associated landscaping and parking lot improvements. The drive through lane proposes storage capacity for up to 39 vehicles. Vehicular access is proposed via two right-in/right-out only driveways on El Camino Real. The parking lot has 51 parking spaces accessible via the Project North Driveway and the Project South Driveway. For analysis purposes, the project is assumed to be constructed and fully operational by the year 2026.

Project Trip Generation

The proposed project is forecast to result in approximately 642 additional daily trips compared to the existing development, including 68 additional trips during the mid-day (MD) peak hour and 48 additional trips during the PM peak hour.

CEQA Impacts

The proposed project would not create conditions that are inconsistent with mobility, safety, or other related goals, policies, and actions set forth in the General Plan.

The proposed project is a local serving use that is less than 50,000 square feet; therefore, the project satisfies the City-established screening threshold for "neighborhood-serving retail project" and may be presumed to result in a less than significant VMT impact under CEQA – no mitigation is required.

With implementation of the minimum CA MUTCD requirements or the recommended prohibition of on-street parking along the entirety of the project frontage to approximately 98 feet south of the Project South Driveway, the project would not worsen existing hazards or cause new design-related hazards such as restricted line of sight.

The project would not substantially contribute to an operational deficiency at the study area facilities and therefore is not expected to substantially increase response times.

Based on the project's location outside high-risk fire zones, evacuation analysis is not necessary and the project would have no impact.

Non-CEQA Impacts

Based on the City-established criteria, the proposed project was found to have no impacts to the following non-CEQA issues evaluated:

- On-site circulation
- Pedestrian facilities
- Bicycle facilities
- Transit

- TDM program consistency
- Safety assessment
- Trucks
- Passenger loading and pick-up/drop-off
- Off-site traffic operations
- Intersection traffic control
- Drive through queuing analysis

Summary of Recommendations

1. For improved sight lines between vehicles as well as bicycles and pedestrians, it is recommended that on-street parking be prohibited on El Camino Real (SR-82) along the entirety of the project frontage to approximately 98 feet south of the Project South Driveway. *(See Section 5. Analysis and Deficiency Identification, Safety (CEQA))*

2. It is recommended that stop controls be installed at the project egress driveways with applicable one-way signage along the El Camino Real (SR-82) median per CA MUTCD standards. *(See Section 5. Analysis and Deficiency Identification, On-Site Circulation)*

3. The project should contribute a fair share payment toward the cost of installing a traffic signal at the intersection of El Camino Real at Southwood Drive/1st Street. The project trip contribution is estimated at approximately 3.6% of the overall traffic volume entering the intersection. *(See Section 5. Analysis and Deficiency Identification, Intersection Traffic Control and Off-Site Improvements - Table 4)*

4. In addition to a fair share payment toward the future installation a traffic signal control at the intersection of El Camino Real and Southwood Drive/1st Street, the project shall be conditioned to install "No U-Turn" signage at the southbound left turn lane on El Camino Real at Southwood Drive/1st Street in the interim condition until such time that the traffic signal is installed.

1. INTRODUCTION

This section describes the purpose of this analysis, project location, proposed development, and study area.

PURPOSE AND OBJECTIVES

The purpose of this Transportation Impact Assessment is to provide an assessment of potential transportation impacts resulting from development of the proposed In-N-Out Burger (972 El Camino Real)and to identify measures necessary to maintain roadway performance standards established by the City of South San Francisco. This analysis also contains an assessment of the project vehicle miles travelled (VMT) impact in context of the California Environmental Quality Act (CEQA).

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

PROJECT DESCRIPTION

The 1.5-acre project site is located east of El Camino Real (State Route 82) approximately mid-block between Westborough Boulevard/Chestnut Avenue and Southwood Drive/1st Street in the City of South San Francisco, California. The overall project site consists of two parcels: The northern parcel has an address of 972 El Camino Real, and the southern parcel has an address of 934 El Camino Real. The northern parcel is currently a retail use occupied by a 3,000 square foot fast food restaurant with drive-through lane (Burger King – to be demolished). The southern parcel is currently occupied by a 1,224 square foot commercial office building ("Psychic Boutique" – to be demolished). Figure 1 shows the project location map.

The proposed project involves redevelopment of the project site with a new 3,887 square foot In-N-Out Burger restaurant with drive through window and associated landscaping and parking lot improvements. The drive through lane proposes storage capacity for up to 39 vehicles. Vehicular access is proposed via two right-in/right-out only driveways on El Camino Real. The parking lot has 51 parking spaces accessible via the Project North Driveway and the Project South Driveway. For analysis purposes, the project is assumed to be constructed and fully operational by the year 2026. Figure 2 shows the project site plan.

STUDY AREA

Based on the study intersections identified in the transportation study scoping agreement (Appendix B), the study area consists of the following study intersections within the City of South San Francisco and California Department of Transportation (Caltrans) jurisdictions:

Study Intersections[1]	Jurisdiction[2]
1. Antoinette Lane (NS) at Chestnut Avenue (EW)	SSF
2. El Camino Real (SR-82) (NS) at Westborough Boulevard/Chestnut Avenue (EW)	SSF/Caltrans
3. El Camino Real (SR-82) (NS) at Southwood Drive/1st Street (EW)	SSF/Caltrans
4. El Camino Real (SR-82) (NS) at Orange Avenue (EW)	SSF/Caltrans
5. El Camino Real (SR-82) (NS) at Project North Driveway (EW)	SSF/Caltrans
6. El Camino Real (SR-82) (NS) at Project South Driveway (EW)	SSF/Caltrans

Notes:
1. (NS) = North-South roadway; (EW) = East-West roadway
2. SSF= South San Francisco; Caltrans = California Department of Transportation

PROJECT DRIVEWAY DESIGN FEATURES

Vehicular access is proposed via two right-in/right-out only driveways on El Camino Real. The parking lot has 51 parking spaces accessible via the Project North Driveway and the Project South Driveway. The proposed project will provide the following improvements at the two project driveways:

El Camino Real (NS) at Project North Driveway (EW)

- Install a westbound cross street stop-control.
- Provide the westbound approach to consist of one right lane.
- Provide one eastbound inbound lane.

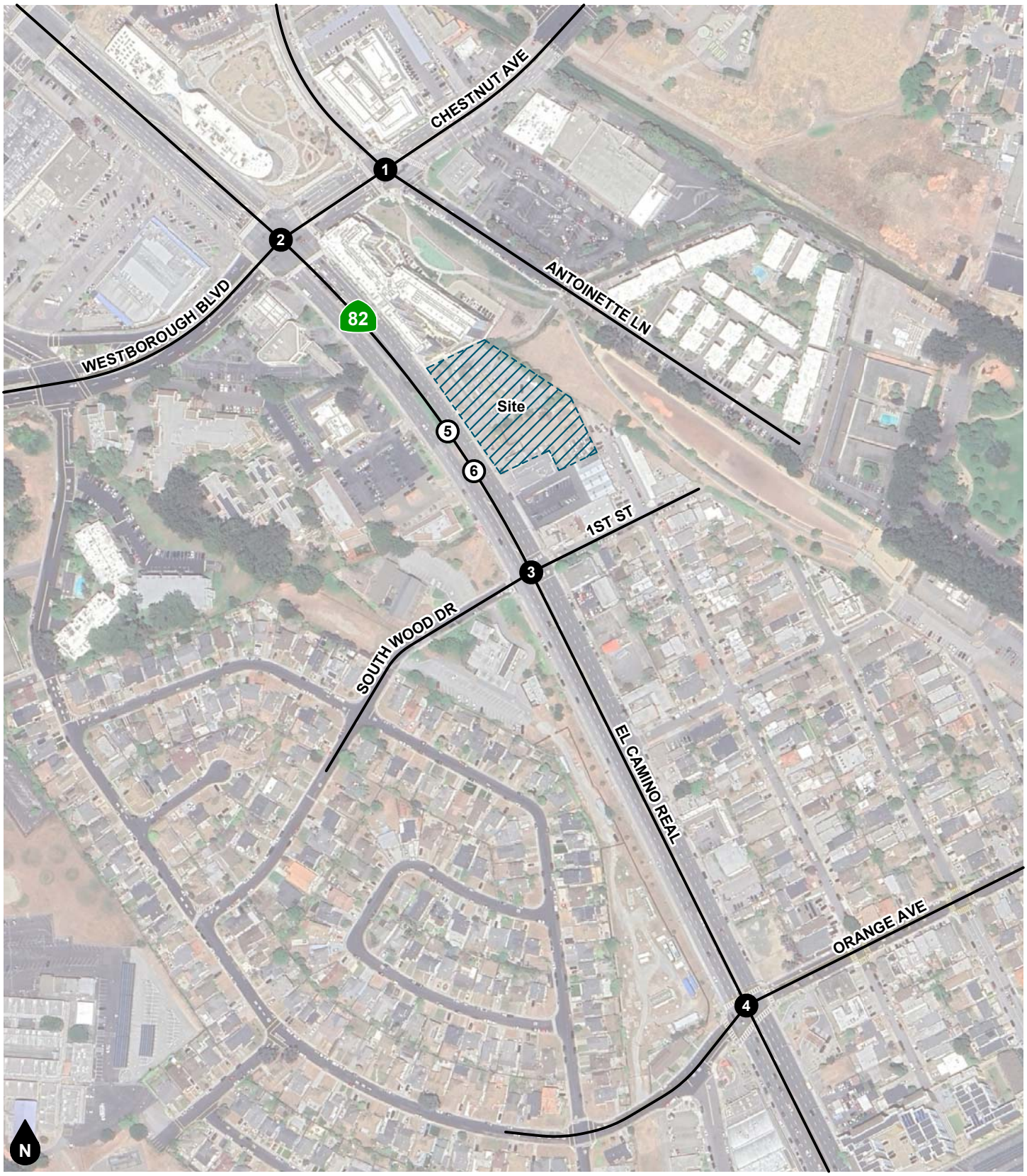
El Camino Real (NS) at Project South Driveway (EW)

- Install a westbound cross street stop-control.
- Provide the westbound approach to consist of one right lane.
- Provide one eastbound inbound lane.

ANALYSIS SCENARIOS

In-N-Out restaurants are not open to the public during the AM peak period of commuter traffic (7-9AM); therefore, analysis of the AM peak hour is unnecessary as the project impact will be negligible during these hours. Peak hour trip generation for In-N-Out Burger restaurants typically occurs during the lunch period between 11:30 AM and 1:30 PM. Accordingly, this study evaluates off-site traffic operations for the mid-day (MD) peak hour and PM peak hour for the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions



Legend

(#) Study Intersection

(#) Project Driveway

Figure 1
Project Location Map

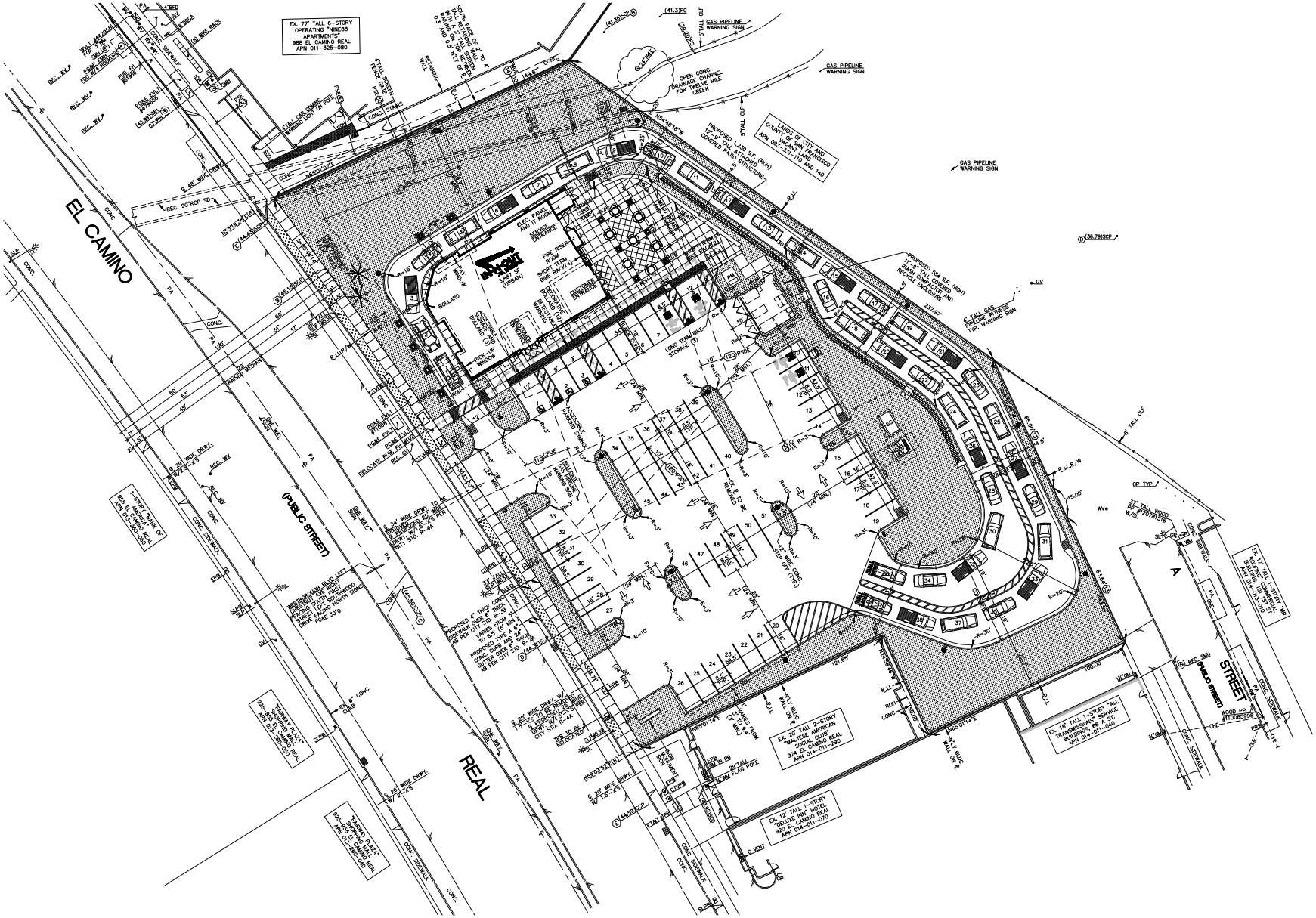


Figure 2
Site Plan

2. TRAFFIC OPERATIONS ANALYSIS METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This study follows guidelines established by the City's *Transportation Analysis Guidelines* (City of South San Francisco, October 2022) ["TAG"].

INTERSECTION DELAY METHODOLOGY

The methodology used to measure intersection performance is known as the intersection delay method based on procedures contained in the *Highway Capacity Manual* (Transportation Research Board, 7th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service (LOS) based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board Highway Capacity Manual (7th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from LOS A (free-flow conditions) to LOS F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane). Intersection Level of Service calculations were performed using the Vistro software.

TRAFFIC SIGNAL WARRANT METHODOLOGY

The need for installation of a traffic signal at currently unsignalized study intersections is evaluated based on the methods documented in the *California Manual on Uniform Traffic Control Devices* (Caltrans, 2014) ["CA MUTCD"]. Section 4C of the CA MUTCD includes nine warrants. As specified in the City's TAG, evaluation of the peak hour signal warrant analysis (Warrant 3) is generally required. Since this analysis contains measured volumes and forecasts for the peak hours, the peak hour volume (Warrant 3) is evaluated first. If the peak hour volume warrant is satisfied, then further evaluation may be requested based on the project context. As noted in the CA MUTCD, the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

PERFORMANCE STANDARDS

The City of South San Francisco has established Level of Service D as the minimum acceptable Level of Service. As established in the City's TAG, the project will be considered to cause a substantial operational deficiency if the addition of project trips causes an intersection to:

1) Operate at LOS F overall or the worst-case movement; or,

2) Increases traffic volumes by 10% at intersections already operating at LOS F under the comparable "no project" scenario.

3. EXISTING CONDITIONS

This section describes the existing transportation setting in the study area.

EXISTING ROADWAY SYSTEM

Figure 3 identifies the lane geometry and intersection traffic controls for existing conditions based on a field survey of the study area. Regional access to the project area is provided by U.S. Highway 101 (US-101) approximately 1.5 miles east of the project site and Interstate 280 (I-280) approximately one mile west of the project site. The primary roadways providing local circulation are El Camino Real (State Route 82), Westborough Boulevard, Chestnut Avenue, Antoinette Lane, Southwood Drive, 1st Street, and Orange Avenue. El Camino Real, Westborough Boulevard, Chestnut Avenue and Orange Avenue are included on the City's High Injury Network.

El Camino Real (SR-82) is classified as a six-lane Arterial in the City of South San Francisco General Plan Mobility Element and generally trends in a north-south direction in the project vicinity. El Camino Real currently provides three lanes each direction with a raised median and intermittent left turn lanes. The posted speed limit is 35 miles per hour in the project vicinity. On-street parking is prohibited north of Westborough Boulevard/Chestnut Avenue and generally permitted on both sides of the roadway south of Westborough Boulevard/Chestnut Avenue. Bicycle lanes are provided north of Westborough Boulevard/Chestnut Avenue; there are no bicycle lanes south of Westborough Boulevard/Chestnut Avenue. Pedestrian sidewalks are provided on both sides of the roadway. El Camino Real is included on the City's High Injury Network.

Westborough Boulevard is classified as a four-lane Arterial in the City of South San Francisco General Plan Mobility Element and generally trends in an east-west direction in the project vicinity. Westborough Boulevard currently provides two lanes each direction with a raised median. The posted speed limit is 30 miles per hour in the project vicinity. On-street parking is prohibited. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway. Westborough Boulevard is included on the City's High Injury Network.

Chestnut Avenue is classified as a four-lane Collector in the City of South San Francisco General Plan Mobility Element and generally trends in an east-west direction in the project vicinity. Chestnut Avenue currently provides two lanes each direction with a raised median. There is no posted speed limit on Chestnut Avenue. Parking is generally permitted on the south side of the roadway east of Antoinette Lane. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway. Chestnut Avenue is included on the City's High Injury Network.

Southwood Drive is classified as a Local Street in the City of South San Francisco General Plan Mobility Element and generally trends in an east-west direction in the project vicinity. Southwood Drive currently provides one unmarked lane in each direction. The posted speed limit is 25 miles per hour in the project vicinity. On-street parking is generally permitted on both sides of the roadway. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway.

1st Street is classified as a Local Street in the City of South San Francisco General Plan Mobility Element and generally trends in an east-west direction in the project vicinity. 1st Street currently provides one unmarked lane in each direction. There is no posted speed limit in the project vicinity. On-street parking is generally permitted on both sides of the roadway. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway.

Orange Avenue is classified as a two-lane Collector east of El Camino Real and as a Local Street west of El Camino Real in the City of South San Francisco General Plan Mobility Element and generally trends in an east-west direction in the project vicinity. Orange Avenue currently provides one lane in each direction. There is

no posted speed limit in the project vicinity. On-street parking is generally permitted on both sides of the roadway. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway. Orange Avenue is included on the City's High Injury Network.

Antoinette Lane is classified as a Local Street in the City of South San Francisco General Plan Mobility Element and generally trends in a north-south direction in the project vicinity. Antoinette Lane currently provides one lane in each direction. There is no posted speed limit in the project vicinity. On-street parking is generally permitted on both sides of the roadway. There are no bicycle lanes within the study area. Pedestrian sidewalks are provided on both sides of the roadway.

Pedestrian Facilities

Existing pedestrian facilities in the project vicinity are shown on Figure 4. As shown on Figure 4, pedestrian sidewalks are currently provided along both sides of El Camino Real adjacent to the project site.

Bicycle Facilities

Figure 5 shows the City of South San Francisco Active South City Recommended Bikeways. There are currently no on-street bicycle lanes on either side of El Camino Real adjacent to the project site; however, there are on-street bicycle lanes on both sides of El Camino Real north of Westborough Boulevard/Chestnut Avenue approximately 500 feet north of the project site. The starting point of the Centennial Way Trail is located approximately 750 feet from the project site at the southwest corner of Antoinette Lane and Chestnut Avenue. A Class IV Separated Bikeway is proposed along El Camino Real in the City's General Plan Mobility Element.

Transit Facilities

Figure 6 shows the existing transit network available in the project vicinity. The nearest bus stop is located approximately 300 feet south of the project site at the northeast corner of El Camino Real and 1st Street. El Camino Real is currently served by the Free South City Shuttle Blue Line and Orange Line buses as well as the SamTrans Bus Line 37 and ECR. BART San Bruno Station is located approximately two miles south of the project site on Huntington Avenue. The project site is within walking distance to a bus line that provides connection to the nearby BART San Bruno Station.

Truck Routes

Figure 7 shows the designated truck network and restrictions as identified in the City of South San Francisco Mobility Element. El Camino Real and Chestnut Avenue are designated truck routes on the City's Mobility Element.

General Plan Context

Figure 8 shows the City of South San Francisco General Plan Mobility Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan.

Existing Traffic Volumes

Existing peak hour volumes are based upon MD and PM peak period intersection turning movement counts obtained in April 2024 during typical weekday conditions while local schools were in session. The MD peak period was counted between 11:30 AM and 1:30 PM and the PM peak period was counted between 4:00 PM and 6:00 PM. The actual peak hour within the peak period is the four consecutive 15 minute periods with the highest total volume when all movements are added together. Thus, the weekday PM peak hour at one

intersection may be 4:45 PM to 5:45 PM if those four consecutive 15 minute periods have the highest combined volume. Intersection turning movement count data sheets are provided in Appendix C.

Figure 9 and Figure 10 show the Existing 2024 MD and PM peak hour intersection turning movement volumes.

EXISTING INTERSECTION LEVELS OF SERVICE

The Levels of Service for Existing conditions are shown in Table 1. Detailed intersection Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for Existing conditions, except for the following intersections that currently operate at LOS F:

- El Camino Real (SR-82) (NS) at Southwood Drive/1st Street (EW) – #3 (MD and PM)
- El Camino Real (SR-82) (NS) at Orange Avenue (EW) – #4 (PM only)

EXISTING INTERSECTION TRAFFIC CONTROL SIGNAL WARRANT ANALYSIS

Existing volumes at the currently unsignalized study intersection of El Camino Real (SR-82) at Southwood Drive/1st Street [#3] satisfy the peak hour signal warrant based on the CA MUTCD peak hour volume analysis (Warrant 3) for existing weekday PM peak hour conditions. The warrant analysis was performed using the CA MUTCD option to consider major street left turn volumes as part of the minor street volume. The City should consider installing a traffic signal at the intersection of El Camino Real (SR-82) at Southwood Drive/1st Street [#3]. Traffic signal warrant analysis worksheets are provided in Appendix E.

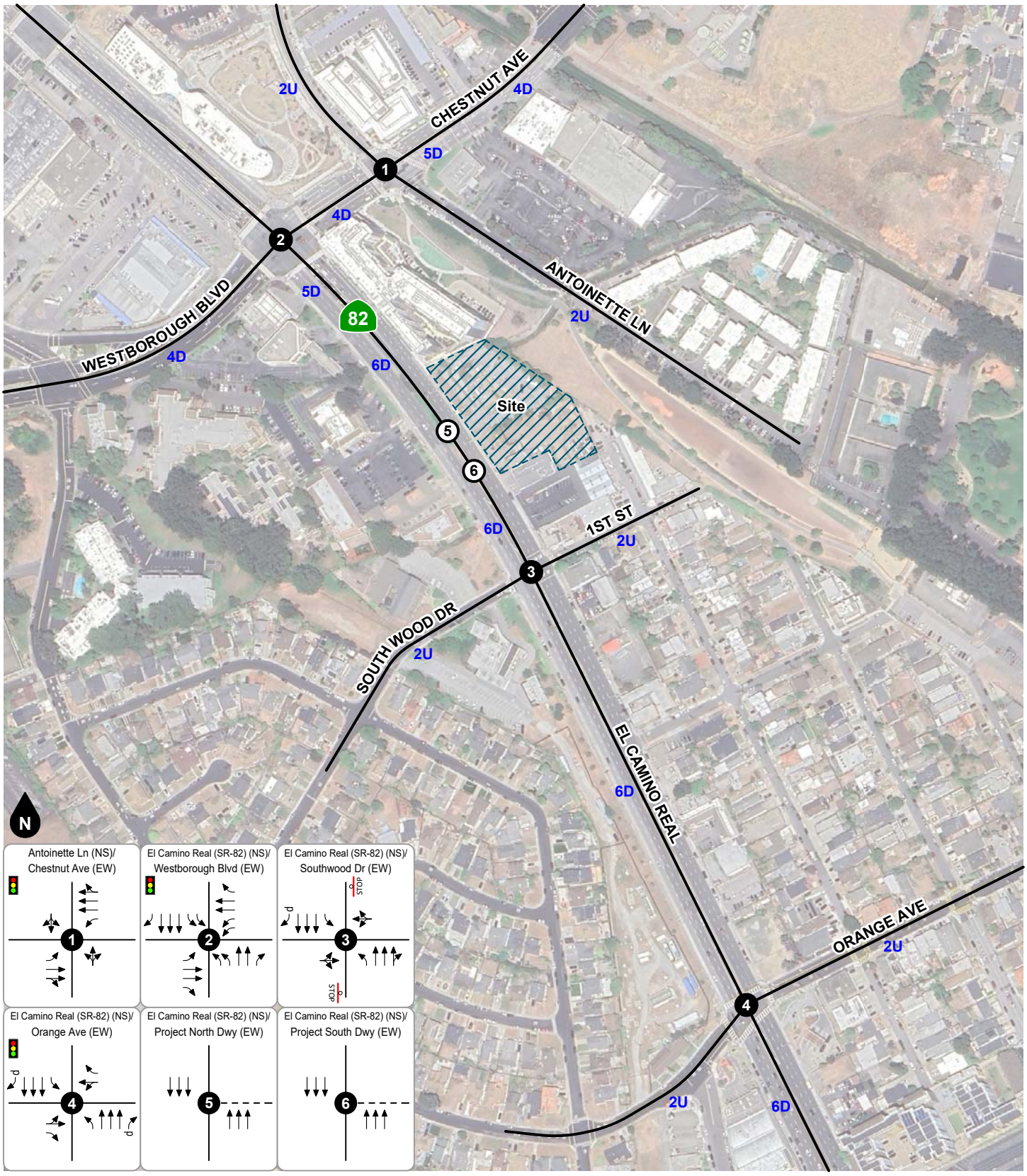
Table 1
Existing Study Intersection LOS

ID	Study Intersection	Traffic Control[1]	Peak Hour	Existing		Traffic Signal Warranted?
				Delay[2]	LOS[3]	
1	Antoinette Ln at Chestnut Ave	TS	MD	27.2	C	n/a
			PM	30.3	C	n/a
2	El Camino Real (SR82) at Westborough Blvd/Chestnut Ave	TS	MD	36.5	D	n/a
			PM	41.7	D	n/a
3	El Camino Real (SR-82) at Southwood Dr/1st St	CSS	MD	57.2	F	No
			PM	158.1	F	Yes
4	El Camino Real (SR-82) at Orange Ave	TS	MD	47.2	D	n/a
			PM	83.9	F	n/a

Notes:
(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) Control delay is shown in seconds/vehicle.

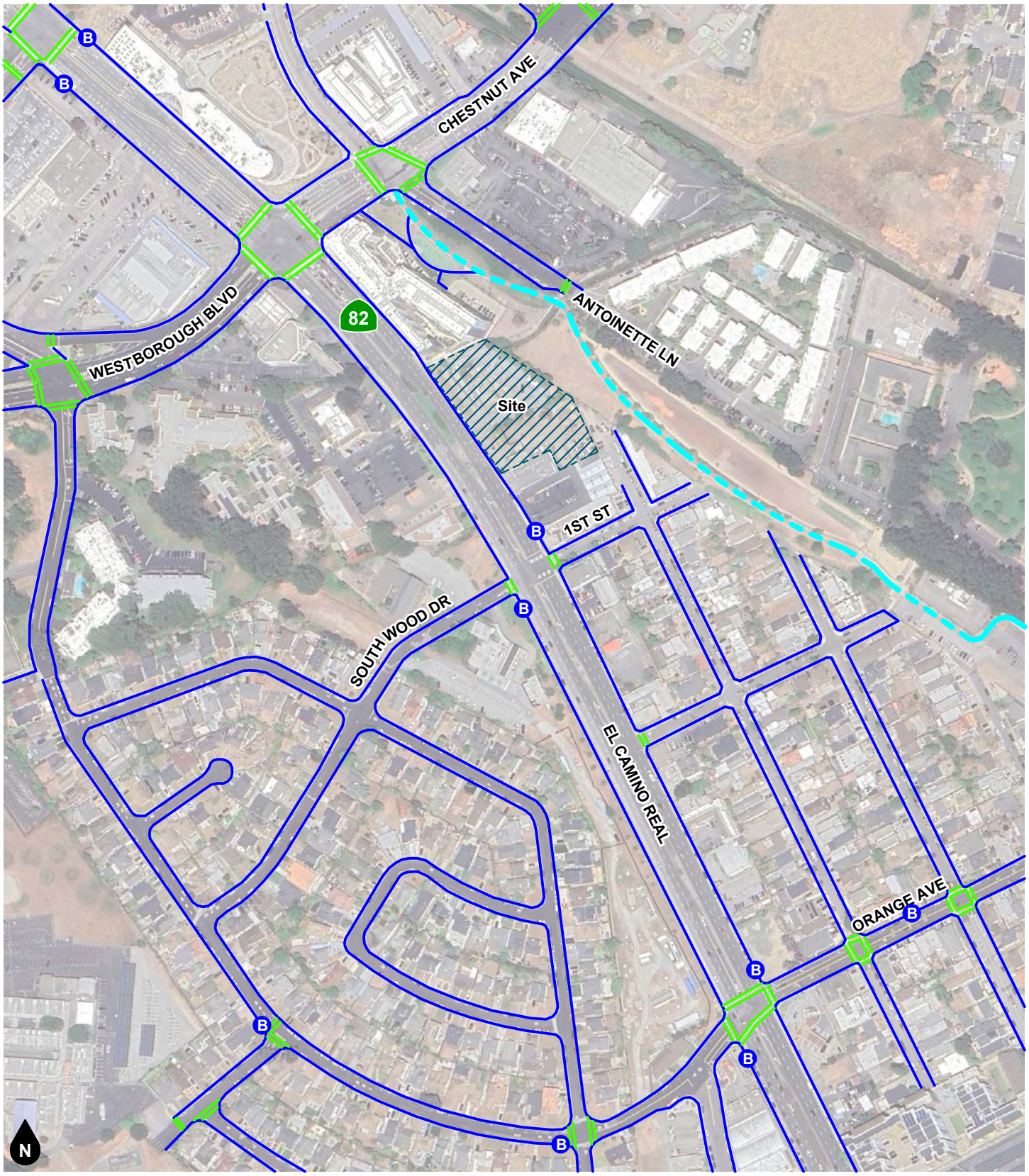
(3) LOS = Level of Service. For intersections with traffic signal or all-way stop control, LOS is based on the overall average control delay. For intersections with cross street stop control, LOS is based on delay of the worst individual movement.



Legend

- Traffic Signal
- STOP Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane
- d De Facto Right Turn Lane
- Project Driveway

Figure 3
Existing Lane Geometry and Intersection Traffic Controls



Legend
- Sidewalk
- Cross Walk
- Multi-Use Path
- Bus Stop

Figure 4
Existing Pedestrian Facilities

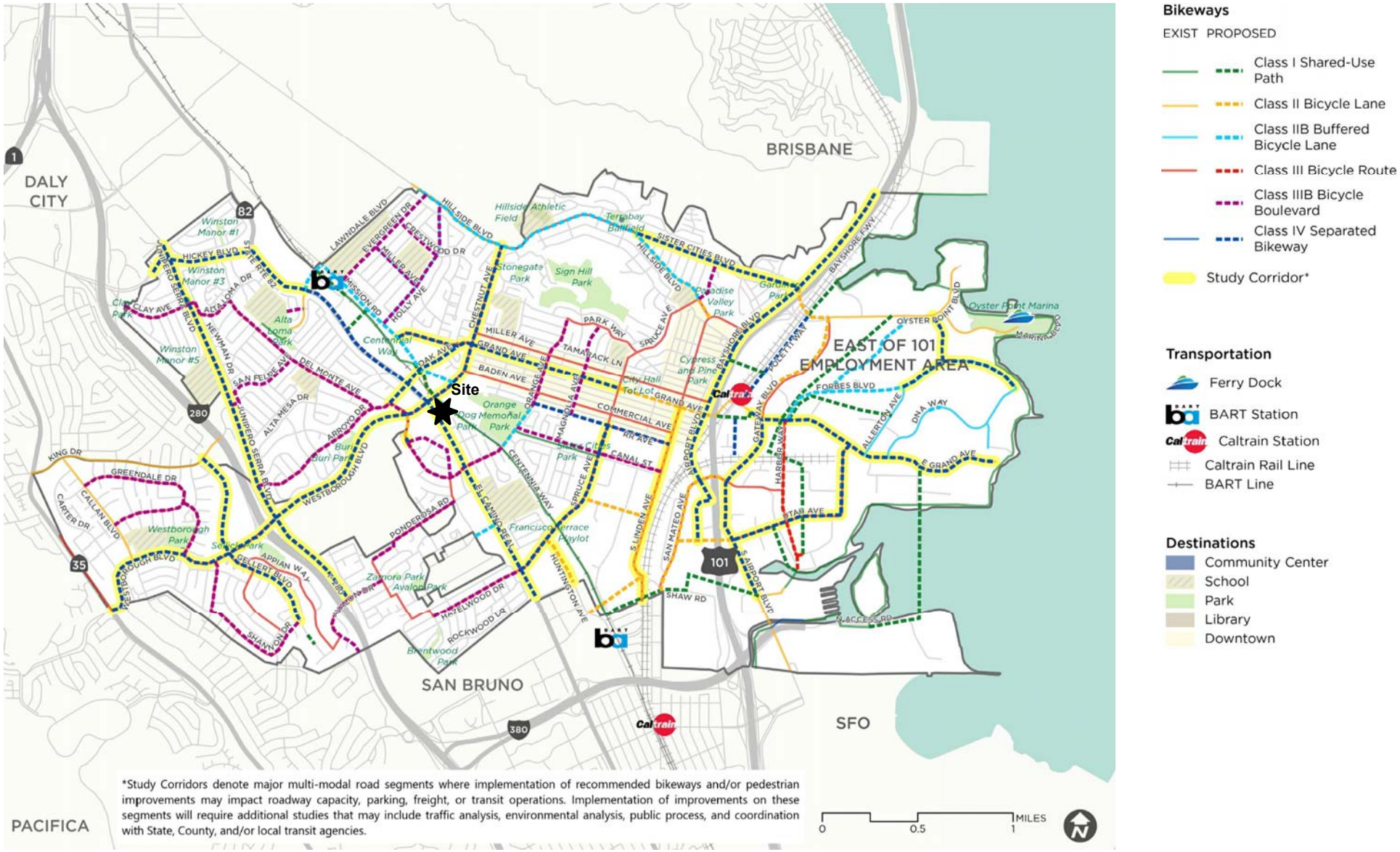
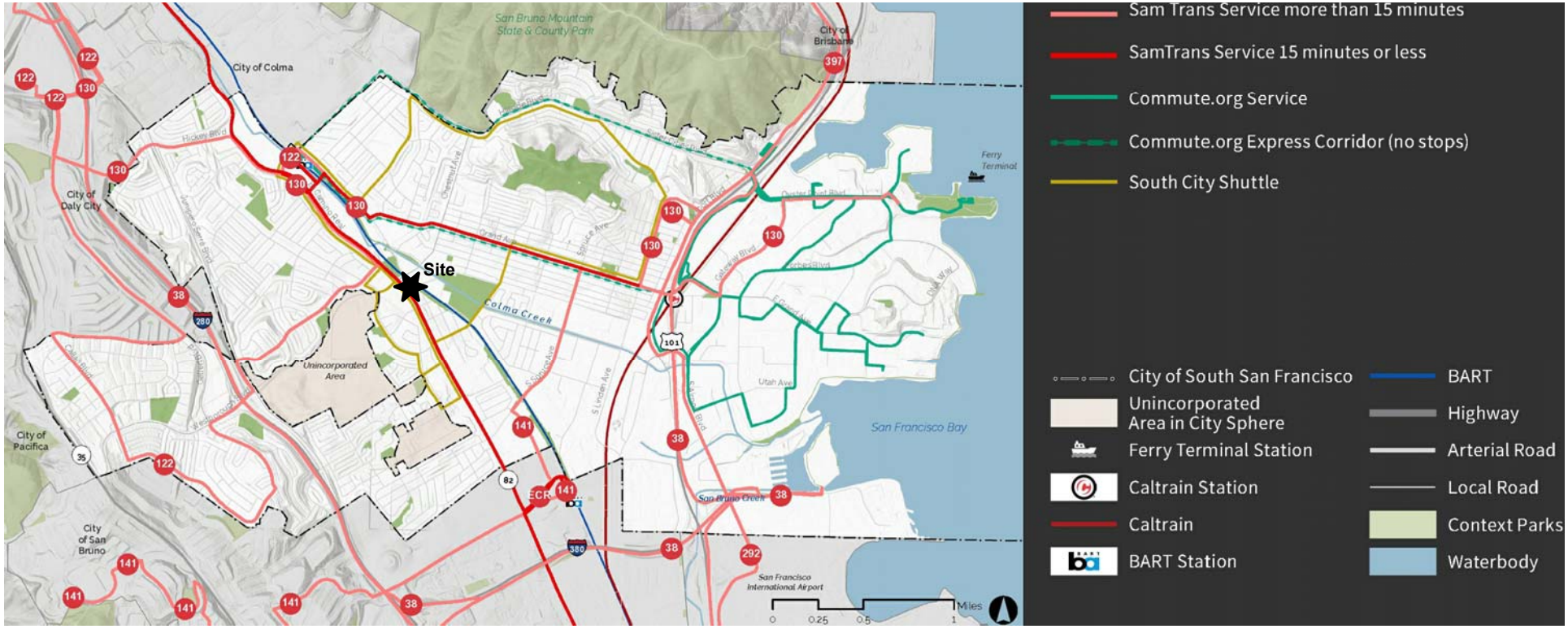


Figure 5
City of South San Francisco
Active South City Recommended Bikeways

Source: City of South San Francisco



Source: City of South San Francisco

Figure 6
City of South San Francisco Transit Network

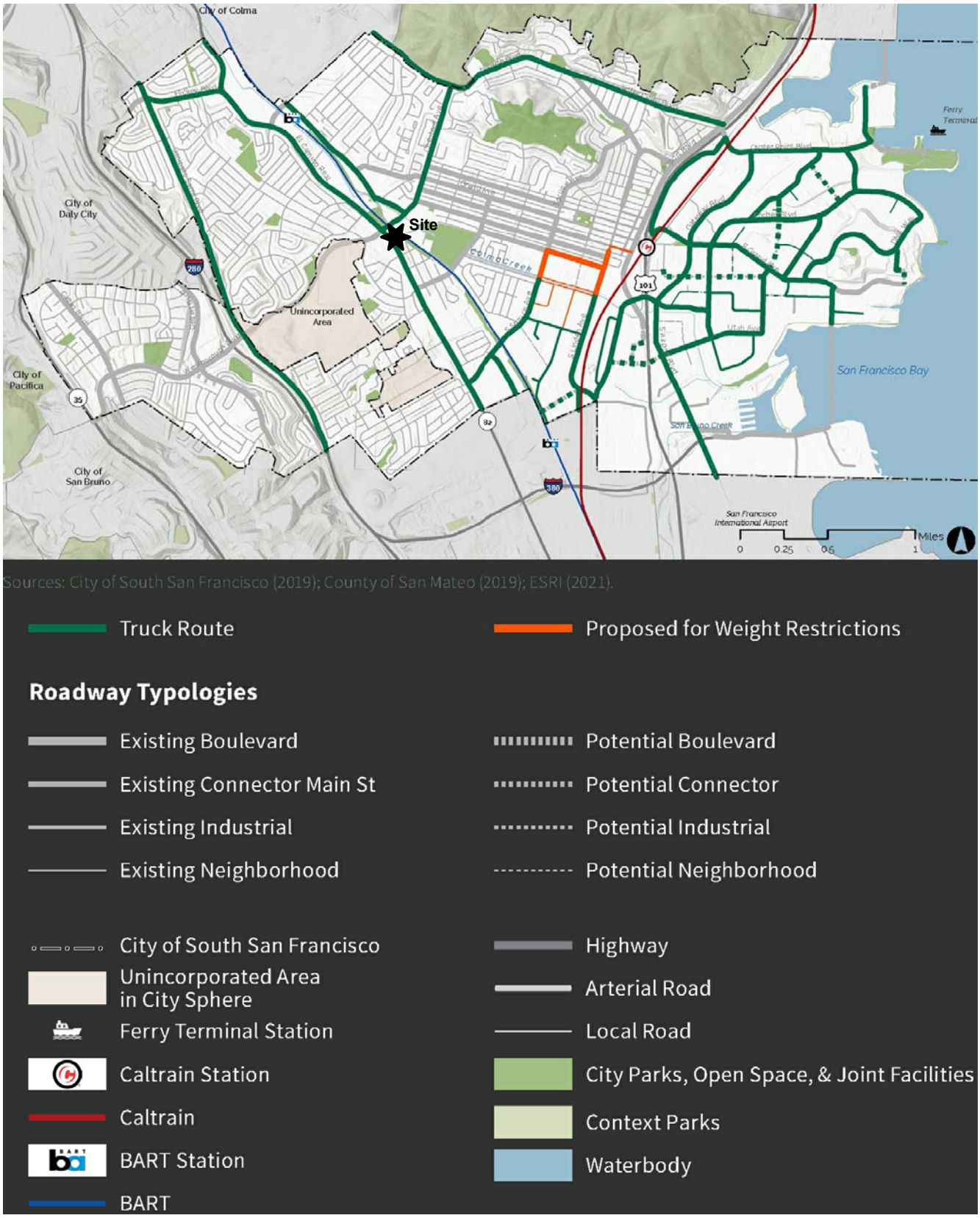


Figure 7
City of South San Francisco Truck Network and Restrictions

Source: City of South San Francisco

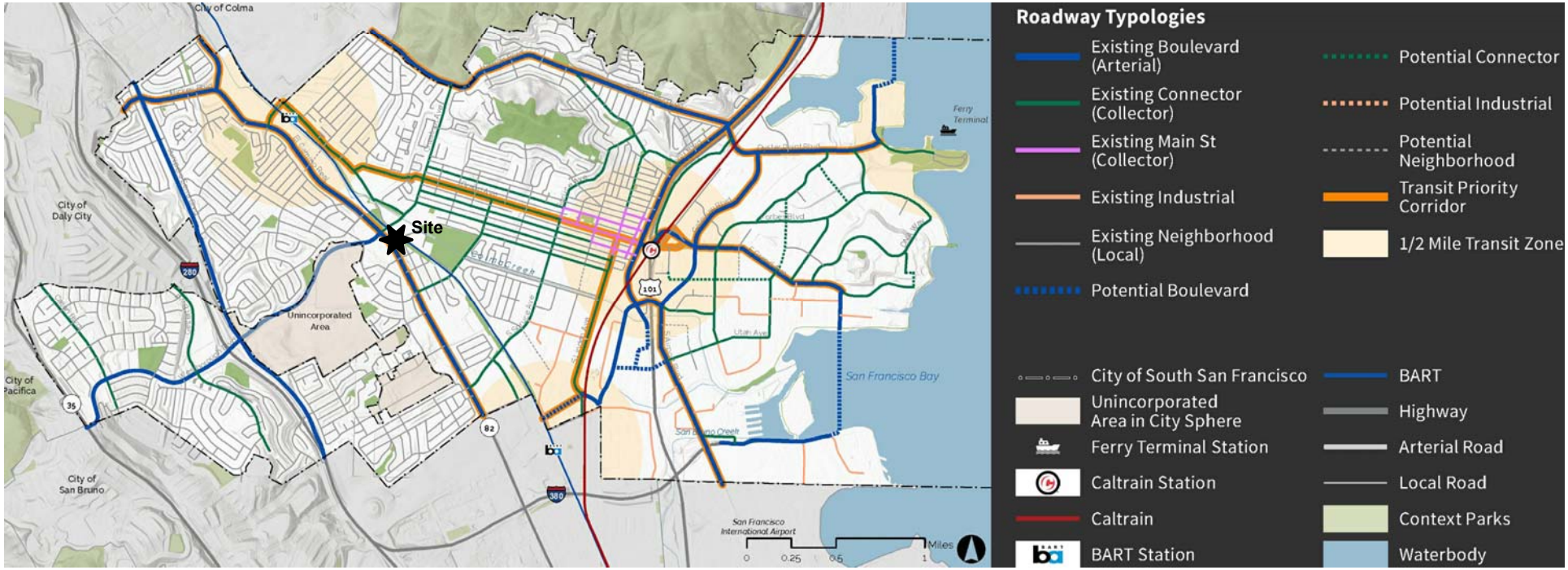


Figure 8
City of South San Francisco
General Plan Mobility Element Roadway Network

Source: City of South San Francisco

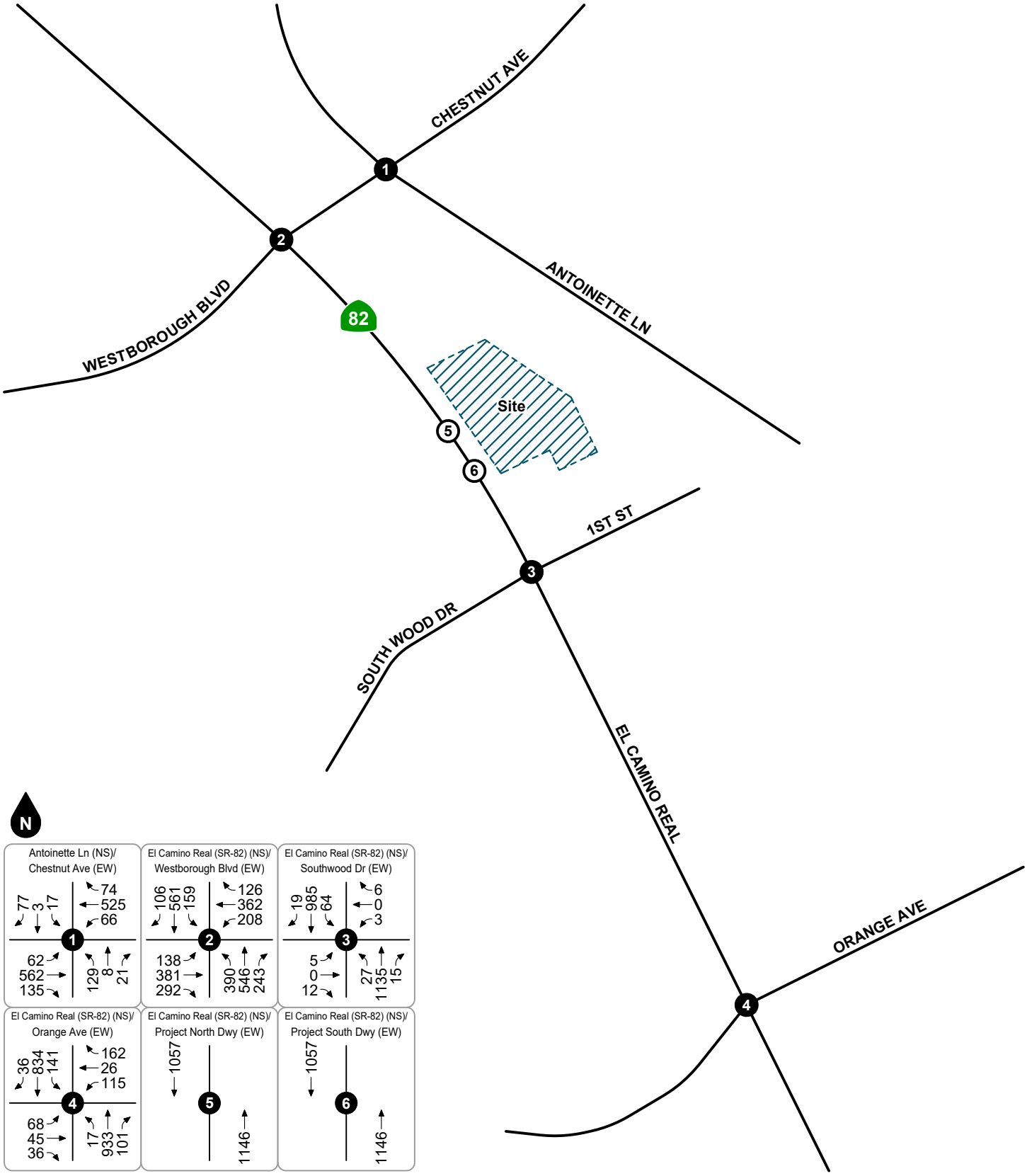


Figure 9
Existing MD Peak Hour Intersection Turning Movement Volumes

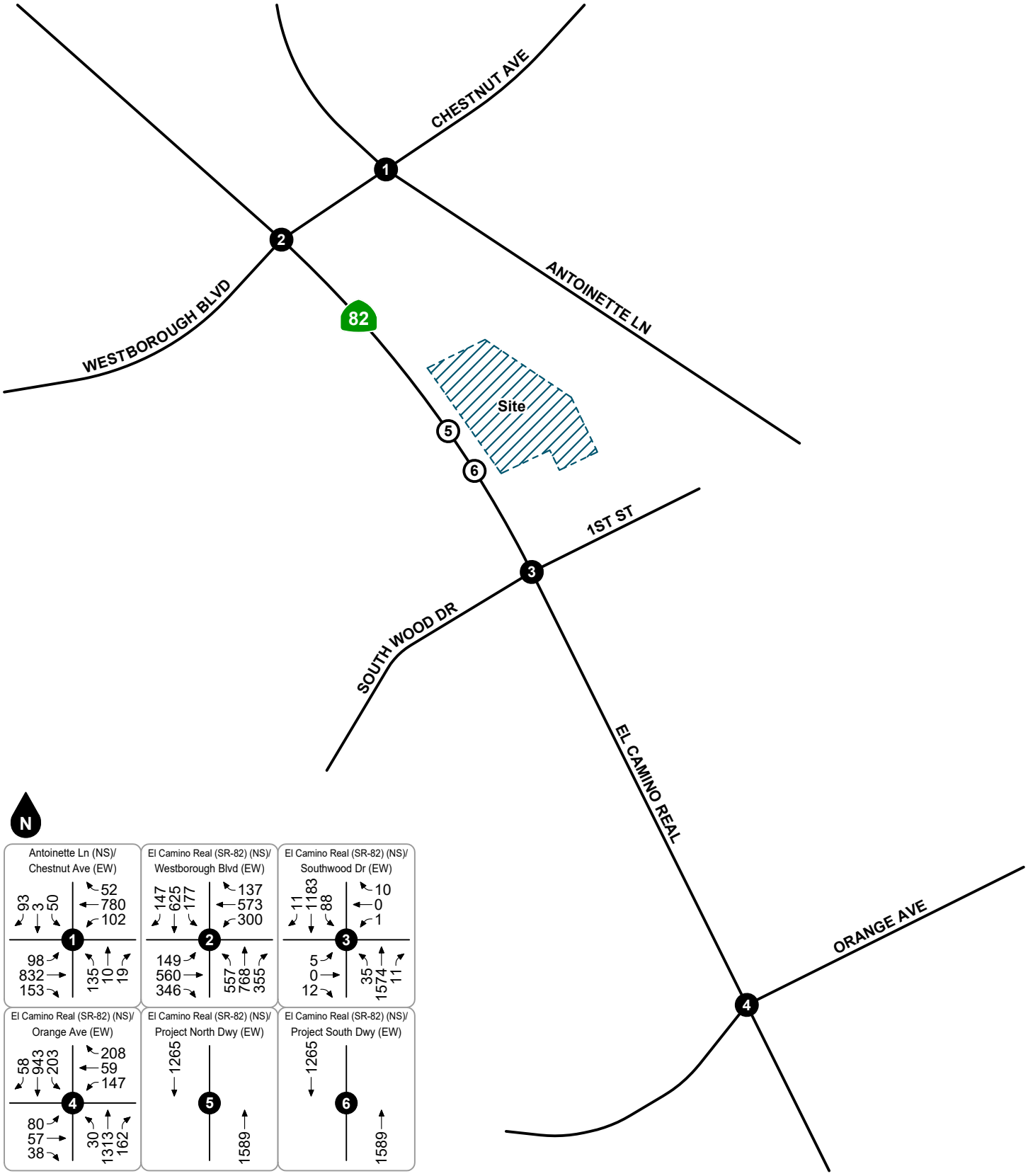


Figure 10
Existing PM Peak Hour Intersection Turning Movement Volumes

4. TRAVEL DEMAND ANALYSIS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the existing, proposed, and net project trip generation. Trip generation for the existing fast-food restaurant (Burger King) and the existing commercial office building (Psychic Boutique) is based on average rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) for Land Use Code 934 (Fast-Food Restaurant with Drive-Through Window) and Land Use Code 712 (Small Office Building). The proposed project trip generation forecast is based on the average trip generation observed at existing In-N-Out Burger restaurants throughout California, including the nearest existing location at 372 Gellert Boulevard in Daly City. Detailed trip generation data is provided in Appendix F.

Land uses such as restaurants will often locate next to busy roadways to attract motorists already on the street. Since the trip generation rates represent vehicles entering and exiting at the site driveway(s), it is appropriate to reduce the initial trip generation forecast by the applicable pass-by trip rate when calculating the net new trips that will be added to the surrounding off-site street system. This analysis applies pass-by trip adjustments based on rates from the ITE *Trip Generation Manual* for the fast-food restaurant with drive-through window land use (Land Use Code 934), which indicates an average pass-by rate of 55 percent. To provide a conservative estimate, this analysis assumes a pass-by rate of 50%. Pass-by trips are included at the project driveways.

As shown in Table 2, the proposed project is forecast to result in approximately 642 additional daily trips compared to the existing development, including 68 additional trips during the MD peak hour and 48 additional trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 11 and Figure 12 show the forecast project inbound and outbound directional distribution patterns. Trip distribution patterns were developed manually using engineering judgment in consultation with City of South San Francisco staff and are based on review of existing volume data, surrounding land uses, locations of existing In-N-Out restaurants, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distribution patterns, the project total MD and PM peak hour intersection turning movement volumes are shown on Figure 13 and Figure 14. The project total volumes were developed by adding together the three following project-related trip components shown on Figure 15 through Figure 20: net new project only trips, pass-by trip adjustments, and existing use driveway adjustment volumes. The net new project MD and PM peak hour intersection turning movement volumes are shown on Figure 15 and Figure 16, respectively. Pass-by intersection turning movement volumes at the applicable intersections are shown on Figure 17 and Figure 18. To provide a conservative analysis, the project's gross pass-by trips were added to applicable intersections rather than the net increase in pass-by trips compared to the existing use. Existing active use trips were added at the project driveways as shown on Figure 19 and Figure 20 to accurately reflect the full project driveway trip generation.

ANALYSIS VOLUMES

Existing Plus Project volume forecasts were derived by adding the net project generated trips to Existing volumes. Existing Plus Project MD and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

Table 2
Project Trip Generation

Trip Generation Rates								
		MD Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	% In	% Out	Rate	% In	% Out	Rate	Rate
Fast-Food Restaurant with Drive-Through Window	ITE 934	51%	49%	44.61	52%	48%	33.03	467.48
Small Office Building (Psychic Boutique)	ITE 712	60%	40%	2.61	34%	66%	2.16	14.39
In-N-Out Burger with Drive-Through Window	[a]	-	-	-	-	-	-	-

Trips Generated									
			MD Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Existing Fast Food Restaurant	3.000	TSF	68	66	134	52	48	100	1,402
Pass-By Trips (50%)[3]			*-34*	*-33*	*-67*	*-26*	*-24*	*-50*	*-701*
Small Office Building (Psychic Boutique)	1.224	TSF	2	1	3	1	2	3	18
Subtotal - Existing Trips			36	34	70	27	26	53	719
In-N-Out Burger With Drive Through Window	3.887	TSF	141	136	277	105	99	204	2,722
Pass-By Trips (50%)[3]			*-71*	*-68*	*-139*	*-53*	*-50*	*-103*	*-1,361*
Subtotal - Proposed Trips			70	68	138	52	49	101	1,361
Net New Trips Generated			**+34**	**+34**	**+68**	**+25**	**+23**	**+48**	**+642**

Notes:

1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.
   [a] = Average trips observed at existing In-N-Out Restaurants throughout California.
2. TSF = Thousand Square Feet
3. Data from the ITE Trip Generation Manual indicates an average pass-by rate of 55% during the peak hours for Land Use Code 934 (fast-food-restaurant with drive through window). To provide a conservative estimate, this analysis assumes a pass-by rate of 50%.

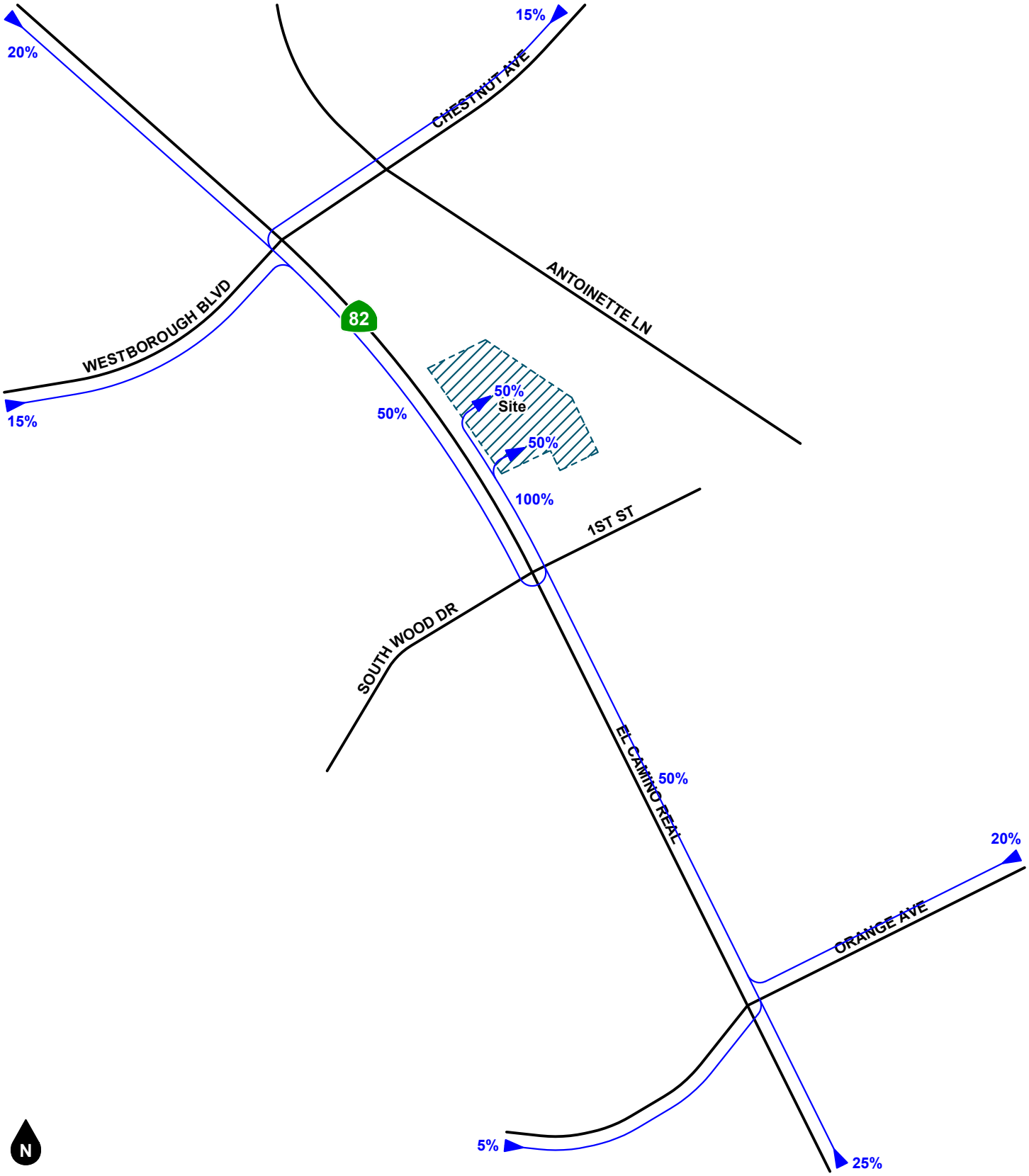


Figure 11
Project Inbound Trip Distribution

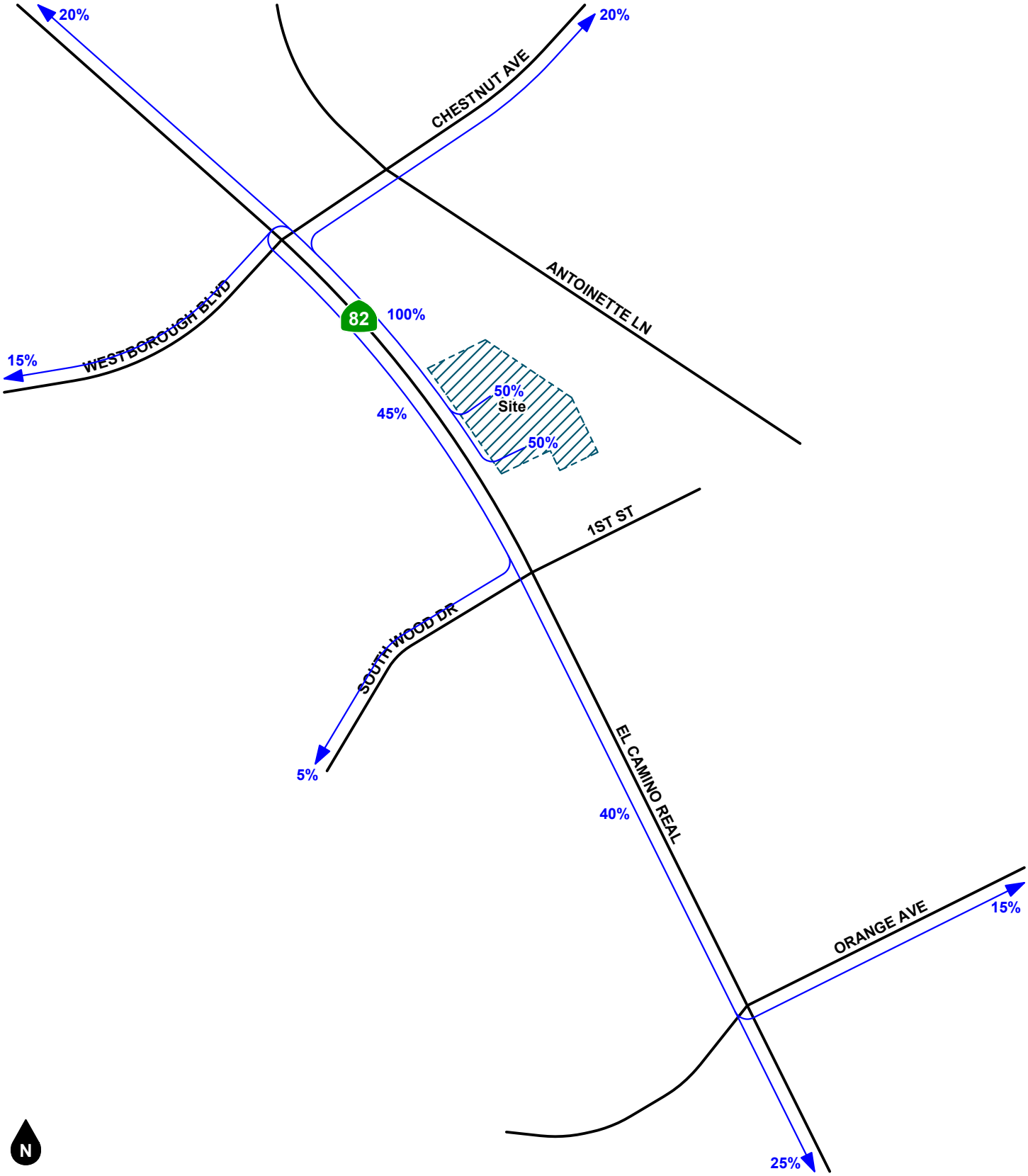


Figure 12
Project Outbound Trip Distribution

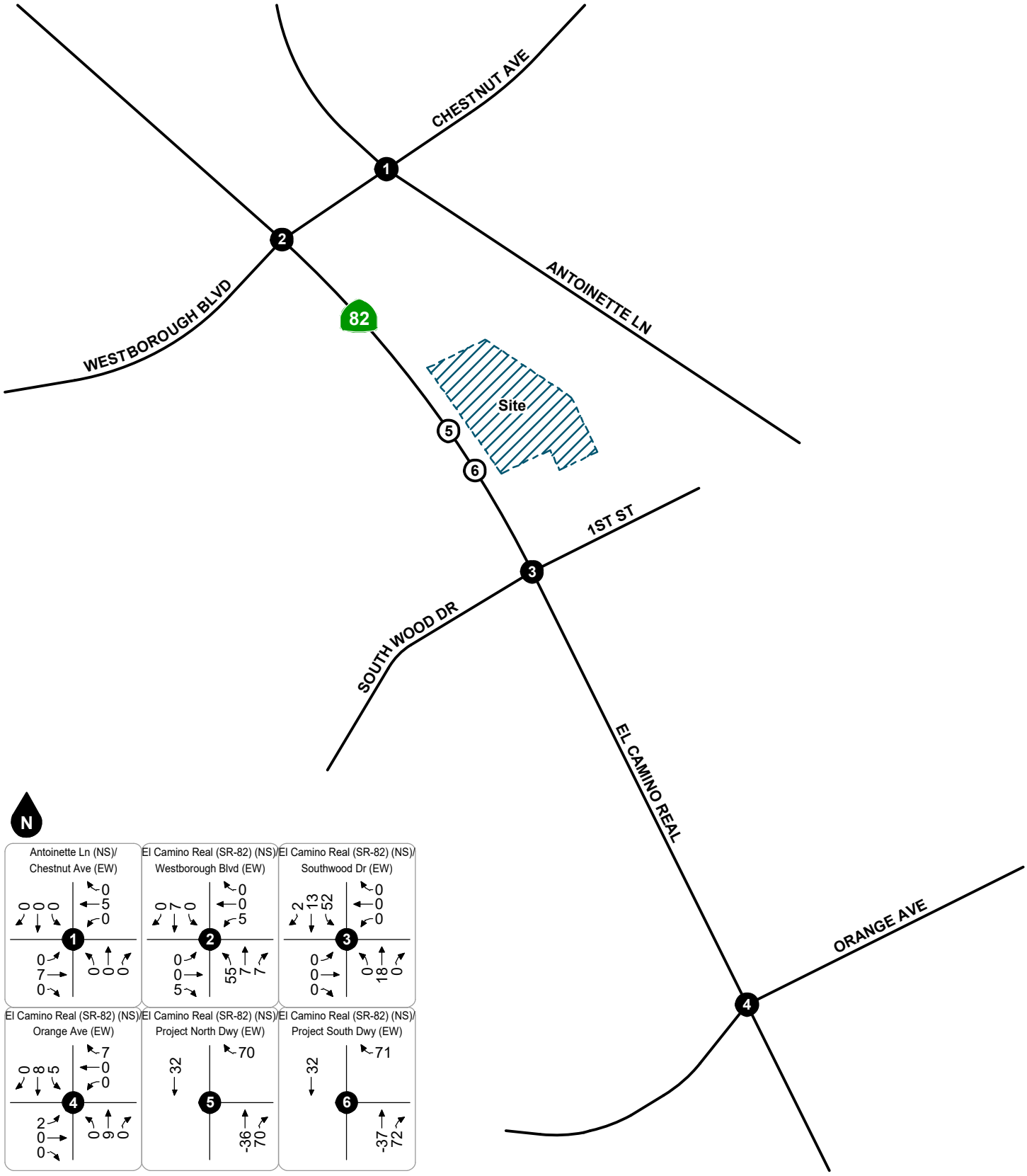


Figure 13
Project Total MD Peak Hour Intersection Turning Movement Volumes

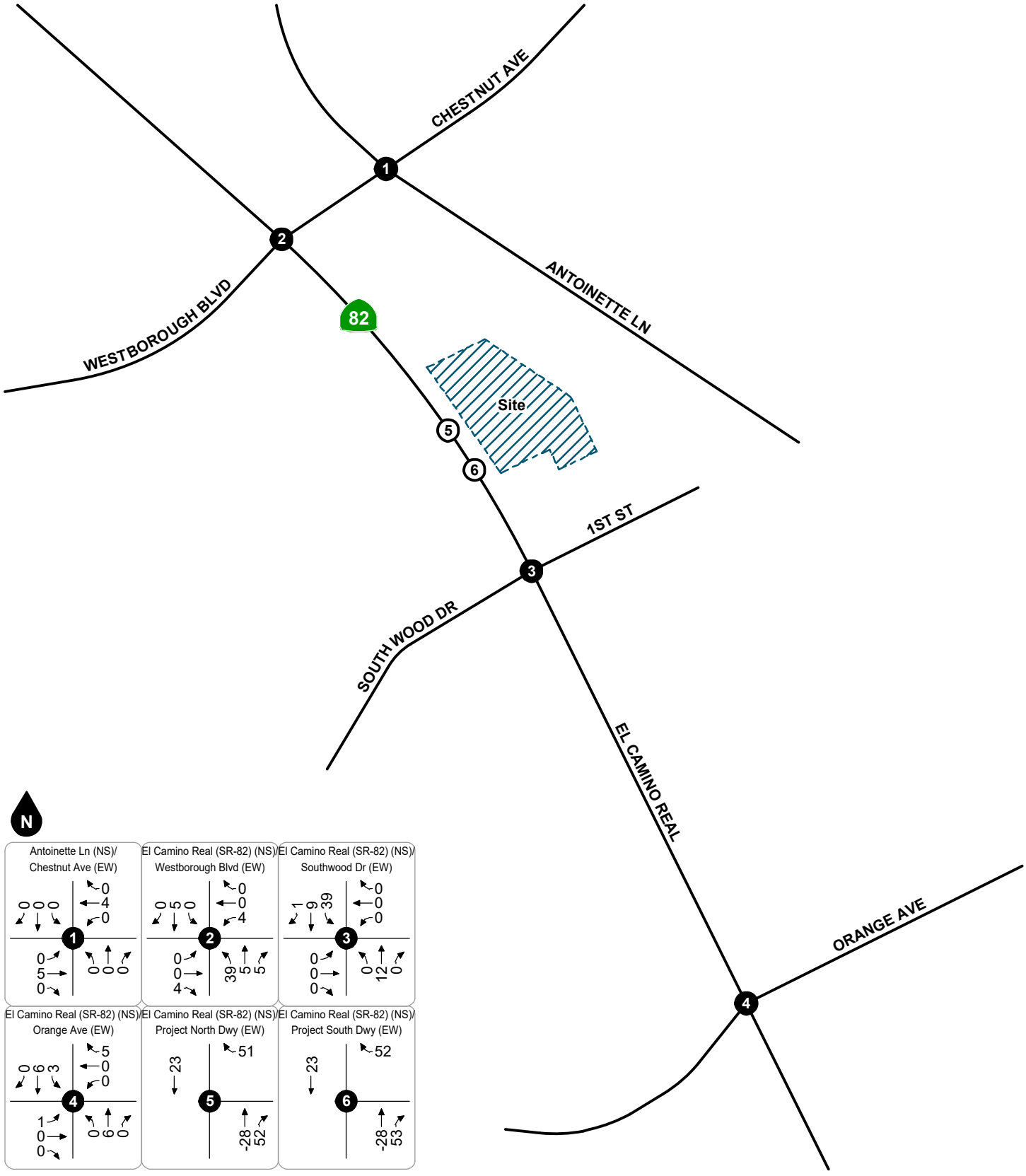


Figure 14
Net Project PM Peak Hour Intersection Turning Movement Volumes

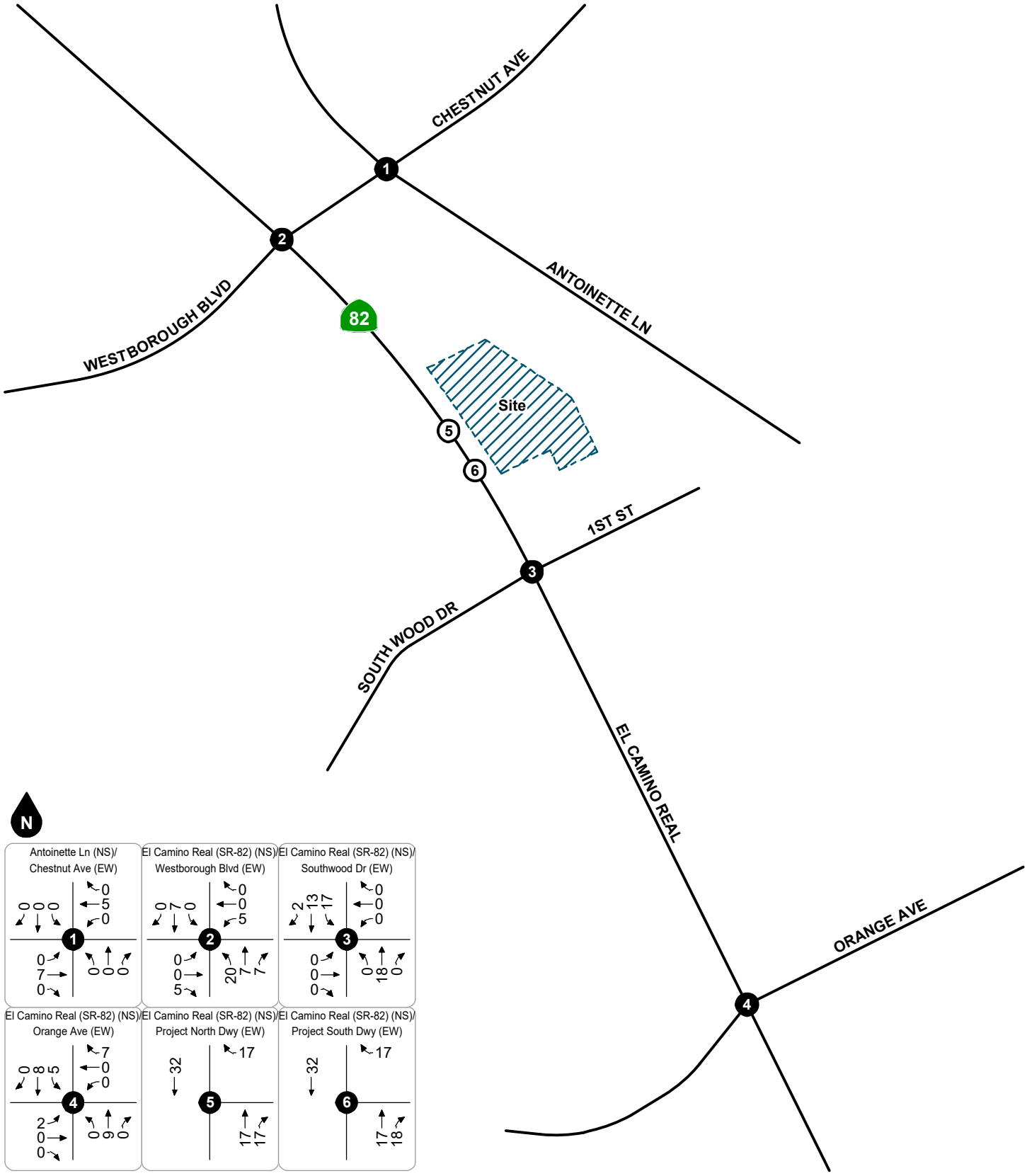
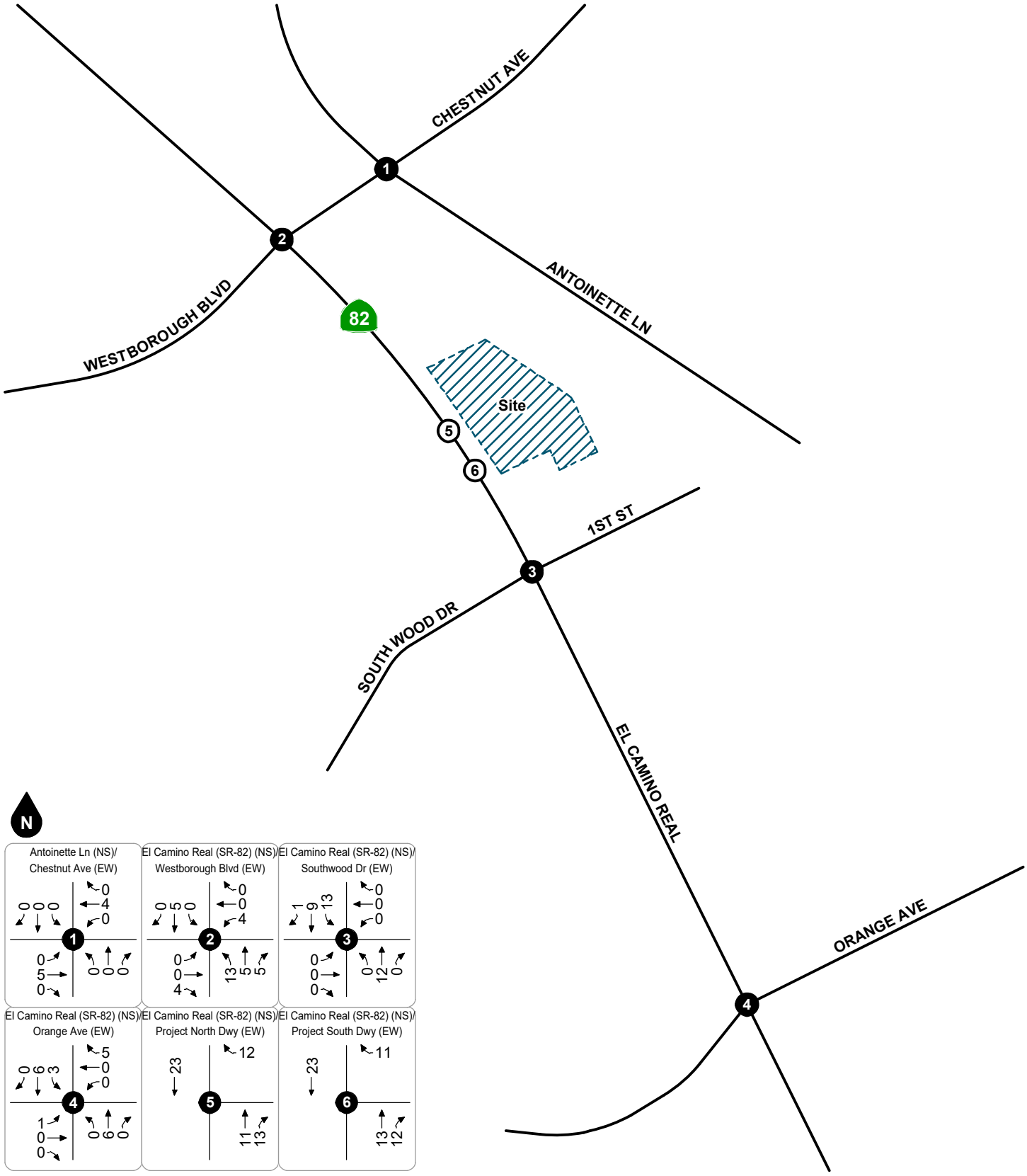


Figure 15
Net New Project Trips Only
MD Peak Hour Intersection Turning Movement Volumes

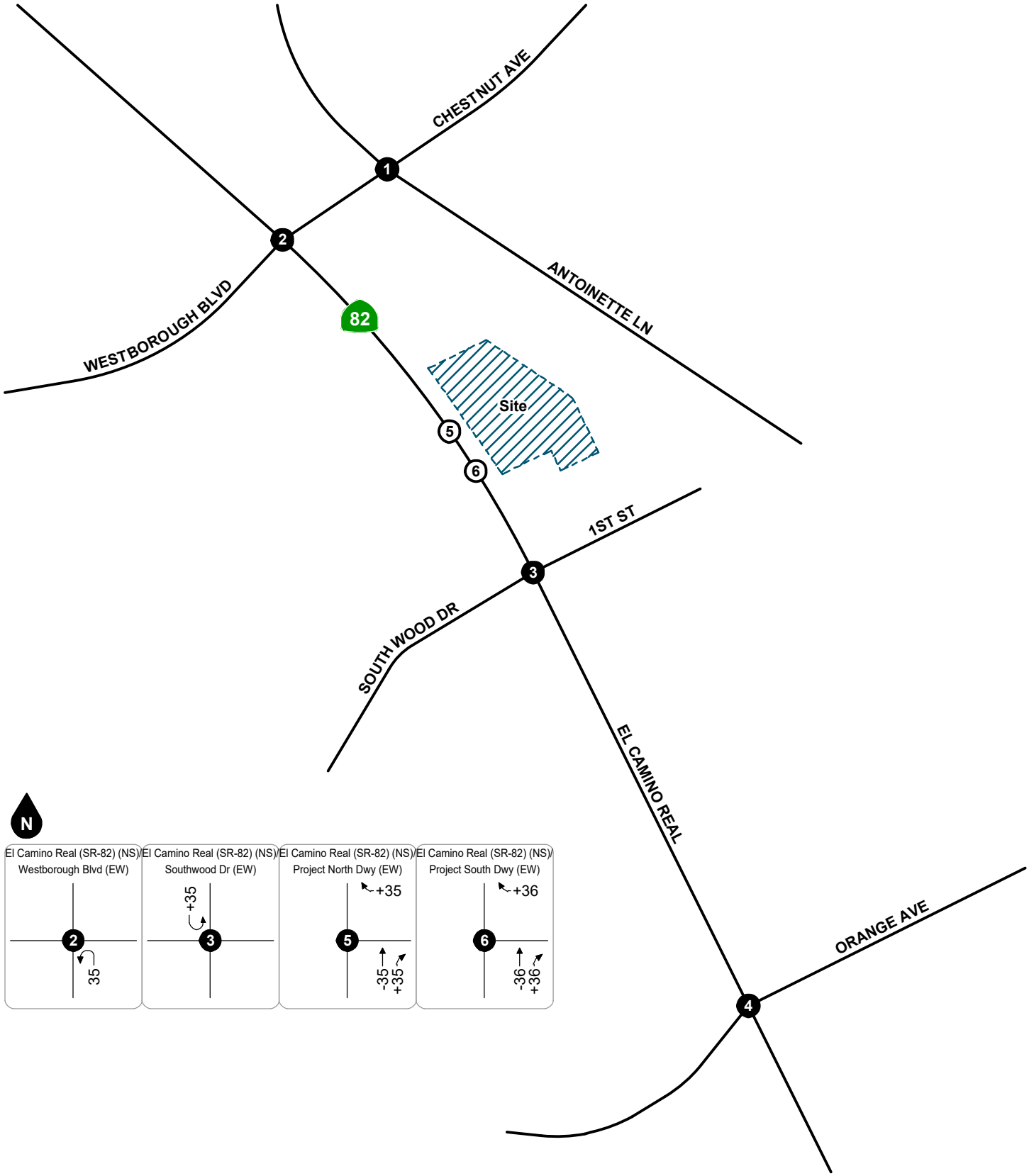


Legend

(#) Study Intersection

(#) Project Driveway

Figure 16
Net New Project Trips Only
PM Peak Hour Intersection Turning Movement Volumes

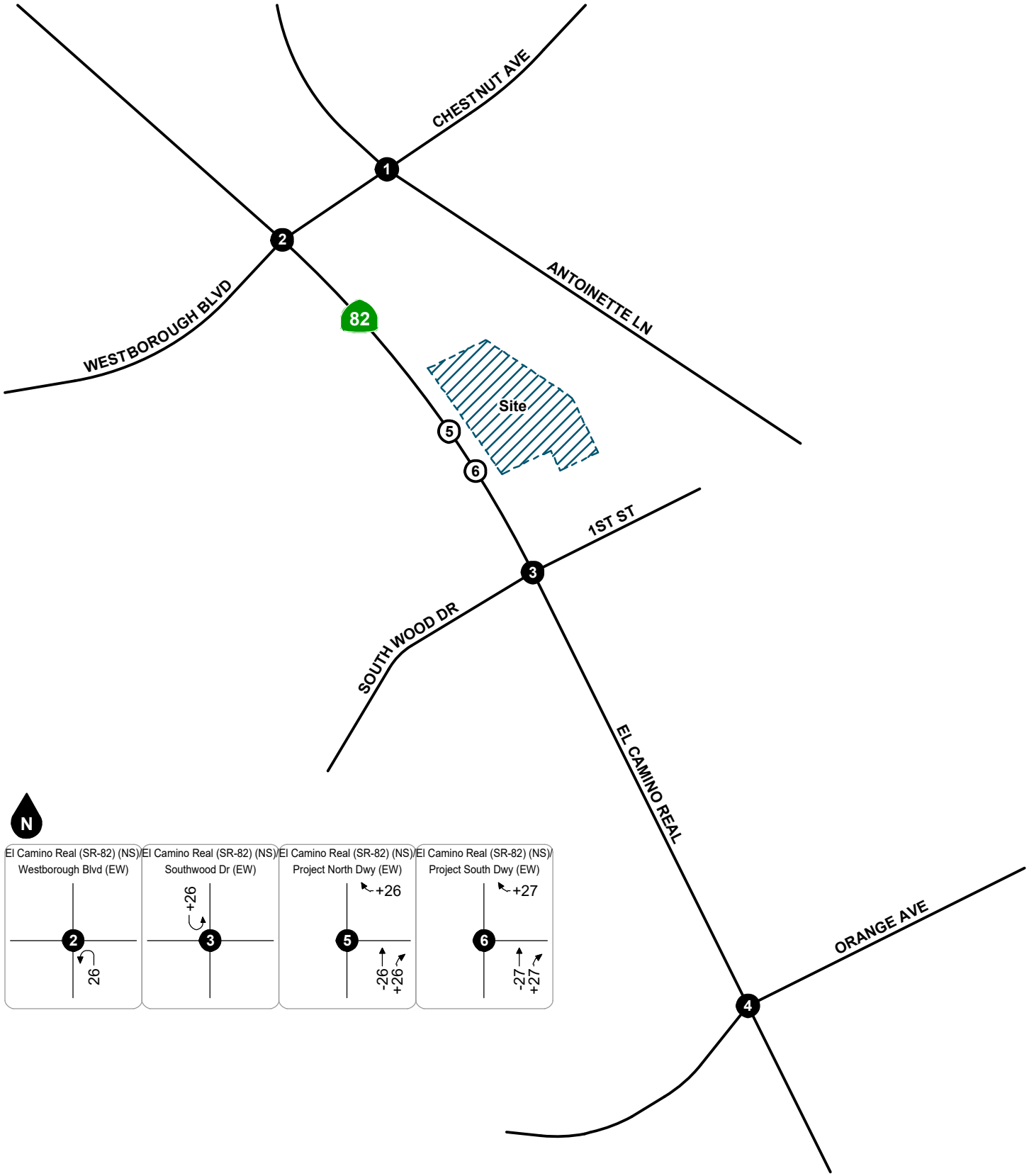


Legend

Study Intersection

(#) Project Driveway

Figure 17
Pass-By Trip Adjustment
MD Peak Hour Intersection Turning Movement Volumes

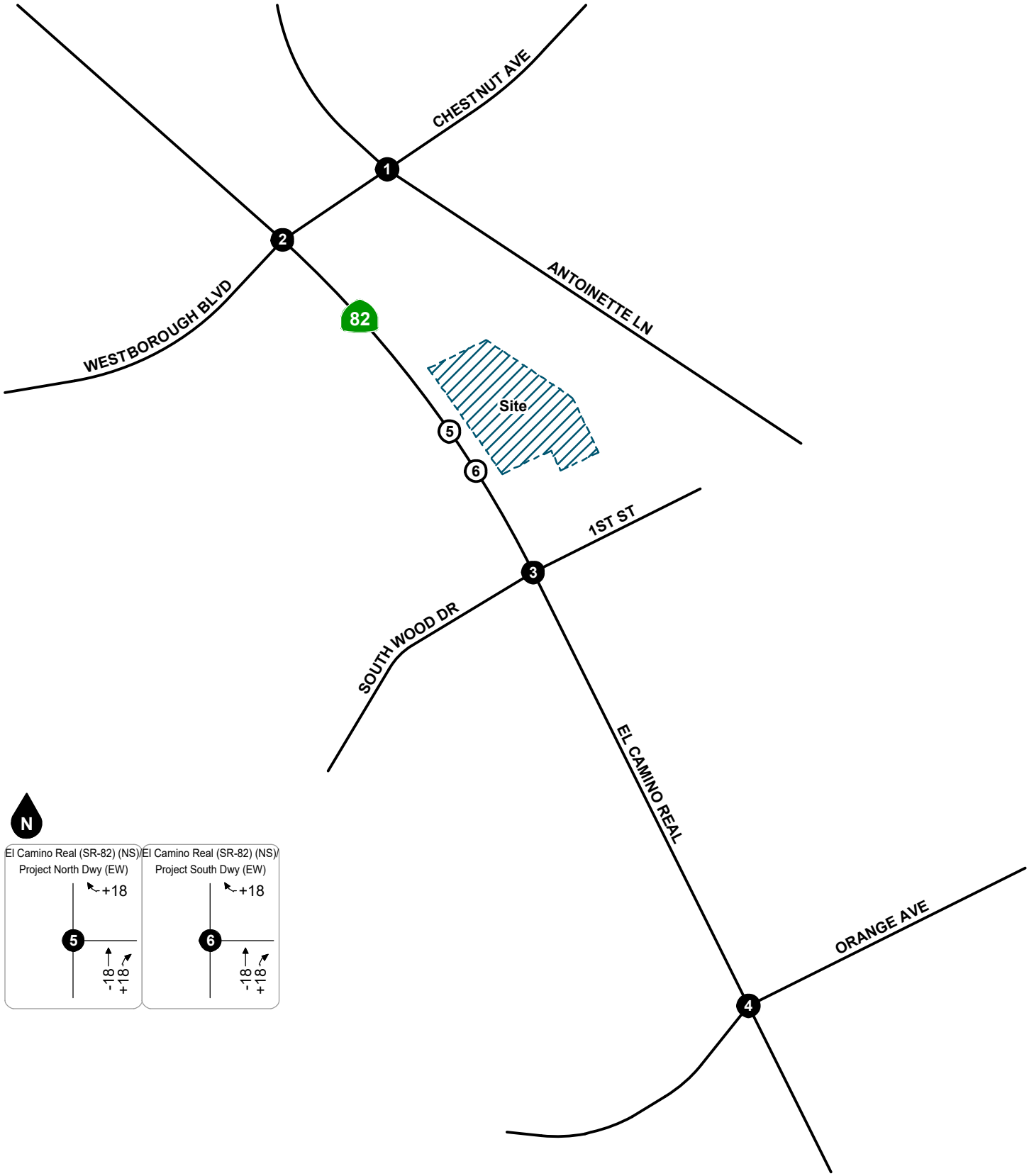


Legend

(#) Study Intersection

(#) Project Driveway

Figure 18
Pass-By Trip Adjustment
PM Peak Hour Intersection Turning Movement Volumes

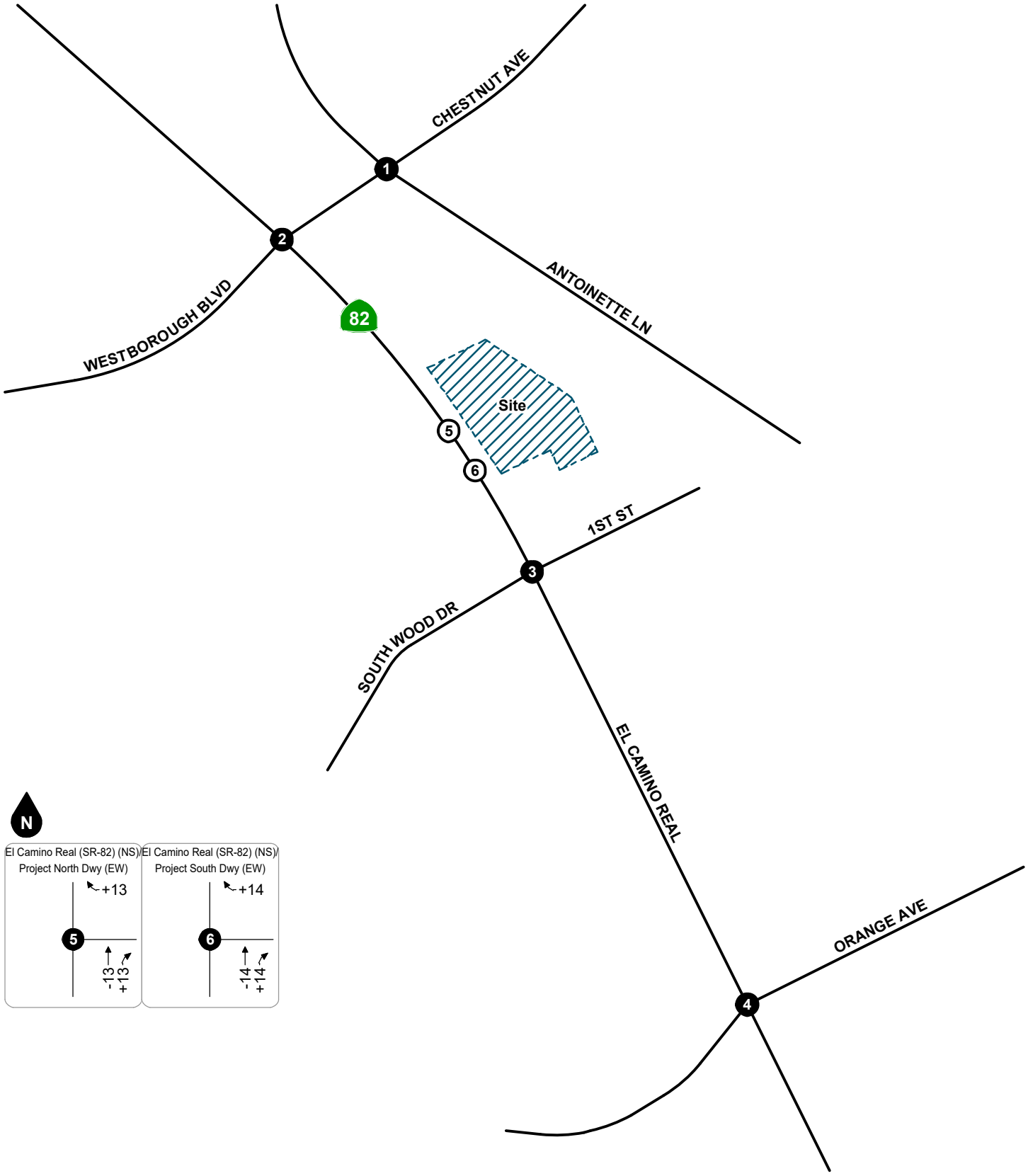


Legend

Study Intersection

(#) Project Driveway

Figure 19
Existing Active Use Driveway Adjustments
MD Peak Hour Intersection Turning Movement Volumes



Legend

(#) Study Intersection

(#) Project Driveway

Figure 20
Existing Active Use Driveway Adjustment
PM Peak Hour Intersection Turning Movement Volumes

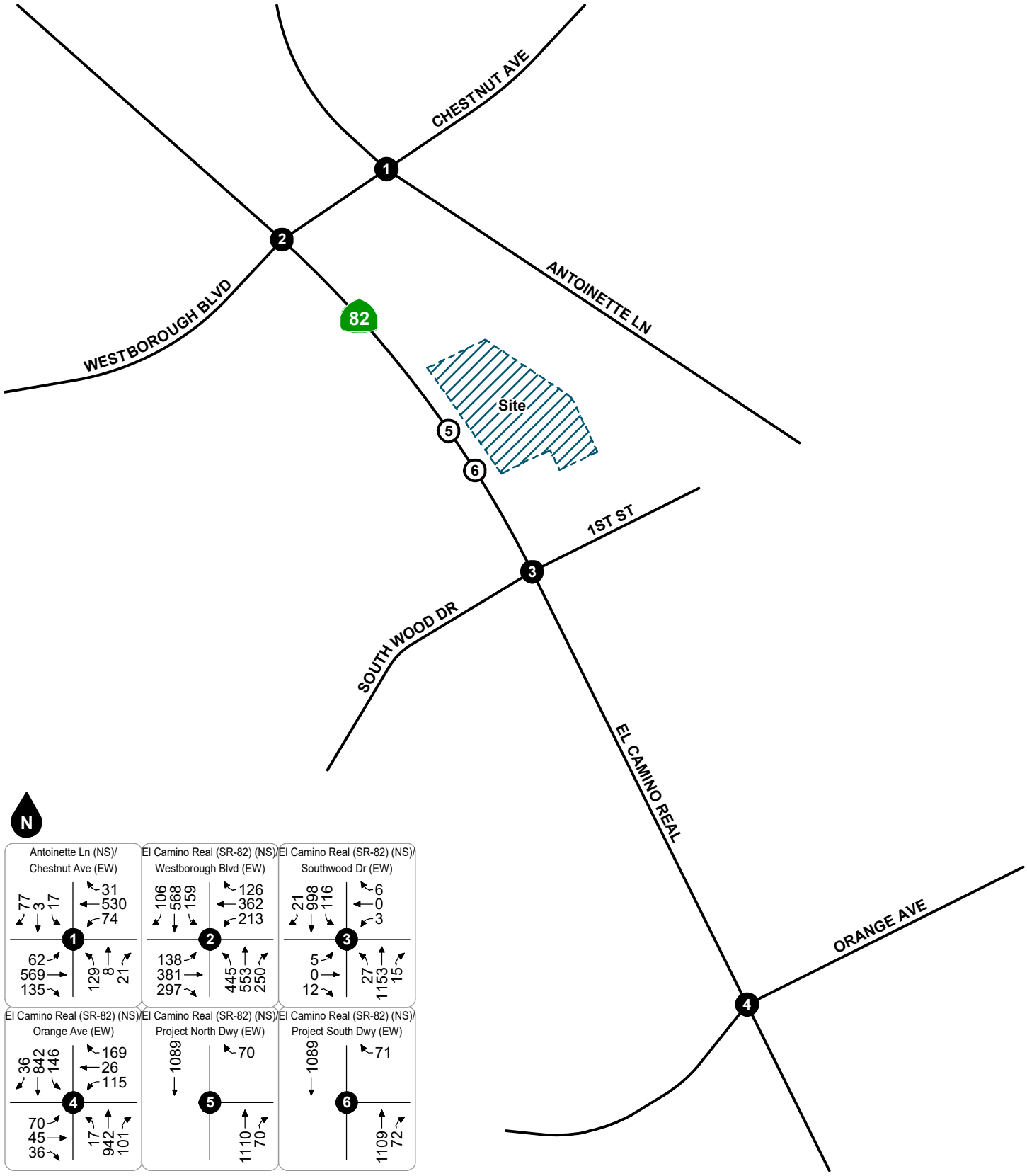


Figure 21
Existing Plus Project
MD Peak Hour Intersection Turning Movement Volumes

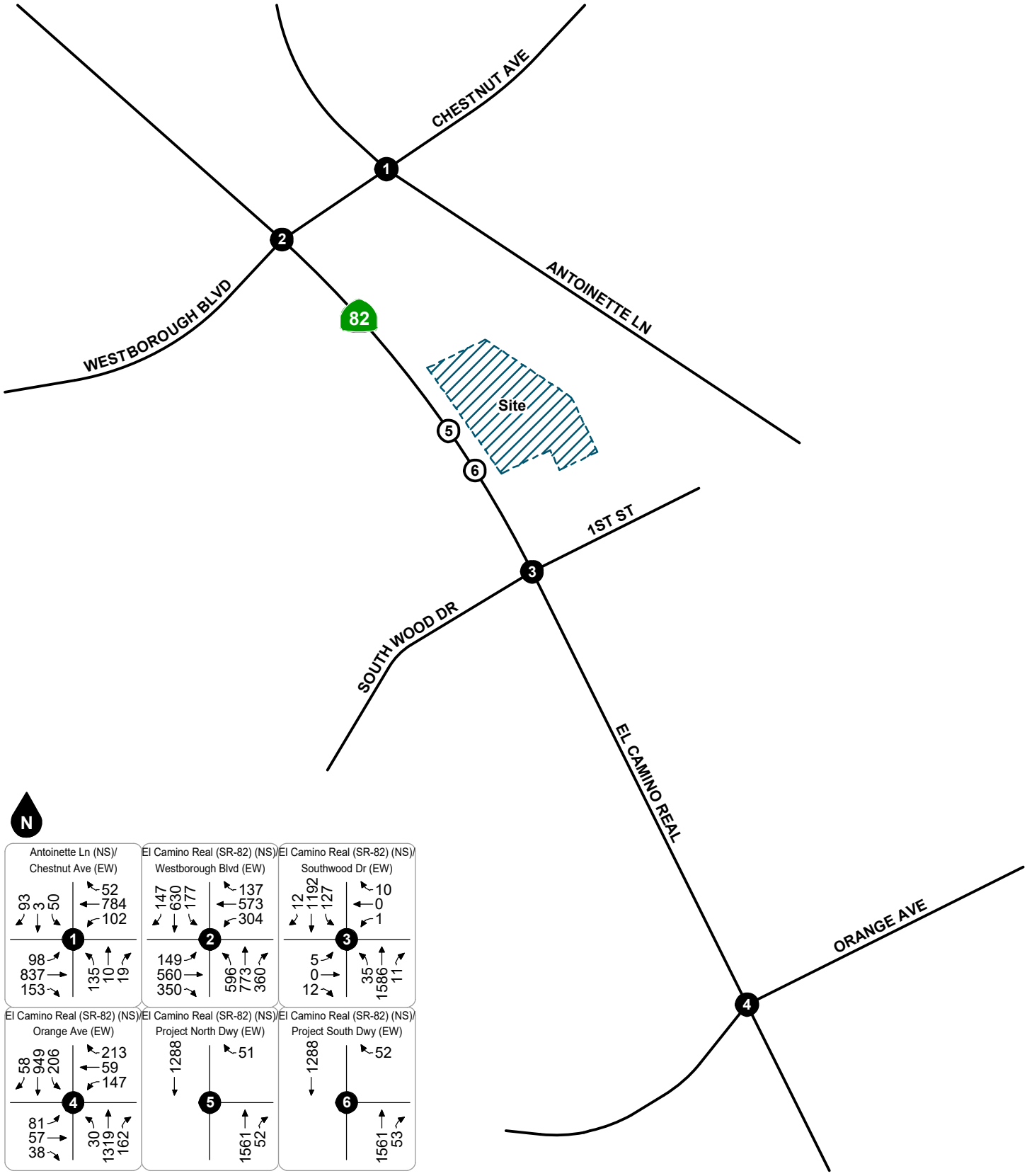


Figure 22
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes

5. ANALYSIS AND DEFICIENCY IDENTIFICATION

This section evaluates potential project-related deficiencies in accordance with Tier 2 Analysis Requirements of the City's TAG.

CONSISTENCY WITH PLANS AND POLICIES

This section evaluates the project's consistency with relevant goals, policies, and actions set forth in the City's General Plan and any relevant area/specific plans and the Mobility Element.

The project site is currently developed with commercial uses. Since the proposed project involves redevelopment of the project site with a new 3,887 square foot In-N-Out Burger restaurant with drive through window, the proposed project will be consistent with the current commercial uses.

The City's General Plan Land Use map identifies the project site as Medium Density Mixed-Use within the El Camino Real subarea. Although the proposed project does not have a residential component, the proposed restaurant will be consistent with the "community commercial" component within the El Camino Real subarea.

The project site is located adjacent and with direct access to El Camino Real (SR-82), which is classified as a six-lane Arterial in the City's General Plan Mobility Element. As described in the following "Off-Site Traffic Operations" section, the project would not substantially contribute to an operational deficiency at the study area facilities.

In summary, the proposed project would not create conditions that are inconsistent with mobility, safety, or other related goals, policies, and actions set forth in the General Plan.

VEHICLE MILES TRAVELED (CEQA)

This section evaluates whether project qualifies for presumption of less than significant impact under CEQA or is consistent with vehicle miles traveled (VMT) impact and mitigations included in City's General Plan. Documentation would describe consistency with proposed zoning, growth forecasts, General Plan policies, and compliance with TDM ordinance.

The City's TAG include land use VMT screening thresholds based on guidance from the State of California's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) ["OPR Technical Advisory"]. As documented in the City's TAG, land use projects that meet at least one of the following screening thresholds are presumed to not require CEQA VMT analysis:

- Transit Priority Areas (TPA): Projects located within ½ mile walk around major transit stops.
- Affordable Housing: 50% restricted affordable residential projects in infill locations
- Small Projects: Projects defined as generating 100 or fewer average daily vehicle trips, absent substantial evidence indicating that a project would generate a potentially significant level of VMT.
- Locally Serving Public Facility: Locally serving public facilities that encompasses government, civic, cultural, health, and infrastructure uses and activity which contribute to and support community needs.
- Neighborhood-Serving Retail Project: Neighborhood-serving retail projects that are less than 50,000 square feet, which serve the immediate neighborhoods.
- Airport / Business Hotels: South San Francisco is very close to the San Francisco International Airport, and also attracts business travelers due to its concentrated life science office space.

- Residential and Office Projects in Low VMT Areas: The project is located within a low VMT area for its land use. Based on information from the South San Francisco model, certain areas of the city have lower rates of VMT generation than others. In existing locations where VMT per capita is below the thresholds, projects may be screened from further VMT analysis.

By their nature, fast-food/quick-service restaurants market for convenience and thus tend to serve the local community and/or existing customers already traveling in the local area. Cursory review indicates at least 10 other fast-food/quick-service restaurants, including one existing In-N-Out, within a three-mile radius of the project site. Thus, the proposed project is not anticipated to generate new trips from outside the immediate neighborhood. The proposed project is a local serving use that is less than 50,000 square feet; therefore, the project satisfies the City-established screening threshold for "neighborhood-serving retail project" and may be presumed to result in a less than significant VMT impact under CEQA – no mitigation is required.

SAFETY (CEQA)

This section evaluates existing hazards within the project vicinity and whether the project would create or substantially contribute to a roadway or design hazard, including restricted lines of sight or other design-related issues. Specifically, line of sight for vehicle egress at the project driveways is evaluated based on the standards established in the Highway Design Manual (California Department of Transportation, 7th Edition).

It is noted that the Highway Design Manual refers to "corner sight distance" and incorporates sight distance guidelines from the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on Geometric Design of Highways and Street (7th Edition, 2018)* ["*AASHTO Greenbook*"]; however, these standards are not applied at unsignalized urban driveways. As noted in the Highway Design Manual: "*Urban Driveways (Refer to Index 205.3); corner sight distance requirements as described above are not applied to urban driveways unless signalized. See Index 405.1(2)(b) underlined standard. If parking is allowed on the major road, parking should be prohibited on both sides of the driveway per the California MUTCD, 3B.19."* To provide a more conservative assessment and improve sight lines, sight lines at the project driveways were evaluated based on the following stopping sight distance standards from the Highway Design Manual:

Design Speed (miles per hour)	Stopping Sight Distance (feet)
10	50
15	100
20	125
25	150
30	200
35	250
40	300
45	360
50	430
55	500
60	580
65	660
70	750
75	840
80	930

Source: Highway Design Manual (Caltrans, 7th Edition), Table 201.1

The design speed along El Camino Real (SR-82) for purposes of this sight distance analysis is based on the posted speed limit of 35 miles per hour near the proposed project driveway. Therefore, the applicable stopping sight distance is 250 feet based on the Highway Design Manual standards.

Figure 23 shows the sight distance analysis for the Project North Driveway at El Camino Real. Figure 24 shows the sight distance analysis for the Project South Driveway at El Camino Real.

As shown on Figure 23 and Figure 24, there are no existing structures, objects, or landscaping that would substantially obstruct the line of sight for the Project North Driveway and the Project South Driveway. At a minimum, parking should be prohibited for 20 feet on both sides of the project driveways based on the Highway Design Manual standards, which defer to CA MUTCD Section 3B.19 for unsignalized urban driveways. For improved sight lines between vehicles as well as bicycles and pedestrians, it is recommended that on-street parking be prohibited on El Camino Real (SR-82) along the entirety of the project frontage to approximately 98 feet south of the Project South Driveway.

With implementation of the minimum CA MUTCD requirements or the recommended prohibition of on-street parking along the entirety of the project frontage to approximately 98 feet south of the Project South Driveway, the project would not worsen existing hazards or cause new design-related hazards such as restricted line of sight.

Emergency Access and Evacuation (CEQA)

This section assesses routes to/from key emergency services (such as fire stations and emergency rooms) and whether the project would increase response times. The project site is located adjacent to El Camino Real with three direct access points for quick access to a major thoroughfare. The emergency room at Kaiser Permanente South San Francisco is located within 3,000 feet north of the project site on El Camino Real. The South San Francisco Fire Station 63 is located within 2,000 feet north of the project on Arroyo Drive. The proposed project is located within very short distances of these emergency services facilities and would not impede access to those services to or from the site. As described in the following "Off-Site Traffic Operations" section, the project would not substantially contribute to an operational deficiency at the study area facilities and therefore is not expected to substantially increase response times. The project site has adequate emergency access routes to and from key emergency services required by the City's Transportation Analysis Guidelines.

Evacuation (CEQA)

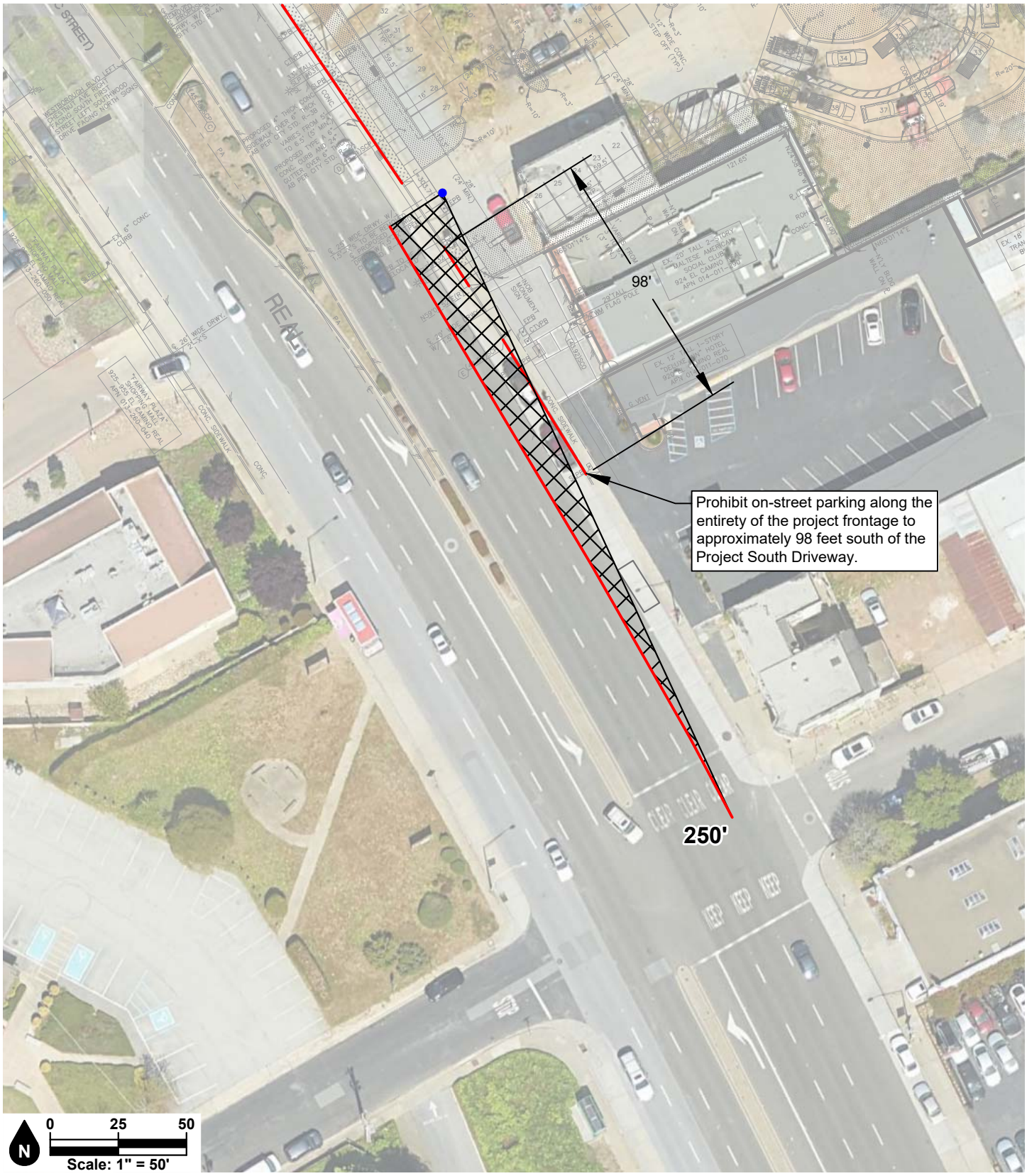
This section evaluates the project's effect on evacuation times in event of natural disaster. This element of the City's guidelines only applies to High Risk or Very High Risk wildfire zones. Based on the project's location outside high-risk fire zones, evacuation analysis is not necessary and the project would have no impact.

Legend

- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Stopping Sight Distance = 250 feet for 35 MPH design speed

Figure 23
Project North Driveway Sight Distance Analysis



Legend

- Stopping Sight Distance
- Restricted Use Area
- Driver's Eye (10 foot setback from curbline extension and 3 feet right of centerline)

Stopping Sight Distance = 250 feet for 35 MPH design speed

Figure 24
Project South Driveway Sight Distance Analysis

ON-SITE CIRCULATION

This section evaluates site access locations, loading zones, and trash collection areas with respect to operations and safety for all modes of transportation. Based on the following assessment, the project adequately meets applicable design guidelines, incorporates bicycle/pedestrian access to the primary building entrance, and provides adequate on-site truck circulation.

Vehicular Access

Vehicular access is proposed via two right-in/right-out only driveways on El Camino Real. The parking lot has 51 parking spaces accessible via the Project Central Driveway and the Project South Driveway. Project driveways shall be designed in accordance with the applicable City standards.

It is assumed the project will adhere to the following conditions in accordance with typical development review requirements:

- All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of South San Francisco Public Works Department.

- Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of South San Francisco Public Works Department.

- On-site traffic signing and striping plans should be submitted for City of South San Francisco approval in conjunction with detailed construction plans for the project.

- The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of South San Francisco/California Department of Transportation sight distance standards.

Additionally, it is recommended that stop controls be installed at the project egress driveways with applicable one-way signage along the El Camino Real (SR-82) median per CA MUTCD standards.

Bicycle/Pedestrian Access

Figure 25 shows bicycle/pedestrian access and on-site circulation. As shown on Figure 25, the proposed bicycle racks are located on the east side of the building adjacent to the open outdoor seating area, which can be accessed via pedestrian walkway along the front (southerly facing side) of the building. The project adequately incorporates bicycle/pedestrian access to the primary building entrance.

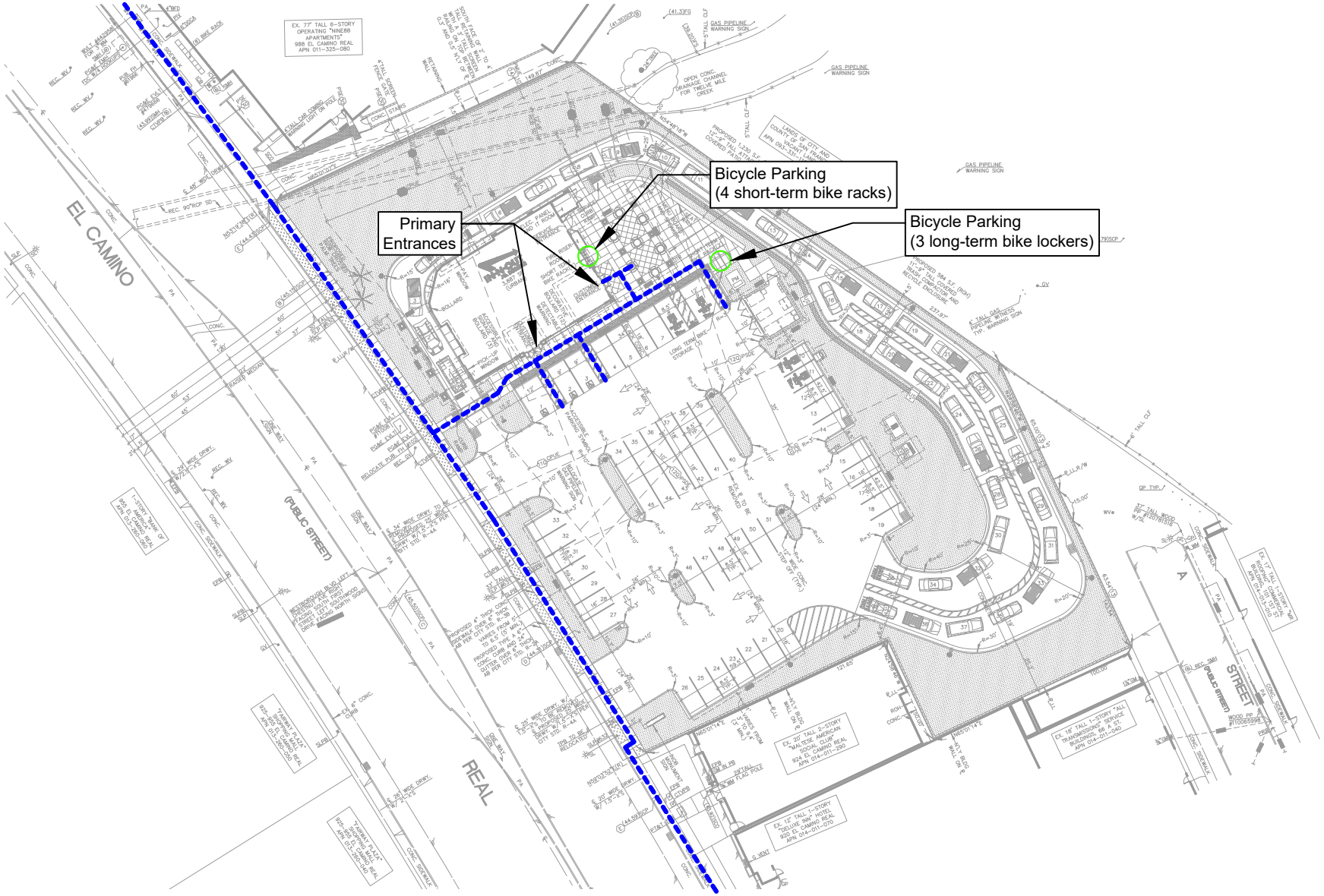


Figure 25
Bicycle/Pedestrian Access and On-Site Circulation

Truck Circulation

While the vast majority of project trips circulating the project will be passenger cars, on-site circulation will need to accommodate In-N-Out delivery trucks and waste collection trucks. Based on the evaluation provided below, adequate circulation would be provided to accommodate delivery and waste collection trucks.

Figure 26 shows delivery truck circulation through the project site. Truck ingress would occur at the Project South Driveway and egress would occur from the Project North Driveway. Truck loading/unloading would occur on-site in the drive aisle closest to the building entrance. Truck deliveries are scheduled to occur after store closing and before opening, typically between 2:00 AM and 9:00 AM, so as not to interfere with on-site circulation and operations while the restaurant is open to the public.

Figure 27 shows waste collection truck circulation through the project site. The trash enclosure is located at the end of the Project North Driveway aisle such that waste collection trucks will have quick direct access to the waste bins after entering through the Project North Driveway with minimal disruption to on-site circulation. After emptying the trash bins, the garbage collection truck would maneuver through the main parking lot by turning right along the access aisles on a continuous forward movement to exit the site at the Project South Driveway.

Emergency Access

Emergency vehicles would be able to access the site similar to the waste collection truck circulation or may stop adjacent to the site along El Camino Real (SR-82). Implementation of the recommended on-street parking prohibitions along the project frontage relating to sight distance improvements would further ensure that emergency vehicles would have a place to park along the project frontage on El Camino Real (SR-82).

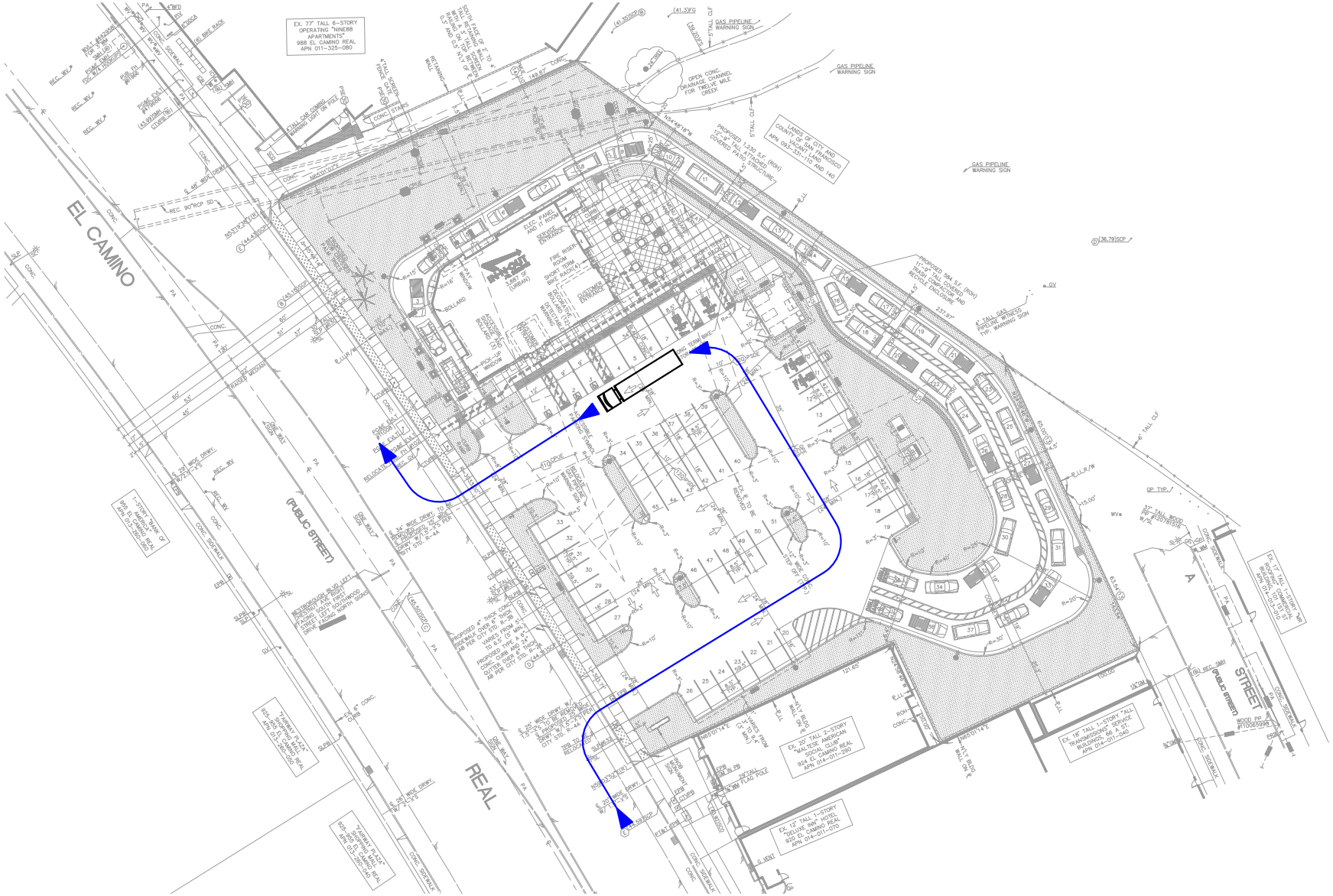


Figure 26
Delivery Truck Circulation

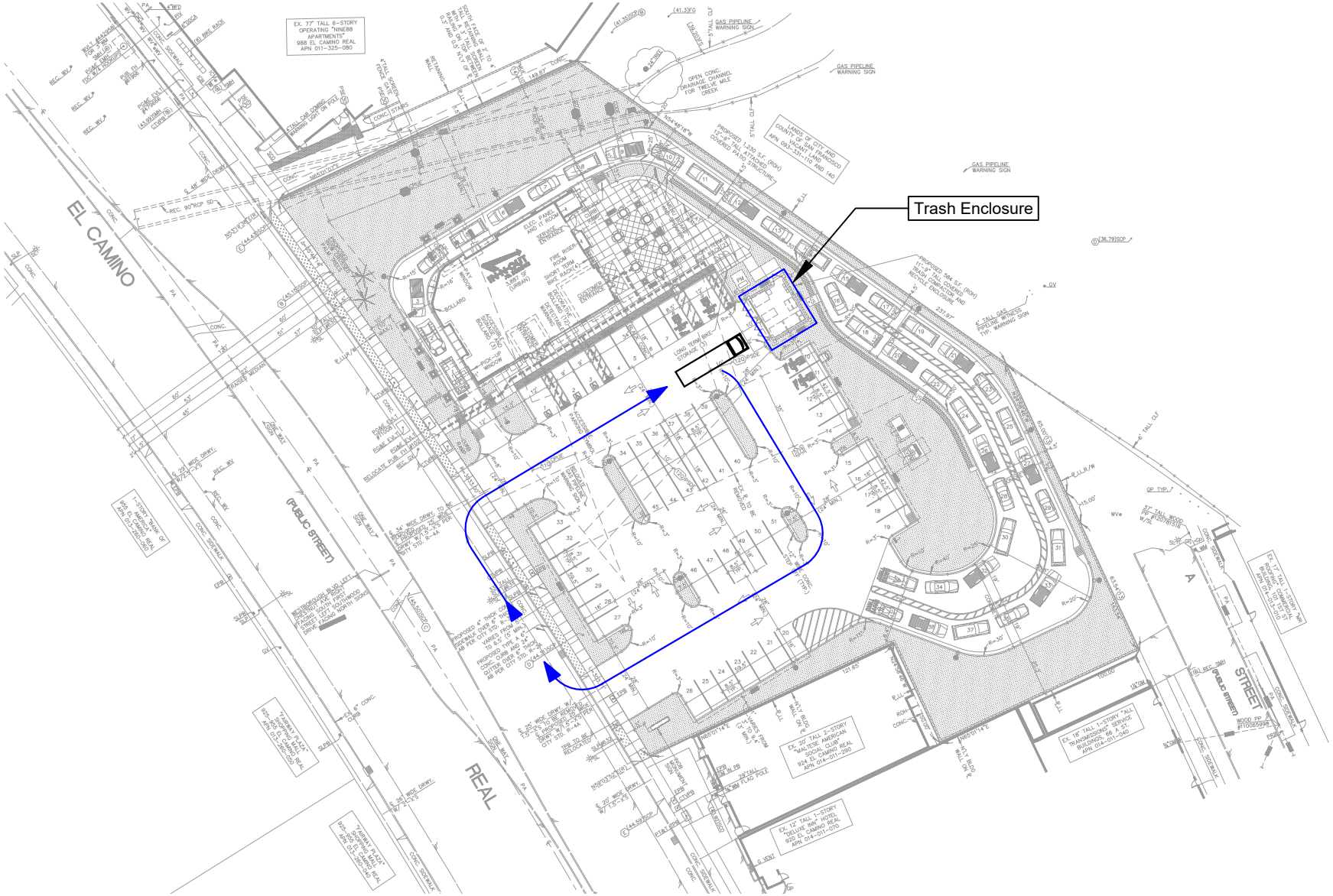


Figure 27
Waste Collection Truck Circulation

PEDESTRIAN FACILITIES

This section identifies existing/planned pedestrian facilities adjacent to the project, pedestrian routes to the nearest transit stop and key destinations, and any missing sidewalk links, unmarked crosswalks, or other potential deficiencies within one-half mile of the project site.

As previously shown on Figure 4, there are existing sidewalks along both sides of El Camino Real (SR-82) adjacent to the project site. The proposed project will connect a pedestrian walkway along the front (southerly facing side) of the building to the existing sidewalk on the east side of El Camino Real (SR-82). The nearest bus stop is located approximately 300 feet south of the project site at the northeast corner of El Camino Real and 1st Street. El Camino Real is served by the Free South City Shuttle Blue Line and Orange Line buses as well as the SamTrans bus line 37 and ECR. BART San Bruno Station is located approximately two miles south of the project site on Huntington Avenue. The project site is within walking distance to a bus line that provides connection to the nearby BART San Bruno Station.

Other key destinations include:

- The Centennial Way Trail located east of the project site where there are playground facilities and a dog park. The starting point of the Centennial Way Trail is located approximately 750 feet from the project site at the southwest corner of Antoinette Lane and Chestnut Avenue.
- South San Francisco Public Library is located approximately 700 feet north of the project site at the northeast corner of El Camino Real and Chestnut Avenue.
- Baden High School is located approximately 2,200 feet southwest of the project site at the end of Southwood Drive.
- South San Francisco High School is located approximately 2,000 feet south of the project site on the east side of El Camino Real.
- California Golf Club of San Francisco is located approximately 3,000 feet southwest of the project site south of Westborough Boulevard and west of Orange Avenue.

Each of these key destinations is accessible via the existing pedestrian network and there does not appear to be any missing sidewalk links or crosswalks that would inhibit pedestrian access to/from the project site, with exception of unmarked crosswalks on El Camino Real at the unsignalized intersection with Southwood Drive/1st Street.

El Camino Real at Southwood Drive/1st Street

The *Active South City: South San Francisco's Bicycle and Pedestrian Master Plan* (City of South San Francisco, June 2022) ["Bicycle and Pedestrian Master Plan"] identifies the project site in a Pedestrian Focus Area and El Camino Real in the City's High Injury Network.

The intersection of El Camino Real at Southwood Drive/1st Street is located approximately 350 feet south of the project site and is currently unsignalized with no marked crosswalks on El Camino Real. As previously noted, El Camino Real is served by the Free South City Shuttle Blue Line and Orange Line buses as well as the SamTrans bus line 37 and ECR with stops at the northeast and southwest corners of the El Camino Real at Southwood Drive/1st Street intersection. The existing bus stops on opposite sides of El Camino Real likely result in pedestrian desire lines since the nearest marked crosswalks are located approximately 880 feet to the north Westborough Boulevard and 1,080 feet to the south at Orange Avenue.

Collision history at the intersection was reviewed using the Transportation Injury Mapping System (TIMS) SWITRS GIS Map by SafeTREC/UC Berkeley, which maps California crash data from the Statewide Integrated Traffic Records System (SWITRS). Based on the collision review, there were no pedestrian or bicycle-involved collisions at the intersection of El Camino Real at Southwood Drive/1st Street for the most recent 5-year

period available (June 30, 2018 to 2024); however, there was one pedestrian fatality on El Camino Real approximately 500 feet south of Westborough Boulevard. The crash report indicates a pedestrian violation and that it was raining.

Guidance from the City's Bicycle and Pedestrian Master Plan states that arterial streets with 30-40 mile per hour speeds and three lanes in one direction are recommended for crosswalks with pedestrian hybrid beacon or traffic signal control. In consideration that the peak hour traffic signal warrant is currently satisfied for the PM peak hour and that the intersection currently operates at Level of Service F during the mid-day and PM peak hours, it is recommended that the marked crosswalks be installed in conjunction with installation of a traffic signal control at this intersection.

The project alone is not expected to substantially increase pedestrian volumes across El Camino Real. Most of the key destinations are accessible via the existing pedestrian network. Except for a relatively small number of single-family residences that are unlikely to visit the project site in substantial volume on a daily basis, pedestrians originating from the Baden neighborhood can access signalized crossings at Westborough Boulevard to the north or Orange Avenue to the south without incurring substantially longer walking distance compared to crossing at the unsignalized, unmarked crossing at Southwood Drive.

Since the project cannot be held solely responsible for rectifying existing deficiencies, the project proposes to contribute a fair share of the improvement costs for future installation of a traffic signal as discussed further in the off-site traffic operations section.

Bicycle Facilities

This section evaluates the project's potential impact on bicycle facilities.

There are no bicycle lanes on El Camino Real (SR-82) adjacent to the project frontage; however, there are on-street bicycle lanes on both sides of El Camino Real (SR-82) north of Westborough Boulevard/Chestnut Avenue approximately 500 feet north of the project site. Future Class IV bicycle lanes along El Camino Real (SR-82) are identified in the City's General Plan Mobility Element. Additionally, the starting point of the Centennial Way Trail is located approximately 750 feet from the project site at the southwest corner of Antoinette Lane and Chestnut Avenue.

The project proposes to provide four (4) short-term bicycle racks on the east side of the building adjacent to the open outdoor seating area, which can be accessed via pedestrian walkway along the front (southerly facing side) of the building.

The project does not propose changes to the roadway frontage or project adjacent right-of-way because there are already two existing driveways.

In summary, the project would provide accessible bicycle connections, high-quality bicycle parking, and would not disrupt existing or planned bicycle facilities.

Transit

This section identifies existing/planned transit facilities and pedestrian routes to nearest transit stop or station.

The nearest bus stop is located approximately 300 feet south of the project site at the northeast corner of El Camino Real and 1st Street. El Camino Real is served by the Free South City Shuttle Blue Line and Orange Line buses as well as the SamTrans bus line 37 and ECR. BART South San Francisco Station is located approximately one mile north of the project site on Mission Road/McLellan Drive and San Bruno Station is located approximately two miles south of the project site on Huntington Avenue. The project site is within

walking distance with clear and direct paths to bus lines that provide connection to the nearby BART South San Francisco and San Bruno Stations.

The proposed project would not conflict with existing or planned transit facilities or the City's adopted plans, guidelines, policies, or standards regarding transit and transit access.

TDM Program Consistency

This section evaluates the project against program requirements, mode split targets, and other elements outlined in the latest Transportation Demand Management (TDM) Program ordinance.

The TDM requirements apply to Tier 2 projects, including hotels, retail, warehouse/distribution, and industrial uses, anticipated to generate greater than 100 daily trips. Unlike employee-based land uses, such as warehouse/distribution, office, and industrial uses, the majority of the trips generated by a fast-food restaurant such as the proposed project are generated by customers, many of which are already traveling in their travel mode of choice for other purposes and over which the project has little to no influence. Since the TDM measures primarily influence employee/commuter trips, Tier 2 requirements apply to projects that are anticipated to generate greater than 100 daily employee trips.

Appendix G contains an employee trip generation assessment memorandum for the proposed project. As documented in Appendix G, the proposed project is estimated to generate approximately 90 employee trips per day. Therefore, the proposed project is anticipated to generate fewer than 100 daily employee trips and is exempt from the TDM checklist requirements.

Safety Assessment (Non-CEQA)

This section identifies facilities on the City's High Injury Network and/or facilities that have safety enhancement projects identified as part of the General Plan, other safety studies, or by City staff. Evaluate whether increased walking/biking activity will result in multi-modal conflicts and any safety countermeasures.

El Camino Real, Westborough Boulevard, Chestnut Avenue and Orange Avenue are included on the City's High Injury Network. The proposed project is forecast to generate approximately 642 additional net daily trips compared to the existing development (No Project conditions), including 68 additional net trips during the MD peak hour and 48 additional net trips during the weekday PM peak hour. Since the project is forecast to add less than 100 peak hour vehicles to an existing High Injury Network facility, the project is anticipated to have no significant safety impact to the surrounding roadways.

Trucks

Since the project is not a relevant industrial use, the project will not result in any truck impacts and further analysis is not necessary.

Passenger Loading and Pick-Up/Drop-Off

Based on the travel characteristics of the proposed restaurant uses, the project is not expected to have a large concentration of pick-up/drop-off activity and passenger loading evaluation is not necessary.

Off-Site Traffic Operations

The Levels of Service for Existing Plus Project conditions are shown in Table 3. As shown in Table 3, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project conditions, except for the following intersections that are forecast to continue operating at LOS F:

- El Camino Real (NS) at Southwood Drive/1st Street (EW) – #3 (MD and PM)
- El Camino Real (NS) at Orange Avenue (EW) – #4 (PM only)

Since the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3] already satisfy the peak hour traffic signal warrant for Existing conditions, installation of a traffic signal is recommended at this location. While the intersection of El Camino Real (SR-82) and Southwood drive/1st Street [#3] is already operating at LOS F for Existing conditions, the project is forecast to increase the intersection volumes by less than 10%; therefore, the project would not substantially contribute to an operational deficiency at the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3] based on the City-established criteria. Nevertheless, the project should contribute its fair share cost toward the installation of a new traffic signal at the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3]. At the initial occupancy of the project, the project shall be conditioned to install "No U-Turn" signage at the southbound left turn lane on El Camino Real at Southwood Drive/1st Street in the interim condition until such time that the traffic signal is installed.

The intersection of El Camino Real (SR-82) and Orange Avenue [#4] is already operating at LOS F for Existing conditions and the project is forecast to increase the intersection volumes by less than 10%; therefore, the project would not substantially contribute to an operational deficiency at the intersection of El Camino Real (SR-82) and Orange Avenue [#4] based on the City-established criteria. No off-site improvements are necessary.

Detailed intersection Level of Service calculation worksheets are provided in Appendix D.

Table 3
Existing Plus Project Study Intersection LOS and Deficiency Assessment

ID	Study Intersection	Traffic Control[1]	Peak Hour	Existing		Existing Plus Project		Traffic Signal Warranted?	Existing Traffic	Project Traffic	Percent Volume Increase[4]	Substantial Effect?[5]
				Delay[2]	LOS[3]	Delay[2]	LOS[3]					
1	Antoinette Ln at	TS	MD	27.2	C	28.0	C	n/a	1,644	12	0.7%	No
	Chestnut Ave		PM	30.3	C	30.4	C	n/a	2,327	9	0.4%	No
2	El Camino Real at	TS	MD	36.5	D	37.5	D	n/a	3,512	86	2.4%	No
	Westborough Blvd		PM	41.7	D	43.7	D	n/a	4,694	62	1.3%	No
3	El Camino Real at	CSS	MD	57.2	F	77.0	F	Yes	2,271	85	3.7%	No
	Southwood Dr		PM	158.1	F	216.2	F	Yes	2,930	61	2.1%	No
	With Traffic Signal	TS	MD			6.0	A	Yes	2,271	85	3.7%	No
			PM			6.5	A	Yes	2,930	61	2.1%	No
4	El Camino Real at	TS	MD	47.2	D	48.2	D	n/a	2,514	31	1.2%	No
	Orange Ave		PM	83.9	F	91.9	F	n/a	3,298	22	0.7%	No
5	El Camino Real at	CSS	MD	-	-	16.4	B	No	2,203	189	8.6%	No
	Proj North Dwy A		PM	-	-	20.8	C	No	2,854	137	4.8%	No
6	El Camino Real at	CSS	MD	-	-	16.4	C	No	2,203	192	8.7%	No
	Proj Central Dwy B		PM	-	-	20.9	C	No	2,854	141	4.9%	No

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) Control delay is shown in seconds/vehicle.

(3) LOS = Level of Service. For intersections with traffic signal or all-way stop control, LOS is based on the overall average control delay. For intersections with cross street stop control, LOS is based on delay of the worst individual movement.

(4) Project-related increase in total intersection volume.

(5) Addition of project traffic causes an intersection to 1) operate at LOS F overall or the worst-case movement, or 2) increases traffic volumes by 10% at intersections already operating at LOS F under the comparable "no project" scenario.

INTERSECTION TRAFFIC CONTROL & OFF-SITE IMPROVEMENTS

The forecasted Existing Plus Project volumes at the currently unsignalized study intersection of El Camino Real (SR-82) at Southwood Drive/1st Street [#3] satisfy the peak hour signal warrant based on the CA MUTCD peak hour volume analysis (Warrant 3). Traffic signal warrant analysis worksheets are provided in Appendix E.

As previously noted, the peak hour volume signal warrant is currently satisfied for existing PM peak hour conditions. Additionally, the intersection of El Camino Real (SR-82) at Southwood Drive/1st Street [#3] currently operates at Level of Service F during the mid-day and PM peak hours and present potential pedestrian crossing hazards as an unsignalized intersection with unmarked crosswalks.

Since the project cannot be held solely responsible for rectifying existing deficiencies, the project proposes to contribute a fair share of the improvement costs for future installation of a traffic signal. Table 4 shows the project fair share calculations based on the percentage of net project traffic contributing to the overall traffic volumes at the intersection. As shown in Table 4, the project contributes approximately 2.0% to 3.6% to the overall traffic during the peak hours at the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3].

Since it is anticipated that additional funding needs may delay installation of a traffic signal until after project opening, the project shall be conditioned to install "No U-Turn" signage at the southbound left turn lane on El Camino Real at Southwood Drive/1st Street in the interim condition until such time that the traffic signal is installed.

Table 4
Project Fair Share Intersection Traffic Contribution

ID	Study Intersection	Peak Hour	Intersection Turning Movement Volumes			
			Existing (2024)	Existing Plus Project	Project	Project Percent of Total Future
3	El Camino Real at	MD	2,271	2,356	85	3.6%
	Southwood Dr	PM	2,930	2,991	61	2.0%

INTERSECTION TURN LANE QUEUING ANALYSIS

Table 5 summarizes intersection turn lane queuing analysis for the southbound left turn lane at the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3] to determine if there are adequate storage capacity to accommodate the southbound left turn and U-turn traffic volumes. The intersection turn lane queuing analysis is based on the Highway Capacity Manual (HCM) 95th-percentile back-of-queue methodology. HCM queue calculation worksheets are provided in Appendix D.

As shown in Table 5, the longest queue length of 91 feet is forecast to occur for Existing Plus Project conditions with ultimate improvements (i.e., installation of a traffic signal); queue lengths the Existing Plus Project scenario with existing lane geometry and future improvements are not forecast to exceed 91 feet, or approximately four vehicles. Therefore, the existing 172-foot southbound left turn lane is anticipated to provide more than sufficient storage length to accommodate the 95th-percentile queues for Existing Plus Project conditions with existing or future traffic controls.

Furthermore, the average delays for the southbound left turn movement are projected to be LOS C and LOS D or during mid-day and PM peak hours, respectively. No queuing issue is anticipated at the southbound left turn lane at the intersection of El Camino Real (SR-82) and Southwood Drive/1st Street [#3] for Existing Plus Project with existing or future traffic controls.

DRIVE THROUGH QUEUING ANALYSIS

The evaluation of peak drive through window queuing demand for the proposed project is based on historical drive through queue surveys at eight (8) existing In-N-Out restaurants throughout Northern California. The survey data was compiled from various traffic studies prepared for other In-N-Out developments and new surveys at the nearest existing location at 372 Gellert Boulevard in Daly City. These survey sites are included in the data set because they represent the typical In-N-Out Burger restaurant with modern kitchen and drive through configurations. Additionally, the surveys at these locations were conducted for 12 or more hours to verify that peak queues typically occur during the peak lunch hours from 11:00 AM to 2:00 PM and peak dinner hours from 4:00 PM to 8:00 PM.

To evaluate adequacy of the proposed drive through lane for In-N-Out, this analysis compiled data of actual vehicular queues observed within the drive through lanes at existing In-N-Out Burger restaurants throughout Northern California. The survey data was compiled from various traffic studies prepared for other development proposals and is provided in Appendix H. A summary is provided below:

Store Address	Peak Queue Observed During Peak Periods	
	Weekday PM (4-6PM)	Saturday MD (12-2PM)
1364 Holiday Ln, Fairfield, CA 94534	17	23
1159 N Rengstorff Ave, Mountain View, CA 94043	13	31
53 W El Camino Real, Mountain View, CA 94040	17	19
5490 Crossings Dr, Rocklin, CA 95677	12	14
445 Industrial Rd, San Carlos, CA 94070	17	n/a
32060 Union Landing Blvd, Union City, CA 94587	17	25
170 Nut Tree Pkwy, Vacaville, CA 95687	18	29
372 Gellert Blvd, Daly City, CA 94015	33	33
Average	18	25

As shown above, the peak drive through queue ranged from 12 to 33 vehicles during the weekday PM peak period and 14 to 33 vehicles during the Saturday MD peak period. On average, the peak queues observed equate to 18 vehicles during the weekday PM peak period and 25 vehicles during the Saturday MD peak period.

Based on the surveyed average peak queue length, a minimum storage capacity of 25 vehicles is recommended for the proposed project to accommodate the average peak queue lengths during peak lunch and dinner periods. With the project site plan proposing storage capacity for up to 39 vehicles, the project site is anticipated to provide more than sufficient drive through storage capacity and would accommodate the maximum drive through queue observed at any individual survey location (33 vehicles).

Table 5
Intersection Turn Lane Queuing Analysis

ID	Study Intersection	Lane[1]	Available Overall Storage Length	Peak Hour	Volume (Veh/Hr)	Delay (sec/veh)	Level of Service	Peak Queue Vehicle[2]	Peak Queue Length[3]	Adequate Storage?
3	El Camino Real at Southwood Dr									
	Existing (Unsignalized)	SB Left/ U-Turn	172' left turn lane + 95' Transition = 267'	MD	116	14.28	B	0.91	25'	Yes
				PM	127	31.54	D	1.93	48'	Yes
	With Traffic Signal	SB Left/ U-Turn	172' left turn lane + 95' Transition = 267'	MD	116	3.50	A	3.30	83'	Yes
				PM	127	6.98	A	3.63	91'	Yes

Notes:

(1) SB = Southbound; EB = Eastbound; WB = Westbound

(2) 95th-percentile queue shown in vehicles per lane.

(3) Queue length based on 25 feet of queue length per vehicle; rounded up to a minimum of 25 feet.

6. CONCLUSIONS

This section summarizes key findings from this report.

PROJECT TRIP GENERATION

The proposed project is forecast to result in approximately 642 additional daily trips compared to the existing development, including 68 additional trips during the MD peak hour and 48 additional trips during the PM peak hour.

CEQA IMPACTS

The proposed project would not create conditions that are inconsistent with mobility, safety, or other related goals, policies, and actions set forth in the General Plan.

The proposed project is a local serving use that is less than 50,000 square feet; therefore, the project satisfies the City-established screening threshold for "neighborhood-serving retail project" and may be presumed to result in a less than significant VMT impact under CEQA – no mitigation is required.

With implementation of the minimum CA MUTCD requirements or the recommended prohibition of on-street parking along the entirety of the project frontage to approximately 98 feet south of the Project South Driveway, the project would not worsen existing hazards or cause new design-related hazards such as restricted line of sight.

The project would not substantially contribute to an operational deficiency at the study area facilities and therefore is not expected to substantially increase response times.

Based on the project's location outside high-risk fire zones, evacuation analysis is not necessary and the project would have no impact.

NON-CEQA IMPACTS

Based on the City-established criteria, the proposed project was found to have no impacts to the following non-CEQA issues evaluated:

- On-site circulation
- Pedestrian facilities
- Bicycle facilities
- Transit
- TDM program consistency
- Safety assessment
- Trucks
- Passenger loading and pick-up/drop-off
- Off-site traffic operations
- Intersection traffic control
- Drive through queuing analysis

SUMMARY OF RECOMMENDATIONS

1. For improved sight lines between vehicles as well as bicycles and pedestrians, it is recommended that on-street parking be prohibited on El Camino Real (SR-82) along the entirety of the project frontage to

approximately 98 feet south of the Project South Driveway. *(See Section 5. Analysis and Deficiency Identification, Safety (CEQA))*

2. It is recommended that stop controls be installed at the project egress driveways with applicable one-way signage along the El Camino Real (SR-82) median per CA MUTCD standards. *(See Section 5. Analysis and Deficiency Identification, On-Site Circulation)*

3. The project should contribute a fair share payment toward the cost of installing a traffic signal at the intersection of El Camino Real at Southwood Drive/1st Street. The project trip contribution is estimated at approximately 3.6% of the overall traffic volume entering the intersection. *(See Section 5. Analysis and Deficiency Identification, Intersection Traffic Control and Off-Site Improvements - Table 4)*

4. In addition to a fair share payment toward the future installation a traffic signal control at the intersection of El Camino Real and Southwood Drive/1st Street, the project shall be conditioned to install "No U-Turn" signage at the southbound left turn lane on El Camino Real at Southwood Drive/1st Street in the interim condition until such time that the traffic signal is installed.

APPENDICES

Appendix A Glossary

Appendix B Scoping Agreement

Appendix C Volume Count Data sheets

Appendix D Level of Service Worksheets

Appendix E Traffic Signal Warrant Analysis Worksheets

Appendix F In-N-Out Trip Generation Data Sheets

Appendix G Employee Trip Generation Assessment

Appendix H In-N-Out Drive Through Queue Survey Data Sheets

APPENDIX A

GLOSSARY

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
LOS	Level of Service
PCE	Passenger Car Equivalent
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

ACTUATED SIGNAL CONTROL: A type of traffic signal control in which display of each phase depends on whether the corresponding phase detector has registered a service call or the phase is on recall.

ACTUATION: Detection of a roadway user that is forwarded to the signal controller.

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CALL: An indication within a signal controller that a particular phase is waiting for service, either through actuation from a roadway user or phase recall.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass through a roadway facility during a specified period.

CHANNELIZATION: The separation of conflicting traffic movements by use of pavement markings, raised curbs, or other suitable means to facilitate free flow movement.

CLEARANCE INTERVAL: Equal to the yellow plus all-red time, if any, when a traffic signal changes between phases (i.e., the amount of time between the end of a green light from one movement to the beginning of a green light for the next).

COORDINATED SIGNAL CONTROL: A type of traffic signal control in which non-coordinated phases associated with minor movements are constrained such that the coordinated phases are served at a specific time during the signal cycle, thus maintaining the efficient progression of traffic flow along the major roadway.

CONTROL DELAY: The portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign). It includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay.

CORDON: An imaginary boundary line around or across a study area across which vehicles, persons, or other information can be collected for survey and analytical purposes.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic traveling at a given speed to radically alter their speed or trajectory.

CYCLE: A complete sequence of signal indications for all phases.

CYCLE LENGTH: The total time for a traffic signal to complete one full cycle.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The total additional travel time experienced by a roadway user (driver, passenger, bicyclist, or pedestrian) beyond that required to travel at a desired speed.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device used to count or determine the presence of a roadway user.

DESIGN SPEED: A speed used for purposes of designing horizontal and vertical alignments of a highway.

DIRECTIONAL SPLIT: The percent of two-way traffic traveling in a specified direction.

DIVERSION: The rerouting of traffic from a normal path of travel between two points, such as to avoid congestion or perform a secondary trip.

FREE FLOW: Traffic flow that is unaffected by a traffic control and/or or upstream or downstream conditions.

GAP: Time or distance between two vehicles measured from rear bumper of the front vehicle to front bumper of the second vehicle.

GAP ACCEPTANCE: The method by which a driver accepts an available gap in traffic to enter or cross the road.

HEADWAY: Time or distance between two successive vehicles measured from same point on both vehicles (i.e., front bumper to front bumper).

LEVEL OF SERVICE: A grading scale of quantitative performance measures representing the quality of service of a transportation facility or service from an average traveler's perspective.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MULTI-MODAL: More than one mode, such as automobile, transit, bicycle, and pedestrian.

OFFSET: The time interval between the beginning of a traffic signal cycle at one intersection and the beginning of signal cycle an adjacent intersection.

PLATOON: A set of vehicles traveling at similar speed and moving as a general group with clear separation between other vehicles ahead and behind.

PASSENGER CAR EQUIVALENT: A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEDESTRIAN CLEARANCE INTERVAL: Also known as the "Flashing Don't Walk" interval, it signals the end of pedestrian entry into the crosswalk following the "Walk" indication and provides time for pedestrians who have already entered the crosswalk to finishing crossing.

PEAK HOUR: The hour within a day in which the maximum volume occurs.

PEAK HOUR FACTOR: The peak hour volume divided by the four times the peak 15-minute flow rate.

PHASE: In traffic signals, the green, yellow, and red clearance intervals assigned to a specified traffic movement.

PRETIMED SIGNAL: A traffic signal operation in which the cycle length, phasing sequence, and phasing times are predetermined and fixed, regardless of actual demand for any given traffic movement. Also known as a fixed time signal.

PROGRESSION: The coordinated movement of vehicles through signalized intersections along a corridor.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

RECALL: A signal phasing operation in which a specified phase places a call to the signal controller each time a conflicting phase is served, thus ensuring the specified phase will be serviced again.

SEMI-ACTUATED CONTROL: A type of traffic signal control in which only the minor movements are provided detection.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible, including reaction and response time.

TRIP OR TRIP END: The one-directional movement of a person or vehicle. Every trip has an origin and a destination at its respective ends (i.e., trip ends). In terms of site trip generation, the same vehicle entering and exiting a site generates two trips: one inbound trip and one outbound trip.

TRIP GENERATION RATE: The rate at which a land use generates trips per the specified land use variable, such per dwelling unit or per thousand square feet.

TRUCK: A heavy motor vehicle generally used for transporting goods.

VEHICLE MILES TRAVELED: A measure of the amount and distance of automobile travel essentially calculated as the sum of each trip times the trip length.

APPENDIX B

SCOPING AGREEMENT

APPENDIX B

SCOPING AGREEMENT

MEMORANDUM OF UNDERSTANDING

TO: CITY OF SOUTH SAN FRANCISCO

FROM: Giancarlo Ganddini | GANDDINI GROUP, INC.

DATE: February 26, 2024

SUBJECT: Transportation Study Scoping Agreement for In-N-Out Burger (972 El Camino Real) Project
Project No. 19710

The purpose of this scoping document is to outline the fundamental parameters and assumptions of the traffic analysis to be prepared for the project for review and concurrence by City of South San Francisco staff.

PROJECT DESCRIPTION

The 1.38-acre project site is located east of El Camino Real (State Route 82) approximately mid-block between Westborough Boulevard/Chestnut Avenue and Southwood Drive/1st Street, addressed at 972 El Camino Real, in the City of South San Francisco, California. The project site is currently developed with an existing 3,000 square foot fast-food restaurant with drive through window (Burger King). Figure 1 shows the project location map.

The proposed project involves redevelopment of the project site with a new 3,887 square foot In-N-Out Burger restaurant with drive through window and associated landscaping and parking lot improvements. Vehicular access is proposed via three driveways on El Camino Real, including one driveway north of the proposed building that will provide access to five (5) parking spaces for employees only. The proposed site plan is shown on Figure 2.

IMPACT ASSESSMENT

Based on review of the project and the City's Transportation Analysis Guidelines (October 2022), the assessment shall consist of a Tier 2 level of analysis that evaluates the following issues:

- Consistency with Plans and Policies: Document and assess the project's consistency with relevant goals, policies, and actions set forth in the City's General Plan and any relevant area/specific plans and the Mobility Element.

- VMT: Prepare a VMT screening analysis based on City-established screening criteria. The proposed project satisfies the screening criteria for "neighborhood-serving retail project" (less than 50,000 square feet); therefore, more detailed VMT modeling/mitigation is not necessary.

- Safety (CEQA): Evaluate existing hazards within the project vicinity and assess whether the project would create or substantially contribute to a roadway or design hazard, including restricted lines of sight or other design-related issues. Specifically, the project shall evaluate line of sight for vehicle egress at the project driveways based on the standards established in the Highway Design Manual (California Department of Transportation, 7th Edition).

- Emergency Access: Assess routes to/from key emergency services (such as fire stations and emergency rooms) and whether the project would increase response times.

- Evacuation: This element of the City's guidelines only applies to High Risk or Very High Risk wildfire zones. Based on the project's location outside high-risk fire zones, evacuation analysis is not necessary.

- On-Site Circulation: Review and evaluate site access locations, loading zones, and trash collection areas with respect to operations and safety for all modes of transportation. Identify bicycle parking facilities and bicycle and pedestrian between roadway and primary building access. Review sight distance, turning radii, and potential hazards to bicycles, pedestrians, and vehicles at the driveways.

- Pedestrian Facilities: Identify existing/planned pedestrian facilities adjacent to the project, pedestrian routes to the nearest transit stop and key destinations, and any missing sidewalk links, unmarked crosswalks, or other potential deficiencies within one-half mile of the project site. Assess how the project will affect local pedestrian circulation.

- Bicycle Facilities: Identify existing/planned bicycle facilities that may be affected by the project, compare existing conditions to City's Bicycle/Pedestrian Plan, note level of traffic stress along immediate access route to the project, and assess how the project will affect bicycle travel.

- Transit: Identify existing/planned transit facilities and pedestrian routes to nearest transit stop or station. If appropriate document how the project improves access to or utilization of transit.

- TDM Program Consistency: Evaluate project against program requirements, mode split targets, and other elements outlined in the latest TDM Program ordinance. The analysis shall document the Tier 2 TDM programs selected for implementation.

- Safety Assessment (non-CEQA): Identify facilities on the City's High Injury Network and/or facilities that have safety enhancement projects identified as part of the General Plan, other safety studies, or by City staff. Evaluate whether increased walking/biking activity will result in multi-modal conflicts and any safety countermeasures.

- Trucks: Since the project is not industrial use, truck analysis is not necessary.

- Passenger Loading and Pick-Up/Drop-Off: Based on the travel characteristics of restaurant uses, passenger loading evaluation is not necessary.

- Off-Site Traffic Operations: Analyze study intersection Levels of Service based on the Highway Capacity Manual (7th Edition) intersection delay methodology and determine the significance of project impacts in accordance with parameters and guidelines established by the City of South San Francisco. The "Off-Site Traffic Operations" section below outlines the fundamental assumptions for the evaluation.

- Intersection Traffic Control: Evaluate the need for installation of a traffic control signal at un-signalized study intersections based on the California Manual on Uniform Traffic Control Devices (CA MUTCD) peak hour signal warrant.

OFF-SITE TRAFFIC OPERATIONS

Project Vehicle Trip Generation

In-N-Out Burger restaurants are not open to the public during the weekday AM peak period of commuter traffic (7-9AM); therefore, analysis of the AM peak hour is unnecessary as the project trip generation will be negligible during these hours. Peak hour trip generation for In-N-Out Burger restaurants typically occurs during the lunch period between 11:30 AM and 1:30 PM; therefore, the analysis will evaluate off-site traffic operations for the mid-day (MD) peak hour and PM peak hour.

Attachment A contains the trip generation plots and survey data for In-N-Out Burger. Based on the trendlines shown in the trip generation plots, there appears to be an inverse relationship between the number of trips generated and the gross floor area. In other words, the trip generation rate per thousand square feet of gross floor area tends to decrease as the gross floor area increases. Therefore, trip generation for the proposed In-N-Out Burger is based on the average number of trips observed rather than use of the calculated average trip rates since this is expected to provide a more accurate approximation of the proposed project's trip generation.

Table 1 shows the existing, proposed, and net project trip generation. Trip generation for the existing fast-food restaurant (Burger King) is based on average rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) for Land Use Code 934 (Fast-Food Restaurant With Drive-Through Window). The proposed project trip generation forecast is based on the average trip generation observed at existing In-N-Out Burger restaurants throughout California.

As shown in Table 1, the proposed project is forecast to result in approximately 625 additional daily trips compared to the existing development, including 71 additional trips during the MD peak hour and 49 additional trips during the PM peak hour.

Project Trip Distribution

Figures 3 and 4 show the forecast directional distribution patterns for the project-generated trips. The trip distribution patterns were developed using engineering judgement based on review of surrounding land uses and the local and regional roadway facilities in the project vicinity.

Study Area

The study area shall consist of the following intersections:

1. Antoinette Lane (NS) at Chestnut Avenue (EW)[1]
2. El Camino Real (SR-82) (NS) at Westborough Boulevard/Chestnut Avenue (EW)
3. El Camino Real (SR-82) (NS) at Southwood Drive/1st Street (EW)
4. El Camino Real (SR-82) (NS) at Orange Avenue (EW)
5. El Camino Real (SR-82) (NS) at Project Driveway A (EW)
6. El Camino Real (SR-82) (NS) at Project Driveway B (EW)
7. El Camino Real (SR-82) (NS) at Project Driveway C (EW)

[1] (NS) = north-south roadway; (EW) = east-west roadway

Analysis Scenarios

The assessment shall evaluate the following analysis scenarios for weekday MD peak hour and PM peak hour conditions:

- Existing
- Existing Plus Project
- Cumulative Without Project (if necessary)
- Cumulative With Project (if necessary)

If cumulative conditions analysis is necessary, Ganddini Group hereby requests the City provide a list of reasonably foreseeable projects within one-half mile of the project site to be considered in the analysis.

Traffic Counts

New intersection turning movement counts will be collected at the existing study intersections on a typical weekday (Tuesday, Wednesday, or Thursday) during the MD peak period (11:30 AM – 1:30 PM) and the PM peak period of commuter traffic (4:00 PM – 6:00 PM). Counts shall be conducted while local schools are in session and shall avoid weeks with a holiday, special events, construction activities, or other conditions which can alter the counts.

DRIVE THROUGH QUEUING ANALYSIS

An evaluation of peak drive-through window queuing demand for the proposed project shall be provided based on historical drive-through queue surveys at seven (7) existing In-N-Out restaurants throughout Northern California. The survey data was compiled from various traffic studies prepared for other development proposals and is provided in Attachment B. A summary is provided below:

Store Address	Peak Queue Observed During Peak Periods	
	Weekday PM (4-6PM)	Weekend MD (12-2PM)
1364 Holiday Ln, Fairfield, CA 94534	17	23
1159 N Rengstorff Ave, Mountain View, CA 94043	13	31
53 W El Camino Real, Mountain View, CA 94040	17	19
5490 Crossings Dr, Rocklin, CA 95677	12	14
445 Industrial Rd, San Carlos, CA 94070	17	n/a
32060 Union Landing Blvd, Union City, CA 94587	17	25
170 Nut Tree Pkwy, Vacaville, CA 95687	18	29
Average	16	24

As shown above, the peak drive through queue ranged from 12 to 18 vehicles on weekdays and 14 to 31 vehicles on weekends. The average peak queue observed is equal to 16 vehicles on weekdays and 24 vehicles on weekends. The traffic analysis shall include a description of standard drive-through operations, the expected peak demand, and a drive-through traffic management plan.

CONCLUSION

We appreciate the opportunity to provide this memorandum of understanding for your review. Should you have any questions or comments, please contact me at 714-795-3100 ext. 101.

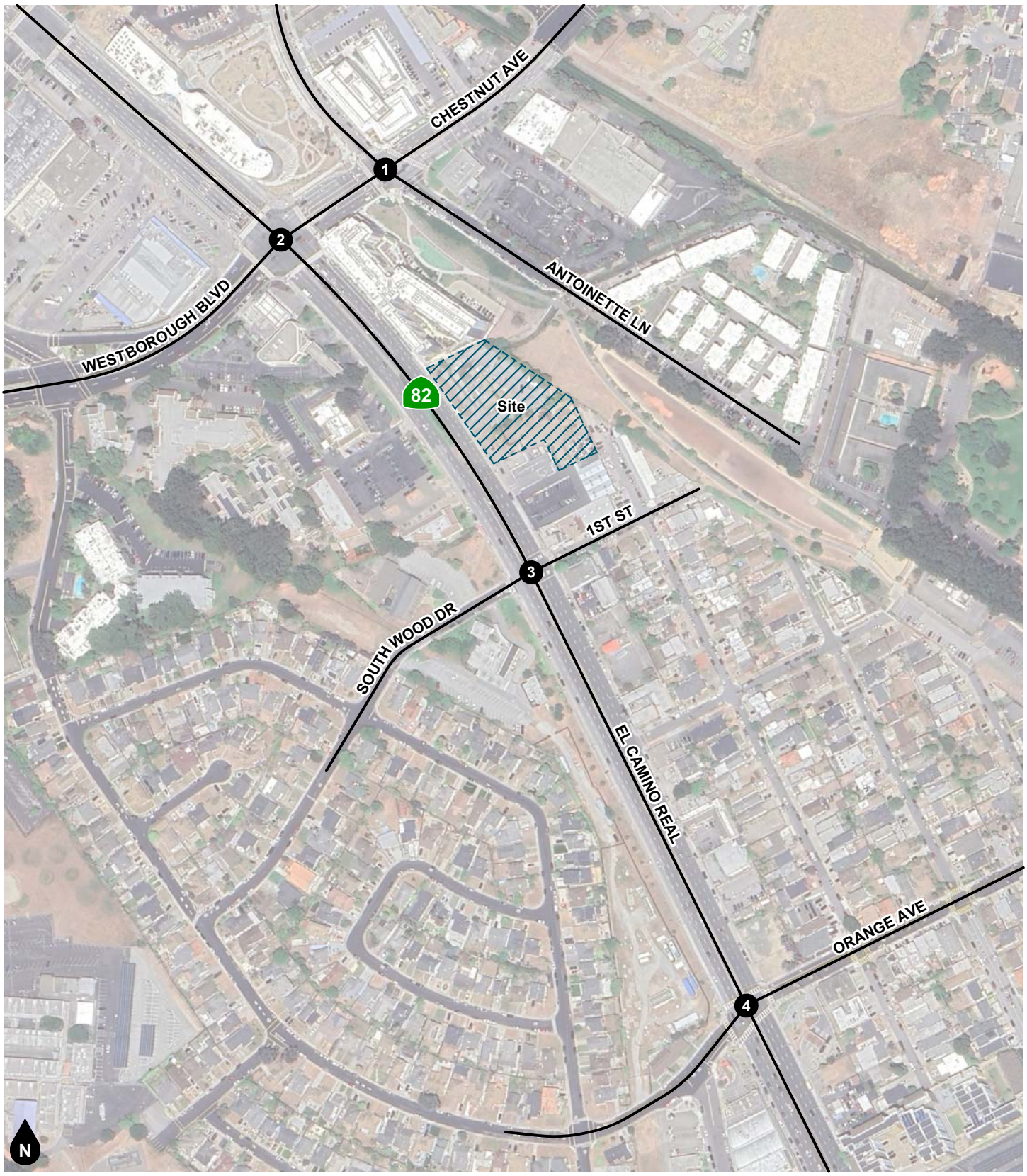
Table 1
Project Trip Generation

Trip Generation Rates								
		MD Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	% In	% Out	Rate	% In	% Out	Rate	Rate
Fast-Food Restaurant with Drive-Through Window	ITE 934	51%	49%	44.61	52%	48%	33.03	467.48
In-N-Out Burger with Drive-Through Window	[a]	-	-	-	-	-	-	-

Trips Generated									
			MD Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Existing Fast Food Restaurant	3.000	TSF	68	66	134	52	48	100	1,402
Pass-By Trips (50%) [3]			*-34*	*-33*	*-67*	*-26*	*-24*	*-50*	*-701*
Subtotal - Existing Trips			34	33	67	26	24	50	701
In-N-Out Burger With Drive Through Window	3.887	TSF	140	136	276	103	97	200	2,652
Pass-By Trips (50%) [3]			*-70*	*-68*	*-138*	*-52*	*-49*	*-101*	*-1,326*
Subtotal - Proposed Trips			70	68	138	51	48	99	1,326
Net New Trips Generated			**+36**	**+35**	**+71**	**+25**	**+24**	**+49**	**+625**

Notes:

1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.
   [a] = Average trips observed at existing In-N-Out Restaurants throughout California; see Attachment A.
2. TSF = Thousand Square Feet
3. Date from the ITE Trip Generation Manual indicates an average pass-by rate of 55% during the peak hours for Land Use Code 934 (fast-food-restaurant with drive through window). To provide a conservative estimate, this analysis assumes a pass-by rate of 50%.



Legend

(#) Study Intersection

Figure 1
Project Location Map

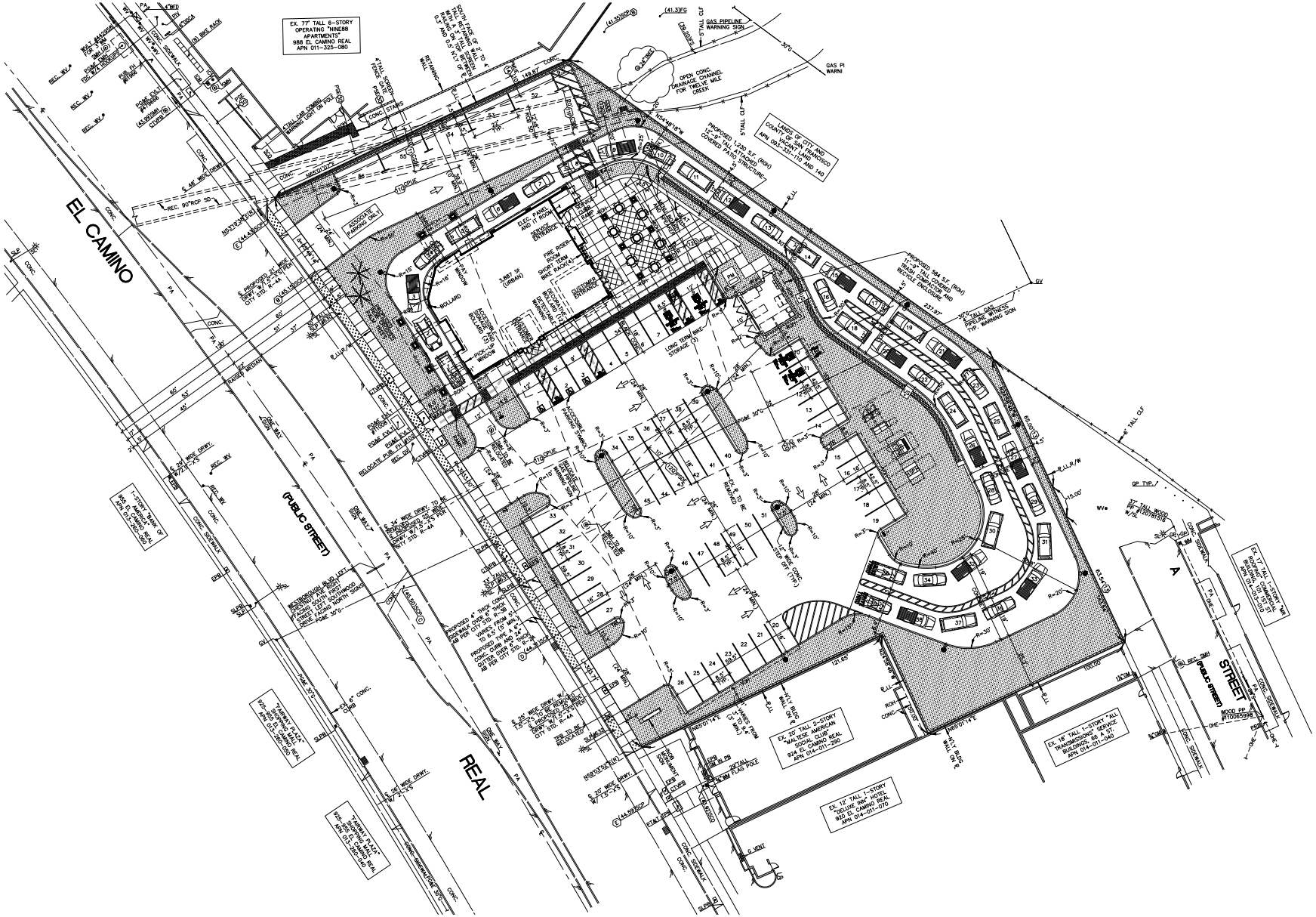


Figure 2
Site Plan

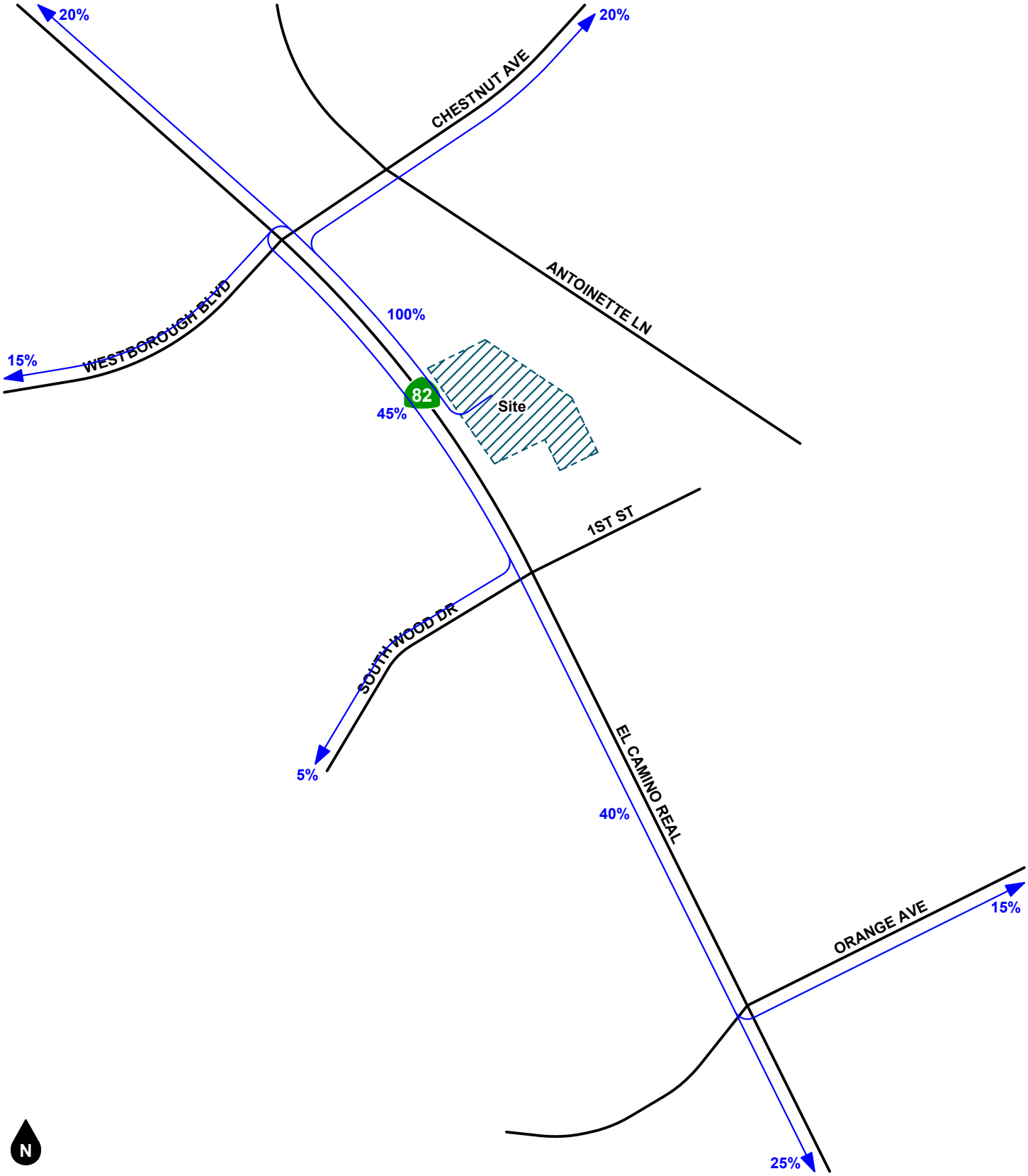


Figure 3
Project Trip Distribution - Outbound

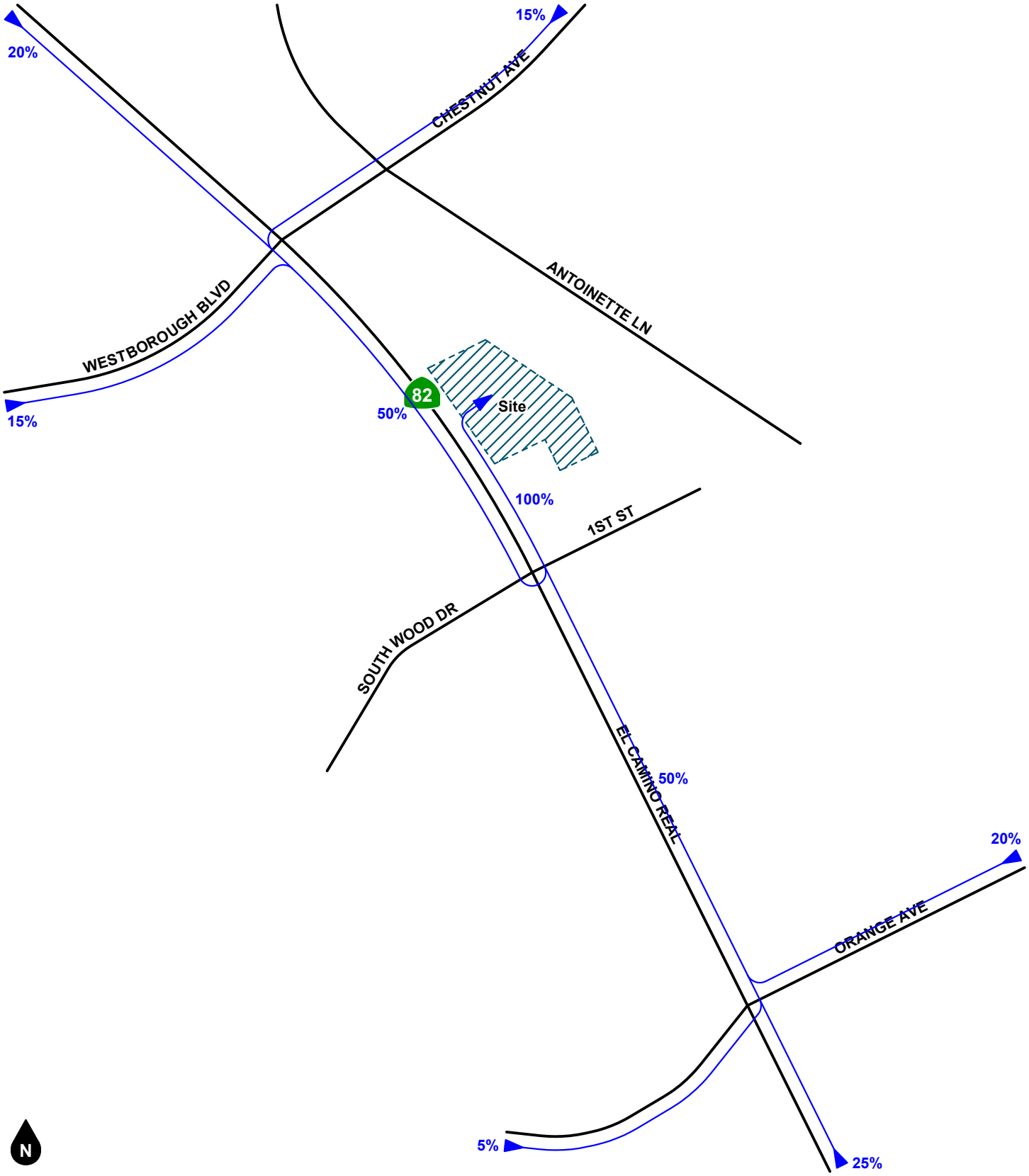


Figure 4
Project Trip Distribution - Inbound

Attachment A
In-N-Out Trip Generation Data

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday, peak hour of adjacent street traffic,
One hour between 11 a.m. and 2 p.m.

ID	Location	Full Address	1,000 SF GFA	Weekday MD			Rate (Trips/TSF)
				In	Out	Total	
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	136	135	271	96.79
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	138	135	273	75.83
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	196	159	355	93.42
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	265	270	535	142.67
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	126	131	257	68.53
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	90	83	173	46.13
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	98	86	184	49.07
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	96	81	177	47.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	131	159	290	93.55
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	178	157	335	112.79
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	154	150	304	96.20
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	131	136	267	72.85
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	120	107	227	77.95
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	127	127	254	79.87
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	117	127	244	66.58
Total			51.602	2,103	2,043	4,146	1219.43
Average			3.440	140	136	276	81.30

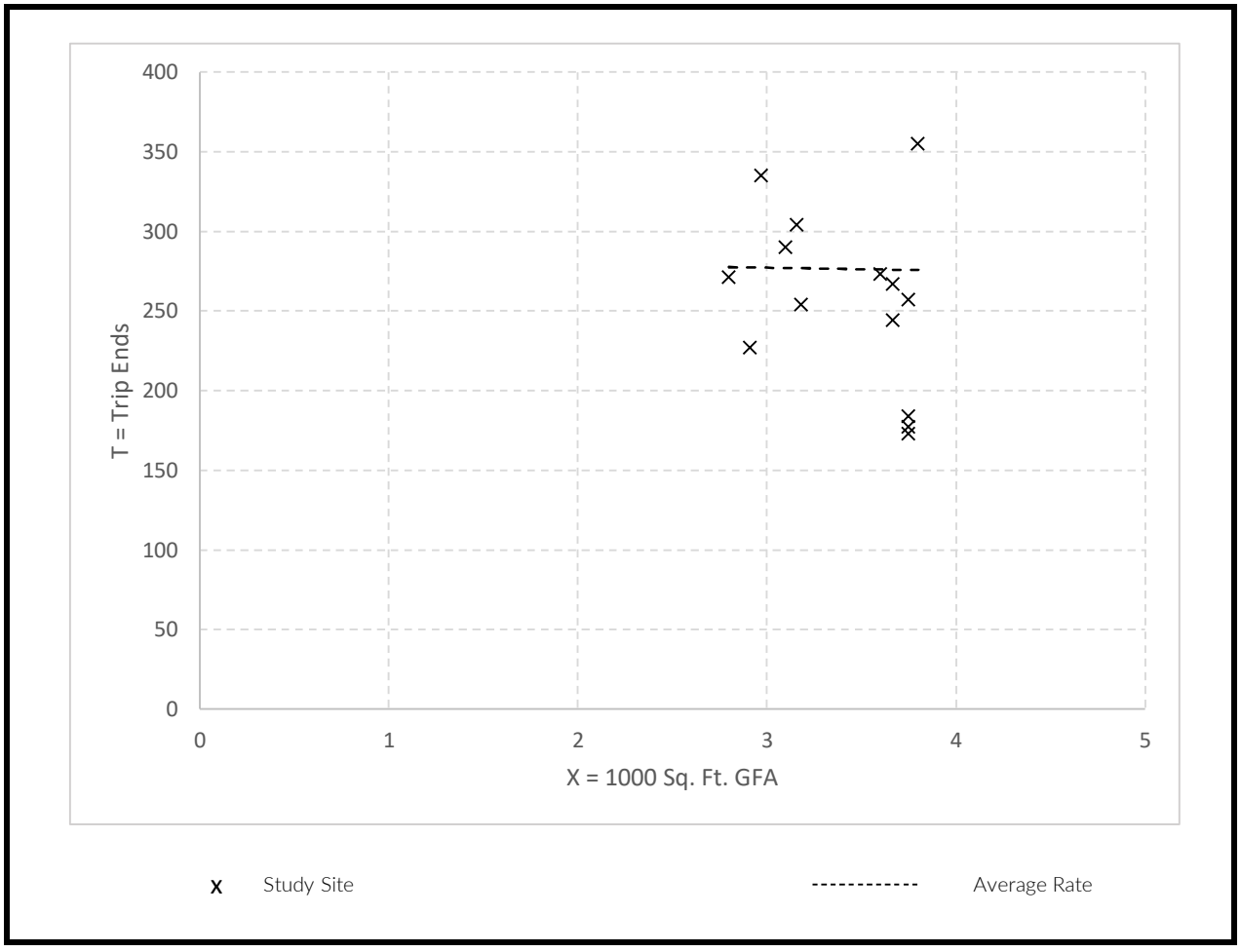
In-N-Out Burger Restaurant (with Drive-Through Window)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, peak hour of adjacent street traffic, One hour between 11 a.m. and 2 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	15
1000 Sq. Ft. GFA (Average):	3.440
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
81.30	46.13 - 142.67	25.1

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday, peak hour of adjacent street traffic,
One hour between 4 and 6 p.m.

ID	Location	Full Address	1,000 SF GFA	Weekday PM			Rate (Trips/TSF)
				In	Out	Total	
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	94	89	183	65.36
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	69	73	142	39.44
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	127	111	238	62.63
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	128	107	235	62.67
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	66	75	141	37.60
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	84	75	159	42.40
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	87	65	152	40.53
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	75	57	132	35.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	110	113	223	71.94
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	141	138	279	93.94
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	137	133	270	85.44
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	137	133	270	73.67
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	98	92	190	65.25
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	87	100	187	58.81
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	98	100	198	54.02
Total			51.602	1,538	1,461	2,999	888.90
Average			3.440	103	97	200	59.26

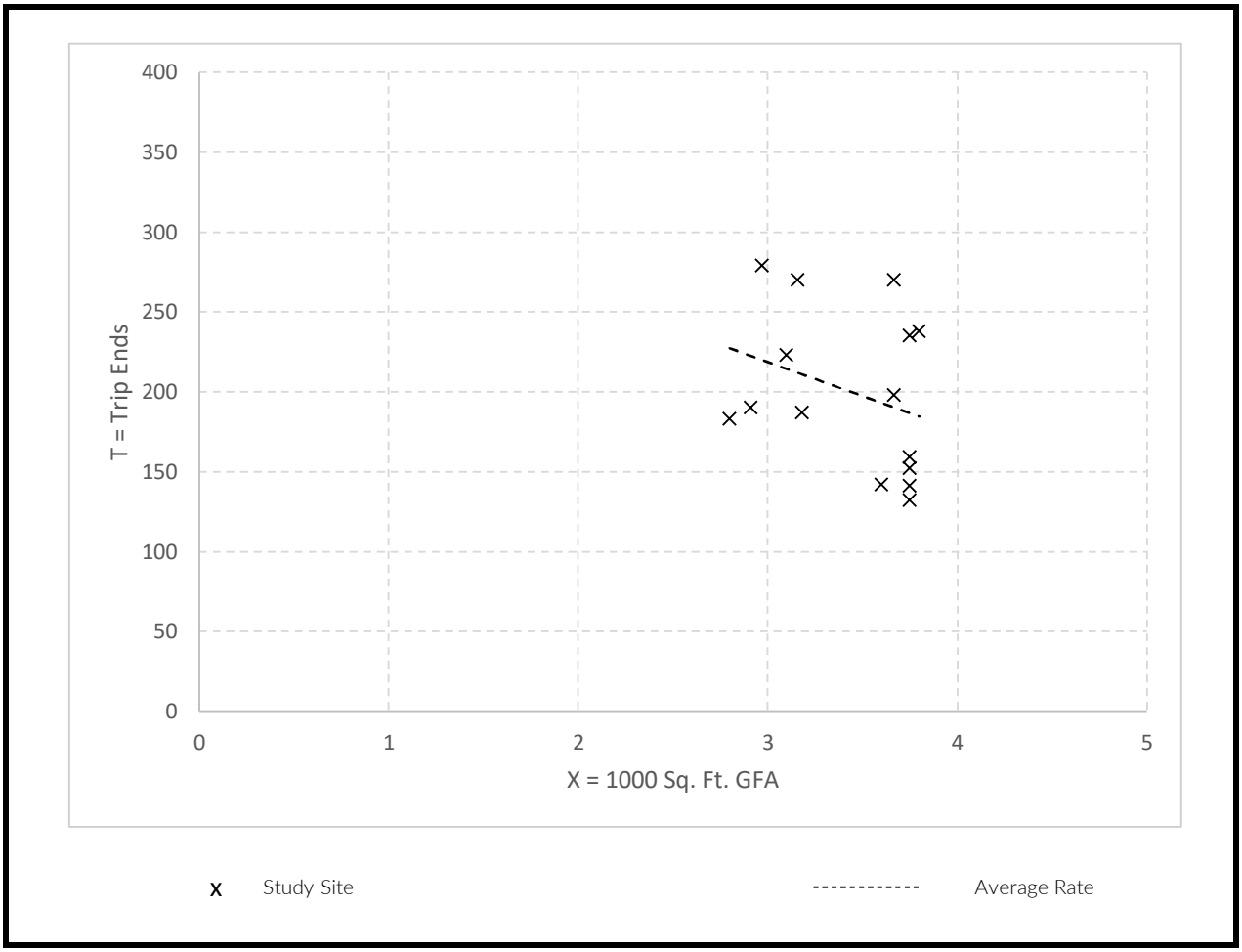
In-N-Out Burger Restaurant (with Drive-Through Window)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, peak hour of adjacent street traffic, One hour between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	15
1000 Sq. Ft. GFA (Average):	3.440
Directional Distribution:	52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
59.26	35.2 - 93.94	17.24

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday

ID	Location	Full Address	1,000 SF GFA	Weekday Total	Rate (Trips/TSF)
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	-	-
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	-	-
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	-	-
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	5,137	1369.87
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	2,225	593.33
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	1,720	458.67
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	1,879	501.07
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	1,662	443.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	2,535	817.74
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	2,962	997.31
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	3,153	997.78
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	2,864	781.45
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	2,376	815.93
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	2,485	781.45
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	2,825	770.80
Total			41.402	31,823	9328.60
Average			3.450	2,652	777.38

In-N-Out Burger Restaurant (with Drive-Through Window)

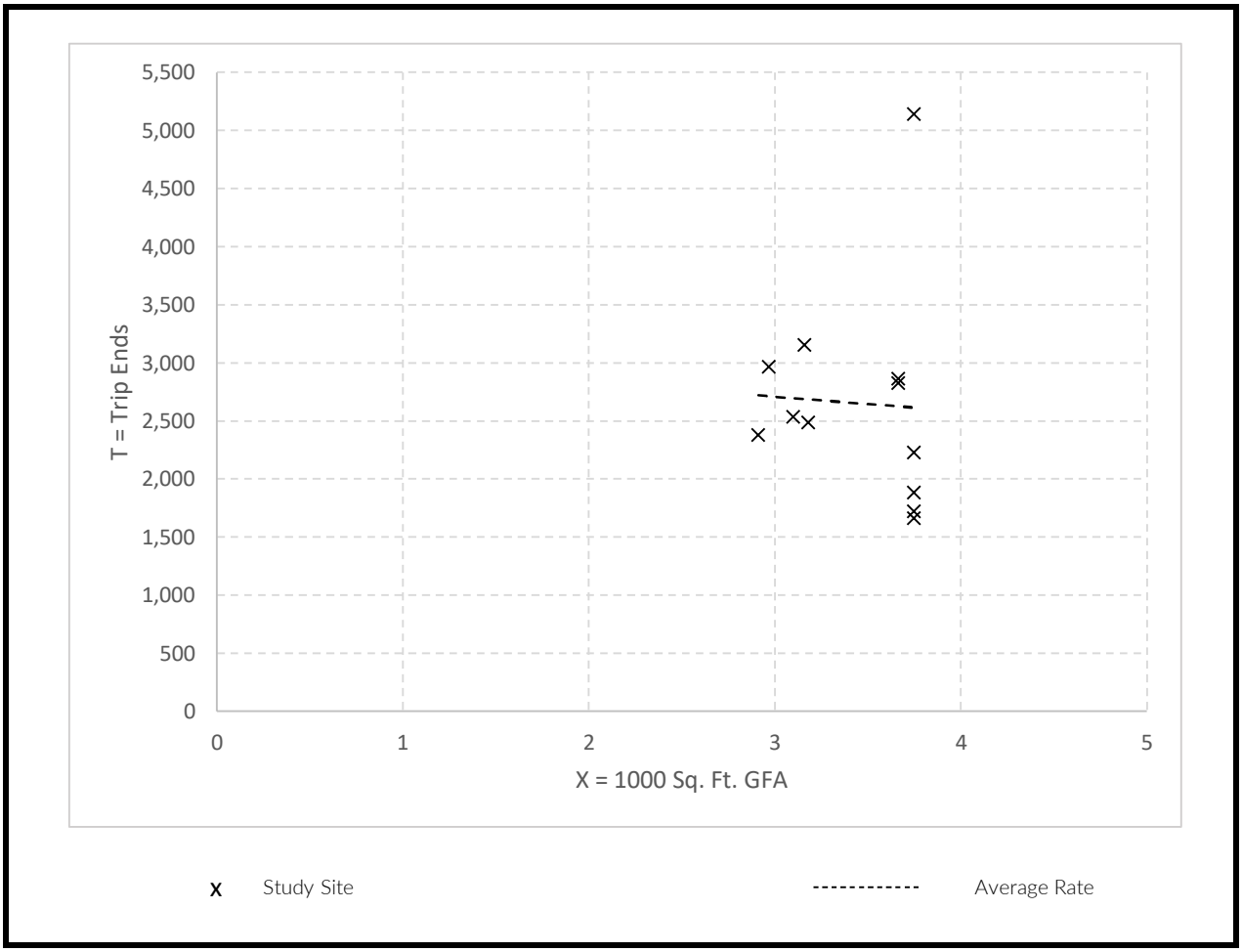
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 15
1000 Sq. Ft. GFA (Average): 3.450
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
777.38	443.2 - 1369.87	254.08

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

Redondo Beach
(3801 Inglewood Ave, Redondo Beach, CA 90278)

Wednesday, May16th 2012 CITY: Redondo Beach PROJECT: IN N OUT

Prepared by

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	32		24		23
00:15						12:15	42		42		26
00:30						12:30	36		29		11
00:45						12:45	27	137	38	133	11
01:00						13:00	31		26		17
01:15						13:15	28		23		16
01:30						13:30	32		31		11
01:45						13:45	X	91	X	80	9
02:00						14:00					10
02:15						14:15					8
02:30						14:30					15
02:45						14:45					13
03:00						15:00					10
03:15						15:15					12
03:30						15:30					14
03:45						15:45					13
04:00						16:00	17		16		16
04:15						16:15	18		19		19
04:30						16:30	29		24		17
04:45						16:45	18	82	23	82	18
05:00						17:00	28		23		22
05:15						17:15	19		19		24
05:30						17:30	24		21		23
05:45						17:45	28	99	21	84	16
06:00						18:00	13		26		18
06:15						18:15	X		X		23
06:30						18:30	X		X		25
06:45						18:45	X	13	X	26	26
07:00						19:00					23
07:15						19:15					27
07:30						19:30					19
07:45						19:45					21
08:00						20:00					23
08:15						20:15					22
08:30						20:30					18
08:45						20:45					28
09:00						21:00					27
09:15						21:15					16
09:30						21:30					17
09:45						21:45					16
10:00					4	22:00					15
10:15					8	22:15					18
10:30					6	22:30					19
10:45					6	22:45					16
11:00					11	23:00					15
11:15					21	23:15					13
11:30	24		34		23	23:30					12
11:45	25	49	37	71	21	23:45					11
Total Vol.		49		71				422		405	

Daily Total	
IN	**471**
OUT	**476**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Long Beach
(6391 E Pacific Coast Highway, Long Beach, CA 90803)

Wednesday, May 16,2012 CITY: Long Beach PROJECT: In N Out Burger

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	31		25		15
00:15						12:15	30		15		15
00:30						12:30	52		50		13
00:45						12:45	25	138	29	119	8
01:00						13:00	29		29		12
01:15						13:15	32		27		13
01:30						13:30	18		23		8
01:45						13:45	X	79	X	79	7
02:00						14:00					8
02:15						14:15					7
02:30						14:30					8
02:45						14:45					6
03:00						15:00					6
03:15						15:15					5
03:30						15:30					4
03:45						15:45					5
04:00						16:00	16		19		6
04:15						16:15	12		17		5
04:30						16:30	14		14		3
04:45						16:45	16	58	10	60	6
05:00						17:00	19		14		5
05:15						17:15	20		19		7
05:30						17:30	19		19		7
05:45						17:45	11	69	21	73	5
06:00						18:00	17		20		12
06:15						18:15	X		X		7
06:30						18:30	X		X		10
06:45						18:45	X	17	X	20	12
07:00						19:00					10
07:15						19:15					11
07:30						19:30					7
07:45						19:45					6
08:00						20:00					8
08:15						20:15					6
08:30						20:30					9
08:45						20:45					10
09:00						21:00					12
09:15						21:15					16
09:30						21:30					14
09:45						21:45					15
10:00						22:00					14
10:15					5	22:15					13
10:30					8	22:30					12
10:45					7	22:45					12
11:00					3	23:00					11
11:15					6	23:15					13
11:30	19		25		7	23:30					9
11:45	21	40	27	52	14	23:45					8
Total Vol.		40		52				361		351	

Daily Total	
IN	**401**
OUT	**361**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Los Angeles
(9149 S Sepulveda Blvd, Los Angeles, CA 90045)

Wednesday, May 16th, 2012 CITY: Los Angeles PROJECT: In-N-Out Burger

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	39		35		20
00:15						12:15	48		36		18
00:30						12:30	52		37		21
00:45						12:45	57	196	41	149	19
01:00						13:00	39		45		22
01:15						13:15	36		46		21
01:30						13:30	35		41		20
01:45						13:45	X	110	X	132	20
02:00						14:00					21
02:15						14:15					21
02:30						14:30					22
02:45						14:45					21
03:00						15:00					18
03:15						15:15					17
03:30						15:30					16
03:45						15:45					18
04:00						16:00	31		24		17
04:15						16:15	18		18		15
04:30						16:30	27		28		12
04:45						16:45	33	109	22	92	10
05:00						17:00	34		30		9
05:15						17:15	25		33		14
05:30						17:30	36		23		17
05:45						17:45	32	127	25	111	19
06:00						18:00	30		36		20
06:15						18:15					19
06:30						18:30					20
06:45						18:45					18
07:00						19:00					17
07:15						19:15					18
07:30						19:30					19
07:45						19:45					20
08:00						20:00					21
08:15						20:15					19
08:30						20:30					19
08:45						20:45					20
09:00						21:00					18
09:15						21:15					19
09:30						21:30					20
09:45						21:45					19
10:00					0	22:00					21
10:15					2	22:15					17
10:30					5	22:30					16
10:45					6	22:45					14
11:00					6	23:00					16
11:15					12	23:15					17
11:30	28		32		16	23:30					15
11:45	31	59	29	61	120 19	23:45					13
Total Vol.		59		61				542		484	

Daily Totals		
IN		**OUT**
601		**545**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Millbrae
(11 Rollins Rd, Millbrae, CA 94030)

Wednesday, May 27, 2015 CITY: Millbrae PROJECT: SC0629

11 Rollings Rd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	20		10			12:00	49		53		
00:15	27		34			12:15	60		74		
00:30	8		15			12:30	47		63		
00:45	2	57	14	73	130	12:45	55	211	57	247	458
01:00	1		5			13:00	40		51		
01:15	0		3			13:15	52		56		
01:30	1		1			13:30	35		51		
01:45	1	3	1	10	13	13:45	48	175	40	198	373
02:00	2		5			14:00	31		42		
02:15	0		0			14:15	30		29		
02:30	0		0			14:30	39		31		
02:45	0	2	1	6	8	14:45	33	133	30	132	265
03:00	0		1			15:00	38		26		
03:15	1		0			15:15	28		34		
03:30	2		0			15:30	40		29		
03:45	2	5	0	1	6	15:45	31	137	30	119	256
04:00	0		0			16:00	34		37		
04:15	3		3			16:15	26		28		
04:30	2		2			16:30	25		18		
04:45	1	6	0	5	11	16:45	8	93	19	102	195
05:00	1		0			17:00	35		11		
05:15	1		0			17:15	32		25		
05:30	3		1			17:30	29		24		
05:45	8	13	2	3	16	17:45	24	120	30	90	210
06:00	7		7			18:00	32		43		
06:15	15		5			18:15	39		38		
06:30	14		3			18:30	42		39		
06:45	7	43	7	22	65	18:45	44	157	43	163	320
07:00	9		5			19:00	30		46		
07:15	9		5			19:15	35		47		
07:30	11		6			19:30	47		41		
07:45	10	39	6	22	61	19:45	51	163	49	183	346
08:00	17		8			20:00	49		50		
08:15	12		3			20:15	44		53		
08:30	11		10			20:30	45		33		
08:45	11	51	12	33	84	20:45	45	183	42	178	361
09:00	11		15			21:00	31		40		
09:15	16		12			21:15	23		40		
09:30	17		18			21:30	24		39		
09:45	20	64	10	55	119	21:45	26	104	38	157	261
10:00	34		10			22:00	21		32		
10:15	31		22			22:15	27		29		
10:30	39		19			22:30	33		38		
10:45	37	141	36	87	228	22:45	34	115	36	135	250
11:00	48		36			23:00	21		26		
11:15	41		38			23:15	27		27		
11:30	58		59			23:30	31		30		
11:45	54	201	52	185	386	23:45	19	98	25	108	206
Total Vol.		625		502	**1127**			1689		1812	**3501**

Daily Totals

IN1	OUT1	Combined
2314	2314	**4628**

	AM			PM		
Split %	55.5%	44.5%	**24.4%**	48.2%	51.8%	**75.6%**
Peak Hour	11:30	11:45	**11:30**	12:00	12:00	**12:00**
Volume	221	242	**459**	211	247	**458**
P.H.F.	0.92	0.82	**0.86**	0.85	0.83	**0.86**

pacific@aimtd.com Tell. 951 249 3226

Wednesday, May 27, 2015 CITY: Millbrae PROJECT: SC0629

11 Rollings Rd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	0		0			12:00	3		12		
00:15	0		0			12:15	20		3		
00:30	1		0			12:30	15		4		
00:45	1	2	2	2	4	12:45	16	54	4	23	77
01:00	0		0			13:00	15		6		
01:15	0		0			13:15	18		4		
01:30	0		0			13:30	15		3		
01:45	0	0	0	0		13:45	3	51	2	15	66
02:00	0		0			14:00	4		3		
02:15	0		0			14:15	1		3		
02:30	0		0			14:30	0		4		
02:45	0	0	2	2	2	14:45	1	6	7	17	23
03:00	0		0			15:00	2		5		
03:15	1		0			15:15	3		1		
03:30	0		0			15:30	2		3		
03:45	0	1	0	0	1	15:45	2	9	3	12	21
04:00	0		0			16:00	4		5		
04:15	0		0			16:15	2		5		
04:30	0		1			16:30	0		4		
04:45	0	0	0	1	1	16:45	3	9	2	16	25
05:00	0		0			17:00	1		5		
05:15	0		0			17:15	1		5		
05:30	0		0			17:30	3		3		
05:45	2	2	1	1	3	17:45	3	8	4	17	25
06:00	0		1			18:00	6		1		
06:15	6		0			18:15	0		5		
06:30	5		2			18:30	1		4		
06:45	4	15	2	5	20	18:45	2	9	4	14	23
07:00	1		5			19:00	3		2		
07:15	1		4			19:15	3		4		
07:30	3		0			19:30	4		3		
07:45	4	9	1	10	19	19:45	5	15	2	11	26
08:00	3		2			20:00	1		4		
08:15	2		3			20:15	2		5		
08:30	5		8			20:30	4		7		
08:45	2	12	4	17	29	20:45	0	7	2	18	25
09:00	3		4			21:00	0		1		
09:15	2		8			21:15	1		1		
09:30	1		2			21:30	0		2		
09:45	5	11	6	20	31	21:45	1	2	1	5	7
10:00	3		3			22:00	0		1		
10:15	2		2			22:15	0		1		
10:30	9		5			22:30	0		0		
10:45	4	18	5	15	33	22:45	1	1	0	2	3
11:00	1		8			23:00	1		1		
11:15	5		6			23:15	3		0		
11:30	4		6			23:30	0		1		
11:45	7	17	2	22	39	23:45	0	4	0	2	6
Total Vol.		87		95	**182**			175		152	**327**

Daily Totals

IN1	OUT1	Combined
262	247	**509**

	AM			PM		
Split %	47.8%	52.2%	**35.8%**	53.5%	46.5%	**64.2%**
Peak Hour	11:45	11:15	**11:45**	12:15	12:00	**12:15**
Volume	45	26	**66**	66	23	**83**
P.H.F.	0.56	0.54	**0.72**	0.84	0.48	**0.72**

pacific@aimtd.com Tell. 951 249 3226

Redwood City
(949 Veterans Blvd, Redwood City, CA 94063)

Wednesday, May 27, 2015 | CITY: Redwood City | PROJECT: SC0629

949 Veterans Blvd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	7		2			12:00	11		18		
00:15	0		1			12:15	14		22		
00:30	3		2			12:30	6		20		
00:45	1	11	0	5	16	12:45	4	35	14	74	109
01:00	0		1			13:00	2		16		
01:15	0		0			13:15	7		32		
01:30	0		0			13:30	12		16		
01:45	0	0	0	1	1	13:45	14	35	13	77	112
02:00	0		0			14:00	13		11		
02:15	0		0			14:15	17		12		
02:30	0		0			14:30	12		7		
02:45	0	0	0	0		14:45	9	51	13	43	94
03:00	0		0			15:00	14		13		
03:15	0		0			15:15	6		15		
03:30	0		0			15:30	8		13		
03:45	0	0	0	0		15:45	7	35	11	52	87
04:00	0		0			16:00	8		6		
04:15	1		0			16:15	11		8		
04:30	0		0			16:30	7		5		
04:45	0	1	0	0	1	16:45	7	33	9	28	61
05:00	2		2			17:00	5		12		
05:15	0		0			17:15	7		8		
05:30	1		1			17:30	5		8		
05:45	1	4	1	4	8	17:45	11	28	3	31	59
06:00	1		0			18:00	4		5		
06:15	0		0			18:15	11		8		
06:30	1		0			18:30	16		9		
06:45	0	2	0	0	2	18:45	8	39	12	34	73
07:00	0		0			19:00	8		9		
07:15	1		0			19:15	8		9		
07:30	0		0			19:30	3		4		
07:45	0	1	0	0	1	19:45	9	28	7	29	57
08:00	0		0			20:00	5		8		
08:15	0		0			20:15	6		12		
08:30	0		0			20:30	7		4		
08:45	1	1	0	0	1	20:45	9	27	2	26	53
09:00	0		0			21:00	11		8		
09:15	0		0			21:15	13		7		
09:30	0		1			21:30	11		5		
09:45	0	0	0	1	1	21:45	5	40	9	29	69
10:00	2		1			22:00	10		9		
10:15	4		0			22:15	9		9		
10:30	1		6			22:30	5		7		
10:45	2	9	3	10	19	22:45	5	29	9	34	63
11:00	8		1			23:00	3		5		
11:15	5		5			23:15	2		6		
11:30	10		7			23:30	2		2		
11:45	14	37	11	24	61	23:45	1	8	0	13	21
Total Vol.		66		45	**111**			388		470	**858**

Daily Totals

IN1	OUT1	Combined
454	515	**969**

	AM			PM		
Split %	59.5%	40.5%	**11.5%**	45.2%	54.8%	**88.5%**
Peak Hour	11:30	11:45	**11:45**	13:30	12:30	**13:15**
Volume	49	71	**116**	56	82	**118**
P.H.F.	0.88	0.81	**0.81**	0.93	0.64	**0.81**

pacific@aimtd.com Tell. 951 249 3226

Wednesday, May 27, 2015 | CITY: Redwood City | PROJECT: SC0629

949 Veterans Blvd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	2		2			12:00	22		11		
00:15	9		8			12:15	21		21		
00:30	2		8			12:30	20		20		
00:45	4	17	4	22	39	12:45	17	80	12	64	144
01:00	0		4			13:00	19		19		
01:15	0		0			13:15	20		14		
01:30	0		0			13:30	14		19		
01:45	0	0	0	4	4	13:45	14	67	12	64	131
02:00	0		2			14:00	7		11		
02:15	0		0			14:15	11		6		
02:30	0		0			14:30	16		10		
02:45	0	0	0	2	2	14:45	15	49	13	40	89
03:00	0		0			15:00	15		12		
03:15	0		0			15:15	4		7		
03:30	0		0			15:30	5		9		
03:45	0	0	0	0		15:45	7	31	8	36	67
04:00	0		0			16:00	12		8		
04:15	0		0			16:15	6		9		
04:30	0		0			16:30	6		4		
04:45	0	0	0	0		16:45	10	34	9	30	64
05:00	0		0			17:00	11		8		
05:15	0		0			17:15	11		12		
05:30	1		0			17:30	10		9		
05:45	0	1	0	0	1	17:45	8	40	8	37	77
06:00	0		0			18:00	12		9		
06:15	0		1			18:15	16		9		
06:30	0		0			18:30	9		16		
06:45	0	0	0	1	1	18:45	7	44	10	44	88
07:00	0		0			19:00	14		22		
07:15	1		0			19:15	12		11		
07:30	0		0			19:30	13		8		
07:45	0	1	0	0	1	19:45	13	52	11	52	104
08:00	0		0			20:00	11		9		
08:15	0		0			20:15	10		7		
08:30	0		0			20:30	9		10		
08:45	0	0	1	1	1	20:45	4	34	9	35	69
09:00	2		1			21:00	19		11		
09:15	0		0			21:15	19		12		
09:30	2		1			21:30	14		12		
09:45	3	7	1	3	10	21:45	15	67	13	48	115
10:00	1		1			22:00	6		12		
10:15	3		1			22:15	10		12		
10:30	5		6			22:30	15		9		
10:45	4	13	2	10	23	22:45	8	39	12	45	84
11:00	20		5			23:00	10		10		
11:15	9		12			23:15	5		10		
11:30	11		10			23:30	2		5		
11:45	18	58	8	35	93	23:45	3	20	4	29	49
Total Vol.		97		78	**175**			557		524	**1081**

Daily Totals

IN1	OUT1	Combined
654	602	**1256**

	AM			PM		
Split %	55.4%	44.6%	**13.9%**	51.5%	48.5%	**86.1%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:15**
Volume	81	60	**141**	80	72	**149**
P.H.F.	0.92	0.71	**0.84**	0.94	0.86	**0.84**

pacific@aimtd.com Tell. 951 249 3226

Rocklin
(5490 Crossings Dr, Rocklin, CA 95677)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Rocklin Dwy 1 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	21		16		
00:15	0		0			12:15	16		23		
00:30	0		0			12:30	15		22		
00:45	0	0	0	0		12:45	17	69	17	78	147
01:00	0		0			13:00	7		23		
01:15	0		0			13:15	13		16		
01:30	0		0			13:30	10		15		
01:45	0	0	0	0		13:45	20	50	10	64	114
02:00	0		0			14:00	18		13		
02:15	0		0			14:15	16		14		
02:30	0		0			14:30	5		21		
02:45	0	0	0	0		14:45	20	59	9	57	116
03:00	0		0			15:00	12		7		
03:15	0		0			15:15	19		13		
03:30	0		0			15:30	10		14		
03:45	0	0	0	0		15:45	8	49	15	49	98
04:00	0		0			16:00	15		14		
04:15	0		0			16:15	10		19		
04:30	0		0			16:30	14		18		
04:45	0	0	0	0		16:45	13	52	12	63	115
05:00	0		0			17:00	11		19		
05:15	0		0			17:15	17		18		
05:30	0		0			17:30	30		11		
05:45	0	0	0	0		17:45	11	69	17	65	134
06:00	0		0			18:00	6		20		
06:15	0		0			18:15	11		18		
06:30	0		0			18:30	13		20		
06:45	0	0	0	0		18:45	18	48	18	76	124
07:00	0		0			19:00	5		20		
07:15	0		0			19:15	17		21		
07:30	0		0			19:30	12		14		
07:45	0	0	0	0		19:45	14	48	14	69	117
08:00	2		0			20:00	15		12		
08:15	0		1			20:15	17		11		
08:30	3		0			20:30	15		10		
08:45	2	7	3	4	11	20:45	5	52	15	48	100
09:00	4		3			21:00	7		13		
09:15	4		1			21:15	8		13		
09:30	2		2			21:30	4		12		
09:45	1	11	1	7	18	21:45	6	25	14	52	77
10:00	4		3			22:00	8		6		
10:15	10		2			22:15	1		12		
10:30	12		7			22:30	1		1		
10:45	22	48	10	22	70	22:45	3	13	1	20	33
11:00	24		19			23:00	4		6		
11:15	31		15			23:15	1		5		
11:30	12		23			23:30	0		4		
11:45	16	83	17	74	157	23:45	0	5	1	16	21
Total Vol.		149		107	**256**			539		657	**1196**

	Daily Totals		
	in	out	**Combined**
	688	764	**1452**

	AM			**PM**		
Split %	58.2%	41.8%	**17.6%**	45.1%	54.9%	**82.4%**
Peak Hour	10:30	11:30	**11:00**	16:45	12:15	**12:00**
Volume	89	79	**157**	71	85	**147**
P.H.F.	0.72	0.86	**0.85**	0.85	0.92	**0.85**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Rocklin Dwy 2 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	2		4		
00:15	0		0			12:15	1		2		
00:30	0		0			12:30	4		4		
00:45	0	0	0	0		12:45	1	8	4	14	22
01:00	0		0			13:00	6		7		
01:15	0		0			13:15	2		2		
01:30	0		0			13:30	6		2		
01:45	0	0	0	0		13:45	2	16	2	13	29
02:00	0		0			14:00	2		4		
02:15	0		0			14:15	2		2		
02:30	0		0			14:30	3		2		
02:45	0	0	0	0		14:45	2	9	0	8	17
03:00	0		0			15:00	7		3		
03:15	0		0			15:15	1		3		
03:30	0		0			15:30	3		2		
03:45	0	0	0	0		15:45	7	18	0	8	26
04:00	0		0			16:00	4		2		
04:15	0		0			16:15	4		2		
04:30	0		0			16:30	4		1		
04:45	0	0	0	0		16:45	7	19	2	7	26
05:00	0		0			17:00	2		3		
05:15	0		0			17:15	4		3		
05:30	0		0			17:30	3		1		
05:45	0	0	0	0		17:45	6	15	3	10	25
06:00	0		0			18:00	8		2		
06:15	0		0			18:15	6		1		
06:30	0		0			18:30	6		0		
06:45	0	0	0	0		18:45	3	23	1	4	27
07:00	0		0			19:00	5		1		
07:15	0		0			19:15	1		0		
07:30	0		0			19:30	5		0		
07:45	0	0	0	0		19:45	2	13	1	2	15
08:00	0		0			20:00	6		4		
08:15	0		0			20:15	0		1		
08:30	0		0			20:30	7		2		
08:45	1	1	1	1	2	20:45	5	18	1	8	26
09:00	0		1			21:00	3		4		
09:15	0		1			21:15	2		2		
09:30	0		1			21:30	2		1		
09:45	1	1	0	3	4	21:45	2	9	0	7	16
10:00	0		0			22:00	5		1		
10:15	2		0			22:15	1		0		
10:30	0		0			22:30	1		0		
10:45	1	3	1	1	4	22:45	1	8	0	1	9
11:00	1		4			23:00	1		1		
11:15	4		0			23:15	0		0		
11:30	1		1			23:30	0		0		
11:45	1	7	4	9	16	23:45	2	3	0	1	4
Total Vol.		12		14	**26**			159		83	**242**

	Daily Totals		
	in	out	**Combined**
	171	97	**268**

	AM			**PM**		
Split %	46.2%	53.8%	**9.7%**	65.7%	34.3%	**90.3%**
Peak Hour	11:15	11:45	**11:45**	17:45	12:15	**17:45**
Volume	8	14	**22**	26	17	**32**
P.H.F.	0.50	0.88	**0.69**	0.81	0.61	**0.69**

Vacaville
(170 Nut Tree Pkwy, Vacaville, CA 95687)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Vacaville PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	12		22		
00:15	0		0			12:15	9		22		
00:30	0		0			12:30	13		22		
00:45	0	0	0	0		12:45	8	42	20	86	128
01:00	0		0			13:00	3		21		
01:15	0		0			13:15	7		22		
01:30	0		0			13:30	6		16		
01:45	0	0	0	0		13:45	3	19	26	85	104
02:00	0		0			14:00	8		17		
02:15	0		0			14:15	3		27		
02:30	0		0			14:30	1		22		
02:45	0	0	0	0		14:45	2	14	12	78	92
03:00	0		0			15:00	3		13		
03:15	0		0			15:15	5		15		
03:30	0		0			15:30	3		23		
03:45	0	0	0	0		15:45	6	17	19	70	87
04:00	0		0			16:00	1		16		
04:15	0		0			16:15	2		17		
04:30	0		0			16:30	3		16		
04:45	0	0	0	0		16:45	2	8	19	68	76
05:00	0		0			17:00	3		15		
05:15	0		0			17:15	17		15		
05:30	0		0			17:30	8		18		
05:45	0	0	0	0		17:45	5	33	13	61	94
06:00	0		0			18:00	7		26		
06:15	0		0			18:15	4		25		
06:30	0		0			18:30	7		20		
06:45	0	0	0	0		18:45	3	21	18	89	110
07:00	0		0			19:00	3		27		
07:15	0		0			19:15	2		18		
07:30	0		0			19:30	6		20		
07:45	0	0	0	0		19:45	6	17	17	82	99
08:00	0		0			20:00	12		15		
08:15	0		0			20:15	16		15		
08:30	0		0			20:30	2		19		
08:45	0	0	0	0		20:45	3	33	20	69	102
09:00	0		0			21:00	5		17		
09:15	0		1			21:15	14		16		
09:30	2		1			21:30	2		18		
09:45	0	2	0	2	4	21:45	2	23	14	65	88
10:00	0		2			22:00	5		10		
10:15	0		1			22:15	1		15		
10:30	3		3			22:30	0		12		
10:45	5	8	9	15	23	22:45	4	10	9	46	56
11:00	6		11			23:00	4		6		
11:15	6		10			23:15	1		10		
11:30	11		12			23:30	1		5		
11:45	17	40	16	49	89	23:45	2	8	6	27	35
Total Vol.		50		66	**116**			245		826	**1071**

Daily Totals	in	out	**Combined**
	295	892	**1187**

	AM			**PM**		
Split %	43.1%	56.9%	**9.8%**	22.9%	77.1%	**90.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	13:45	**12:00**
Volume	51	82	**133**	42	92	**128**
P.H.F.	0.75	0.93	**0.95**	0.90	0.85	**0.95**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Vacaville Dwy 2 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	14		1		
00:15	0		0			12:15	13		1		
00:30	0		0			12:30	9		2		
00:45	0	0	0	0		12:45	14	50	1	5	55
01:00	0		0			13:00	14		0		
01:15	0		0			13:15	14		1		
01:30	0		0			13:30	9		1		
01:45	0	0	0	0		13:45	15	52	0	2	54
02:00	0		0			14:00	14		0		
02:15	0		0			14:15	12		0		
02:30	0		0			14:30	8		0		
02:45	0	0	0	0		14:45	14	48	2	2	50
03:00	0		0			15:00	9		0		
03:15	0		0			15:15	8		0		
03:30	0		0			15:30	7		0		
03:45	0	0	0	0		15:45	10	34	0	0	34
04:00	0		0			16:00	9		0		
04:15	0		0			16:15	8		2		
04:30	0		0			16:30	10		1		
04:45	0	0	0	0		16:45	12	39	1	4	43
05:00	0		0			17:00	11		1		
05:15	0		0			17:15	8		2		
05:30	0		0			17:30	10		1		
05:45	0	0	0	0		17:45	25	54	0	4	58
06:00	0		0			18:00	20		1		
06:15	0		0			18:15	22		0		
06:30	0		0			18:30	15		0		
06:45	0	0	0	0		18:45	18	75	1	2	77
07:00	0		0			19:00	14		0		
07:15	0		0			19:15	15		2		
07:30	0		0			19:30	14		2		
07:45	0	0	0	0		19:45	16	59	1	5	64
08:00	0		0			20:00	16		2		
08:15	0		0			20:15	9		2		
08:30	1		0			20:30	17		1		
08:45	0	1	1	1	2	20:45	13	55	0	5	60
09:00	0		0			21:00	17		2		
09:15	1		0			21:15	10		1		
09:30	0		1			21:30	14		1		
09:45	0	1	0	1	2	21:45	12	53	1	5	58
10:00	3		0			22:00	9		2		
10:15	1		0			22:15	12		1		
10:30	4		1			22:30	7		1		
10:45	13	21	0	1	22	22:45	9	37	2	6	43
11:00	7		0			23:00	7		0		
11:15	14		1			23:15	4		1		
11:30	12		0			23:30	4		1		
11:45	11	44	0	1	45	23:45	7	22	1	3	25
Total Vol.		67		4	**71**			578		43	**621**

Daily Totals	in	out	**Combined**
	645	47	**692**

	AM			**PM**		
Split %	94.4%	5.6%	**10.3%**	93.1%	6.9%	**89.7%**
Peak Hour	11:15	11:45	**11:15**	17:45	19:15	**17:45**
Volume	51	4	**53**	82	7	**83**
P.H.F.	0.91	0.50	**0.88**	0.89	0.88	**0.88**

Fairfield
(1364 Holiday Ln, Fairfield, CA 94534)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Fairfield PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	21		17		
00:15	0		0			12:15	21		20		
00:30	0		0			12:30	27		18		
00:45	0	0	0	0		12:45	27	96	24	79	175
01:00	0		0			13:00	21		19		
01:15	0		0			13:15	16		19		
01:30	0		0			13:30	9		23		
01:45	0	0	0	0		13:45	20	66	19	80	146
02:00	0		0			14:00	22		19		
02:15	0		0			14:15	20		25		
02:30	0		0			14:30	17		18		
02:45	0	0	0	0		14:45	16	75	17	79	154
03:00	0		0			15:00	12		17		
03:15	0		0			15:15	19		20		
03:30	0		0			15:30	20		18		
03:45	0	0	0	0		15:45	28	79	23	78	157
04:00	0		0			16:00	17		16		
04:15	0		0			16:15	24		18		
04:30	0		0			16:30	20		13		
04:45	0	0	0	0		16:45	14	75	10	57	132
05:00	0		0			17:00	11		14		
05:15	0		0			17:15	12		14		
05:30	0		0			17:30	16		17		
05:45	0	0	0	0		17:45	9	48	17	62	110
06:00	0		0			18:00	14		14		
06:15	0		0			18:15	21		15		
06:30	0		0			18:30	14		17		
06:45	0	0	0	0		18:45	10	59	15	61	120
07:00	0		0			19:00	17		12		
07:15	0		0			19:15	19		18		
07:30	0		0			19:30	11		19		
07:45	0	0	0	0		19:45	17	64	15	64	128
08:00	2		3			20:00	12		13		
08:15	2		3			20:15	10		14		
08:30	4		2			20:30	12		11		
08:45	5	13	5	13	26	20:45	3	37	8	46	83
09:00	6		5			21:00	12		5		
09:15	2		5			21:15	3		8		
09:30	9		7			21:30	9		18		
09:45	11	28	8	25	53	21:45	6	30	7	38	68
10:00	8		6			22:00	6		6		
10:15	12		5			22:15	6		3		
10:30	15		9			22:30	8		10		
10:45	14	49	12	32	81	22:45	6	26	9	28	54
11:00	17		12			23:00	6		11		
11:15	14		17			23:15	5		6		
11:30	12		18			23:30	2		2		
11:45	25	68	18	65	133	23:45	5	18	5	24	42
Total Vol.		158		135	**293**			673		696	**1369**

	Daily Totals		
	in	out	Combined
	831	831	**1662**

	AM			PM		
Split %	53.9%	46.1%	**17.6%**	49.2%	50.8%	**82.4%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:30	**12:15**
Volume	94	73	**167**	96	86	**177**
P.H.F.	0.87	0.91	**0.93**	0.89	0.86	**0.93**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Saturday, February 06, 2016 CITY: Fairfield PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	34		22		
00:15	0		0			12:15	24		30		
00:30	0		0			12:30	22		28		
00:45	0	0	0	0		12:45	25	105	23	103	208
01:00	0		0			13:00	24		20		
01:15	0		0			13:15	20		13		
01:30	0		0			13:30	18		20		
01:45	0	0	0	0		13:45	27	89	21	74	163
02:00	0		0			14:00	12		28		
02:15	0		0			14:15	23		20		
02:30	0		0			14:30	19		18		
02:45	0	0	0	0		14:45	17	71	18	84	155
03:00	0		0			15:00	18		13		
03:15	0		0			15:15	18		27		
03:30	0		0			15:30	18		18		
03:45	0	0	0	0		15:45	25	79	24	82	161
04:00	0		0			16:00	16		21		
04:15	0		0			16:15	26		15		
04:30	0		0			16:30	30		18		
04:45	0	0	0	0		16:45	26	98	26	80	178
05:00	0		0			17:00	28		32		
05:15	0		0			17:15	25		22		
05:30	0		0			17:30	27		20		
05:45	0	0	0	0		17:45	32	112	17	91	203
06:00	0		0			18:00	22		15		
06:15	0		0			18:15	25		22		
06:30	0		0			18:30	30		24		
06:45	0	0	0	0		18:45	21	98	20	81	179
07:00	0		0			19:00	20		22		
07:15	0		0			19:15	9		12		
07:30	0		0			19:30	19		18		
07:45	0	0	0	0		19:45	21	69	23	75	144
08:00	0		0			20:00	19		18		
08:15	1		0			20:15	14		20		
08:30	3		2			20:30	9		14		
08:45	3	7	1	3	10	20:45	5	47	18	70	117
09:00	5		0			21:00	14		14		
09:15	2		2			21:15	14		11		
09:30	5		2			21:30	20		20		
09:45	5	17	4	8	25	21:45	11	59	16	61	120
10:00	6		4			22:00	11		10		
10:15	7		5			22:15	9		14		
10:30	8		8			22:30	9		12		
10:45	15	36	13	30	66	22:45	33	62	15	51	113
11:00	17		13			23:00	6		13		
11:15	13		14			23:15	5		19		
11:30	19		18			23:30	4		19		
11:45	23	72	23	68	140	23:45	4	19	29	80	99
Total Vol.		132		109	**241**			908		932	**1840**

	Daily Totals		
	in	out	Combined
	1040	1041	**2081**

	AM			PM		
Split %	54.8%	45.2%	**11.6%**	49.3%	50.7%	**88.4%**
Peak Hour	11:45	11:45	**11:45**	17:00	12:00	**12:00**
Volume	103	103	**206**	112	103	**208**
P.H.F.	0.76	0.86	**0.92**	0.96	0.86	**0.92**

Mountain View & Union City
(1159 N Rengstorff Ave, Mountain View, CA 94043,
(53 W El Camino Real, Mountain View, CA 94040,
(32060 Union Landing Blvd, Union City, CA 94587)

Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Thursday
Date: 9/14/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View				3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**52**	**40**	**2**	**42**	**161**
4:00 PM	21	1	22	26	1	2	29	34	0	34	**85**
4:30 PM	23	2	25	22	1	3	26	32	2	34	**85**
5:00 PM	22	2	24	26	0	1	27	23	1	24	**75**
5:30 PM	24	1	25	28	0	1	29	29	0	29	**83**
6:00 PM	28	1	29	36	0	2	38	25	1	26	**93**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View Drive-Thru Max Queue	2. 53 El Camino Real, Mountain View Drive-Thru Max Queue	3. 32060 Union Landing, Union City Drive-Thru Max Queue
4:00 PM	7	6	17
4:15 PM	4	3	17
4:30 PM	8	9	13
4:45 PM	9	11	2
5:00 PM	7	7	14
5:15 PM	10	11	12
5:30 PM	13	17	12
5:45 PM	12	16	12
6:00 PM	6	17	6

NOTES:

2. 53 El Camino Real,Mountain View

- At 5:30pm an In-N-Out employee came out to the drive-thru to manually take orders - didn't appear to have an impact on the queue wait time or shrinking the line at drive-thru.
- The drive-thru can hold 12-13 cars in queue before extending to the street.

Driveway In & Outs

	Site	1		2		3	
	Time	IN	OUT	IN	OUT	IN	OUT
15 Minute Intervals Peak	4:00 PM	13	15	21	28	27	25
	4:15 PM	19	12	19	20	25	32
	4:30 PM	19	24	23	15	11	22
	4:45 PM	19	19	22	23	23	23
	5:00 PM	14	13	26	19	29	28
	5:15 PM	24	15	28	22	27	21
	5:30 PM	24	21	27	24	23	24
	5:45 PM	23	24	32	24	27	24
	Sum	155	143	198	175	192	199
1 Hour Intervals	10:30 AM	68	35	78	60	77	68
	11:30 AM	154	123	178	157	136	108
	12:30 PM	131	159	164	170	154	150
	1:30 PM	116	119	113	114	131	132
	2:30 PM	67	77	99	112	82	102
	3:30 PM	65	67	75	83	118	100
	4:30 PM	76	71	99	79	90	94
	5:30 PM	109	96	117	114	116	105
	6:30 PM	110	113	141	138	137	133
	7:30 PM	107	100	108	111	131	130
	8:30 PM	76	90	113	125	133	136
	9:30 PM	83	81	102	100	110	123
	10:30 PM	52	67	59	66	90	102
	11:30 PM	35	50	29	35	61	67
	12:30 AM	17	21	11	12	11	26
	Sum	1266	1269	1486	1476	1577	1576

Rancho Santa Margarita
(30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688)

Thursday, May 09, 2019 CITY: Rancho Santa Margarita PROJECT: SC

ADT1 Driveway 1 north of Santa Margarita. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	IN		OUT		EB		WB			PM Period	IN		OUT		EB		WB		
0:00	1		2		0		0			12:00	21		24		0		0		
0:15	2		4		0		0			12:15	15		18		0		0		
0:30	4		6		0		0			12:30	20		33		0		0		
0:45	1	8	4	16	0	0	0	0	24	12:45	24	80	22	97	0	0	0	0	177
1:00	0		1		0		0			13:00	20		25		0		0		
1:15	0		0		0		0			13:15	20		29		0		0		
1:30	0		1		0		0			13:30	7		21		0		0		
1:45	0	0	2	4	0	0	0	0	4	13:45	17	64	26	101	0	0	0	0	165
2:00	0		0		0		0			14:00	15		15		0		0		
2:15	0		0		0		0			14:15	11		20		0		0		
2:30	0		0		0		0			14:30	17		21		0		0		
2:45	0	0	0	0	0	0	0	0		14:45	12	55	20	76	0	0	0	0	131
3:00	0		0		0		0			15:00	10		18		0		0		
3:15	0		0		0		0			15:15	14		16		0		0		
3:30	0		0		0		0			15:30	13		30		0		0		
3:45	0	0	0	0	0	0	0	0		15:45	11	48	23	87	0	0	0	0	135
4:00	0		0		0		0			16:00	24		16		0		0		
4:15	0		0		0		0			16:15	18		14		0		0		
4:30	0		0		0		0			16:30	21		11		0		0		
4:45	3	3	0	0	0	0	0	0	3	16:45	14	77	28	69	0	0	0	0	146
5:00	0		0		0		0			17:00	15		33		0		0		
5:15	0		0		0		0			17:15	25		15		0		0		
5:30	0		0		0		0			17:30	23		34		0		0		
5:45	0	0	0	0	0	0	0	0		17:45	23	86	32	114	0	0	0	0	200
6:00	0		0		0		0			18:00	25		29		0		0		
6:15	1		0		0		0			18:15	33		31		0		0		
6:30	0		0		0		0			18:30	19		26		0		0		
6:45	1	2	2	2	0	0	0	0	4	18:45	21	98	30	116	0	0	0	0	214
7:00	0		0		0		0			19:00	23		24		0		0		
7:15	0		0		0		0			19:15	19		28		0		0		
7:30	2		2		0		0			19:30	21		25		0		0		
7:45	0	2	1	3	0	0	0	0	5	19:45	15	78	14	91	0	0	0	0	169
8:00	0		0		0		0			20:00	18		25		0		0		
8:15	0		0		0		0			20:15	12		23		0		0		
8:30	2		0		0		0			20:30	9		18		0		0		
8:45	1	3	0	0	0	0	0	0	3	20:45	9	48	34	100	0	0	0	0	148
9:00	0		0		0		0			21:00	15		21		0		0		
9:15	1		0		0		0			21:15	12		14		0		0		
9:30	0		0		0		0			21:30	11		23		0		0		
9:45	2	3	0	0	0	0	0	0	3	21:45	8	46	18	76	0	0	0	0	122
10:00	5		1		0		0			22:00	4		14		0		0		
10:15	3		9		0		0			22:15	9		14		0		0		
10:30	9		4		0		0			22:30	10		11		0		0		
10:45	12	29	7	21	0	0	0	0	50	22:45	6	29	15	54	0	0	0	0	83
11:00	18		12		0		0			23:00	4		12		0		0		
11:15	12		20		0		0			23:15	4		11		0		0		
11:30	24		27		0		0			23:30	1		6		0		0		
11:45	23	77	25	84	0	0	0	0	161	23:45	5	14	10	39	0	0	0	0	53
Total Vol.		127		130					**257**			723		1020					**1743**

Daily Totals	NB	SB	EB	WB	Combined
	850	1150			**2000**

	AM			PM		
Split %	49.4%	50.6%	**12.9%**	41.5%	58.5%	**87.2%**
Peak Hour	11:30	11:45	**11:45**	17:30	17:30	**17:30**
Volume	83	100	**179**	104	126	**230**
P.H.F.	0.86	0.76	**0.84**	0.96	0.93	**0.90**

cs@aimtd.com Tell. 714 253 7888

Thursday, May 09, 2019 CITY: Rancho Santa Margarita PROJECT: SC

ADT2 Driveway 2 north of Santa Margarita. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	IN		OUT		EB		WB			PM Period	IN		OUT		EB		WB		
0:00	7		4		0		0			12:00	16		2		0		0		
0:15	5		2		0		0			12:15	15		7		0		0		
0:30	1		2		0		0			12:30	8		5		0		0		
0:45	1	14	4	12	0	0	0	0	26	12:45	20	59	10	24	0	0	0	0	83
1:00	0		0		0		0			13:00	12		7		0		0		
1:15	0		1		0		0			13:15	7		5		0		0		
1:30	0		0		0		0			13:30	9		6		0		0		
1:45	0	0	0	1	0	0	0	0	1	13:45	7	35	2	20	0	0	0	0	55
2:00	0		0		0		0			14:00	8		8		0		0		
2:15	0		0		0		0			14:15	12		4		0		0		
2:30	0		0		0		0			14:30	9		9		0		0		
2:45	0	0	0	0	0	0	0	0		14:45	7	36	6	27	0	0	0	0	63
3:00	0		0		0		0			15:00	23		4		0		0		
3:15	0		0		0		0			15:15	18		7		0		0		
3:30	0		0		0		0			15:30	12		7		0		0		
3:45	0	0	0	0	0	0	0	0		15:45	4	57	5	23	0	0	0	0	80
4:00	0		0		0		0			16:00	13		4		0		0		
4:15	0		0		0		0			16:15	8		4		0		0		
4:30	0		0		0		0			16:30	16		5		0		0		
4:45	0	0	0	0	0	0	0	0		16:45	13	50	4	17	0	0	0	0	67
5:00	0		0		0		0			17:00	20		7		0		0		
5:15	0		0		0		0			17:15	7		6		0		0		
5:30	0		0		0		0			17:30	11		5		0		0		
5:45	0	0	0	0	0	0	0	0		17:45	13	51	1	19	0	0	0	0	70
6:00	0		0		0		0			18:00	12		9		0		0		
6:15	0		0		0		0			18:15	15		3		0		0		
6:30	0		1		0		0			18:30	5		4		0		0		
6:45	0	0	0	1	0	0	0	0	1	18:45	15	47	5	21	0	0	0	0	68
7:00	0		0		0		0			19:00	14		7		0		0		
7:15	0		0		0		0			19:15	7		1		0		0		
7:30	0		0		0		0			19:30	6		3		0		0		
7:45	1	1	0	0	0	0	0	0	1	19:45	7	34	9	20	0	0	0	0	54
8:00	0		0		0		0			20:00	17		5		0		0		
8:15	0		0		0		0			20:15	11		3		0		0		
8:30	0		0		0		0			20:30	7		7		0		0		
8:45	0	0	0	0	0	0	0	0		20:45	13	48	4	19	0	0	0	0	67
9:00	0		0		0		0			21:00	36		6		0		0		
9:15	0		0		0		0			21:15	10		5		0		0		
9:30	0		0		0		0			21:30	4		4		0		0		
9:45	1	1	0	0	0	0	0	0	1	21:45	11	61	11	26	0	0	0	0	87
10:00	4		1		0		0			22:00	3		4		0		0		
10:15	3		1		0		0			22:15	6		9		0		0		
10:30	2		2		0		0			22:30	4		3		0		0		
10:45	6	15	3	7	0	0	0	0	22	22:45	4	17	0	16	0	0	0	0	33
11:00	6		3		0		0			23:00	10		5		0		0		
11:15	12		2		0		0			23:15	5		5		0		0		
11:30	8		3		0		0			23:30	1		1		0		0		
11:45	14	40	6	14	0	0	0	0	54	23:45	1	17	3	14	0	0	0	0	31
Total Vol.		71		35					**106**			512		246					**758**

Daily Totals	NB	SB	EB	WB	Combined
	583	281			**864**

	AM			PM		
Split %	67.0%	33.0%	**12.3%**	67.5%	32.5%	**87.7%**
Peak Hour	11:30	11:45	**11:45**	20:15	12:15	**20:30**
Volume	53	20	**73**	67	29	**88**
P.H.F.	0.83	0.71	**0.83**	0.85	0.73	**0.52**

cs@aimtd.com Tell. 714 253 7888

San Diego 1
(10880 Carmel Mountain Road, San Diego, CA 92128)

City:	San Diego
Location:	11880 Carmel Mountain Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	8	10	18
0:15	13	11	24
0:30	7	9	16
0:45	7	9	16
1:00	0	5	5
1:15	1	2	3
1:30	0	0	0
1:45	0	4	4
2:00	0	1	1
2:15	0	4	4
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	1	2	3
3:30	0	1	1
3:45	0	1	1
4:00	0	0	0
4:15	1	0	1
4:30	0	0	0
4:45	1	1	2
5:00	1	1	2
5:15	0	0	0
5:30	1	2	3
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	1	1	2
7:45	5	1	6
8:00	0	0	0
8:15	0	0	0
8:30	1	1	2
8:45	2	3	5
9:00	0	0	0
9:15	1	3	4
9:30	1	0	1
9:45	0	1	1
10:00	11	2	13
10:15	6	9	15
10:30	11	11	22
10:45	8	6	14
11:00	21	7	28
11:15	20	12	32
11:30	25	25	50
11:45	33	25	58
12:00	20	28	48
12:15	25	24	49
12:30	33	27	60
12:45	34	32	66
13:00	28	24	52

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

City:	San Diego
Location:	11880 Carmel Mountain Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	16	24	40
13:30	27	31	58
13:45	25	21	46
14:00	22	15	37
14:15	17	30	47
14:30	22	22	44
14:45	14	17	31
15:00	15	24	39
15:15	22	22	44
15:30	17	16	33
15:45	19	17	36
16:00	22	17	39
16:15	17	14	31
16:30	26	28	54
16:45	24	23	47
17:00	19	20	39
17:15	29	21	50
17:30	28	20	48
17:45	14	18	32
18:00	22	27	49
18:15	24	18	42
18:30	20	24	44
18:45	25	27	52
19:00	17	21	38
19:15	26	21	47
19:30	23	30	53
19:45	24	25	49
20:00	20	24	44
20:15	23	20	43
20:30	25	24	49
20:45	17	31	48
21:00	19	19	38
21:15	24	17	41
21:30	18	22	40
21:45	21	22	43
22:00	19	22	41
22:15	15	19	34
22:30	10	21	31
22:45	10	11	21
23:00	21	10	31
23:15	11	11	22
23:30	10	16	26
23:45	9	12	21
TOTAL	**1177**	**1199**	**2376**

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(951) 268-6268

San Diego 2
(4375 Kearny Mesa Road, San Diego, CA 92111)

City:	San Diego
Location:	4375 Kearny Mesa Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	15	8	23
0:15	10	11	21
0:30	8	13	21
0:45	7	12	19
1:00	1	11	12
1:15	0	1	1
1:30	0	1	1
1:45	0	0	0
2:00	0	1	1
2:15	0	6	6
2:30	0	0	0
2:45	0	0	0
3:00	1	0	1
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	1	0	1
4:30	0	1	1
4:45	1	0	1
5:00	1	0	1
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	0	0	0
7:45	2	0	2
8:00	0	1	1
8:15	1	0	1
8:30	2	0	2
8:45	1	2	3
9:00	2	3	5
9:15	1	1	2
9:30	2	1	3
9:45	8	4	12
10:00	9	3	12
10:15	12	7	19
10:30	13	11	24
10:45	24	17	41
11:00	19	14	33
11:15	21	18	39
11:30	19	21	40
11:45	19	29	48
12:00	29	23	52
12:15	31	38	69
12:30	23	24	47
12:45	29	28	57
13:00	38	38	76

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Corona, CA 92878
(951) 268-6268

City:	San Diego
Location:	4375 Kearny Mesa Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	32	28	60
13:30	28	33	61
13:45	23	25	48
14:00	29	22	51
14:15	18	31	49
14:30	18	23	41
14:45	20	26	46
15:00	23	26	49
15:15	19	21	40
15:30	16	23	39
15:45	20	22	42
16:00	17	26	43
16:15	24	22	46
16:30	23	28	51
16:45	23	24	47
17:00	20	21	41
17:15	18	23	41
17:30	18	26	44
17:45	24	20	44
18:00	20	26	46
18:15	23	23	46
18:30	27	22	49
18:45	27	26	53
19:00	20	29	49
19:15	29	23	52
19:30	17	22	39
19:45	13	24	37
20:00	22	21	43
20:15	26	23	49
20:30	19	18	37
20:45	12	16	28
21:00	21	20	41
21:15	18	14	32
21:30	19	18	37
21:45	18	14	32
22:00	15	18	33
22:15	20	19	39
22:30	15	15	30
22:45	21	17	38
23:00	22	0	22
23:15	26	1	27
23:30	23	0	23
23:45	19	1	20
TOTAL	**1257**	**1228**	**2485**

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Oceanside
(936 North Coast Highway, Oceanside, CA 92054)

City:	San Diego
Location:	936 N Coast Highway
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	17	15	32
0:15	10	11	21
0:30	7	17	24
0:45	8	8	16
1:00	7	11	18
1:15	4	13	17
1:30	1	5	6
1:45	1	2	3
2:00	0	1	1
2:15	1	0	1
2:30	0	5	5
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	1	1
4:30	1	0	1
4:45	2	0	2
5:00	2	0	2
5:15	1	0	1
5:30	0	0	0
5:45	0	0	0
6:00	3	2	5
6:15	0	0	0
6:30	0	1	1
6:45	1	0	1
7:00	2	2	4
7:15	1	0	1
7:30	0	0	0
7:45	0	2	2
8:00	3	6	9
8:15	0	2	2
8:30	0	2	2
8:45	0	5	5
9:00	1	0	1
9:15	4	1	5
9:30	1	2	3
9:45	1	5	6
10:00	5	2	7
10:15	8	2	10
10:30	16	3	19
10:45	12	5	17
11:00	18	17	35
11:15	22	15	37
11:30	30	16	46
11:45	34	13	47
12:00	23	19	42
12:15	27	39	66
12:30	24	18	42
12:45	32	32	64
13:00	26	25	51

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City:	San Diego
Location:	936 N Coast Highway
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	28	27	55
13:30	31	43	74
13:45	32	27	59
14:00	25	20	45
14:15	22	26	48
14:30	28	22	50
14:45	13	22	35
15:00	26	13	39
15:15	14	17	31
15:30	17	25	42
15:45	21	17	38
16:00	21	28	49
16:15	20	32	52
16:30	28	21	49
16:45	22	24	46
17:00	28	23	51
17:15	18	23	41
17:30	17	20	37
17:45	21	24	45
18:00	23	29	52
18:15	32	30	62
18:30	27	32	59
18:45	23	23	46
19:00	30	31	61
19:15	29	37	66
19:30	33	26	59
19:45	26	30	56
20:00	26	29	55
20:15	25	37	62
20:30	34	23	57
20:45	30	24	54
21:00	19	24	43
21:15	23	25	48
21:30	32	42	74
21:45	31	31	62
22:00	23	30	53
22:15	26	20	46
22:30	38	22	60
22:45	26	25	51
23:00	18	20	38
23:15	21	12	33
23:30	15	16	31
23:45	14	16	30
TOTAL	**1412**	**1413**	**2825**

Counts Unlimited, Inc.
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(951) 268-6268

Attachment B

In-N-Out Drive Through Queue Data

Drive-Through Lane Queue Study

In-N-Out Fairfield

02.04.16	Thursday
Time	Vehicles
16:00-16:15	5
16:15-16:30	8
16:30-16:45	9
16:45-17:00	16
17:00-17:15	17
17:15-17:30	16
17:30-17:45	8
17:45-18:00	17

02.06.16	Saturday
Time	Vehicles
12:00-12:15	13
12:15-12:30	18
12:30-12:45	17
12:45-13:00	18
13:00-13:15	23
13:15-13:30	17
13:30-13:45	15
13:45-14:00	18

Prepared by AimTD LLC tel. 714 253 7888

cs@aimtd.com

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Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Thursday
Date: 9/14/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View				3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**52**	**40**	**2**	**42**	**161**
4:00 PM	21	1	22	26	1	2	29	34	0	34	**85**
4:30 PM	23	2	25	22	1	3	26	32	2	34	**85**
5:00 PM	22	2	24	26	0	1	27	23	1	24	**75**
5:30 PM	24	1	25	28	0	1	29	29	0	29	**83**
6:00 PM	28	1	29	36	0	2	38	25	1	26	**93**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View Drive-Thru Max Queue	2. 53 El Camino Real, Mountain View Drive-Thru Max Queue	3. 32060 Union Landing, Union City Drive-Thru Max Queue
4:00 PM	7	6	17
4:15 PM	4	3	17
4:30 PM	8	9	13
4:45 PM	9	11	2
5:00 PM	7	7	14
5:15 PM	10	11	12
5:30 PM	13	17	12
5:45 PM	12	16	12
6:00 PM	6	17	6

NOTES:

2. 53 El Camino Real,Mountain View

- At 5:30pm an In-N-Out employee came out to the drive-thru to manually take orders - didn't appear to have an impact on the queue wait time or shrinking the line at drive-thru.
- The drive-thru can hold 12-13 cars in queue before extending to the street.

Driveway In & Outs

	Site	1		2		3	
	Time	IN	OUT	IN	OUT	IN	OUT
15 Minute Intervals Peak	4:00 PM	13	15	21	28	27	25
	4:15 PM	19	12	19	20	25	32
	4:30 PM	19	24	23	15	11	22
	4:45 PM	19	19	22	23	23	23
	5:00 PM	14	13	26	19	29	28
	5:15 PM	24	15	28	22	27	21
	5:30 PM	24	21	27	24	23	24
	5:45 PM	23	24	32	24	27	24
	Sum	155	143	198	175	192	199
1 Hour Intervals	10:30 AM	68	35	78	60	77	68
	11:30 AM	154	123	178	157	136	108
	12:30 PM	131	159	164	170	154	150
	1:30 PM	116	119	113	114	131	132
	2:30 PM	67	77	99	112	82	102
	3:30 PM	65	67	75	83	118	100
	4:30 PM	76	71	99	79	90	94
	5:30 PM	109	96	117	114	116	105
	6:30 PM	110	113	141	138	137	133
	7:30 PM	107	100	108	111	131	130
	8:30 PM	76	90	113	125	133	136
	9:30 PM	83	81	102	100	110	123
	10:30 PM	52	67	59	66	90	102
	11:30 PM	35	50	29	35	61	67
	12:30 AM	17	21	11	12	11	26
	Sum	1266	1269	1486	1476	1577	1576

Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Saturday
Date: 9/16/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View					3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	NP	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**0**	**52**	**40**	**2**	**42**	**161**
12:00 PM	44	1	45	39	1	3	0	43	38	2	40	**128**
12:30 PM	50	2	52	42	0	4	0	46	36	2	38	**136**
1:00 PM	45	3	48	41	2	3	1	47	39	1	40	**135**
1:30 PM	63	3	66	39	2	1	0	42	40	2	42	**150**
2:00 PM	53	1	54	38	1	0	0	39	36	1	37	**130**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View	2. 53 El Camino Real, Mountain View	3. 32060 Union Landing, Union City
	Drive-Thru Max Queue	Drive-Thru Max Queue	Drive-Thru Max Queue
12:00 PM	25	17	13
12:15 PM	22	15	14
12:30 PM	28	17	17
12:45 PM	31	18	12
1:00 PM	30	19	11
1:15 PM	23	15	14
1:30 PM	28	13	20
1:45 PM	29	15	25
2:00 PM	x	x	14

Driveway In & Outs

Site	1		2		3	
Time	**IN**	**OUT**	**IN**	**OUT**	**IN**	**OUT**
12:00 PM	38	32	45	47	37	23
12:15 PM	36	38	41	38	39	43
12:30 PM	40	27	38	39	34	36
12:45 PM	39	42	47	45	34	40
1:00 PM	39	40	35	37	38	27
1:15 PM	38	29	42	48	44	39
1:30 PM	41	42	28	27	42	43
1:45 PM	29	37	43	45	33	37
Sum	300	287	319	326	301	288

NOTES:

2. 53 El Camino Real,Mountain View

- A In-N-Out employee manually taking orders halted the queue several times.

Drive-Through Lane Queue Study

In-N-Out Rocklin

02.04.16	Thursday
Time	Vehicles
16:00-16:15	5
16:15-16:30	8
16:30-16:45	7
16:45-17:00	6
17:00-17:15	8
17:15-17:30	9
17:30-17:45	11
17:45-18:00	12

02.06.16	Saturday
Time	Vehicles
12:00-12:15	10
12:15-12:30	13
12:30-12:45	12
12:45-13:00	11
13:00-13:15	12
13:15-13:30	14
13:30-13:45	13
13:45-14:00	12

Prepared by AimTD LLC tel. 714 253 7888

cs@aimtd.com

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Site 4 (Q)

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com		
In N Out **445 Industrial Road, San Carlos** **Queue Study**		
Time	**Wed 27/May 15**	**Notes**
16:00	17	
16:15	16	
16:30	16	
16:45	16	
17:00	16	
17:15	16	
17:30	17	
17:45	17	

Drive-Through Lane Queue Study

In-N-Out Vacaville

02.04.16	Thursday
Time	Vehicles
16:00-16:15	11
16:15-16:30	14
16:30-16:45	16
16:45-17:00	17
17:00-17:15	13
17:15-17:30	11
17:30-17:45	13
17:45-18:00	18

02.06.16	Saturday
Time	Vehicles
12:00-12:15	20
12:15-12:30	19
12:30-12:45	15
12:45-13:00	23
13:00-13:15	22
13:15-13:30	28
13:30-13:45	27
13:45-14:00	29

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APPENDIX C

VOLUME COUNT DATA SHEETS

APPENDIX C

VOLUME COUNT DATA SHEETS

INTERSECTION TURNING MOVEMENT COUNTS

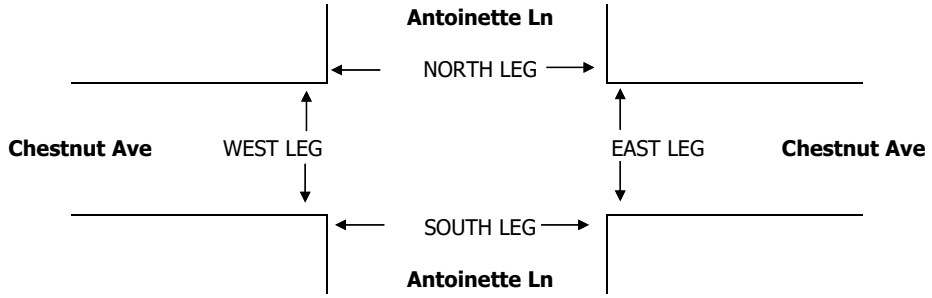
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	San Francisco	PROJECT #:	SC4541
Thu, Apr 11, 24	NORTH & SOUTH:	Antoinette Ln	LOCATION #:	1
	EAST & WEST:	Chestnut Ave	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND Antoinette Ln			SOUTHBOUND Antoinette Ln			EASTBOUND Chestnut Ave			WESTBOUND Chestnut Ave			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 1	ET 1.5	ER 0.5	WL 1	WT 2.5	WR 0.5	TOTAL
MD	11:30 AM	34	0	4	4	0	8	12	145	34	12	123	3	379
	11:45 AM	36	4	7	1	1	16	14	132	33	15	146	13	418
	12:00 PM	31	1	6	7	2	34	20	140	34	21	113	8	417
	12:15 PM	28	3	4	5	0	19	13	145	34	18	143	7	419
	12:30 PM	30	3	4	6	5	9	19	142	25	19	97	9	368
	12:45 PM	24	0	1	7	3	19	25	131	24	8	148	17	407
	1:00 PM	29	0	5	2	4	15	21	122	28	19	124	9	378
	1:15 PM	29	1	5	2	1	14	19	181	33	12	158	9	464
	VOLUMES	241	12	36	34	16	134	143	1,138	245	124	1,052	75	3,272
	APPROACH %	83%	4%	12%	18%	9%	73%	9%	74%	16%	10%	83%	6%	
	APP/DEPART	289	/	230	184	/	385	1,534	/	1,222	1,265	/	1,435	0
	BEGIN PEAK HR		11:30 AM											
	VOLUMES	129	8	21	17	3	77	59	562	135	66	525	31	1,644
	APPROACH %	82%	5%	13%	18%	3%	79%	8%	74%	18%	10%	83%	5%	
	PEAK HR FACTOR		0.840			0.564			0.973			0.885		0.972
	APP/DEPART	158	/	98	97	/	204	759	/	608	630	/	734	0
PM	4:00 PM	27	3	3	6	1	31	19	204	31	15	190	17	547
	4:15 PM	30	2	6	8	1	26	25	184	42	25	159	12	520
	4:30 PM	38	0	5	14	5	16	19	195	60	26	173	8	559
	4:45 PM	42	1	3	15	0	24	26	200	41	21	188	8	569
	5:00 PM	38	1	6	13	2	10	20	196	36	20	199	13	554
	5:15 PM	23	5	5	10	0	21	31	214	40	20	193	18	580
	5:30 PM	32	3	5	12	1	38	19	222	36	23	200	13	604
	5:45 PM	28	5	3	10	1	17	20	204	29	13	189	12	531
	VOLUMES	258	20	36	88	11	183	179	1,619	315	163	1,491	101	4,491
	APPROACH %	82%	6%	11%	31%	4%	65%	8%	77%	15%	9%	84%	6%	
	APP/DEPART	314	/	300	282	/	489	2,116	/	1,767	1,779	/	1,935	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	135	10	19	50	3	93	96	832	153	84	780	52	2,327
	APPROACH %	82%	6%	12%	34%	2%	64%	9%	77%	14%	9%	84%	6%	
	PEAK HR FACTOR		0.891			0.716			0.950			0.973		0.954
	APP/DEPART	164	/	158	146	/	240	1,083	/	919	934	/	1,010	0



INTERSECTION TURNING MOVEMENT COUNTS

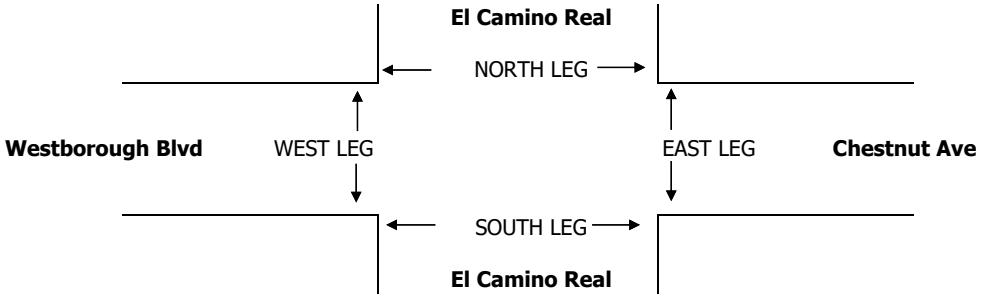
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	San Francisco	PROJECT #:	SC4541
Thu, Apr 11, 24	NORTH & SOUTH:	El Camino Real	LOCATION #:	2
	EAST & WEST:	Westborough Blvd	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND El Camino Real			SOUTHBOUND El Camino Real			EASTBOUND Westborough Blvd			WESTBOUND Chestnut Ave			
	LANES:	NL 2	NT 2	NR 1	SL 2	ST 3	SR 1	EL 1	ET 2	ER 1	WL 2	WT 2	WR 1	TOTAL
MD	11:30 AM	113	115	70	43	156	26	30	77	58	47	88	29	852
	11:45 AM	90	111	51	34	105	32	46	94	60	68	104	26	821
	12:00 PM	112	134	69	45	122	27	26	86	70	58	90	31	870
	12:15 PM	87	116	60	40	138	22	34	91	54	60	92	37	831
	12:30 PM	96	180	64	37	157	30	31	87	69	43	65	25	884
	12:45 PM	76	110	53	42	135	20	24	84	79	59	91	40	813
	1:00 PM	95	139	58	26	140	30	38	87	66	51	90	27	847
	1:15 PM	83	117	68	42	129	26	34	123	78	51	116	34	901
	VOLUMES	752	1,022	493	309	1,082	213	263	729	534	437	736	249	6,963
	APPROACH %	32%	43%	21%	19%	66%	13%	17%	47%	34%	31%	51%	17%	
	APP/DEPART	2,355	/	1,559	1,629	/	2,141	1,549	/	1,539	1,430	/	1,724	0
	BEGIN PEAK HR		12:30 PM											
	VOLUMES	350	546	243	147	561	106	127	381	292	204	362	126	3,512
	APPROACH %	30%	46%	21%	18%	68%	13%	16%	47%	36%	29%	52%	18%	
	PEAK HR FACTOR		0.847			0.906			0.855			0.866		0.963
	APP/DEPART	1,179	/	811	826	/	1,097	811	/	775	696	/	829	0
PM	4:00 PM	93	140	69	50	147	32	38	135	80	77	123	48	1,032
	4:15 PM	111	156	79	43	131	45	41	128	95	58	112	41	1,040
	4:30 PM	124	147	72	48	179	39	39	154	95	52	146	29	1,124
	4:45 PM	130	196	80	34	148	36	32	153	111	73	149	32	1,174
	5:00 PM	119	199	79	42	159	46	36	128	70	71	148	25	1,122
	5:15 PM	133	169	101	43	143	34	41	142	86	69	129	36	1,126
	5:30 PM	130	204	95	47	175	31	32	137	79	81	147	44	1,202
	5:45 PM	136	190	71	47	127	25	36	135	84	69	145	20	1,085
	VOLUMES	976	1,401	646	354	1,209	288	295	1,112	700	550	1,099	275	9,029
	APPROACH %	31%	45%	21%	19%	65%	15%	14%	52%	33%	28%	57%	14%	
	APP/DEPART	3,103	/	1,990	1,870	/	2,539	2,124	/	2,120	1,932	/	2,380	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	512	768	355	166	625	147	141	560	346	294	573	137	4,694
	APPROACH %	30%	46%	21%	17%	66%	15%	13%	53%	33%	29%	57%	14%	
	PEAK HR FACTOR		0.957			0.934			0.891			0.928		0.965
	APP/DEPART	1,680	/	1,057	949	/	1,310	1,055	/	1,087	1,010	/	1,240	0



INTERSECTION TURNING MOVEMENT COUNTS

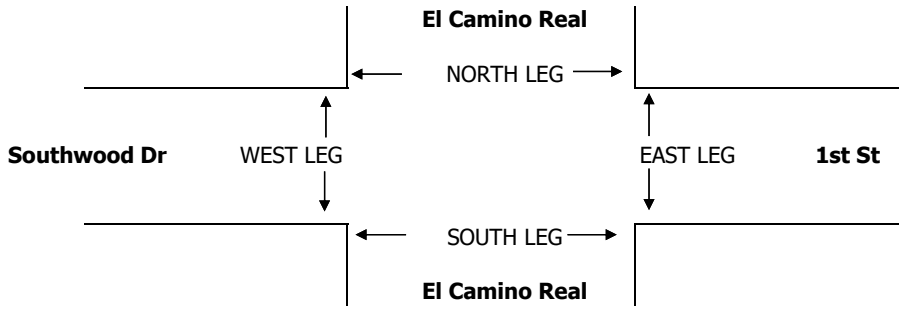
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	San Francisco	PROJECT #:	SC4541
Thu, Apr 11, 24	NORTH & SOUTH:	El Camino Real	LOCATION #:	3
	EAST & WEST:	Southwood Dr	CONTROL:	STOP E/W

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

	NORTHBOUND El Camino Real			SOUTHBOUND El Camino Real			EASTBOUND Southwood Dr			WESTBOUND 1st St			
LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
11:30 AM	4	272	1	2	243	5	3	0	1	0	0	0	531
11:45 AM	3	254	1	2	220	6	3	0	4	0	0	1	494
12:00 PM	4	277	2	0	220	6	2	0	7	0	0	0	518
12:15 PM	2	299	6	0	250	3	2	0	1	1	0	3	567
12:30 PM	1	296	4	0	246	7	1	0	2	1	0	3	561
12:45 PM	0	263	3	0	269	3	0	0	2	1	0	0	541
1:00 PM	1	256	0	1	232	6	3	0	2	0	0	0	501
1:15 PM	5	297	2	0	251	2	0	0	1	1	0	2	561
VOLUMES	20	2,214	19	5	1,931	38	14	0	20	4	0	9	4,437
APPROACH %	1%	97%	1%	0%	92%	2%	41%	0%	59%	31%	0%	69%	
APP/DEPART	2,292	/	2,361	2,098	/	1,994	34	/	24	13	/	58	0
BEGIN PEAK HR		12:00 PM											
VOLUMES	7	1,135	15	0	985	19	5	0	12	3	0	6	2,271
APPROACH %	1%	96%	1%	0%	92%	2%	29%	0%	71%	33%	0%	67%	
PEAK HR FACTOR		0.952			0.930			0.472			0.563		0.972
APP/DEPART	1,177	/	1,210	1,068	/	1,020	17	/	15	9	/	26	0
4:00 PM	0	315	1	1	284	7	1	0	3	0	0	5	617
4:15 PM	3	311	0	3	258	6	2	0	3	1	0	3	590
4:30 PM	1	359	3	3	313	2	0	0	3	0	0	6	690
4:45 PM	6	392	5	4	301	0	2	0	5	0	0	3	718
5:00 PM	8	397	1	1	288	1	0	0	4	1	0	1	702
5:15 PM	7	394	3	2	277	2	0	0	2	0	0	4	691
5:30 PM	6	391	2	1	317	8	3	0	1	0	0	2	731
5:45 PM	7	405	1	2	269	3	1	0	2	0	0	2	692
VOLUMES	38	2,964	16	17	2,307	29	9	0	23	2	0	26	5,576
APPROACH %	1%	98%	1%	1%	93%	1%	28%	0%	72%	7%	0%	93%	
APP/DEPART	3,039	/	3,123	2,477	/	2,353	32	/	33	28	/	67	0
BEGIN PEAK HR		4:45 PM											
VOLUMES	27	1,574	11	8	1,183	11	5	0	12	1	0	10	2,930
APPROACH %	2%	97%	1%	1%	92%	1%	29%	0%	71%	9%	0%	91%	
PEAK HR FACTOR		0.990			0.929			0.607			0.688		0.977
APP/DEPART	1,620	/	1,669	1,282	/	1,204	17	/	19	11	/	38	0



INTERSECTION TURNING MOVEMENT COUNTS

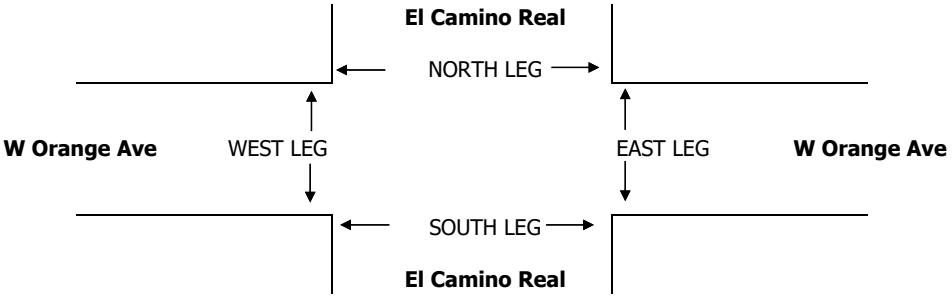
PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	San Francisco	PROJECT #:	SC4541
Thu, Apr 11, 24	NORTH & SOUTH:	El Camino Real	LOCATION #:	4
	EAST & WEST:	W Orange Ave	CONTROL:	SIGNAL

NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N, ◄ W, E ►, S ▼

		NORTHBOUND El Camino Real			SOUTHBOUND El Camino Real			EASTBOUND W Orange Ave			WESTBOUND W Orange Ave			
	LANES:	NL 1	NT 3	NR 0	SL 1	ST 3	SR 0	EL 0	ET 1	ER 1	WL 0	WT 1	WR 1	TOTAL
MD	11:30 AM	1	214	14	27	209	6	16	5	6	27	9	42	576
	11:45 AM	2	207	23	16	189	14	18	13	5	22	5	27	541
	12:00 PM	0	228	26	22	188	7	16	12	4	34	6	56	599
	12:15 PM	2	266	24	24	212	11	15	11	8	18	6	33	630
	12:30 PM	2	218	24	35	202	11	24	11	12	34	7	38	618
	12:45 PM	1	221	27	30	232	7	13	11	12	29	7	35	625
	1:00 PM	1	204	22	24	212	11	19	10	6	33	4	36	582
	1:15 PM	0	246	28	35	198	13	24	15	3	22	10	29	623
	VOLUMES	9	1,804	188	213	1,642	80	145	88	56	219	54	296	4,878
	APPROACH %	0%	89%	9%	11%	82%	4%	50%	30%	19%	38%	9%	52%	
	APP/DEPART	2,029	/	2,301	1,991	/	1,945	289	/	489	569	/	143	0
	BEGIN PEAK HR		12:00 PM											
	VOLUMES	5	933	101	111	834	36	68	45	36	115	26	162	2,514
	APPROACH %	0%	89%	10%	11%	82%	4%	46%	30%	24%	38%	9%	53%	
	PEAK HR FACTOR		0.888			0.926			0.793			0.789		0.974
	APP/DEPART	1,051	/	1,193	1,011	/	997	149	/	257	303	/	67	0
PM	4:00 PM	2	267	30	31	238	8	11	10	8	26	8	31	670
	4:15 PM	1	263	38	43	210	19	12	13	9	28	9	43	688
	4:30 PM	0	269	33	47	238	11	12	11	10	30	13	71	745
	4:45 PM	4	324	42	54	250	15	22	12	5	36	16	41	821
	5:00 PM	4	329	36	53	215	14	22	12	13	39	17	54	808
	5:15 PM	3	325	37	37	231	13	16	16	11	32	16	62	799
	5:30 PM	2	335	47	48	247	16	20	17	9	40	10	51	842
	5:45 PM	5	348	40	50	209	12	8	18	6	39	11	60	806
	VOLUMES	21	2,460	303	363	1,838	108	123	109	71	270	100	413	6,239
	APPROACH %	1%	87%	11%	16%	79%	5%	41%	36%	23%	34%	13%	53%	
	APP/DEPART	2,823	/	3,017	2,330	/	2,218	303	/	775	783	/	229	0
	BEGIN PEAK HR		4:45 PM											
	VOLUMES	13	1,313	162	192	943	58	80	57	38	147	59	208	3,298
	APPROACH %	1%	87%	11%	16%	78%	5%	46%	33%	22%	36%	14%	50%	
	PEAK HR FACTOR		0.967			0.938			0.931			0.941		0.968
	APP/DEPART	1,505	/	1,612	1,204	/	1,145	175	/	411	414	/	130	0



APPENDIX D

LEVEL OF SERVICE WORKSHEETS

EXISTING

In-N-Out Burger (972 El Camino Real)

Vistro File: E:\...\MD.vistro
Report File: E:\...\MD E.pdf

Scenario 1 Existing
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Antoinette Ln (NS) at Chestnut Ave (EW)	Signalized	HCM 7th Edition	WB Left	0.367	27.2	C
2	El Camino Real (SR-82) (NS) at Westborough Blvd (EW)	Signalized	HCM 7th Edition	EB Left	0.494	36.5	D
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Two-way stop	HCM 7th Edition	WB Left	0.042	57.2	F
4	El Camino Real (SR-82) (NS) at Orange Ave (EW)	Signalized	HCM 7th Edition	WB Left	6.593	47.2	D

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

Intersection Level Of Service Report
Intersection 1: Antoinette Ln (NS) at Chestnut Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.367

Intersection Setup

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	177.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Base Volume Input [veh/h]	129	8	21	17	3	77	3	59	562	135	8	66	525	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	8	21	17	3	77	3	59	562	135	8	66	525	31
Peak Hour Factor	0.9720	0.9720	0.9720	0.9720	0.9720	0.9720	1.000	0.972	0.972	0.972	1.000	0.972	0.972	0.972
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	33	2	5	4	1	20	1	15	145	35	2	17	135	8
Total Analysis Volume [veh/h]	133	8	22	17	3	79	3	61	578	139	8	68	540	32
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	75
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	6	0	0	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	-	-	-	-	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	0	11	28	0	0	9	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	29	0	0	0	19	0	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No	No			No	No	
Maximum Recall		No			No			No	No			No	No	
Pedestrian Recall		No			No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	75	75	75	75	75	75	75	75
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	41	41	4	18	18	4	18	18
g / C, Green / Cycle	0.55	0.55	0.05	0.23	0.23	0.06	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.12	0.06	0.04	0.20	0.20	0.04	0.11	0.11
s, saturation flow rate [veh/h]	1410	1575	1781	1870	1746	1781	3560	1817
c, Capacity [veh/h]	863	922	90	438	409	100	853	435
d1, Uniform Delay [s]	8.36	8.09	35.11	27.47	27.49	34.94	24.29	24.31
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.49	0.23	9.82	4.58	4.96	11.16	0.36	0.72
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.11	0.71	0.85	0.85	0.76	0.44	0.45
d, Delay for Lane Group [s/veh]	8.84	8.33	44.93	32.05	32.44	46.10	24.65	25.03
Lane Group LOS	A	A	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.32	0.77	1.37	6.60	6.22	1.64	2.78	2.91
50th-Percentile Queue Length [ft/ln]	32.99	19.19	34.24	164.91	155.54	41.11	69.52	72.74
95th-Percentile Queue Length [veh/ln]	2.37	1.38	2.47	10.81	10.31	2.96	5.01	5.24
95th-Percentile Queue Length [ft/ln]	59.37	34.53	61.63	270.21	257.81	74.00	125.14	130.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	8.84	8.84	8.84	8.33	8.33	8.33	44.93	44.93	32.19	32.44	46.10	46.10	24.77	25.03
Movement LOS	A	A	A	A	A	A	D	D	C	C	D	D	C	C
d_A, Approach Delay [s/veh]	8.84			8.33			33.28				27.28			
Approach LOS	A			A			C				C			
d_I, Intersection Delay [s/veh]	27.17													
Intersection LOS	C													
Intersection V/C	0.367													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.07	29.07	29.07	29.07
l_p,int, Pedestrian LOS Score for Intersectio	1.859	1.789	2.989	2.675
Crosswalk LOS	A	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	906	906	640	586
d_b, Bicycle Delay [s]	11.23	11.23	17.36	18.75
l_b,int, Bicycle LOS Score for Intersection	1.829	1.723	2.154	1.879
Bicycle LOS	A	A	B	A

Sequence

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

Intersection Level Of Service Report
Intersection 2: El Camino Real (SR-82) (NS) at Westborough Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	36.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.494

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	0	0	2	0	0	1	1	0	0	1	0	0	0	1
Entry Pocket Length [ft]	285.0	100.0	100.0	100.0	255.0	100.0	100.0	413.0	172.0	100.0	100.0	226.0	100.0	100.0	100.0	115.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Base Volume Input [veh/h]	40	350	546	243	12	147	561	106	11	127	381	292	4	204	362	126
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	40	350	546	243	12	147	561	106	11	127	381	292	4	204	362	126
Peak Hour Factor	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	10	91	142	63	3	38	146	28	3	33	99	76	1	53	94	33
Total Analysis Volume [veh/h]	42	363	567	252	12	153	583	110	11	132	396	303	4	212	376	131
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups																
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	18	41	0	0	15	38	0	0	13	41	0	0	13	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	0	32	0	0	0	29	0	0	0	32	0	0	0	32	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	110	110	110	110	110	110	110	110	110	110	110	110
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	54	54	7	47	47	9	24	24	9	24	24
g / C, Green / Cycle	0.13	0.49	0.49	0.07	0.43	0.43	0.08	0.22	0.22	0.08	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.12	0.16	0.16	0.05	0.11	0.07	0.08	0.11	0.19	0.06	0.11	0.08
s, saturation flow rate [veh/h]	3459	3560	1589	3459	5094	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	442	1746	779	230	2186	682	147	774	346	278	767	342
d1, Uniform Delay [s]	47.44	17.01	17.00	50.36	20.26	19.27	50.39	37.93	41.65	49.67	37.90	36.94
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.14	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.00	0.50	1.10	4.13	0.30	0.51	28.59	0.52	8.76	4.69	0.49	0.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.92	0.32	0.32	0.72	0.27	0.16	0.97	0.51	0.88	0.78	0.49	0.38
d, Delay for Lane Group [s/veh]	55.44	17.51	18.10	54.49	20.55	19.78	78.98	38.45	50.40	54.35	38.39	37.65
Lane Group LOS	E	B	B	D	C	B	E	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.89	4.32	3.96	2.34	3.20	1.79	5.08	4.74	8.72	3.09	4.49	3.08
50th-Percentile Queue Length [ft/ln]	147.36	107.90	99.11	58.39	80.06	44.70	127.02	118.61	217.97	77.21	112.24	77.02
95th-Percentile Queue Length [veh/ln]	9.88	7.72	7.14	4.20	5.76	3.22	8.78	8.32	13.56	5.56	7.96	5.55
95th-Percentile Queue Length [ft/ln]	246.91	193.07	178.40	105.10	144.10	80.46	219.44	207.91	339.03	138.98	199.11	138.64

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.44	55.44	17.51	18.10	54.49	54.49	20.55	19.78	78.98	78.98	38.45	50.40	54.35	54.35	38.39	37.65
Movement LOS	E	E	B	B	D	D	C	B	E	E	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	30.18				26.98				49.64				43.02			
Approach LOS	C				C				D				D			
d_I, Intersection Delay [s/veh]	36.47															
Intersection LOS	D															
Intersection V/C	0.494															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.39	46.39	46.39	46.39
l_p,int, Pedestrian LOS Score for Intersectio	3.067	2.977	2.739	2.817
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	672	618	672	672
d_b, Bicycle Delay [s]	24.25	26.28	24.25	24.25
l_b,int, Bicycle LOS Score for Intersection	2.535	1.947	2.145	1.981
Bicycle LOS	B	A	B	A

Sequence

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

Intersection Level Of Service Report
Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	57.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	20	7	1135	15	64	0	985	19	5	0	12	3	0	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	7	1135	15	64	0	985	19	5	0	12	3	0	6
Peak Hour Factor	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.9720	0.9720	0.9720	0.9720	0.9720	0.9720
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	292	4	16	0	253	5	1	0	3	1	0	2
Total Analysis Volume [veh/h]	21	7	1168	15	66	0	1013	20	5	0	12	3	0	6
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.01	0.00	0.13	0.00	0.01	0.00	0.06	0.00	0.03	0.04	0.00	0.02
d_M, Delay for Movement [s/veh]	11.44	14.93	0.00	0.00	13.02	17.31	0.00	0.00	50.35	136.14	15.02	57.23	138.19	15.76
Movement LOS	B	B	A	A	B	C	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.17	0.17	0.00	0.00	0.44	0.44	0.00	0.00	0.29	0.29	0.29	0.18	0.18	0.18
95th-Percentile Queue Length [ft/ln]	4.25	4.25	0.00	0.00	10.94	10.94	0.00	0.00	7.14	7.14	7.14	4.56	4.56	4.56
d_A, Approach Delay [s/veh]	0.28				0.78				25.41			29.58		
Approach LOS	A				A				D			D		
d_I, Intersection Delay [s/veh]	0.81													
Intersection LOS	F													

Intersection Level Of Service Report
Intersection 4: El Camino Real (SR-82) (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	47.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.593

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	108.0	100.0	100.0	180.0	218.0	100.0	100.0	100.0	100.00	100.00	85.00	100.00	100.00	206.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Base Volume Input [veh/h]	12	5	933	101	30	111	834	36	68	45	36	115	26	162
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	5	933	101	30	111	834	36	68	45	36	115	26	162
Peak Hour Factor	1.000	0.974	0.974	0.974	1.000	0.974	0.974	0.974	0.9740	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	1	239	26	8	28	214	9	17	12	9	30	7	42
Total Analysis Volume [veh/h]	12	5	958	104	30	114	856	37	70	46	37	118	27	166
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	9	24	0	0	10	25	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	14	0	0	0	16	0	0	33	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	C	R	C	R
C, Cycle Length [s]	76	76	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	20	20	6	25	25	38	38	38	38
g / C, Green / Cycle	0.02	0.26	0.26	0.08	0.32	0.32	0.50	0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.01	0.19	0.07	0.08	0.17	0.02	1.76	0.02	6.15	0.10
s, saturation flow rate [veh/h]	1781	5094	1589	1781	5094	1589	66	1589	24	1589
c, Capacity [veh/h]	35	1349	421	141	1650	515	109	792	98	792
d1, Uniform Delay [s]	36.86	25.29	21.97	35.00	20.87	17.78	26.94	9.79	33.66	10.68
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.79	3.19	1.40	41.54	1.17	0.27	105.32	0.02	264.65	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.71	0.25	1.02	0.52	0.07	1.07	0.05	1.48	0.21
d, Delay for Lane Group [s/veh]	46.65	28.48	23.37	76.54	22.04	18.05	132.26	9.82	298.31	10.81
Lane Group LOS	D	C	C	F	C	B	F	A	F	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.40	5.29	1.55	4.12	4.01	0.46	5.19	0.31	8.98	1.50
50th-Percentile Queue Length [ft/ln]	9.95	132.14	38.66	102.90	100.32	11.55	129.73	7.63	224.54	37.40
95th-Percentile Queue Length [veh/ln]	0.72	9.06	2.78	7.41	7.22	0.83	9.27	0.55	16.17	2.69
95th-Percentile Queue Length [ft/ln]	17.90	226.41	69.58	185.22	180.57	20.80	231.80	13.73	404.17	67.31

Movement, Approach, & Intersection Results

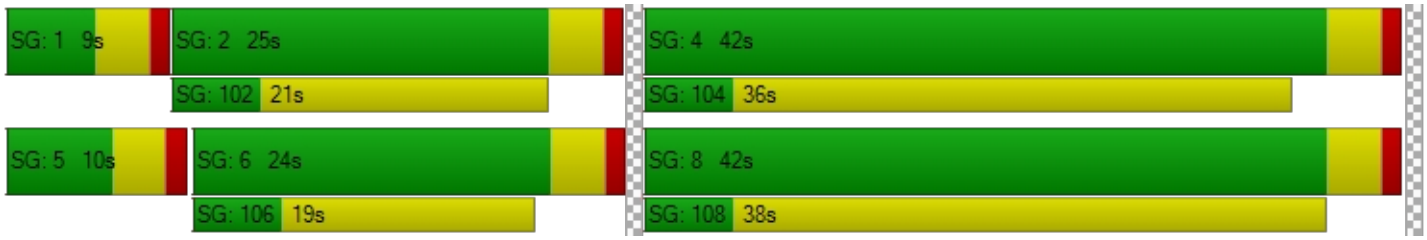
d_M, Delay for Movement [s/veh]	46.65	46.65	28.48	23.37	76.54	76.54	22.04	18.05	132.26	132.26	9.82	298.31	298.31	10.81
Movement LOS	D	D	C	C	E	E	C	B	F	F	A	F	F	B
d_A, Approach Delay [s/veh]	28.27				29.47				102.65			144.85		
Approach LOS	C				C				F			F		
d_I, Intersection Delay [s/veh]	47.22													
Intersection LOS	D													
Intersection V/C	6.593													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.53	29.53	29.53	29.53
l_p,int, Pedestrian LOS Score for Intersectio	3.184	3.135	1.993	2.089
Crosswalk LOS	C	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	553	1000	1000
d_b, Bicycle Delay [s]	20.63	19.90	9.50	9.50
l_b,int, Bicycle LOS Score for Intersection	2.146	2.067	1.812	2.073
Bicycle LOS	B	B	A	B

Sequence

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



In-N-Out Burger (972 El Camino Real)

Vistro File: E:\...\PM.vistro
Report File: E:\...\PM E.pdf

Scenario 1 Existing
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Antoinette Ln (NS) at Chestnut Ave (EW)	Signalized	HCM 7th Edition	EB Left	0.481	30.3	C
2	El Camino Real (SR-82) (NS) at Westborough Blvd (EW)	Signalized	HCM 7th Edition	EB Left	0.620	41.7	D
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Two-way stop	HCM 7th Edition	WB Left	0.042	158.1	F
4	El Camino Real (SR-82) (NS) at Orange Ave (EW)	Signalized	HCM 7th Edition	WB Left	5.672	83.9	F

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

Intersection Level Of Service Report
Intersection 1: Antoinette Ln (NS) at Chestnut Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	30.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.481

Intersection Setup

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	177.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Base Volume Input [veh/h]	135	10	19	50	3	93	2	96	832	153	18	84	780	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	10	19	50	3	93	2	96	832	153	18	84	780	52
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	1.000	0.954	0.954	0.954	1.000	0.954	0.954	0.954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	35	3	5	13	1	24	1	25	218	40	5	22	204	14
Total Analysis Volume [veh/h]	142	10	20	52	3	97	2	101	872	160	18	88	818	55
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	6	0	0	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	-	-	-	-	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	0	12	28	0	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	29	0	0	0	19	0	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No	No			No	No	
Maximum Recall		No			No			No	No			No	No	
Pedestrian Recall		No			No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	35	35	6	23	23	6	23	23
g / C, Green / Cycle	0.46	0.46	0.07	0.31	0.31	0.08	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.12	0.10	0.06	0.28	0.28	0.06	0.16	0.16
s, saturation flow rate [veh/h]	1378	1553	1781	1870	1770	1781	3560	1810
c, Capacity [veh/h]	721	779	132	572	541	136	1095	557
d1, Uniform Delay [s]	12.43	12.17	34.57	25.57	25.58	34.50	21.77	21.78
k, delay calibration	0.50	0.50	0.11	0.24	0.24	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.78	0.56	9.39	13.71	14.49	9.40	0.40	0.78
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.20	0.78	0.93	0.93	0.78	0.53	0.53
d, Delay for Lane Group [s/veh]	13.22	12.73	43.96	39.27	40.08	43.90	22.16	22.57
Lane Group LOS	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.85	1.58	2.17	10.86	10.42	2.23	4.10	4.25
50th-Percentile Queue Length [ft/ln]	46.27	39.62	54.18	271.52	260.45	55.70	102.55	106.21
95th-Percentile Queue Length [veh/ln]	3.33	2.85	3.90	16.27	15.71	4.01	7.38	7.63
95th-Percentile Queue Length [ft/ln]	83.29	71.32	97.53	406.64	392.78	100.25	184.59	190.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.22	13.22	13.22	12.73	12.73	12.73	43.96	43.96	39.59	40.08	43.90	43.90	22.28	22.57
Movement LOS	B	B	B	B	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	13.22			12.73			40.05				24.64			
Approach LOS	B			B			D				C			
d_I, Intersection Delay [s/veh]	30.27													
Intersection LOS	C													
Intersection V/C	0.481													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.54	29.54	29.54	29.54
l_p,int, Pedestrian LOS Score for Intersectio	1.880	1.837	3.094	2.832
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	895	895	631	579
d_b, Bicycle Delay [s]	11.61	11.61	17.80	19.19
l_b,int, Bicycle LOS Score for Intersection	1.843	1.810	2.413	2.050
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 2: El Camino Real (SR-82) (NS) at Westborough Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	41.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.620

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	0	0	2	0	0	1	1	0	0	1	0	0	0	1
Entry Pocket Length [ft]	285.0	100.0	100.0	100.0	255.0	100.0	100.0	413.0	172.0	100.0	100.0	226.0	100.0	100.0	100.0	115.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Base Volume Input [veh/h]	45	512	768	355	11	166	625	147	8	141	560	346	6	294	573	137
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	45	512	768	355	11	166	625	147	8	141	560	346	6	294	573	137
Peak Hour Factor	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	12	133	199	92	3	43	162	38	2	37	145	90	2	76	148	35
Total Analysis Volume [veh/h]	47	531	796	368	11	172	648	152	8	146	580	359	6	305	594	142
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups																
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	25	51	0	0	12	38	0	0	16	41	0	0	16	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	0	32	0	0	0	29	0	0	0	32	0	0	0	32	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	21	54	54	8	41	41	12	30	30	12	30	30
g / C, Green / Cycle	0.18	0.45	0.45	0.07	0.34	0.34	0.10	0.25	0.25	0.10	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.17	0.22	0.23	0.05	0.13	0.10	0.09	0.16	0.23	0.09	0.17	0.09
s, saturation flow rate [veh/h]	3459	3560	1589	3459	5094	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	607	1592	711	235	1731	540	180	892	398	350	892	398
d1, Uniform Delay [s]	49.03	23.64	23.89	55.08	30.00	28.95	53.13	40.30	43.58	53.33	40.49	37.04
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.27	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.07	1.12	2.69	5.49	0.62	1.30	10.95	0.81	16.09	7.76	0.86	0.54
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.95	0.50	0.52	0.78	0.37	0.28	0.86	0.65	0.90	0.89	0.67	0.36
d, Delay for Lane Group [s/veh]	58.10	24.77	26.58	60.57	30.62	30.25	64.08	41.10	59.67	61.09	41.35	37.58
Lane Group LOS	E	C	C	E	C	C	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	9.23	8.09	7.86	2.88	4.78	3.37	5.12	7.76	12.03	5.01	7.99	3.51
50th-Percentile Queue Length [ft/ln]	230.73	202.26	196.40	72.09	119.39	84.27	127.96	193.91	300.74	125.24	199.64	87.65
95th-Percentile Queue Length [veh/ln]	14.21	12.76	12.45	5.19	8.36	6.07	8.83	12.32	17.72	8.68	12.62	6.31
95th-Percentile Queue Length [ft/ln]	355.29	318.88	311.31	129.77	208.99	151.68	220.72	308.10	442.94	217.01	315.50	157.77

Movement, Approach, & Intersection Results

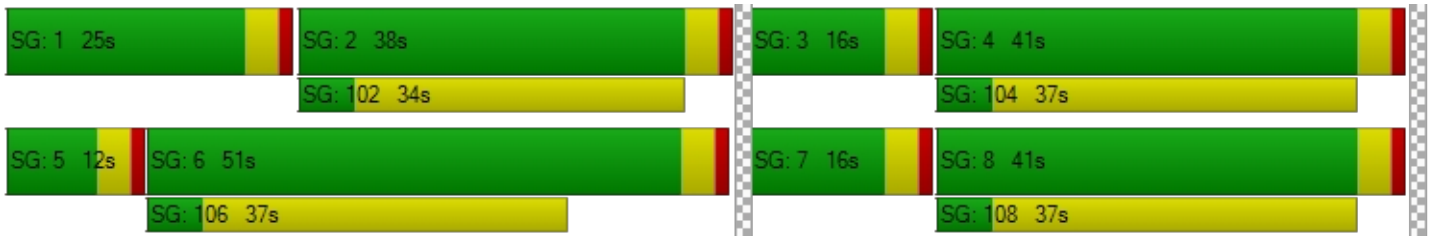
d_M, Delay for Movement [s/veh]	58.10	58.10	24.77	26.58	60.57	60.57	30.62	30.25	64.08	64.08	41.10	59.67	61.09	61.09	41.35	37.58
Movement LOS	E	E	C	C	E	E	C	C	E	E	D	E	E	E	D	D
d_A, Approach Delay [s/veh]	36.21				36.14				50.44				46.71			
Approach LOS	D				D				D				D			
d_I, Intersection Delay [s/veh]	41.65															
Intersection LOS	D															
Intersection V/C	0.620															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.37	51.37	51.37	51.37
l_p,int, Pedestrian LOS Score for Intersectio	3.175	3.035	2.853	2.911
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	783	566	616	616
d_b, Bicycle Delay [s]	22.23	30.85	28.73	28.73
l_b,int, Bicycle LOS Score for Intersection	2.958	2.006	2.341	2.172
Bicycle LOS	C	B	B	B

Sequence

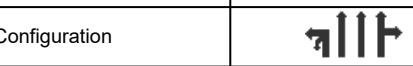
Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



Intersection Level Of Service Report
Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	158.1
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	8	27	1574	11	80	8	1183	11	5	0	12	1	0	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	27	1574	11	80	8	1183	11	5	0	12	1	0	10
Peak Hour Factor	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.9770	0.9770	0.9770	0.9770	0.9770	0.9770
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	7	403	3	20	2	303	3	1	0	3	0	0	3
Total Analysis Volume [veh/h]	8	28	1611	11	82	8	1211	11	5	0	12	1	0	10
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.09	0.02	0.00	0.25	0.04	0.01	0.00	0.15	0.00	0.03	0.04	0.00	0.04
d_M, Delay for Movement [s/veh]	13.60	18.09	0.00	0.00	20.30	28.11	0.00	0.00	119.28	487.62	22.65	158.05	485.66	20.16
Movement LOS	B	C	A	A	C	D	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.36	0.36	0.00	0.00	1.16	1.16	0.00	0.00	0.62	0.62	0.62	0.25	0.25	0.25
95th-Percentile Queue Length [ft/ln]	8.99	8.99	0.00	0.00	28.91	28.91	0.00	0.00	15.40	15.40	15.40	6.25	6.25	6.25
d_A, Approach Delay [s/veh]	0.37				1.44				51.07			32.69		
Approach LOS	A				A				F			D		
d_I, Intersection Delay [s/veh]	1.24													
Intersection LOS	F													

Intersection Level Of Service Report
Intersection 4: El Camino Real (SR-82) (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	83.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.672

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	108.0	100.0	100.0	180.0	218.0	100.0	100.0	100.0	100.00	100.00	85.00	100.00	100.00	206.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Base Volume Input [veh/h]	17	13	1313	162	11	192	943	58	80	57	38	147	59	208
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	13	1313	162	11	192	943	58	80	57	38	147	59	208
Peak Hour Factor	1.000	0.968	0.968	0.968	1.000	0.968	0.968	0.968	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	339	42	3	50	244	15	21	15	10	38	15	54
Total Analysis Volume [veh/h]	17	13	1356	167	11	198	974	60	83	59	39	152	61	215
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	79
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	12	25	0	0	12	25	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	14	0	0	0	16	0	0	33	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	C	R	C	R
C, Cycle Length [s]	79	79	79	79	79	79	79	79	79	79
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	21	21	8	27	27	38	38	38	38
g / C, Green / Cycle	0.03	0.27	0.27	0.10	0.34	0.34	0.48	0.48	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.02	0.27	0.11	0.12	0.19	0.04	1.98	0.02	5.15	0.14
s, saturation flow rate [veh/h]	1781	5094	1589	1781	5094	1589	72	1589	41	1589
c, Capacity [veh/h]	54	1367	426	180	1727	539	107	761	98	761
d1, Uniform Delay [s]	37.76	28.82	23.63	35.50	21.34	17.93	27.79	11.01	32.24	12.42
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.41	22.55	2.69	84.62	1.34	0.42	200.18	0.03	561.19	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.99	0.39	1.16	0.56	0.11	1.33	0.05	2.18	0.28
d, Delay for Lane Group [s/veh]	46.17	51.37	26.32	120.12	22.68	18.35	227.97	11.04	593.43	12.62
Lane Group LOS	D	D	C	F	C	B	F	B	F	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.68	10.84	2.74	7.57	4.80	0.77	7.98	0.36	17.15	2.22
50th-Percentile Queue Length [ft/ln]	17.04	271.12	68.49	189.37	119.97	19.37	199.54	8.90	428.71	55.50
95th-Percentile Queue Length [veh/ln]	1.23	16.25	4.93	12.74	8.39	1.39	14.37	0.64	30.87	4.00
95th-Percentile Queue Length [ft/ln]	30.67	406.14	123.28	318.54	209.79	34.86	359.16	16.02	771.68	99.91

Movement, Approach, & Intersection Results

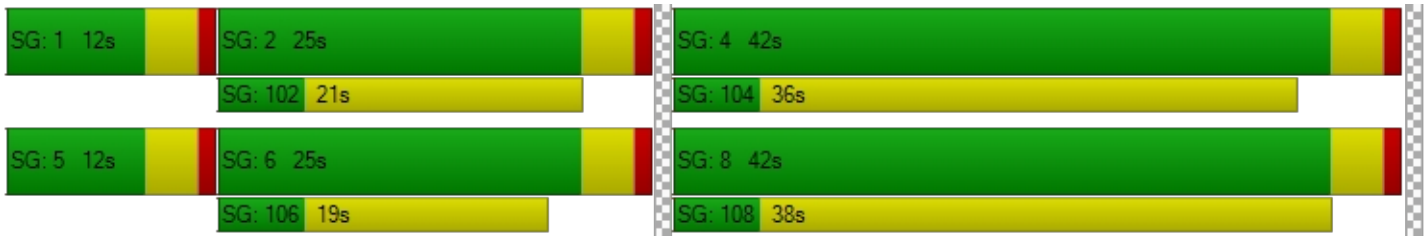
d_M, Delay for Movement [s/veh]	46.17	46.17	51.37	26.32	120.1	120.1	22.68	18.35	227.97	227.97	11.04	593.43	593.43	12.62
Movement LOS	D	D	D	C	F	F	C	B	F	F	B	F	F	B
d_A, Approach Delay [s/veh]	48.57				38.85				181.22			301.67		
Approach LOS	D				D				F			F		
d_I, Intersection Delay [s/veh]	83.89													
Intersection LOS	F													
Intersection V/C	5.672													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	31.01	31.01	31.01	31.01
l_p,int, Pedestrian LOS Score for Intersectio	3.323	3.250	2.021	2.166
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	532	532	962	962
d_b, Bicycle Delay [s]	21.29	21.29	10.64	10.64
l_b,int, Bicycle LOS Score for Intersection	2.404	2.134	1.858	2.266
Bicycle LOS	B	B	A	B

Sequence

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



EXISTING PLUS PROJECT

In-N-Out Burger (972 El Camino Real)

Vistro File: E:\...\MD.vistro
Report File: E:\...\MD EP.pdf

Scenario 2 Existing Plus Project
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Antoinette Ln (NS) at Chestnut Ave (EW)	Signalized	HCM 7th Edition	WB Left	0.368	28.0	C
2	El Camino Real (SR-82) (NS) at Westborough Blvd (EW)	Signalized	HCM 7th Edition	EB Left	0.516	37.5	D
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Two-way stop	HCM 7th Edition	WB Left	0.058	77.0	F
4	El Camino Real (SR-82) (NS) at Orange Ave (EW)	Signalized	HCM 7th Edition	WB Left	6.613	48.2	D
5	El Camino Real (SR-82) (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.181	16.4	C
6	El Camino Real (SR-82) (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.184	16.4	C

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

Intersection Level Of Service Report
Intersection 1: Antoinette Ln (NS) at Chestnut Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.368

Intersection Setup

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	177.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Base Volume Input [veh/h]	129	8	21	17	3	77	3	59	562	135	8	66	525	31
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	7	0	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	8	21	17	3	77	3	59	569	135	8	66	530	31
Peak Hour Factor	0.9720	0.9720	0.9720	0.9720	0.9720	0.9720	1.000	0.972	0.972	0.972	1.000	0.972	0.972	0.972
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	33	2	5	4	1	20	1	15	146	35	2	17	136	8
Total Analysis Volume [veh/h]	133	8	22	17	3	79	3	61	585	139	8	68	545	32
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	78
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	6	0	0	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	-	-	-	-	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	0	12	31	0	0	9	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	29	0	0	0	19	0	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No	No			No	No	
Maximum Recall		No			No			No	No			No	No	
Pedestrian Recall		No			No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	78	78	78	78	78	78	78	78
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	43	43	4	18	18	4	19	19
g / C, Green / Cycle	0.55	0.55	0.05	0.24	0.24	0.06	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.12	0.06	0.04	0.20	0.20	0.04	0.11	0.11
s, saturation flow rate [veh/h]	1409	1574	1781	1870	1748	1781	3560	1818
c, Capacity [veh/h]	865	926	88	442	413	100	865	441
d1, Uniform Delay [s]	8.54	8.27	36.59	28.47	28.48	36.34	25.07	25.09
k, delay calibration	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	0.23	10.73	4.54	4.91	11.23	0.35	0.70
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.11	0.73	0.85	0.85	0.76	0.44	0.44
d, Delay for Lane Group [s/veh]	9.02	8.50	47.32	33.01	33.39	47.57	25.42	25.80
Lane Group LOS	A	A	D	C	C	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.37	0.80	1.44	6.95	6.55	1.71	2.93	3.06
50th-Percentile Queue Length [ft/ln]	34.26	19.93	36.01	173.67	163.79	42.71	73.20	76.52
95th-Percentile Queue Length [veh/ln]	2.47	1.43	2.59	11.27	10.75	3.07	5.27	5.51
95th-Percentile Queue Length [ft/ln]	61.67	35.87	64.82	281.73	268.73	76.87	131.77	137.74

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	9.02	9.02	9.02	8.50	8.50	8.50	47.32	47.32	33.15	33.39	47.57	47.57	25.54	25.80
Movement LOS	A	A	A	A	A	A	D	D	C	C	D	D	C	C
d_A, Approach Delay [s/veh]	9.02			8.50			34.34				28.11			
Approach LOS	A			A			C				C			
d_I, Intersection Delay [s/veh]	28.03													
Intersection LOS	C													
Intersection V/C	0.368													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	30.54	30.54	30.54	30.54
l_p,int, Pedestrian LOS Score for Intersectio	1.861	1.791	2.993	2.679
Crosswalk LOS	A	A	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	871	871	692	615
d_b, Bicycle Delay [s]	12.43	12.43	16.69	18.71
l_b,int, Bicycle LOS Score for Intersection	1.829	1.723	2.159	1.881
Bicycle LOS	A	A	B	A

Sequence

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

Intersection Level Of Service Report

Intersection 2: El Camino Real (SR-82) (NS) at Westborough Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	37.5
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.516

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	0	0	2	0	0	1	1	0	0	1	0	0	0	1
Entry Pocket Length [ft]	285.0	100.0	100.0	100.0	255.0	100.0	100.0	413.0	172.0	100.0	100.0	226.0	100.0	100.0	100.0	115.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Base Volume Input [veh/h]	40	350	546	243	12	147	561	106	11	127	381	292	4	204	362	126
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	5	7	7	0	0	7	0	0	0	0	5	0	5	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	90	355	553	250	12	147	568	106	11	127	381	297	4	209	362	126
Peak Hour Factor	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	23	92	144	65	3	38	147	28	3	33	99	77	1	54	94	33
Total Analysis Volume [veh/h]	93	369	574	260	12	153	590	110	11	132	396	308	4	217	376	131
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	113
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups																
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	20	46	0	0	12	38	0	0	14	41	0	0	14	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	0	32	0	0	0	29	0	0	0	32	0	0	0	32	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	113	113	113	113	113	113	113	113	113	113	113	113
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	56	56	7	47	47	10	25	25	9	24	24
g / C, Green / Cycle	0.14	0.49	0.49	0.06	0.42	0.42	0.09	0.22	0.22	0.08	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.13	0.16	0.16	0.05	0.12	0.07	0.08	0.11	0.19	0.06	0.11	0.08
s, saturation flow rate [veh/h]	3459	3560	1589	3459	5094	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	491	1752	782	226	2115	660	159	783	349	282	756	337
d1, Uniform Delay [s]	48.05	17.40	17.45	51.89	21.87	20.78	51.01	38.73	42.69	50.95	39.23	38.24
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.15	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.34	0.50	1.14	4.53	0.33	0.54	16.32	0.51	9.66	4.76	0.51	0.73
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.33	0.33	0.73	0.28	0.17	0.90	0.51	0.88	0.78	0.50	0.39
d, Delay for Lane Group [s/veh]	57.39	17.90	18.59	56.42	22.20	21.32	67.34	39.23	52.36	55.71	39.74	38.97
Lane Group LOS	E	B	B	E	C	C	E	D	D	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.99	4.51	4.23	2.42	3.45	1.90	4.72	4.87	9.20	3.25	4.65	3.19
50th-Percentile Queue Length [ft/ln]	174.82	112.68	105.81	60.41	86.32	47.50	118.00	121.79	229.94	81.29	116.20	79.73
95th-Percentile Queue Length [veh/ln]	11.33	7.99	7.61	4.35	6.21	3.42	8.28	8.49	14.17	5.85	8.18	5.74
95th-Percentile Queue Length [ft/ln]	283.23	199.72	190.15	108.74	155.37	85.50	207.08	212.29	354.28	146.32	204.59	143.51

Movement, Approach, & Intersection Results

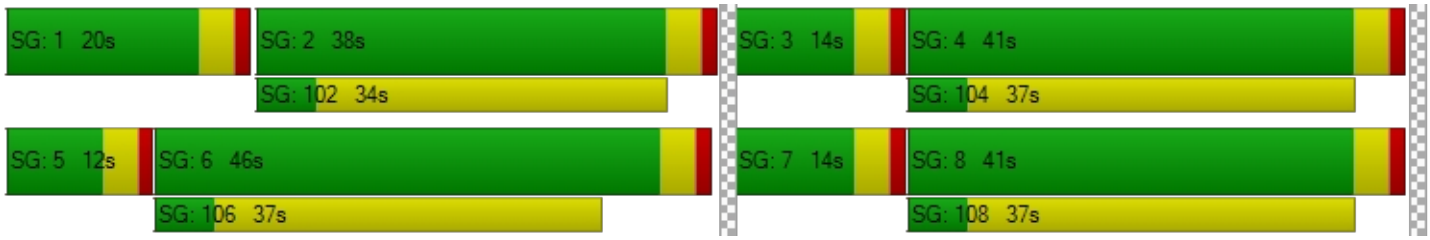
d_M, Delay for Movement [s/veh]	57.39	57.39	17.90	18.59	56.42	56.42	22.20	21.32	67.34	67.34	39.23	52.36	55.71	55.71	39.74	38.97
Movement LOS	E	E	B	B	E	E	C	C	E	E	D	D	E	E	D	D
d_A, Approach Delay [s/veh]	32.12				28.62				48.75				44.45			
Approach LOS	C				C				D				D			
d_I, Intersection Delay [s/veh]	37.48															
Intersection LOS	D															
Intersection V/C	0.516															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.88	47.88	47.88	47.88
l_p,int, Pedestrian LOS Score for Intersectio	3.081	2.980	2.742	2.820
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	743	602	655	655
d_b, Bicycle Delay [s]	22.32	27.64	25.58	25.58
l_b,int, Bicycle LOS Score for Intersection	2.552	1.951	2.149	1.981
Bicycle LOS	B	A	B	A

Sequence

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

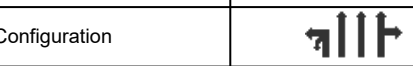


Intersection Level Of Service Report

Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	77.0
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.058

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	20	7	1135	15	64	0	985	19	5	0	12	3	0	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	18	0	17	0	13	2	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	35	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	7	1153	15	116	0	998	21	5	0	12	3	0	6
Peak Hour Factor	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.9720	0.9720	0.9720	0.9720	0.9720	0.9720
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	297	4	30	0	257	5	1	0	3	1	0	2
Total Analysis Volume [veh/h]	21	7	1186	15	119	0	1027	22	5	0	12	3	0	6
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.01	0.00	0.24	0.00	0.01	0.00	0.08	0.00	0.03	0.06	0.00	0.02
d_M, Delay for Movement [s/veh]	11.53	15.12	0.00	0.00	14.28	18.69	0.00	0.00	67.36	189.02	16.19	77.04	192.44	16.81
Movement LOS	B	C	A	A	B	C	A	A	F	F	C	F	F	C
95th-Percentile Queue Length [veh/ln]	0.17	0.17	0.00	0.00	0.91	0.91	0.00	0.00	0.36	0.36	0.36	0.24	0.24	0.24
95th-Percentile Queue Length [ft/ln]	4.32	4.32	0.00	0.00	22.63	22.63	0.00	0.00	9.11	9.11	9.11	5.88	5.88	5.88
d_A, Approach Delay [s/veh]	0.28				1.46				31.24			36.89		
Approach LOS	A				A				D			E		
d_I, Intersection Delay [s/veh]	1.20													
Intersection LOS	F													

Intersection Level Of Service Report
Intersection 4: El Camino Real (SR-82) (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	48.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.613

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	108.0	100.0	100.0	180.0	218.0	100.0	100.0	100.0	100.00	100.00	85.00	100.00	100.00	206.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Base Volume Input [veh/h]	12	5	933	101	30	111	834	36	68	45	36	115	26	162
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	9	0	0	5	8	0	2	0	0	0	0	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	5	942	101	30	116	842	36	70	45	36	115	26	169
Peak Hour Factor	1.000	0.974	0.974	0.974	1.000	0.974	0.974	0.974	0.9740	0.9740	0.9740	0.9740	0.9740	0.9740
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	1	242	26	8	30	216	9	18	12	9	30	7	43
Total Analysis Volume [veh/h]	12	5	967	104	30	119	864	37	72	46	37	118	27	174
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	9	24	0	0	10	25	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	14	0	0	0	16	0	0	33	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	C	R	C	R
C, Cycle Length [s]	76	76	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	20	20	6	25	25	38	38	38	38
g / C, Green / Cycle	0.02	0.26	0.26	0.08	0.32	0.32	0.50	0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.01	0.19	0.07	0.08	0.17	0.02	1.84	0.02	6.17	0.11
s, saturation flow rate [veh/h]	1781	5094	1589	1781	5094	1589	64	1589	24	1589
c, Capacity [veh/h]	35	1349	421	141	1650	515	108	792	98	792
d1, Uniform Delay [s]	36.86	25.36	21.98	35.00	20.92	17.79	27.18	9.79	33.66	10.74
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.79	3.30	1.40	52.15	1.19	0.27	113.14	0.02	264.81	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.48	0.72	0.25	1.06	0.52	0.07	1.09	0.05	1.49	0.22
d, Delay for Lane Group [s/veh]	46.65	28.66	23.38	87.15	22.12	18.06	140.31	9.81	298.47	10.87
Lane Group LOS	D	C	C	F	C	B	F	A	F	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.40	5.36	1.55	4.53	4.06	0.46	5.40	0.31	8.98	1.58
50th-Percentile Queue Length [ft/ln]	9.95	133.91	38.66	113.26	101.50	11.56	134.88	7.63	224.59	39.42
95th-Percentile Queue Length [veh/ln]	0.72	9.15	2.78	8.15	7.31	0.83	9.69	0.55	16.17	2.84
95th-Percentile Queue Length [ft/ln]	17.90	228.80	69.59	203.87	182.70	20.80	242.16	13.73	404.27	70.95

Movement, Approach, & Intersection Results

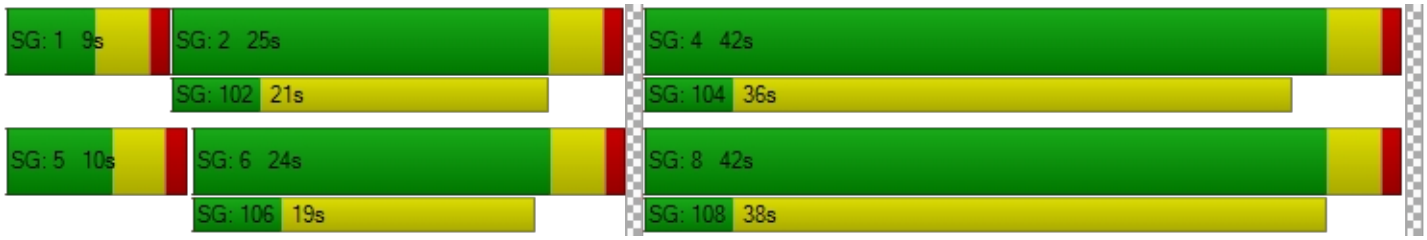
d_M, Delay for Movement [s/veh]	46.65	46.65	28.66	23.38	87.15	87.15	22.12	18.06	140.31	140.31	9.81	298.47	298.47	10.87
Movement LOS	D	D	C	C	F	F	C	B	F	F	A	F	F	B
d_A, Approach Delay [s/veh]	28.43				31.20				109.16			141.60		
Approach LOS	C				C				F			F		
d_I, Intersection Delay [s/veh]	48.16													
Intersection LOS	D													
Intersection V/C	6.613													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.53	29.53	29.53	29.53
l_p,int, Pedestrian LOS Score for Intersectio	3.186	3.143	1.994	2.093
Crosswalk LOS	C	C	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	553	1000	1000
d_b, Bicycle Delay [s]	20.63	19.90	9.50	9.50
l_b,int, Bicycle LOS Score for Intersection	2.151	2.072	1.815	2.086
Bicycle LOS	B	B	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 5: El Camino Real (SR-82) (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.181

Intersection Setup

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project North Dwy	
Base Volume Input [veh/h]	1146	0	0	1057	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	17	0	32	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-35	35	0	0	0	35
Existing Site Adjustment Volume [veh/h]	-18	18	0	0	0	18
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1110	70	0	1089	0	70
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	278	18	0	272	0	18
Total Analysis Volume [veh/h]	1110	70	0	1089	0	70
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.18
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.37
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.65
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	16.33
d_A, Approach Delay [s/veh]	0.00		0.00		16.37	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: El Camino Real (SR-82) (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.184

Intersection Setup

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project South Dwy	
Base Volume Input [veh/h]	1146	0	0	1057	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	18	0	32	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-36	36	0	0	0	36
Existing Site Adjustment Volume [veh/h]	-18	18	0	0	0	18
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1109	72	0	1089	0	71
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	277	18	0	272	0	18
Total Analysis Volume [veh/h]	1109	72	0	1089	0	71
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.01	0.00	0.18
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.42
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.67
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	16.63
d_A, Approach Delay [s/veh]	0.00		0.00		16.42	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.50					
Intersection LOS	C					

In-N-Out Burger (972 El Camino Real)

Vistro File: E:\...\PM.vistro
Report File: E:\...\PM EP.pdf

Scenario 2 Existing Plus Project
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Antoinette Ln (NS) at Chestnut Ave (EW)	Signalized	HCM 7th Edition	EB Left	0.482	30.4	C
2	El Camino Real (SR-82) (NS) at Westborough Blvd (EW)	Signalized	HCM 7th Edition	EB Left	0.637	43.7	D
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Two-way stop	HCM 7th Edition	WB Left	0.058	216.2	F
4	El Camino Real (SR-82) (NS) at Orange Ave (EW)	Signalized	HCM 7th Edition	WB Left	5.774	91.9	F
5	El Camino Real (SR-82) (NS) at Project North Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.183	20.8	C
6	El Camino Real (SR-82) (NS) at Project South Dwy (EW)	Two-way stop	HCM 7th Edition	WB Right	0.187	20.9	C

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

Intersection Level Of Service Report
Intersection 1: Antoinette Ln (NS) at Chestnut Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	30.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.482

Intersection Setup

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Approach	Northbound			Southbound			Eastbound				Westbound			
Lane Configuration														
Turning Movement	Left	Thru	Right	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.0	100.0	100.0	100.0	177.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			30.00				30.00			
Grade [%]	0.00			0.00			0.00				0.00			
Curb Present	No			No			No				No			
Crosswalk	Yes			Yes			Yes				Yes			

Volumes

Name	Antoinette Ln			Antoinette Ln			Chestnut Ave				Chestnut Ave			
Base Volume Input [veh/h]	135	10	19	50	3	93	2	96	832	153	18	84	780	52
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	5	0	0	0	4	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	135	10	19	50	3	93	2	96	837	153	18	84	784	52
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540	1.000	0.954	0.954	0.954	1.000	0.954	0.954	0.954
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	35	3	5	13	1	24	1	25	219	40	5	22	205	14
Total Analysis Volume [veh/h]	142	10	20	52	3	97	2	101	877	160	18	88	822	55
Presence of On-Street Parking	No		No	No		No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0				0			
v_di, Inbound Pedestrian Volume crossing m	0			0			0				0			
v_co, Outbound Pedestrian Volume crossing	0			0			0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0				0			
Bicycle Volume [bicycles/h]	0			0			0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	6	0	0	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups														
Lead / Lag	-	-	-	-	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	10	0	0	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	0	0	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	38	0	0	38	0	0	12	28	0	0	10	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	29	0	0	29	0	0	0	19	0	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No			No			No	No			No	No	
Maximum Recall		No			No			No	No			No	No	
Pedestrian Recall		No			No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C	C	L	C	C	L	C	C
C, Cycle Length [s]	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	35	35	6	23	23	6	24	24
g / C, Green / Cycle	0.46	0.46	0.07	0.31	0.31	0.08	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.12	0.10	0.06	0.28	0.29	0.06	0.16	0.16
s, saturation flow rate [veh/h]	1378	1553	1781	1870	1771	1781	3560	1811
c, Capacity [veh/h]	720	777	132	573	543	136	1098	558
d1, Uniform Delay [s]	12.47	12.21	34.57	25.55	25.57	34.50	21.73	21.75
k, delay calibration	0.50	0.50	0.11	0.25	0.25	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.78	0.56	9.39	13.99	14.80	9.40	0.40	0.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.24	0.20	0.78	0.93	0.93	0.78	0.53	0.53
d, Delay for Lane Group [s/veh]	13.25	12.77	43.96	39.55	40.37	43.90	22.13	22.53
Lane Group LOS	B	B	D	D	D	D	C	C
Critical Lane Group	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.85	1.59	2.17	10.95	10.51	2.23	4.12	4.26
50th-Percentile Queue Length [ft/ln]	46.36	39.71	54.18	273.86	262.85	55.70	102.94	106.62
95th-Percentile Queue Length [veh/ln]	3.34	2.86	3.90	16.38	15.83	4.01	7.41	7.65
95th-Percentile Queue Length [ft/ln]	83.45	71.47	97.53	409.56	395.79	100.25	185.29	191.29

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.25	13.25	13.25	12.77	12.77	12.77	43.96	43.96	39.87	40.37	43.90	43.90	22.25	22.53
Movement LOS	B	B	B	B	B	B	D	D	D	D	D	D	C	C
d_A, Approach Delay [s/veh]	13.25			12.77			40.31				24.60			
Approach LOS	B			B			D				C			
d_I, Intersection Delay [s/veh]	30.39													
Intersection LOS	C													
Intersection V/C	0.482													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.54	29.54	29.54	29.54
l_p,int, Pedestrian LOS Score for Intersectio	1.880	1.837	3.096	2.834
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	895	895	631	579
d_b, Bicycle Delay [s]	11.61	11.61	17.80	19.19
l_b,int, Bicycle LOS Score for Intersection	1.843	1.810	2.417	2.052
Bicycle LOS	A	A	B	B

Sequence

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

Intersection Level Of Service Report

Intersection 2: El Camino Real (SR-82) (NS) at Westborough Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	43.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.637

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Approach	Northbound				Southbound				Eastbound				Westbound			
Lane Configuration																
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	2	0	0	0	2	0	0	1	1	0	0	1	0	0	0	1
Entry Pocket Length [ft]	285.0	100.0	100.0	100.0	255.0	100.0	100.0	413.0	172.0	100.0	100.0	226.0	100.0	100.0	100.0	115.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				30.00				30.00			
Grade [%]	0.00				0.00				0.00				0.00			
Curb Present	No				No				No				No			
Crosswalk	Yes				Yes				Yes				Yes			

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Westborough Blvd				Chestnut Ave			
Base Volume Input [veh/h]	45	512	768	355	11	166	625	147	8	141	560	346	6	294	573	137
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00															
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	3	5	5	0	0	5	0	0	0	0	4	0	4	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	81	515	773	360	11	166	630	147	8	141	560	350	6	298	573	137
Peak Hour Factor	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965	0.965
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	21	133	200	93	3	43	163	38	2	37	145	91	2	77	148	35
Total Analysis Volume [veh/h]	84	534	801	373	11	172	653	152	8	146	580	363	6	309	594	142
Presence of On-Street Parking	No			No	No			No	No			No	No			No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0				0			
v_di, Inbound Pedestrian Volume crossing m	0				0				0				0			
v_co, Outbound Pedestrian Volume crossing	0				0				0				0			
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0				0			
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0				0			
Bicycle Volume [bicycles/h]	0				0				0				0			

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	119
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi
Signal Group	0	1	6	0	0	5	2	0	0	3	8	0	0	7	4	0
Auxiliary Signal Groups																
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-	-	Lead	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	5	10	0	0	5	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	30	0	0	30	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	0	25	52	0	0	11	38	0	0	15	41	0	0	15	41	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	0	5	0	0	0	5	0
Pedestrian Clearance [s]	0	0	32	0	0	0	29	0	0	0	32	0	0	0	32	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No				No				No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0
Minimum Recall		No	No			No	No			No	No			No	No	
Maximum Recall		No	No			No	No			No	No			No	No	
Pedestrian Recall		No	No			No	No			No	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	L	C	R	L	C	R
C, Cycle Length [s]	119	119	119	119	119	119	119	119	119	119	119	119
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	21	55	55	7	41	41	11	30	30	11	30	30
g / C, Green / Cycle	0.18	0.46	0.46	0.06	0.34	0.34	0.09	0.25	0.25	0.09	0.25	0.25
(v / s)_i Volume / Saturation Flow Rate	0.18	0.22	0.23	0.05	0.13	0.10	0.09	0.16	0.23	0.09	0.17	0.09
s, saturation flow rate [veh/h]	3459	3560	1589	3459	5094	1589	1781	3560	1589	3459	3560	1589
c, Capacity [veh/h]	612	1634	729	208	1743	544	167	901	402	324	901	402
d1, Uniform Delay [s]	49.03	22.51	22.79	55.54	29.56	28.50	53.57	39.70	43.07	53.84	39.89	36.50
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.27	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	19.48	1.06	2.55	11.16	0.62	1.28	18.44	0.78	16.18	17.70	0.83	0.53
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.01	0.49	0.51	0.88	0.37	0.28	0.92	0.64	0.90	0.97	0.66	0.35
d, Delay for Lane Group [s/veh]	68.51	23.56	25.35	66.70	30.18	29.78	72.01	40.48	59.25	71.54	40.72	37.02
Lane Group LOS	F	C	C	E	C	C	E	D	E	E	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.62	7.87	7.71	3.03	4.75	3.33	5.42	7.65	12.07	5.49	7.88	3.46
50th-Percentile Queue Length [ft/ln]	265.42	196.68	192.79	75.69	118.80	83.13	135.61	191.31	301.67	137.35	196.95	86.49
95th-Percentile Queue Length [veh/ln]	16.04	12.47	12.27	5.45	8.33	5.99	9.24	12.19	17.76	9.34	12.48	6.23
95th-Percentile Queue Length [ft/ln]	401.08	311.68	306.64	136.24	208.18	149.63	231.10	304.72	444.10	233.45	312.03	155.67

Movement, Approach, & Intersection Results

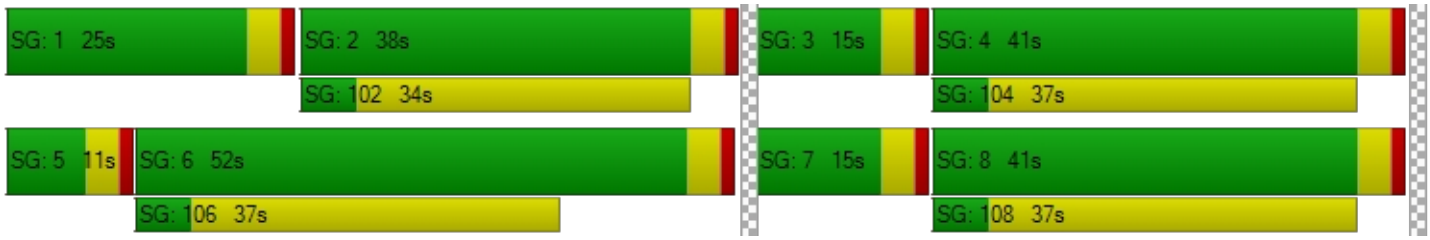
d_M, Delay for Movement [s/veh]	68.51	68.51	23.56	25.35	66.70	66.70	30.18	29.78	72.01	72.01	40.48	59.25	71.54	71.54	40.72	37.02
Movement LOS	E	E	C	C	E	E	C	C	E	E	D	E	E	E	D	D
d_A, Approach Delay [s/veh]	39.44				36.88				51.12				49.46			
Approach LOS	D				D				D				D			
d_I, Intersection Delay [s/veh]	43.66															
Intersection LOS	D															
Intersection V/C	0.637															

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	50.87	50.87	50.87	50.87
l_p,int, Pedestrian LOS Score for Intersectio	3.184	3.036	2.854	2.912
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	806	571	622	622
d_b, Bicycle Delay [s]	21.21	30.39	28.28	28.28
l_b,int, Bicycle LOS Score for Intersection	2.969	2.008	2.344	2.172
Bicycle LOS	C	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	216.2
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.058

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	8	27	1574	11	80	8	1183	11	5	0	12	1	0	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	0	13	0	9	1	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	26	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	27	1586	11	119	8	1192	12	5	0	12	1	0	10
Peak Hour Factor	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.9770	0.9770	0.9770	0.9770	0.9770	0.9770
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	7	406	3	30	2	305	3	1	0	3	0	0	3
Total Analysis Volume [veh/h]	8	28	1623	11	122	8	1220	12	5	0	12	1	0	10
Pedestrian Volume [ped/h]	0				0				0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.09	0.02	0.00	0.37	0.04	0.01	0.00	0.20	0.00	0.03	0.06	0.00	0.04
d_M, Delay for Movement [s/veh]	13.69	18.25	0.00	0.00	23.60	31.54	0.00	0.00	165.35	683.47	29.19	216.22	678.73	21.31
Movement LOS	B	C	A	A	C	D	A	A	F	F	D	F	F	C
95th-Percentile Queue Length [veh/ln]	0.36	0.36	0.00	0.00	1.93	1.93	0.00	0.00	0.82	0.82	0.82	0.31	0.31	0.31
95th-Percentile Queue Length [ft/ln]	9.09	9.09	0.00	0.00	48.29	48.29	0.00	0.00	20.54	20.54	20.54	7.63	7.63	7.63
d_A, Approach Delay [s/veh]	0.37				2.30				69.24			39.03		
Approach LOS	A				A				F			E		
d_I, Intersection Delay [s/veh]	1.75													
Intersection LOS	F													

Intersection Level Of Service Report
Intersection 4: El Camino Real (SR-82) (NS) at Orange Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	91.9
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.774

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	1	0	0	1	0	0	1	0	0	1
Entry Pocket Length [ft]	108.0	100.0	100.0	180.0	218.0	100.0	100.0	100.0	100.00	100.00	85.00	100.00	100.00	206.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	Yes				Yes				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Orange Ave			Orange Ave		
Base Volume Input [veh/h]	17	13	1313	162	11	192	943	58	80	57	38	147	59	208
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	3	6	0	1	0	0	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	13	1319	162	11	195	949	58	81	57	38	147	59	213
Peak Hour Factor	1.000	0.968	0.968	0.968	1.000	0.968	0.968	0.968	0.9680	0.9680	0.9680	0.9680	0.9680	0.9680
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	341	42	3	50	245	15	21	15	10	38	15	55
Total Analysis Volume [veh/h]	17	13	1363	167	11	201	980	60	84	59	39	152	61	220
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	76
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	9	24	0	0	10	25	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	14	0	0	0	16	0	0	33	0	0	31	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	R	C	R	C	R
C, Cycle Length [s]	76	76	76	76	76	76	76	76	76	76
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	20	20	6	24	24	38	38	38	38
g / C, Green / Cycle	0.03	0.26	0.26	0.08	0.31	0.31	0.50	0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.02	0.27	0.11	0.12	0.19	0.04	2.03	0.02	5.24	0.14
s, saturation flow rate [veh/h]	1781	5094	1589	1781	5094	1589	70	1589	41	1589
c, Capacity [veh/h]	55	1349	421	141	1593	497	110	792	101	792
d1, Uniform Delay [s]	36.30	27.94	22.95	35.00	22.22	18.65	26.34	9.80	30.71	11.10
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.50	0.11	0.50	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.15	27.16	2.79	236.31	1.79	0.50	185.26	0.03	526.68	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	1.01	0.40	1.51	0.62	0.12	1.30	0.05	2.10	0.28
d, Delay for Lane Group [s/veh]	44.45	55.10	25.74	271.31	24.01	19.14	211.61	9.83	557.38	11.29
Lane Group LOS	D	F	C	F	C	B	F	A	F	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.65	10.99	2.64	11.73	4.88	0.78	7.71	0.32	16.71	2.06
50th-Percentile Queue Length [ft/ln]	16.35	274.75	66.12	293.13	122.00	19.50	192.66	8.05	417.83	51.56
95th-Percentile Queue Length [veh/ln]	1.18	16.53	4.76	19.53	8.50	1.40	13.87	0.58	30.08	3.71
95th-Percentile Queue Length [ft/ln]	29.43	413.19	119.02	488.15	212.57	35.11	346.79	14.49	752.10	92.81

Movement, Approach, & Intersection Results

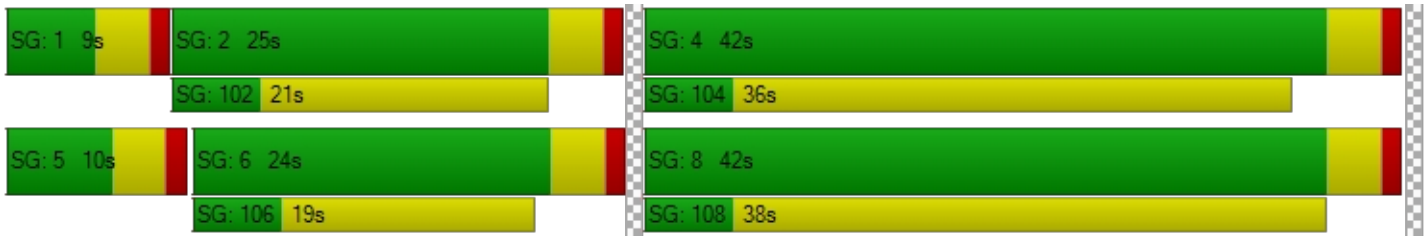
d_M, Delay for Movement [s/veh]	44.45	44.45	55.10	25.74	271.3	271.3	24.01	19.14	211.61	211.61	9.83	557.38	557.38	11.29
Movement LOS	D	D	F	C	F	F	C	B	F	F	A	F	F	B
d_A, Approach Delay [s/veh]	51.75				65.65				168.37			279.92		
Approach LOS	D				E				F			F		
d_I, Intersection Delay [s/veh]	91.85													
Intersection LOS	F													
Intersection V/C	5.774													

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	29.53	29.53	29.53	29.53
l_p,int, Pedestrian LOS Score for Intersectio	3.323	3.253	2.019	2.166
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	526	553	1000	1000
d_b, Bicycle Delay [s]	20.63	19.90	9.50	9.50
l_b,int, Bicycle LOS Score for Intersection	2.408	2.138	1.860	2.274
Bicycle LOS	B	B	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 5: El Camino Real (SR-82) (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.183

Intersection Setup

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project North Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project North Dwy	
Base Volume Input [veh/h]	1589	0	0	1265	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	13	0	23	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-26	26	0	0	0	26
Existing Site Adjustment Volume [veh/h]	-13	13	0	0	0	13
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1561	52	0	1288	0	51
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	390	13	0	322	0	13
Total Analysis Volume [veh/h]	1561	52	0	1288	0	51
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.01	0.00	0.18
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	20.79
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.66
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	16.42
d_A, Approach Delay [s/veh]	0.00		0.00		20.79	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.36					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: El Camino Real (SR-82) (NS) at Project South Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	20.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.187

Intersection Setup

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project South Dwy	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	El Camino Real (SR-82)		El Camino Real (SR-82)		Project South Dwy	
Base Volume Input [veh/h]	1589	0	0	1265	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	12	0	23	0	11
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	-27	27	0	0	0	27
Existing Site Adjustment Volume [veh/h]	-14	14	0	0	0	14
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1561	53	0	1288	0	52
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	390	13	0	322	0	13
Total Analysis Volume [veh/h]	1561	53	0	1288	0	52
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.01	0.00	0.19
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	20.87
Movement LOS	A	A		A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.67
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	16.82
d_A, Approach Delay [s/veh]	0.00		0.00		20.87	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.37					
Intersection LOS	C					

In-N-Out Burger (972 El Camino Real)

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Report File: E:\...\MD EP - Ultimate.pdf

Scenario 4 Existing Plus Project - Ultimate Improvements
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Signalized	HCM 7th Edition	NB U-T	0.308	6.0	A

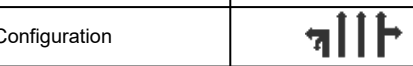
V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report

Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	6.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.308

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	20	7	1135	15	64	0	985	19	5	0	12	3	0	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	18	0	17	0	13	2	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	35	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	7	1153	15	116	0	998	21	5	0	12	3	0	6
Peak Hour Factor	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.972	0.9720	0.9720	0.9720	0.9720	0.9720	0.9720
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	2	297	4	30	0	257	5	1	0	3	1	0	2
Total Analysis Volume [veh/h]	21	7	1186	15	119	0	1027	22	5	0	12	3	0	6
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	16	19	0	0	27	30	0	0	14	0	0	14	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	10	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	40	40	5	44	44	3	3
g / C, Green / Cycle	0.03	0.67	0.67	0.09	0.73	0.73	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.22	0.22	0.07	0.20	0.01	0.01	0.01
s, saturation flow rate [veh/h]	1781	3560	1858	1781	5094	1589	1757	1773
c, Capacity [veh/h]	59	2375	1239	160	3687	1150	154	157
d1, Uniform Delay [s]	28.56	4.29	4.29	26.69	2.87	2.33	27.79	27.67
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.74	0.38	0.72	6.59	0.19	0.03	0.31	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.33	0.33	0.74	0.28	0.02	0.11	0.06
d, Delay for Lane Group [s/veh]	34.30	4.66	5.01	33.28	3.06	2.36	28.11	27.82
Lane Group LOS	C	A	A	C	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.47	1.35	1.53	1.84	0.69	0.04	0.24	0.13
50th-Percentile Queue Length [ft/ln]	11.64	33.72	38.16	45.89	17.33	1.06	6.05	3.18
95th-Percentile Queue Length [veh/ln]	0.84	2.43	2.75	3.30	1.25	0.08	0.44	0.23
95th-Percentile Queue Length [ft/ln]	20.95	60.69	68.70	82.61	31.20	1.91	10.90	5.72

Movement, Approach, & Intersection Results

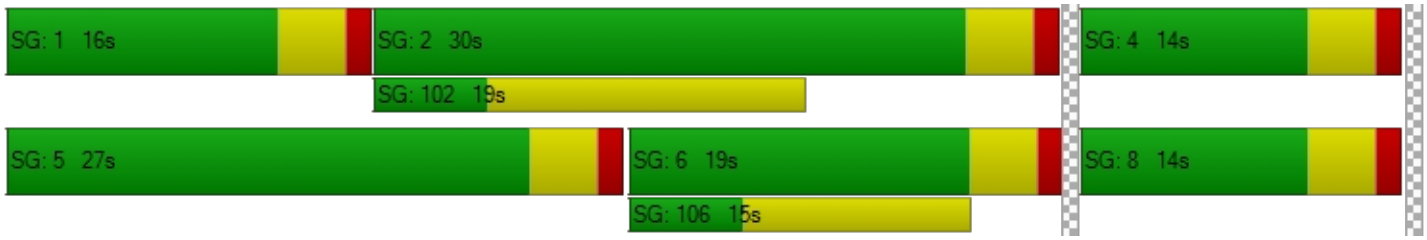
d_M, Delay for Movement [s/veh]	34.30	34.30	4.78	5.01	33.28	33.28	3.06	2.36	28.11	28.11	28.11	27.82	27.82	27.82
Movement LOS	C	C	A	A	C	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	5.45				6.13				28.11			27.82		
Approach LOS	A				A				C			C		
d_I, Intersection Delay [s/veh]	6.02													
Intersection LOS	A													
Intersection V/C	0.308													

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.121	1.927
Crosswalk LOS	F	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	499	865	333	333
d_b, Bicycle Delay [s]	16.91	9.67	20.87	20.87
l_b,int, Bicycle LOS Score for Intersection	2.224	2.202	1.588	1.574
Bicycle LOS	B	B	A	A

Sequence

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



In-N-Out Burger (972 El Camino Real)

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Report File: E:\...\PM EP - Ultimate.pdf

Scenario 4 Existing Plus Project - Ultimate Improvements
12/12/2024

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
3	El Camino Real (SR-82) (NS) at Southwood Dr (EW)	Signalized	HCM 7th Edition	NB Left	0.397	6.5	A

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

Intersection Level Of Service Report

Intersection 3: El Camino Real (SR-82) (NS) at Southwood Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	6.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.397

Intersection Setup

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Approach	Northbound				Southbound				Eastbound			Westbound		
Lane Configuration														
Turning Movement	U-tu	Left	Thru	Right	U-tu	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	122.0	100.0	100.0	100.0	172.0	100.0	100.0	130.0	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00				35.00				25.00			25.00		
Grade [%]	0.00				0.00				0.00			0.00		
Curb Present	No				No				No			No		
Crosswalk	No				No				Yes			Yes		

Volumes

Name	El Camino Real (SR-82)				El Camino Real (SR-82)				Southwood Dr			1st St		
Base Volume Input [veh/h]	8	27	1574	11	80	8	1183	11	5	0	12	1	0	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00													
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	0	13	0	9	1	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	26	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	8	27	1586	11	119	8	1192	12	5	0	12	1	0	10
Peak Hour Factor	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.977	0.9770	0.9770	0.9770	0.9770	0.9770	0.9770
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	7	406	3	30	2	305	3	1	0	3	0	0	3
Total Analysis Volume [veh/h]	8	28	1623	11	122	8	1220	12	5	0	12	1	0	10
Presence of On-Street Parking	No			No	No			No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0				0				0			0		
v_di, Inbound Pedestrian Volume crossing m	0				0				0			0		
v_co, Outbound Pedestrian Volume crossing	0				0				0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0				0				0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0				0				0			0		
Bicycle Volume [bicycles/h]	0				0				0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	2.00

Phasing & Timing

Control Type	Permi	Prote	Permi	Permi	Permi	Prote	Permi	Permi	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	1	6	0	0	5	2	0	0	8	0	0	4	0
Auxiliary Signal Groups														
Lead / Lag	-	Lead	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	5	10	0	0	5	10	0	0	10	0	0	10	0
Maximum Green [s]	0	30	30	0	0	30	30	0	0	30	0	0	30	0
Amber [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	10	35	0	0	11	36	0	0	14	0	0	14	0
Vehicle Extension [s]	0.0	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	5	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	10	0	0	0	14	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk			No				No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No	No			No	No			No			No	
Maximum Recall		No	No			No	No			No			No	
Pedestrian Recall		No	No			No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	40	40	6	43	43	3	3
g / C, Green / Cycle	0.04	0.66	0.66	0.09	0.72	0.72	0.04	0.04
(v / s)_i Volume / Saturation Flow Rate	0.02	0.30	0.30	0.07	0.24	0.01	0.01	0.01
s, saturation flow rate [veh/h]	1781	3560	1864	1781	5094	1589	1766	1791
c, Capacity [veh/h]	71	2357	1234	169	3654	1140	154	143
d1, Uniform Delay [s]	28.31	4.92	4.92	26.57	3.16	2.42	27.79	27.71
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.52	0.64	1.21	7.08	0.25	0.02	0.31	0.23
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.51	0.46	0.46	0.77	0.33	0.01	0.11	0.08
d, Delay for Lane Group [s/veh]	33.83	5.56	6.13	33.65	3.41	2.44	28.11	27.94
Lane Group LOS	C	A	A	C	A	A	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	0.58	2.13	2.42	2.02	0.93	0.02	0.24	0.16
50th-Percentile Queue Length [ft/ln]	14.60	53.18	60.61	50.43	23.15	0.61	6.05	3.91
95th-Percentile Queue Length [veh/ln]	1.05	3.83	4.36	3.63	1.67	0.04	0.44	0.28
95th-Percentile Queue Length [ft/ln]	26.28	95.73	109.11	90.77	41.68	1.10	10.89	7.05

Movement, Approach, & Intersection Results

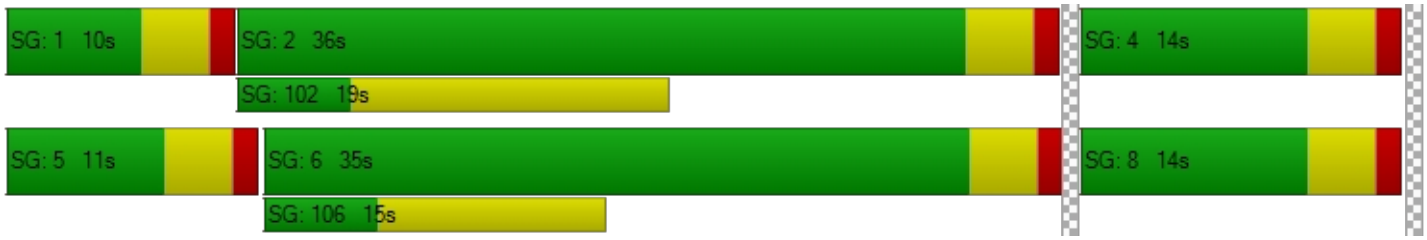
d_M, Delay for Movement [s/veh]	33.83	33.83	5.75	6.13	33.65	33.65	3.41	2.44	28.11	28.11	28.11	27.94	27.94	27.94
Movement LOS	C	C	A	A	C	C	A	A	C	C	C	C	C	C
d_A, Approach Delay [s/veh]	6.36				6.29				28.11			27.94		
Approach LOS	A				A				C			C		
d_I, Intersection Delay [s/veh]	6.53													
Intersection LOS	A													
Intersection V/C	0.397													

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	21.72	21.72
l_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.123	1.929
Crosswalk LOS	F	F	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1032	1065	333	333
d_b, Bicycle Delay [s]	7.04	6.56	20.87	20.87
l_b,int, Bicycle LOS Score for Intersection	2.474	2.304	1.588	1.578
Bicycle LOS	B	B	A	A

Sequence

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



APPENDIX E

TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

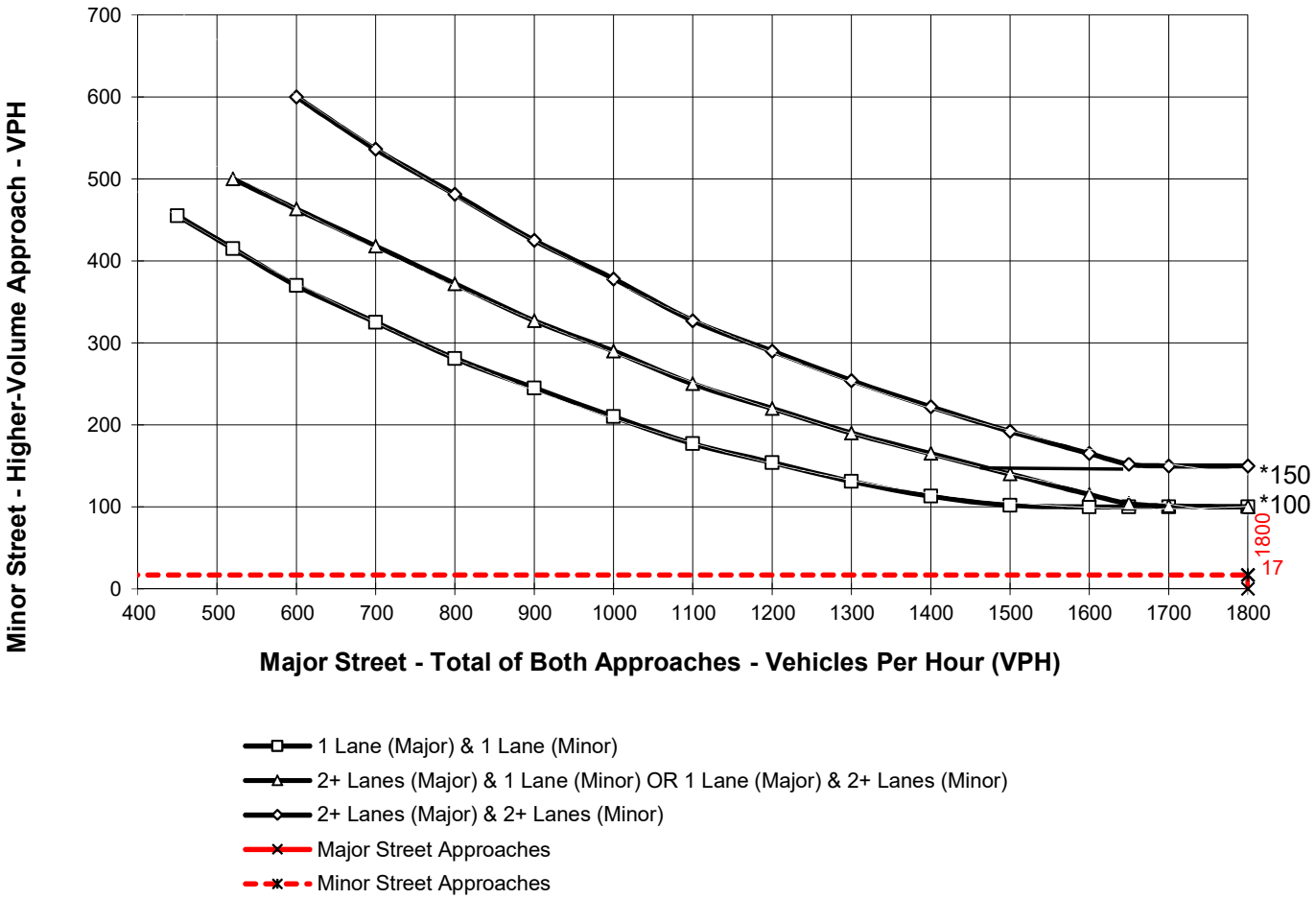
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Existing Weekday PM**

Major Street Name = **El Camino Real** Total of Both Approaches (VPH) = **2894**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Southwood Drive** High Volume Approach (VPH) = **17**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

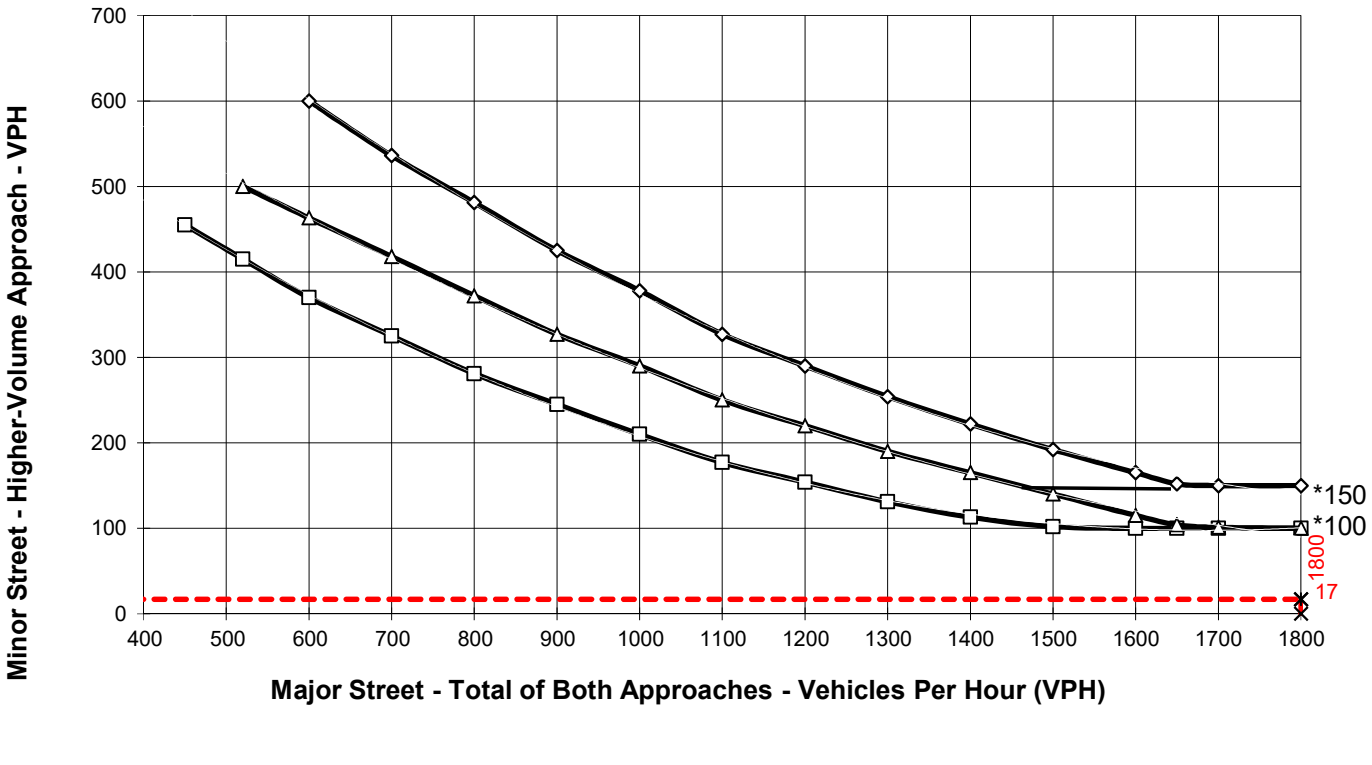
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Existing Weekday Mid-Day**

Major Street Name = **El Camino Real**
Total of Both Approaches (VPH) = **2225**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Southwood Drive**
High Volume Approach (VPH) = **17**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

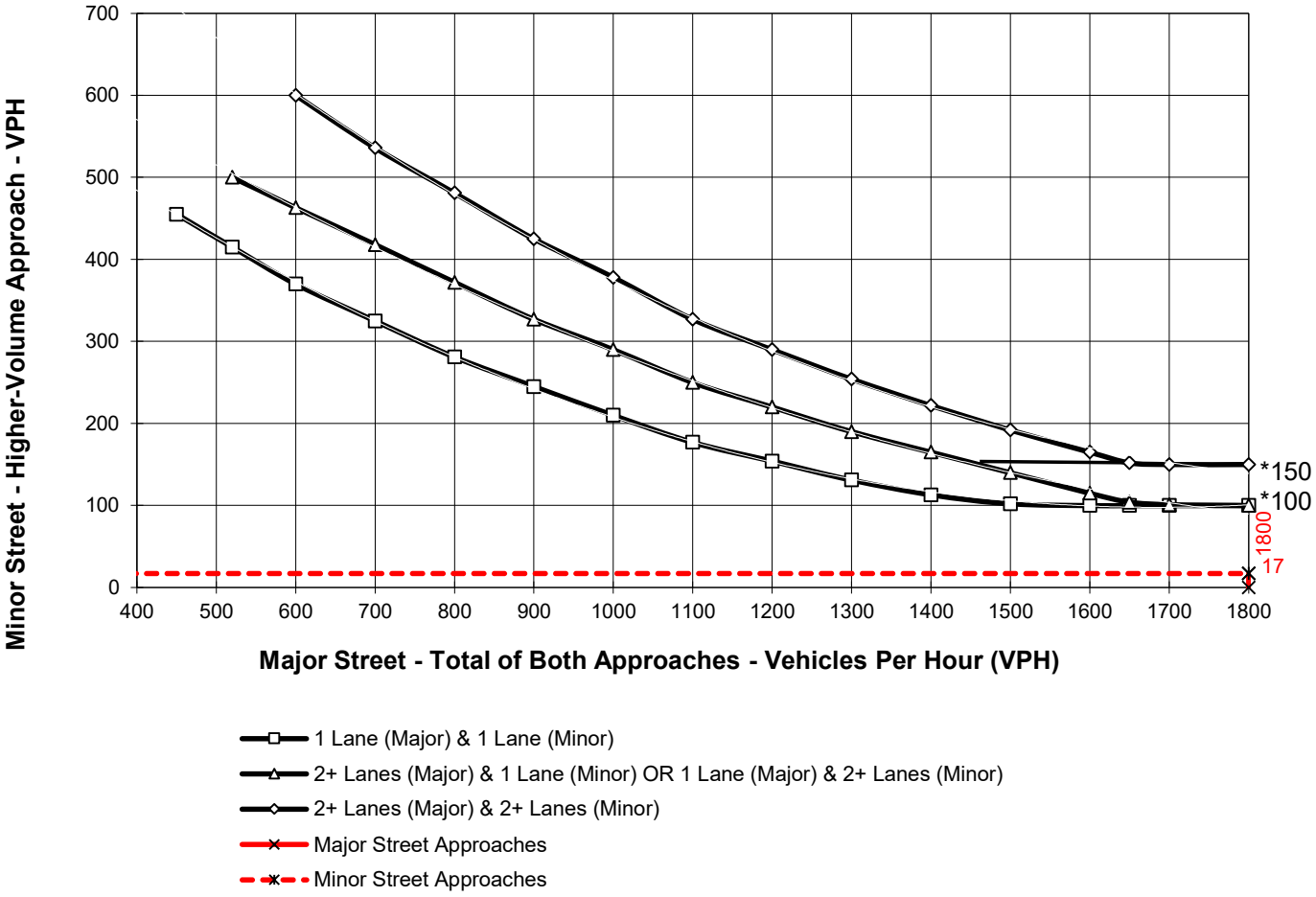
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Existing Plus Project Weekday PM**

Major Street Name = **El Camino Real**
Total of Both Approaches (VPH) = **2929**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Southwood Drive**
High Volume Approach (VPH) = **17**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

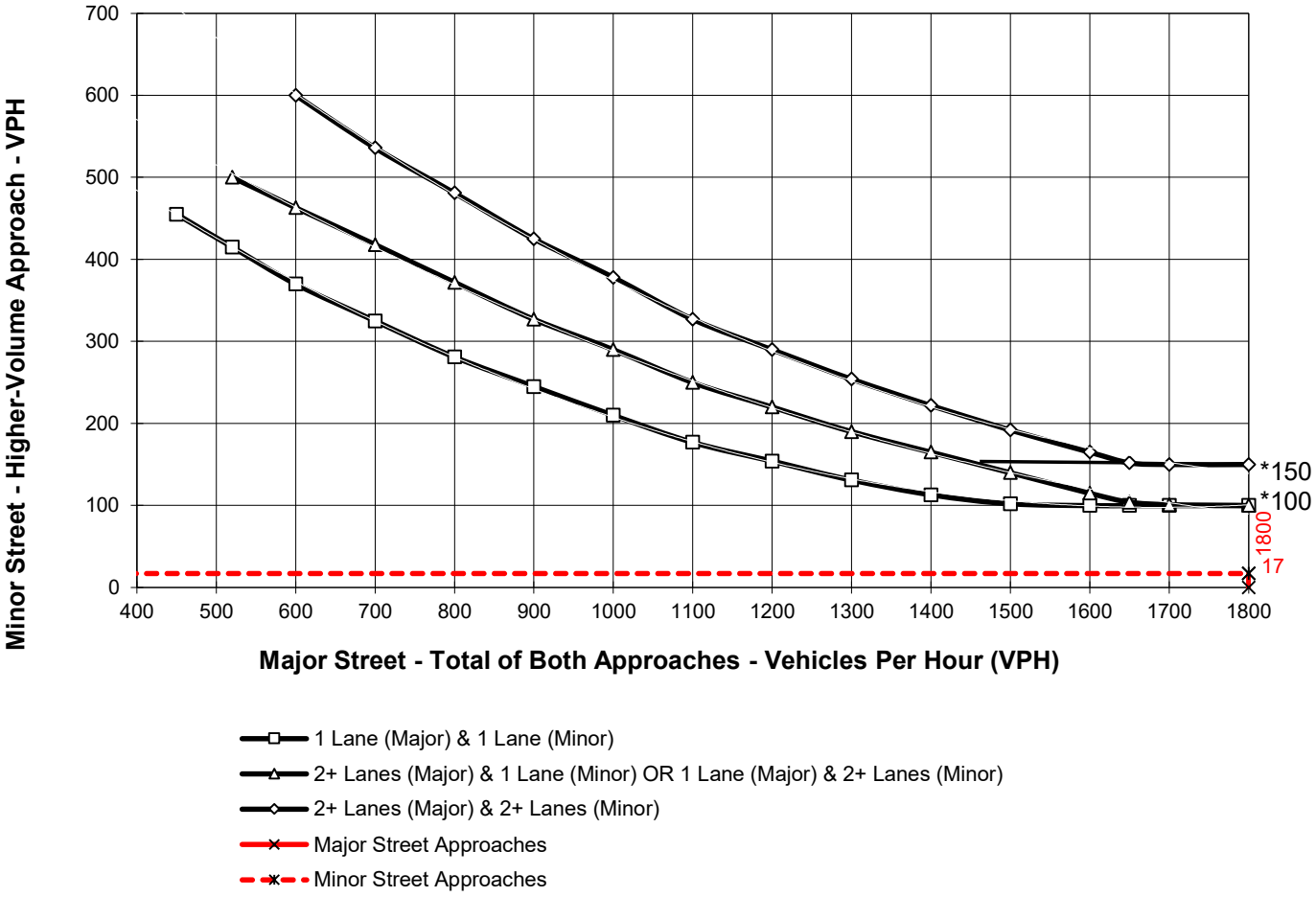
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Existing Plus Project Weekday Mid-Day**

Major Street Name = **El Camino Real**
Total of Both Approaches (VPH) = **2275**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Southwood Drive**
High Volume Approach (VPH) = **17**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



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

APPENDIX F

IN-N-OUT TRIP GENERATION DATA SHEETS

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday, peak hour of adjacent street traffic,
One hour between 11 a.m. and 2 p.m.

ID	Location	Full Address	1,000 SF GFA	Weekday MD			Rate (Trips/TSF)
				In	Out	Total	
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	136	135	271	96.79
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	138	135	273	75.83
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	196	159	355	93.42
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	265	270	535	142.67
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	126	131	257	68.53
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	90	83	173	46.13
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	98	86	184	49.07
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	96	81	177	47.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	131	159	290	93.55
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	178	157	335	112.79
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	154	150	304	96.20
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	131	136	267	72.85
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	120	107	227	77.95
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	127	127	254	79.87
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	117	127	244	66.58
Total			51.602	2,103	2,043	4,146	1219.43
Average			3.440	140	136	276	81.30

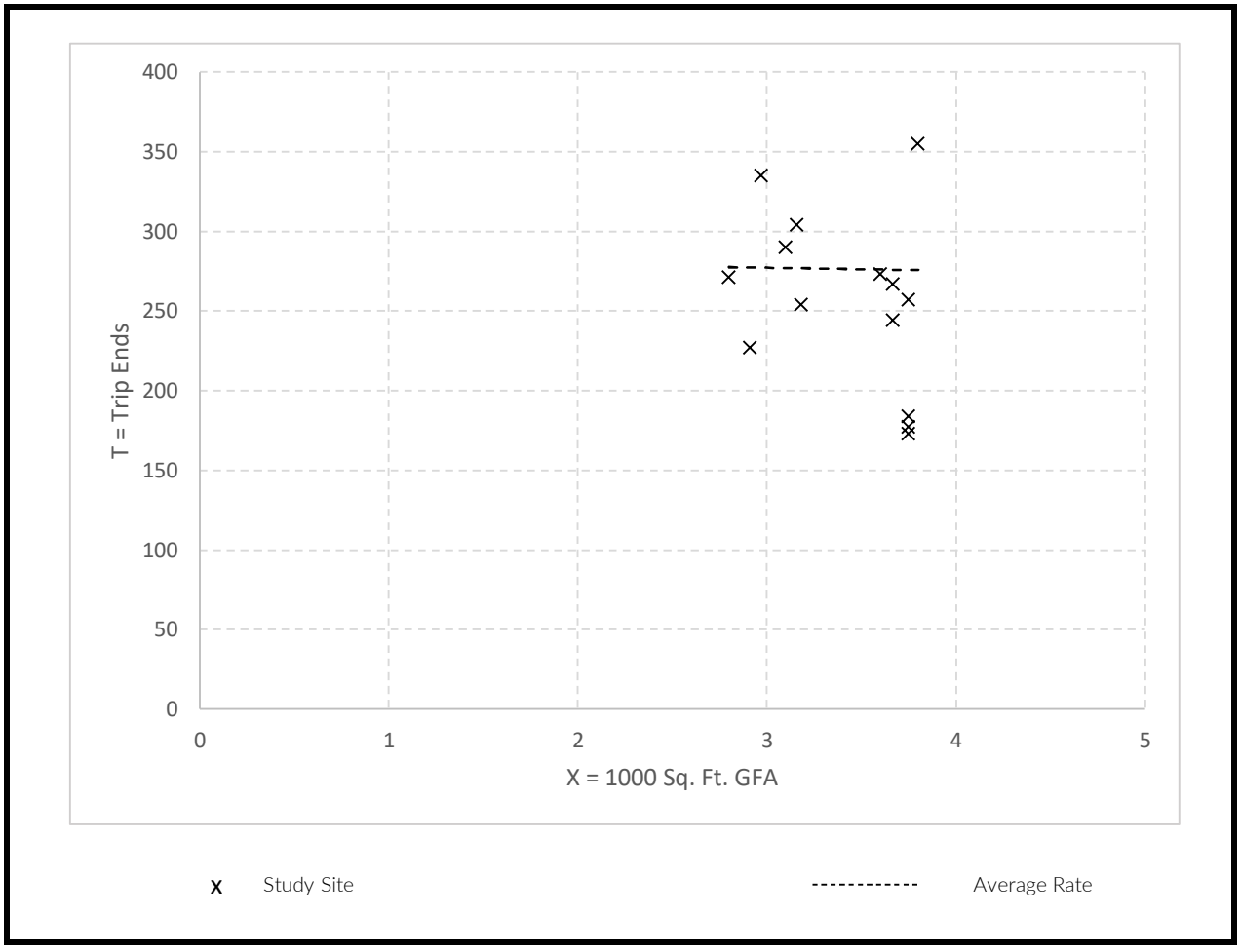
In-N-Out Burger Restaurant (with Drive-Through Window)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, peak hour of adjacent street traffic, One hour between 11 a.m. and 2 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	15
1000 Sq. Ft. GFA (Average):	3.440
Directional Distribution:	51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
81.30	46.13 - 142.67	25.1

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday, peak hour of adjacent street traffic,
One hour between 4 and 6 p.m.

ID	Location	Full Address	1,000 SF GFA	Weekday PM			Rate (Trips/TSF)
				In	Out	Total	
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	94	89	183	65.36
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	69	73	142	39.44
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	127	111	238	62.63
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	128	107	235	62.67
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	66	75	141	37.60
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	84	75	159	42.40
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	87	65	152	40.53
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	75	57	132	35.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	110	113	223	71.94
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	141	138	279	93.94
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	137	133	270	85.44
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	137	133	270	73.67
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	98	92	190	65.25
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	87	100	187	58.81
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	98	100	198	54.02
Total			51.602	1,538	1,461	2,999	888.90
Average			3.440	103	97	200	59.26

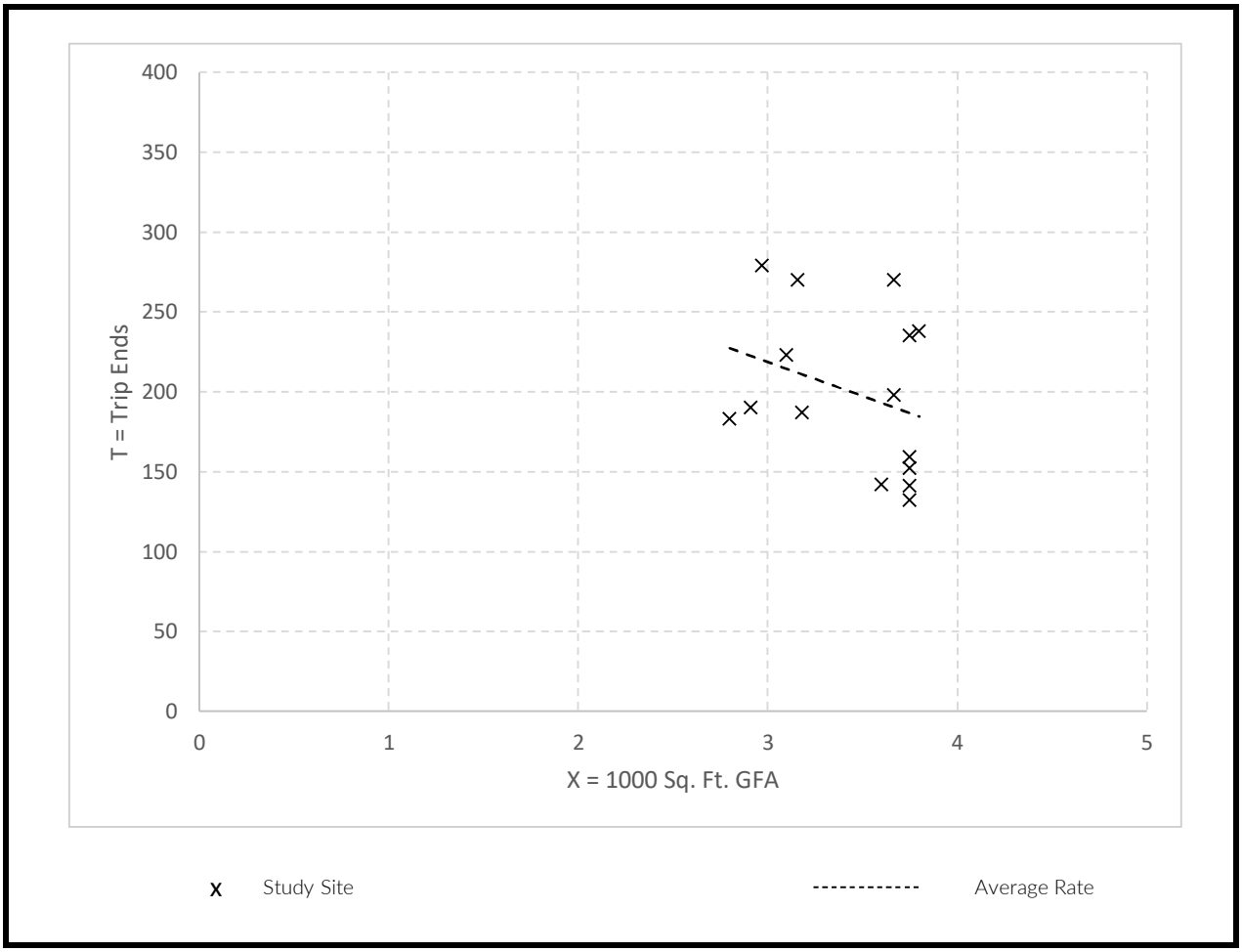
In-N-Out Burger Restaurant (with Drive-Through Window)

Vehicle Trip Ends vs:	1000 Sq. Ft. GFA
On a:	Weekday, peak hour of adjacent street traffic, One hour between 4 and 6 p.m.
Setting/Location:	General Urban/Suburban
Number of Studies:	15
1000 Sq. Ft. GFA (Average):	3.440
Directional Distribution:	52% entering, 48% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
59.26	35.2 - 93.94	17.24

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

In-N-Out Burger Restaurant (with Drive-Through Window)
Weekday

ID	Location	Full Address	1,000 SF GFA	Weekday Total	Rate (Trips/TSF)
1	Redondo Beach	3801 Inglewood Ave, Redondo Beach, CA 90278	2.800	-	-
2	Long Beach	6391 E Pacific Coast Highway, Long Beach, CA 90803	3.600	-	-
3	Los Angeles	9149 S Sepulveda Blvd, Los Angeles, CA 90045	3.800	-	-
4	Millbrae	11 Rollins Rd, Millbrae, CA 94030	3.750	5,137	1369.87
5	Redwood City	949 Veterans Blvd, Redwood City, CA 94063	3.750	2,225	593.33
6	Rocklin	5490 Crossings Dr, Rocklin, CA 95677	3.750	1,720	458.67
7	Vacaville	170 Nut Tree Pkwy, Vacaville, CA 95687	3.750	1,879	501.07
8	Fairfield	1364 Holiday Ln, Fairfield, CA 94534	3.750	1,662	443.20
9	Mountain View	1159 N Rengstorff Ave, Mountain View, CA 94043	3.100	2,535	817.74
10	Mountain View	53 W El Camino Real, Mountain View, CA 94040	2.970	2,962	997.31
11	Union City	32060 Union Landing Blvd, Union City, CA 94587	3.160	3,153	997.78
12	Rancho San Margarita	30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688	3.665	2,864	781.45
13	San Diego	10880 Carmel Mtn Rd, San Diego, CA 92128	2.912	2,376	815.93
14	San Diego	4375 Kearny Mesa Road, San Diego, CA 92111	3.180	2,485	781.45
15	Oceanside	936 North Coast Highway, Oceanside, CA 92054	3.665	2,825	770.80
Total			41.402	31,823	9328.60
Average			3.450	2,652	777.38

In-N-Out Burger Restaurant (with Drive-Through Window)

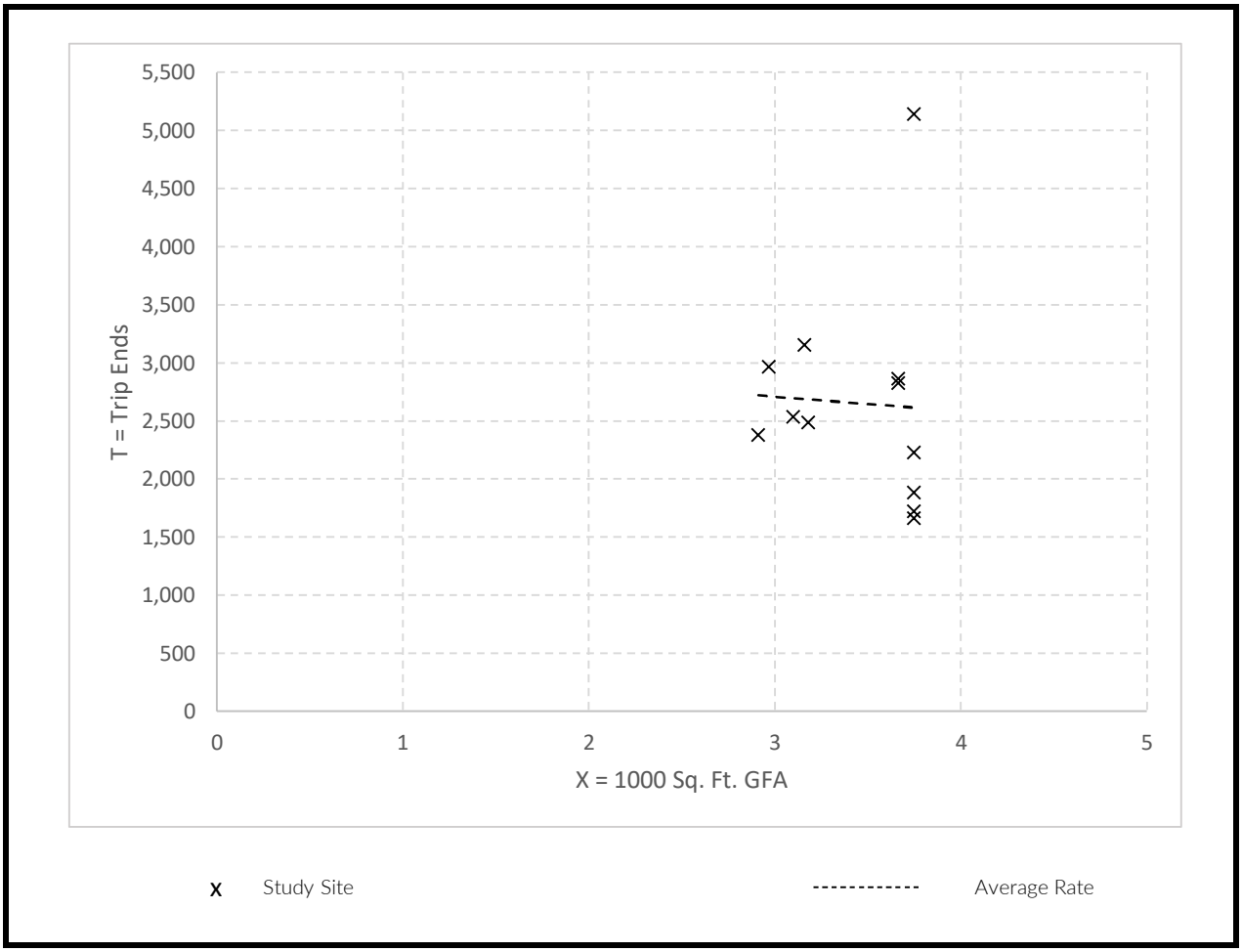
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 15
1000 Sq. Ft. GFA (Average): 3.450
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
777.38	443.2 - 1369.87	254.08

Data Plot & Equation



Trip generation data for each site is provided on the attached count sheets.

Ganddini Group, Inc. (February 2024)

Redondo Beach
(3801 Inglewood Ave, Redondo Beach, CA 90278)

Wednesday, May16th 2012 CITY: Redondo Beach PROJECT: IN N OUT

Prepared by

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	32		24		23
00:15						12:15	42		42		26
00:30						12:30	36		29		11
00:45						12:45	27	137	38	133	11
01:00						13:00	31		26		17
01:15						13:15	28		23		16
01:30						13:30	32		31		11
01:45						13:45	X	91	X	80	9
02:00						14:00					10
02:15						14:15					8
02:30						14:30					15
02:45						14:45					13
03:00						15:00					10
03:15						15:15					12
03:30						15:30					14
03:45						15:45					13
04:00						16:00	17		16		16
04:15						16:15	18		19		19
04:30						16:30	29		24		17
04:45						16:45	18	82	23	82	18
05:00						17:00	28		23		22
05:15						17:15	19		19		24
05:30						17:30	24		21		23
05:45						17:45	28	99	21	84	16
06:00						18:00	13		26		18
06:15						18:15	X		X		23
06:30						18:30	X		X		25
06:45						18:45	X	13	X	26	26
07:00						19:00					23
07:15						19:15					27
07:30						19:30					19
07:45						19:45					21
08:00						20:00					23
08:15						20:15					22
08:30						20:30					18
08:45						20:45					28
09:00						21:00					27
09:15						21:15					16
09:30						21:30					17
09:45						21:45					16
10:00					4	22:00					15
10:15					8	22:15					18
10:30					6	22:30					19
10:45					6	22:45					16
11:00					11	23:00					15
11:15					21	23:15					13
11:30	24		34		23	23:30					12
11:45	25	49	37	71	21	23:45					11
Total Vol.		49		71				422		405	

Daily Total	
IN	**471**
OUT	**476**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Long Beach
(6391 E Pacific Coast Highway, Long Beach, CA 90803)

Wednesday, May 16,2012 CITY: Long Beach PROJECT: In N Out Burger

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	31		25		15
00:15						12:15	30		15		15
00:30						12:30	52		50		13
00:45						12:45	25	138	29	119	8
01:00						13:00	29		29		12
01:15						13:15	32		27		13
01:30						13:30	18		23		8
01:45						13:45	X	79	X	79	7
02:00						14:00					8
02:15						14:15					7
02:30						14:30					8
02:45						14:45					6
03:00						15:00					6
03:15						15:15					5
03:30						15:30					4
03:45						15:45					5
04:00						16:00	16		19		6
04:15						16:15	12		17		5
04:30						16:30	14		14		3
04:45						16:45	16	58	10	60	6
05:00						17:00	19		14		5
05:15						17:15	20		19		7
05:30						17:30	19		19		7
05:45						17:45	11	69	21	73	5
06:00						18:00	17		20		12
06:15						18:15	X		X		7
06:30						18:30	X		X		10
06:45						18:45	X	17	X	20	12
07:00						19:00					10
07:15						19:15					11
07:30						19:30					7
07:45						19:45					6
08:00						20:00					8
08:15						20:15					6
08:30						20:30					9
08:45						20:45					10
09:00						21:00					12
09:15						21:15					16
09:30						21:30					14
09:45						21:45					15
10:00						22:00					14
10:15					5	22:15					13
10:30					8	22:30					12
10:45					7	22:45					12
11:00					3	23:00					11
11:15					6	23:15					13
11:30	19		25		7	23:30					9
11:45	21	40	27	52	14	23:45					8
Total Vol.		40		52				361		351	

Daily Total	
IN	**401**
OUT	**361**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Los Angeles
(9149 S Sepulveda Blvd, Los Angeles, CA 90045)

Wednesday, May 16th, 2012 CITY: Los Angeles PROJECT: In-N-Out Burger

AM Period	IN		OUT		MAXIMUM QUEUE	PM Period	IN		OUT		MAXIMUM QUEUE
00:00						12:00	39		35		20
00:15						12:15	48		36		18
00:30						12:30	52		37		21
00:45						12:45	57	196	41	149	19
01:00						13:00	39		45		22
01:15						13:15	36		46		21
01:30						13:30	35		41		20
01:45						13:45	X	110	X	132	20
02:00						14:00					21
02:15						14:15					21
02:30						14:30					22
02:45						14:45					21
03:00						15:00					18
03:15						15:15					17
03:30						15:30					16
03:45						15:45					18
04:00						16:00	31		24		17
04:15						16:15	18		18		15
04:30						16:30	27		28		12
04:45						16:45	33	109	22	92	10
05:00						17:00	34		30		9
05:15						17:15	25		33		14
05:30						17:30	36		23		17
05:45						17:45	32	127	25	111	19
06:00						18:00	30		36		20
06:15						18:15					19
06:30						18:30					20
06:45						18:45					18
07:00						19:00					17
07:15						19:15					18
07:30						19:30					19
07:45						19:45					20
08:00						20:00					21
08:15						20:15					19
08:30						20:30					19
08:45						20:45					20
09:00						21:00					18
09:15						21:15					19
09:30						21:30					20
09:45						21:45					19
10:00					0	22:00					21
10:15					2	22:15					17
10:30					5	22:30					16
10:45					6	22:45					14
11:00					6	23:00					16
11:15					12	23:15					17
11:30	28		32		16	23:30					15
11:45	31	59	29	61	120 19	23:45					13
Total Vol.		59		61				542		484	

Daily Totals		
IN		**OUT**
601		**545**

PACIFIC TRAFFIC & TRANSIT DATA SERVICES

Millbrae
(11 Rollins Rd, Millbrae, CA 94030)

Wednesday, May 27, 2015 CITY: Millbrae PROJECT: SC0629

11 Rollings Rd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	20		10			12:00	49		53		
00:15	27		34			12:15	60		74		
00:30	8		15			12:30	47		63		
00:45	2	57	14	73	130	12:45	55	211	57	247	458
01:00	1		5			13:00	40		51		
01:15	0		3			13:15	52		56		
01:30	1		1			13:30	35		51		
01:45	1	3	1	10	13	13:45	48	175	40	198	373
02:00	2		5			14:00	31		42		
02:15	0		0			14:15	30		29		
02:30	0		0			14:30	39		31		
02:45	0	2	1	6	8	14:45	33	133	30	132	265
03:00	0		1			15:00	38		26		
03:15	1		0			15:15	28		34		
03:30	2		0			15:30	40		29		
03:45	2	5	0	1	6	15:45	31	137	30	119	256
04:00	0		0			16:00	34		37		
04:15	3		3			16:15	26		28		
04:30	2		2			16:30	25		18		
04:45	1	6	0	5	11	16:45	8	93	19	102	195
05:00	1		0			17:00	35		11		
05:15	1		0			17:15	32		25		
05:30	3		1			17:30	29		24		
05:45	8	13	2	3	16	17:45	24	120	30	90	210
06:00	7		7			18:00	32		43		
06:15	15		5			18:15	39		38		
06:30	14		3			18:30	42		39		
06:45	7	43	7	22	65	18:45	44	157	43	163	320
07:00	9		5			19:00	30		46		
07:15	9		5			19:15	35		47		
07:30	11		6			19:30	47		41		
07:45	10	39	6	22	61	19:45	51	163	49	183	346
08:00	17		8			20:00	49		50		
08:15	12		3			20:15	44		53		
08:30	11		10			20:30	45		33		
08:45	11	51	12	33	84	20:45	45	183	42	178	361
09:00	11		15			21:00	31		40		
09:15	16		12			21:15	23		40		
09:30	17		18			21:30	24		39		
09:45	20	64	10	55	119	21:45	26	104	38	157	261
10:00	34		10			22:00	21		32		
10:15	31		22			22:15	27		29		
10:30	39		19			22:30	33		38		
10:45	37	141	36	87	228	22:45	34	115	36	135	250
11:00	48		36			23:00	21		26		
11:15	41		38			23:15	27		27		
11:30	58		59			23:30	31		30		
11:45	54	201	52	185	386	23:45	19	98	25	108	206
Total Vol.		625		502	**1127**			1689		1812	**3501**

Daily Totals

IN1	OUT1	Combined
2314	2314	**4628**

	AM			PM		
Split %	55.5%	44.5%	**24.4%**	48.2%	51.8%	**75.6%**
Peak Hour	11:30	11:45	**11:30**	12:00	12:00	**12:00**
Volume	221	242	**459**	211	247	**458**
P.H.F.	0.92	0.82	**0.86**	0.85	0.83	**0.86**

pacific@aimtd.com Tell. 951 249 3226

Wednesday, May 27, 2015 CITY: Millbrae PROJECT: SC0629

11 Rollings Rd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	0		0			12:00	3		12		
00:15	0		0			12:15	20		3		
00:30	1		0			12:30	15		4		
00:45	1	2	2	2	4	12:45	16	54	4	23	77
01:00	0		0			13:00	15		6		
01:15	0		0			13:15	18		4		
01:30	0		0			13:30	15		3		
01:45	0	0	0	0		13:45	3	51	2	15	66
02:00	0		0			14:00	4		3		
02:15	0		0			14:15	1		3		
02:30	0		0			14:30	0		4		
02:45	0	0	2	2	2	14:45	1	6	7	17	23
03:00	0		0			15:00	2		5		
03:15	1		0			15:15	3		1		
03:30	0		0			15:30	2		3		
03:45	0	1	0	0	1	15:45	2	9	3	12	21
04:00	0		0			16:00	4		5		
04:15	0		0			16:15	2		5		
04:30	0		1			16:30	0		4		
04:45	0	0	0	1	1	16:45	3	9	2	16	25
05:00	0		0			17:00	1		5		
05:15	0		0			17:15	1		5		
05:30	0		0			17:30	3		3		
05:45	2	2	1	1	3	17:45	3	8	4	17	25
06:00	0		1			18:00	6		1		
06:15	6		0			18:15	0		5		
06:30	5		2			18:30	1		4		
06:45	4	15	2	5	20	18:45	2	9	4	14	23
07:00	1		5			19:00	3		2		
07:15	1		4			19:15	3		4		
07:30	3		0			19:30	4		3		
07:45	4	9	1	10	19	19:45	5	15	2	11	26
08:00	3		2			20:00	1		4		
08:15	2		3			20:15	2		5		
08:30	5		8			20:30	4		7		
08:45	2	12	4	17	29	20:45	0	7	2	18	25
09:00	3		4			21:00	0		1		
09:15	2		8			21:15	1		1		
09:30	1		2			21:30	0		2		
09:45	5	11	6	20	31	21:45	1	2	1	5	7
10:00	3		3			22:00	0		1		
10:15	2		2			22:15	0		1		
10:30	9		5			22:30	0		0		
10:45	4	18	5	15	33	22:45	1	1	0	2	3
11:00	1		8			23:00	1		1		
11:15	5		6			23:15	3		0		
11:30	4		6			23:30	0		1		
11:45	7	17	2	22	39	23:45	0	4	0	2	6
Total Vol.		87		95	**182**			175		152	**327**

Daily Totals

IN1	OUT1	Combined
262	247	**509**

	AM			PM		
Split %	47.8%	52.2%	**35.8%**	53.5%	46.5%	**64.2%**
Peak Hour	11:45	11:15	**11:45**	12:15	12:00	**12:15**
Volume	45	26	**66**	66	23	**83**
P.H.F.	0.56	0.54	**0.72**	0.84	0.48	**0.72**

pacific@aimtd.com Tell. 951 249 3226

Redwood City
(949 Veterans Blvd, Redwood City, CA 94063)

Wednesday, May 27, 2015 CITY: Redwood City PROJECT: SC0629

949 Veterans Blvd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	7		2			12:00	11		18		
00:15	0		1			12:15	14		22		
00:30	3		2			12:30	6		20		
00:45	1	11	0	5	16	12:45	4	35	14	74	109
01:00	0		1			13:00	2		16		
01:15	0		0			13:15	7		32		
01:30	0		0			13:30	12		16		
01:45	0	0	0	1	1	13:45	14	35	13	77	112
02:00	0		0			14:00	13		11		
02:15	0		0			14:15	17		12		
02:30	0		0			14:30	12		7		
02:45	0	0	0	0		14:45	9	51	13	43	94
03:00	0		0			15:00	14		13		
03:15	0		0			15:15	6		15		
03:30	0		0			15:30	8		13		
03:45	0	0	0	0		15:45	7	35	11	52	87
04:00	0		0			16:00	8		6		
04:15	1		0			16:15	11		8		
04:30	0		0			16:30	7		5		
04:45	0	1	0	0	1	16:45	7	33	9	28	61
05:00	2		2			17:00	5		12		
05:15	0		0			17:15	7		8		
05:30	1		1			17:30	5		8		
05:45	1	4	1	4	8	17:45	11	28	3	31	59
06:00	1		0			18:00	4		5		
06:15	0		0			18:15	11		8		
06:30	1		0			18:30	16		9		
06:45	0	2	0	0	2	18:45	8	39	12	34	73
07:00	0		0			19:00	8		9		
07:15	1		0			19:15	8		9		
07:30	0		0			19:30	3		4		
07:45	0	1	0	0	1	19:45	9	28	7	29	57
08:00	0		0			20:00	5		8		
08:15	0		0			20:15	6		12		
08:30	0		0			20:30	7		4		
08:45	1	1	0	0	1	20:45	9	27	2	26	53
09:00	0		0			21:00	11		8		
09:15	0		0			21:15	13		7		
09:30	0		1			21:30	11		5		
09:45	0	0	0	1	1	21:45	5	40	9	29	69
10:00	2		1			22:00	10		9		
10:15	4		0			22:15	9		9		
10:30	1		6			22:30	5		7		
10:45	2	9	3	10	19	22:45	5	29	9	34	63
11:00	8		1			23:00	3		5		
11:15	5		5			23:15	2		6		
11:30	10		7			23:30	2		2		
11:45	14	37	11	24	61	23:45	1	8	0	13	21
Total Vol.		66		45	**111**			388		470	**858**

Daily Totals

IN1	OUT1	Combined
454	515	**969**

	AM			PM		
Split %	59.5%	40.5%	**11.5%**	45.2%	54.8%	**88.5%**
Peak Hour	11:30	11:45	**11:45**	13:30	12:30	**13:15**
Volume	49	71	**116**	56	82	**118**
P.H.F.	0.88	0.81	**0.81**	0.93	0.64	**0.81**

pacific@aimtd.com Tell. 951 249 3226

Wednesday, May 27, 2015 CITY: Redwood City PROJECT: SC0629

949 Veterans Blvd

Prepaired by AimTD LLC tel. 951 249 3226

AM Period	IN1		OUT1			PM Period	IN1		OUT1		
00:00	2		2			12:00	22		11		
00:15	9		8			12:15	21		21		
00:30	2		8			12:30	20		20		
00:45	4	17	4	22	39	12:45	17	80	12	64	144
01:00	0		4			13:00	19		19		
01:15	0		0			13:15	20		14		
01:30	0		0			13:30	14		19		
01:45	0	0	0	4	4	13:45	14	67	12	64	131
02:00	0		2			14:00	7		11		
02:15	0		0			14:15	11		6		
02:30	0		0			14:30	16		10		
02:45	0	0	0	2	2	14:45	15	49	13	40	89
03:00	0		0			15:00	15		12		
03:15	0		0			15:15	4		7		
03:30	0		0			15:30	5		9		
03:45	0	0	0	0		15:45	7	31	8	36	67
04:00	0		0			16:00	12		8		
04:15	0		0			16:15	6		9		
04:30	0		0			16:30	6		4		
04:45	0	0	0	0		16:45	10	34	9	30	64
05:00	0		0			17:00	11		8		
05:15	0		0			17:15	11		12		
05:30	1		0			17:30	10		9		
05:45	0	1	0	0	1	17:45	8	40	8	37	77
06:00	0		0			18:00	12		9		
06:15	0		1			18:15	16		9		
06:30	0		0			18:30	9		16		
06:45	0	0	0	1	1	18:45	7	44	10	44	88
07:00	0		0			19:00	14		22		
07:15	1		0			19:15	12		11		
07:30	0		0			19:30	13		8		
07:45	0	1	0	0	1	19:45	13	52	11	52	104
08:00	0		0			20:00	11		9		
08:15	0		0			20:15	10		7		
08:30	0		0			20:30	9		10		
08:45	0	0	1	1	1	20:45	4	34	9	35	69
09:00	2		1			21:00	19		11		
09:15	0		0			21:15	19		12		
09:30	2		1			21:30	14		12		
09:45	3	7	1	3	10	21:45	15	67	13	48	115
10:00	1		1			22:00	6		12		
10:15	3		1			22:15	10		12		
10:30	5		6			22:30	15		9		
10:45	4	13	2	10	23	22:45	8	39	12	45	84
11:00	20		5			23:00	10		10		
11:15	9		12			23:15	5		10		
11:30	11		10			23:30	2		5		
11:45	18	58	8	35	93	23:45	3	20	4	29	49
Total Vol.		97		78	**175**			557		524	**1081**

Daily Totals

IN1	OUT1	Combined
654	602	**1256**

	AM			PM		
Split %	55.4%	44.6%	**13.9%**	51.5%	48.5%	**86.1%**
Peak Hour	11:45	11:45	**11:45**	12:00	12:15	**12:15**
Volume	81	60	**141**	80	72	**149**
P.H.F.	0.92	0.71	**0.84**	0.94	0.86	**0.84**

pacific@aimtd.com Tell. 951 249 3226

Rocklin
(5490 Crossings Dr, Rocklin, CA 95677)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Rocklin Dwy 1 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	21		16		
00:15	0		0			12:15	16		23		
00:30	0		0			12:30	15		22		
00:45	0	0	0	0		12:45	17	69	17	78	147
01:00	0		0			13:00	7		23		
01:15	0		0			13:15	13		16		
01:30	0		0			13:30	10		15		
01:45	0	0	0	0		13:45	20	50	10	64	114
02:00	0		0			14:00	18		13		
02:15	0		0			14:15	16		14		
02:30	0		0			14:30	5		21		
02:45	0	0	0	0		14:45	20	59	9	57	116
03:00	0		0			15:00	12		7		
03:15	0		0			15:15	19		13		
03:30	0		0			15:30	10		14		
03:45	0	0	0	0		15:45	8	49	15	49	98
04:00	0		0			16:00	15		14		
04:15	0		0			16:15	10		19		
04:30	0		0			16:30	14		18		
04:45	0	0	0	0		16:45	13	52	12	63	115
05:00	0		0			17:00	11		19		
05:15	0		0			17:15	17		18		
05:30	0		0			17:30	30		11		
05:45	0	0	0	0		17:45	11	69	17	65	134
06:00	0		0			18:00	6		20		
06:15	0		0			18:15	11		18		
06:30	0		0			18:30	13		20		
06:45	0	0	0	0		18:45	18	48	18	76	124
07:00	0		0			19:00	5		20		
07:15	0		0			19:15	17		21		
07:30	0		0			19:30	12		14		
07:45	0	0	0	0		19:45	14	48	14	69	117
08:00	2		0			20:00	15		12		
08:15	0		1			20:15	17		11		
08:30	3		0			20:30	15		10		
08:45	2	7	3	4	11	20:45	5	52	15	48	100
09:00	4		3			21:00	7		13		
09:15	4		1			21:15	8		13		
09:30	2		2			21:30	4		12		
09:45	1	11	1	7	18	21:45	6	25	14	52	77
10:00	4		3			22:00	8		6		
10:15	10		2			22:15	1		12		
10:30	12		7			22:30	1		1		
10:45	22	48	10	22	70	22:45	3	13	1	20	33
11:00	24		19			23:00	4		6		
11:15	31		15			23:15	1		5		
11:30	12		23			23:30	0		4		
11:45	16	83	17	74	157	23:45	0	5	1	16	21
Total Vol.		149		107	**256**			539		657	**1196**

	Daily Totals		
	in	out	**Combined**
	688	764	**1452**

	AM			**PM**		
Split %	58.2%	41.8%	**17.6%**	45.1%	54.9%	**82.4%**
Peak Hour	10:30	11:30	**11:00**	16:45	12:15	**12:00**
Volume	89	79	**157**	71	85	**147**
P.H.F.	0.72	0.86	**0.85**	0.85	0.92	**0.85**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Rocklin Dwy 2 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	2		4		
00:15	0		0			12:15	1		2		
00:30	0		0			12:30	4		4		
00:45	0	0	0	0		12:45	1	8	4	14	22
01:00	0		0			13:00	6		7		
01:15	0		0			13:15	2		2		
01:30	0		0			13:30	6		2		
01:45	0	0	0	0		13:45	2	16	2	13	29
02:00	0		0			14:00	2		4		
02:15	0		0			14:15	2		2		
02:30	0		0			14:30	3		2		
02:45	0	0	0	0		14:45	2	9	0	8	17
03:00	0		0			15:00	7		3		
03:15	0		0			15:15	1		3		
03:30	0		0			15:30	3		2		
03:45	0	0	0	0		15:45	7	18	0	8	26
04:00	0		0			16:00	4		2		
04:15	0		0			16:15	4		2		
04:30	0		0			16:30	4		1		
04:45	0	0	0	0		16:45	7	19	2	7	26
05:00	0		0			17:00	2		3		
05:15	0		0			17:15	4		3		
05:30	0		0			17:30	3		1		
05:45	0	0	0	0		17:45	6	15	3	10	25
06:00	0		0			18:00	8		2		
06:15	0		0			18:15	6		1		
06:30	0		0			18:30	6		0		
06:45	0	0	0	0		18:45	3	23	1	4	27
07:00	0		0			19:00	5		1		
07:15	0		0			19:15	1		0		
07:30	0		0			19:30	5		0		
07:45	0	0	0	0		19:45	2	13	1	2	15
08:00	0		0			20:00	6		4		
08:15	0		0			20:15	0		1		
08:30	0		0			20:30	7		2		
08:45	1	1	1	1	2	20:45	5	18	1	8	26
09:00	0		1			21:00	3		4		
09:15	0		1			21:15	2		2		
09:30	0		1			21:30	2		1		
09:45	1	1	0	3	4	21:45	2	9	0	7	16
10:00	0		0			22:00	5		1		
10:15	2		0			22:15	1		0		
10:30	0		0			22:30	1		0		
10:45	1	3	1	1	4	22:45	1	8	0	1	9
11:00	1		4			23:00	1		1		
11:15	4		0			23:15	0		0		
11:30	1		1			23:30	0		0		
11:45	1	7	4	9	16	23:45	2	3	0	1	4
Total Vol.		12		14	**26**			159		83	**242**

	Daily Totals		
	in	out	**Combined**
	171	97	**268**

	AM			**PM**		
Split %	46.2%	53.8%	**9.7%**	65.7%	34.3%	**90.3%**
Peak Hour	11:15	11:45	**11:45**	17:45	12:15	**17:45**
Volume	8	14	**22**	26	17	**32**
P.H.F.	0.50	0.88	**0.69**	0.81	0.61	**0.69**

Vacaville
(170 Nut Tree Pkwy, Vacaville, CA 95687)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Vacaville PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	12		22		
00:15	0		0			12:15	9		22		
00:30	0		0			12:30	13		22		
00:45	0	0	0	0		12:45	8	42	20	86	128
01:00	0		0			13:00	3		21		
01:15	0		0			13:15	7		22		
01:30	0		0			13:30	6		16		
01:45	0	0	0	0		13:45	3	19	26	85	104
02:00	0		0			14:00	8		17		
02:15	0		0			14:15	3		27		
02:30	0		0			14:30	1		22		
02:45	0	0	0	0		14:45	2	14	12	78	92
03:00	0		0			15:00	3		13		
03:15	0		0			15:15	5		15		
03:30	0		0			15:30	3		23		
03:45	0	0	0	0		15:45	6	17	19	70	87
04:00	0		0			16:00	1		16		
04:15	0		0			16:15	2		17		
04:30	0		0			16:30	3		16		
04:45	0	0	0	0		16:45	2	8	19	68	76
05:00	0		0			17:00	3		15		
05:15	0		0			17:15	17		15		
05:30	0		0			17:30	8		18		
05:45	0	0	0	0		17:45	5	33	13	61	94
06:00	0		0			18:00	7		26		
06:15	0		0			18:15	4		25		
06:30	0		0			18:30	7		20		
06:45	0	0	0	0		18:45	3	21	18	89	110
07:00	0		0			19:00	3		27		
07:15	0		0			19:15	2		18		
07:30	0		0			19:30	6		20		
07:45	0	0	0	0		19:45	6	17	17	82	99
08:00	0		0			20:00	12		15		
08:15	0		0			20:15	16		15		
08:30	0		0			20:30	2		19		
08:45	0	0	0	0		20:45	3	33	20	69	102
09:00	0		0			21:00	5		17		
09:15	0		1			21:15	14		16		
09:30	2		1			21:30	2		18		
09:45	0	2	0	2	4	21:45	2	23	14	65	88
10:00	0		2			22:00	5		10		
10:15	0		1			22:15	1		15		
10:30	3		3			22:30	0		12		
10:45	5	8	9	15	23	22:45	4	10	9	46	56
11:00	6		11			23:00	4		6		
11:15	6		10			23:15	1		10		
11:30	11		12			23:30	1		5		
11:45	17	40	16	49	89	23:45	2	8	6	27	35
Total Vol.		50		66	**116**			245		826	**1071**

Daily Totals	in	out	**Combined**
	295	892	**1187**

	AM			**PM**		
Split %	43.1%	56.9%	**9.8%**	22.9%	77.1%	**90.2%**
Peak Hour	11:45	11:45	**11:45**	12:00	13:45	**12:00**
Volume	51	82	**133**	42	92	**128**
P.H.F.	0.75	0.93	**0.95**	0.90	0.85	**0.95**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Vacaville Dwy 2 PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	14		1		
00:15	0		0			12:15	13		1		
00:30	0		0			12:30	9		2		
00:45	0	0	0	0		12:45	14	50	1	5	55
01:00	0		0			13:00	14		0		
01:15	0		0			13:15	14		1		
01:30	0		0			13:30	9		1		
01:45	0	0	0	0		13:45	15	52	0	2	54
02:00	0		0			14:00	14		0		
02:15	0		0			14:15	12		0		
02:30	0		0			14:30	8		0		
02:45	0	0	0	0		14:45	14	48	2	2	50
03:00	0		0			15:00	9		0		
03:15	0		0			15:15	8		0		
03:30	0		0			15:30	7		0		
03:45	0	0	0	0		15:45	10	34	0	0	34
04:00	0		0			16:00	9		0		
04:15	0		0			16:15	8		2		
04:30	0		0			16:30	10		1		
04:45	0	0	0	0		16:45	12	39	1	4	43
05:00	0		0			17:00	11		1		
05:15	0		0			17:15	8		2		
05:30	0		0			17:30	10		1		
05:45	0	0	0	0		17:45	25	54	0	4	58
06:00	0		0			18:00	20		1		
06:15	0		0			18:15	22		0		
06:30	0		0			18:30	15		0		
06:45	0	0	0	0		18:45	18	75	1	2	77
07:00	0		0			19:00	14		0		
07:15	0		0			19:15	15		2		
07:30	0		0			19:30	14		2		
07:45	0	0	0	0		19:45	16	59	1	5	64
08:00	0		0			20:00	16		2		
08:15	0		0			20:15	9		2		
08:30	1		0			20:30	17		1		
08:45	0	1	1	1	2	20:45	13	55	0	5	60
09:00	0		0			21:00	17		2		
09:15	1		0			21:15	10		1		
09:30	0		1			21:30	14		1		
09:45	0	1	0	1	2	21:45	12	53	1	5	58
10:00	3		0			22:00	9		2		
10:15	1		0			22:15	12		1		
10:30	4		1			22:30	7		1		
10:45	13	21	0	1	22	22:45	9	37	2	6	43
11:00	7		0			23:00	7		0		
11:15	14		1			23:15	4		1		
11:30	12		0			23:30	4		1		
11:45	11	44	0	1	45	23:45	7	22	1	3	25
Total Vol.		67		4	**71**			578		43	**621**

Daily Totals	in	out	**Combined**
	645	47	**692**

	AM			**PM**		
Split %	94.4%	5.6%	**10.3%**	93.1%	6.9%	**89.7%**
Peak Hour	11:15	11:45	**11:15**	17:45	19:15	**17:45**
Volume	51	4	**53**	82	7	**83**
P.H.F.	0.91	0.50	**0.88**	0.89	0.88	**0.88**

Fairfield
(1364 Holiday Ln, Fairfield, CA 94534)

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Thursday, February 04, 2016 CITY: Fairfield PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	21		17		
00:15	0		0			12:15	21		20		
00:30	0		0			12:30	27		18		
00:45	0	0	0	0		12:45	27	96	24	79	175
01:00	0		0			13:00	21		19		
01:15	0		0			13:15	16		19		
01:30	0		0			13:30	9		23		
01:45	0	0	0	0		13:45	20	66	19	80	146
02:00	0		0			14:00	22		19		
02:15	0		0			14:15	20		25		
02:30	0		0			14:30	17		18		
02:45	0	0	0	0		14:45	16	75	17	79	154
03:00	0		0			15:00	12		17		
03:15	0		0			15:15	19		20		
03:30	0		0			15:30	20		18		
03:45	0	0	0	0		15:45	28	79	23	78	157
04:00	0		0			16:00	17		16		
04:15	0		0			16:15	24		18		
04:30	0		0			16:30	20		13		
04:45	0	0	0	0		16:45	14	75	10	57	132
05:00	0		0			17:00	11		14		
05:15	0		0			17:15	12		14		
05:30	0		0			17:30	16		17		
05:45	0	0	0	0		17:45	9	48	17	62	110
06:00	0		0			18:00	14		14		
06:15	0		0			18:15	21		15		
06:30	0		0			18:30	14		17		
06:45	0	0	0	0		18:45	10	59	15	61	120
07:00	0		0			19:00	17		12		
07:15	0		0			19:15	19		18		
07:30	0		0			19:30	11		19		
07:45	0	0	0	0		19:45	17	64	15	64	128
08:00	2		3			20:00	12		13		
08:15	2		3			20:15	10		14		
08:30	4		2			20:30	12		11		
08:45	5	13	5	13	26	20:45	3	37	8	46	83
09:00	6		5			21:00	12		5		
09:15	2		5			21:15	3		8		
09:30	9		7			21:30	9		18		
09:45	11	28	8	25	53	21:45	6	30	7	38	68
10:00	8		6			22:00	6		6		
10:15	12		5			22:15	6		3		
10:30	15		9			22:30	8		10		
10:45	14	49	12	32	81	22:45	6	26	9	28	54
11:00	17		12			23:00	6		11		
11:15	14		17			23:15	5		6		
11:30	12		18			23:30	2		2		
11:45	25	68	18	65	133	23:45	5	18	5	24	42
Total Vol.		158		135	**293**			673		696	**1369**

	Daily Totals		
	in	out	Combined
	831	831	**1662**

	AM			PM		
Split %	53.9%	46.1%	**17.6%**	49.2%	50.8%	**82.4%**
Peak Hour	11:45	11:30	**11:45**	12:00	13:30	**12:15**
Volume	94	73	**167**	96	86	**177**
P.H.F.	0.87	0.91	**0.93**	0.89	0.86	**0.93**

Average Daily Traffic Volumes

Prepared by: Field Data Services of Arizona, Inc.

Saturday, February 06, 2016 CITY: Fairfield PROJECT: sc0824

Prepaired by AimTD LLC tel. 714.253.7888

AM Period	in		out			PM Period	in		out		
00:00	0		0			12:00	34		22		
00:15	0		0			12:15	24		30		
00:30	0		0			12:30	22		28		
00:45	0	0	0	0		12:45	25	105	23	103	208
01:00	0		0			13:00	24		20		
01:15	0		0			13:15	20		13		
01:30	0		0			13:30	18		20		
01:45	0	0	0	0		13:45	27	89	21	74	163
02:00	0		0			14:00	12		28		
02:15	0		0			14:15	23		20		
02:30	0		0			14:30	19		18		
02:45	0	0	0	0		14:45	17	71	18	84	155
03:00	0		0			15:00	18		13		
03:15	0		0			15:15	18		27		
03:30	0		0			15:30	18		18		
03:45	0	0	0	0		15:45	25	79	24	82	161
04:00	0		0			16:00	16		21		
04:15	0		0			16:15	26		15		
04:30	0		0			16:30	30		18		
04:45	0	0	0	0		16:45	26	98	26	80	178
05:00	0		0			17:00	28		32		
05:15	0		0			17:15	25		22		
05:30	0		0			17:30	27		20		
05:45	0	0	0	0		17:45	32	112	17	91	203
06:00	0		0			18:00	22		15		
06:15	0		0			18:15	25		22		
06:30	0		0			18:30	30		24		
06:45	0	0	0	0		18:45	21	98	20	81	179
07:00	0		0			19:00	20		22		
07:15	0		0			19:15	9		12		
07:30	0		0			19:30	19		18		
07:45	0	0	0	0		19:45	21	69	23	75	144
08:00	0		0			20:00	19		18		
08:15	1		0			20:15	14		20		
08:30	3		2			20:30	9		14		
08:45	3	7	1	3	10	20:45	5	47	18	70	117
09:00	5		0			21:00	14		14		
09:15	2		2			21:15	14		11		
09:30	5		2			21:30	20		20		
09:45	5	17	4	8	25	21:45	11	59	16	61	120
10:00	6		4			22:00	11		10		
10:15	7		5			22:15	9		14		
10:30	8		8			22:30	9		12		
10:45	15	36	13	30	66	22:45	33	62	15	51	113
11:00	17		13			23:00	6		13		
11:15	13		14			23:15	5		19		
11:30	19		18			23:30	4		19		
11:45	23	72	23	68	140	23:45	4	19	29	80	99
Total Vol.		132		109	**241**			908		932	**1840**

	Daily Totals		
	in	out	Combined
	1040	1041	**2081**

	AM			PM		
Split %	54.8%	45.2%	**11.6%**	49.3%	50.7%	**88.4%**
Peak Hour	11:45	11:45	**11:45**	17:00	12:00	**12:00**
Volume	103	103	**206**	112	103	**208**
P.H.F.	0.76	0.86	**0.92**	0.96	0.86	**0.92**

Mountain View & Union City
(1159 N Rengstorff Ave, Mountain View, CA 94043,
(53 W El Camino Real, Mountain View, CA 94040,
(32060 Union Landing Blvd, Union City, CA 94587)

Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Thursday
Date: 9/14/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View				3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**52**	**40**	**2**	**42**	**161**
4:00 PM	21	1	22	26	1	2	29	34	0	34	**85**
4:30 PM	23	2	25	22	1	3	26	32	2	34	**85**
5:00 PM	22	2	24	26	0	1	27	23	1	24	**75**
5:30 PM	24	1	25	28	0	1	29	29	0	29	**83**
6:00 PM	28	1	29	36	0	2	38	25	1	26	**93**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View Drive-Thru Max Queue	2. 53 El Camino Real, Mountain View Drive-Thru Max Queue	3. 32060 Union Landing, Union City Drive-Thru Max Queue
4:00 PM	7	6	17
4:15 PM	4	3	17
4:30 PM	8	9	13
4:45 PM	9	11	2
5:00 PM	7	7	14
5:15 PM	10	11	12
5:30 PM	13	17	12
5:45 PM	12	16	12
6:00 PM	6	17	6

NOTES:

2. 53 El Camino Real,Mountain View

- At 5:30pm an In-N-Out employee came out to the drive-thru to manually take orders - didn't appear to have an impact on the queue wait time or shrinking the line at drive-thru.
- The drive-thru can hold 12-13 cars in queue before extending to the street.

Driveway In & Outs

	Site	1		2		3	
	Time	IN	OUT	IN	OUT	IN	OUT
15 Minute Intervals Peak	4:00 PM	13	15	21	28	27	25
	4:15 PM	19	12	19	20	25	32
	4:30 PM	19	24	23	15	11	22
	4:45 PM	19	19	22	23	23	23
	5:00 PM	14	13	26	19	29	28
	5:15 PM	24	15	28	22	27	21
	5:30 PM	24	21	27	24	23	24
	5:45 PM	23	24	32	24	27	24
	Sum	155	143	198	175	192	199
1 Hour Intervals	10:30 AM	68	35	78	60	77	68
	11:30 AM	154	123	178	157	136	108
	12:30 PM	131	159	164	170	154	150
	1:30 PM	116	119	113	114	131	132
	2:30 PM	67	77	99	112	82	102
	3:30 PM	65	67	75	83	118	100
	4:30 PM	76	71	99	79	90	94
	5:30 PM	109	96	117	114	116	105
	6:30 PM	110	113	141	138	137	133
	7:30 PM	107	100	108	111	131	130
	8:30 PM	76	90	113	125	133	136
	9:30 PM	83	81	102	100	110	123
	10:30 PM	52	67	59	66	90	102
	11:30 PM	35	50	29	35	61	67
	12:30 AM	17	21	11	12	11	26
	Sum	1266	1269	1486	1476	1577	1576

Rancho Santa Margarita
(30121 Santa Margarita Pkwy, Rancho Santa Margarita, CA 92688)

Thursday, May 09, 2019 CITY: Rancho Santa Margarita PROJECT: SC

ADT1 Driveway 1 north of Santa Margarita. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	IN		OUT		EB		WB			PM Period	IN		OUT		EB		WB		
0:00	1		2		0		0			12:00	21		24		0		0		
0:15	2		4		0		0			12:15	15		18		0		0		
0:30	4		6		0		0			12:30	20		33		0		0		
0:45	1	8	4	16	0	0	0	0	24	12:45	24	80	22	97	0	0	0	0	177
1:00	0		1		0		0			13:00	20		25		0		0		
1:15	0		0		0		0			13:15	20		29		0		0		
1:30	0		1		0		0			13:30	7		21		0		0		
1:45	0	0	2	4	0	0	0	0	4	13:45	17	64	26	101	0	0	0	0	165
2:00	0		0		0		0			14:00	15		15		0		0		
2:15	0		0		0		0			14:15	11		20		0		0		
2:30	0		0		0		0			14:30	17		21		0		0		
2:45	0	0	0	0	0	0	0	0		14:45	12	55	20	76	0	0	0	0	131
3:00	0		0		0		0			15:00	10		18		0		0		
3:15	0		0		0		0			15:15	14		16		0		0		
3:30	0		0		0		0			15:30	13		30		0		0		
3:45	0	0	0	0	0	0	0	0		15:45	11	48	23	87	0	0	0	0	135
4:00	0		0		0		0			16:00	24		16		0		0		
4:15	0		0		0		0			16:15	18		14		0		0		
4:30	0		0		0		0			16:30	21		11		0		0		
4:45	3	3	0	0	0	0	0	0	3	16:45	14	77	28	69	0	0	0	0	146
5:00	0		0		0		0			17:00	15		33		0		0		
5:15	0		0		0		0			17:15	25		15		0		0		
5:30	0		0		0		0			17:30	23		34		0		0		
5:45	0	0	0	0	0	0	0	0		17:45	23	86	32	114	0	0	0	0	200
6:00	0		0		0		0			18:00	25		29		0		0		
6:15	1		0		0		0			18:15	33		31		0		0		
6:30	0		0		0		0			18:30	19		26		0		0		
6:45	1	2	2	2	0	0	0	0	4	18:45	21	98	30	116	0	0	0	0	214
7:00	0		0		0		0			19:00	23		24		0		0		
7:15	0		0		0		0			19:15	19		28		0		0		
7:30	2		2		0		0			19:30	21		25		0		0		
7:45	0	2	1	3	0	0	0	0	5	19:45	15	78	14	91	0	0	0	0	169
8:00	0		0		0		0			20:00	18		25		0		0		
8:15	0		0		0		0			20:15	12		23		0		0		
8:30	2		0		0		0			20:30	9		18		0		0		
8:45	1	3	0	0	0	0	0	0	3	20:45	9	48	34	100	0	0	0	0	148
9:00	0		0		0		0			21:00	15		21		0		0		
9:15	1		0		0		0			21:15	12		14		0		0		
9:30	0		0		0		0			21:30	11		23		0		0		
9:45	2	3	0	0	0	0	0	0	3	21:45	8	46	18	76	0	0	0	0	122
10:00	5		1		0		0			22:00	4		14		0		0		
10:15	3		9		0		0			22:15	9		14		0		0		
10:30	9		4		0		0			22:30	10		11		0		0		
10:45	12	29	7	21	0	0	0	0	50	22:45	6	29	15	54	0	0	0	0	83
11:00	18		12		0		0			23:00	4		12		0		0		
11:15	12		20		0		0			23:15	4		11		0		0		
11:30	24		27		0		0			23:30	1		6		0		0		
11:45	23	77	25	84	0	0	0	0	161	23:45	5	14	10	39	0	0	0	0	53
Total Vol.		127		130					**257**			723		1020					**1743**

Daily Totals	NB	SB	EB	WB	Combined
	850	1150			**2000**

	AM			PM		
Split %	49.4%	50.6%	**12.9%**	41.5%	58.5%	**87.2%**
Peak Hour	11:30	11:45	**11:45**	17:30	17:30	**17:30**
Volume	83	100	**179**	104	126	**230**
P.H.F.	0.86	0.76	**0.84**	0.96	0.93	**0.90**

cs@aimtd.com Tell. 714 253 7888

Thursday, May 09, 2019 CITY: Rancho Santa Margarita PROJECT: SC

ADT2 Driveway 2 north of Santa Margarita. **Prepared by AimTD LLC tel. 714 253 7888**

AM Period	IN		OUT		EB		WB			PM Period	IN		OUT		EB		WB		
0:00	7		4		0		0			12:00	16		2		0		0		
0:15	5		2		0		0			12:15	15		7		0		0		
0:30	1		2		0		0			12:30	8		5		0		0		
0:45	1	14	4	12	0	0	0	0	26	12:45	20	59	10	24	0	0	0	0	83
1:00	0		0		0		0			13:00	12		7		0		0		
1:15	0		1		0		0			13:15	7		5		0		0		
1:30	0		0		0		0			13:30	9		6		0		0		
1:45	0	0	0	1	0	0	0	0	1	13:45	7	35	2	20	0	0	0	0	55
2:00	0		0		0		0			14:00	8		8		0		0		
2:15	0		0		0		0			14:15	12		4		0		0		
2:30	0		0		0		0			14:30	9		9		0		0		
2:45	0	0	0	0	0	0	0	0		14:45	7	36	6	27	0	0	0	0	63
3:00	0		0		0		0			15:00	23		4		0		0		
3:15	0		0		0		0			15:15	18		7		0		0		
3:30	0		0		0		0			15:30	12		7		0		0		
3:45	0	0	0	0	0	0	0	0		15:45	4	57	5	23	0	0	0	0	80
4:00	0		0		0		0			16:00	13		4		0		0		
4:15	0		0		0		0			16:15	8		4		0		0		
4:30	0		0		0		0			16:30	16		5		0		0		
4:45	0	0	0	0	0	0	0	0		16:45	13	50	4	17	0	0	0	0	67
5:00	0		0		0		0			17:00	20		7		0		0		
5:15	0		0		0		0			17:15	7		6		0		0		
5:30	0		0		0		0			17:30	11		5		0		0		
5:45	0	0	0	0	0	0	0	0		17:45	13	51	1	19	0	0	0	0	70
6:00	0		0		0		0			18:00	12		9		0		0		
6:15	0		0		0		0			18:15	15		3		0		0		
6:30	0		1		0		0			18:30	5		4		0		0		
6:45	0	0	0	1	0	0	0	0	1	18:45	15	47	5	21	0	0	0	0	68
7:00	0		0		0		0			19:00	14		7		0		0		
7:15	0		0		0		0			19:15	7		1		0		0		
7:30	0		0		0		0			19:30	6		3		0		0		
7:45	1	1	0	0	0	0	0	0	1	19:45	7	34	9	20	0	0	0	0	54
8:00	0		0		0		0			20:00	17		5		0		0		
8:15	0		0		0		0			20:15	11		3		0		0		
8:30	0		0		0		0			20:30	7		7		0		0		
8:45	0	0	0	0	0	0	0	0		20:45	13	48	4	19	0	0	0	0	67
9:00	0		0		0		0			21:00	36		6		0		0		
9:15	0		0		0		0			21:15	10		5		0		0		
9:30	0		0		0		0			21:30	4		4		0		0		
9:45	1	1	0	0	0	0	0	0	1	21:45	11	61	11	26	0	0	0	0	87
10:00	4		1		0		0			22:00	3		4		0		0		
10:15	3		1		0		0			22:15	6		9		0		0		
10:30	2		2		0		0			22:30	4		3		0		0		
10:45	6	15	3	7	0	0	0	0	22	22:45	4	17	0	16	0	0	0	0	33
11:00	6		3		0		0			23:00	10		5		0		0		
11:15	12		2		0		0			23:15	5		5		0		0		
11:30	8		3		0		0			23:30	1		1		0		0		
11:45	14	40	6	14	0	0	0	0	54	23:45	1	17	3	14	0	0	0	0	31
Total Vol.		71		35					**106**			512		246					**758**

Daily Totals	NB	SB	EB	WB	Combined
	583	281			**864**

	AM			PM		
Split %	67.0%	33.0%	**12.3%**	67.5%	32.5%	**87.7%**
Peak Hour	11:30	11:45	**11:45**	20:15	12:15	**20:30**
Volume	53	20	**73**	67	29	**88**
P.H.F.	0.83	0.71	**0.83**	0.85	0.73	**0.52**

cs@aimtd.com Tell. 714 253 7888

San Diego 1
(10880 Carmel Mountain Road, San Diego, CA 92128)

City:	San Diego
Location:	11880 Carmel Mountain Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	8	10	18
0:15	13	11	24
0:30	7	9	16
0:45	7	9	16
1:00	0	5	5
1:15	1	2	3
1:30	0	0	0
1:45	0	4	4
2:00	0	1	1
2:15	0	4	4
2:30	0	0	0
2:45	0	0	0
3:00	0	0	0
3:15	1	2	3
3:30	0	1	1
3:45	0	1	1
4:00	0	0	0
4:15	1	0	1
4:30	0	0	0
4:45	1	1	2
5:00	1	1	2
5:15	0	0	0
5:30	1	2	3
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	1	1	2
7:45	5	1	6
8:00	0	0	0
8:15	0	0	0
8:30	1	1	2
8:45	2	3	5
9:00	0	0	0
9:15	1	3	4
9:30	1	0	1
9:45	0	1	1
10:00	11	2	13
10:15	6	9	15
10:30	11	11	22
10:45	8	6	14
11:00	21	7	28
11:15	20	12	32
11:30	25	25	50
11:45	33	25	58
12:00	20	28	48
12:15	25	24	49
12:30	33	27	60
12:45	34	32	66
13:00	28	24	52

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

City:	San Diego
Location:	11880 Carmel Mountain Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	16	24	40
13:30	27	31	58
13:45	25	21	46
14:00	22	15	37
14:15	17	30	47
14:30	22	22	44
14:45	14	17	31
15:00	15	24	39
15:15	22	22	44
15:30	17	16	33
15:45	19	17	36
16:00	22	17	39
16:15	17	14	31
16:30	26	28	54
16:45	24	23	47
17:00	19	20	39
17:15	29	21	50
17:30	28	20	48
17:45	14	18	32
18:00	22	27	49
18:15	24	18	42
18:30	20	24	44
18:45	25	27	52
19:00	17	21	38
19:15	26	21	47
19:30	23	30	53
19:45	24	25	49
20:00	20	24	44
20:15	23	20	43
20:30	25	24	49
20:45	17	31	48
21:00	19	19	38
21:15	24	17	41
21:30	18	22	40
21:45	21	22	43
22:00	19	22	41
22:15	15	19	34
22:30	10	21	31
22:45	10	11	21
23:00	21	10	31
23:15	11	11	22
23:30	10	16	26
23:45	9	12	21
TOTAL	**1177**	**1199**	**2376**

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

San Diego 2
(4375 Kearny Mesa Road, San Diego, CA 92111)

City:	San Diego
Location:	4375 Kearny Mesa Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	15	8	23
0:15	10	11	21
0:30	8	13	21
0:45	7	12	19
1:00	1	11	12
1:15	0	1	1
1:30	0	1	1
1:45	0	0	0
2:00	0	1	1
2:15	0	6	6
2:30	0	0	0
2:45	0	0	0
3:00	1	0	1
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	1	0	1
4:30	0	1	1
4:45	1	0	1
5:00	1	0	1
5:15	0	0	0
5:30	0	0	0
5:45	0	0	0
6:00	0	0	0
6:15	0	0	0
6:30	1	0	1
6:45	0	0	0
7:00	0	0	0
7:15	1	0	1
7:30	0	0	0
7:45	2	0	2
8:00	0	1	1
8:15	1	0	1
8:30	2	0	2
8:45	1	2	3
9:00	2	3	5
9:15	1	1	2
9:30	2	1	3
9:45	8	4	12
10:00	9	3	12
10:15	12	7	19
10:30	13	11	24
10:45	24	17	41
11:00	19	14	33
11:15	21	18	39
11:30	19	21	40
11:45	19	29	48
12:00	29	23	52
12:15	31	38	69
12:30	23	24	47
12:45	29	28	57
13:00	38	38	76

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

City:	San Diego
Location:	4375 Kearny Mesa Road
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	32	28	60
13:30	28	33	61
13:45	23	25	48
14:00	29	22	51
14:15	18	31	49
14:30	18	23	41
14:45	20	26	46
15:00	23	26	49
15:15	19	21	40
15:30	16	23	39
15:45	20	22	42
16:00	17	26	43
16:15	24	22	46
16:30	23	28	51
16:45	23	24	47
17:00	20	21	41
17:15	18	23	41
17:30	18	26	44
17:45	24	20	44
18:00	20	26	46
18:15	23	23	46
18:30	27	22	49
18:45	27	26	53
19:00	20	29	49
19:15	29	23	52
19:30	17	22	39
19:45	13	24	37
20:00	22	21	43
20:15	26	23	49
20:30	19	18	37
20:45	12	16	28
21:00	21	20	41
21:15	18	14	32
21:30	19	18	37
21:45	18	14	32
22:00	15	18	33
22:15	20	19	39
22:30	15	15	30
22:45	21	17	38
23:00	22	0	22
23:15	26	1	27
23:30	23	0	23
23:45	19	1	20
TOTAL	**1257**	**1228**	**2485**

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

Oceanside
(936 North Coast Highway, Oceanside, CA 92054)

City:	San Diego
Location:	936 N Coast Highway
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
0:00	17	15	32
0:15	10	11	21
0:30	7	17	24
0:45	8	8	16
1:00	7	11	18
1:15	4	13	17
1:30	1	5	6
1:45	1	2	3
2:00	0	1	1
2:15	1	0	1
2:30	0	5	5
2:45	0	0	0
3:00	0	0	0
3:15	0	0	0
3:30	0	0	0
3:45	0	0	0
4:00	0	0	0
4:15	0	1	1
4:30	1	0	1
4:45	2	0	2
5:00	2	0	2
5:15	1	0	1
5:30	0	0	0
5:45	0	0	0
6:00	3	2	5
6:15	0	0	0
6:30	0	1	1
6:45	1	0	1
7:00	2	2	4
7:15	1	0	1
7:30	0	0	0
7:45	0	2	2
8:00	3	6	9
8:15	0	2	2
8:30	0	2	2
8:45	0	5	5
9:00	1	0	1
9:15	4	1	5
9:30	1	2	3
9:45	1	5	6
10:00	5	2	7
10:15	8	2	10
10:30	16	3	19
10:45	12	5	17
11:00	18	17	35
11:15	22	15	37
11:30	30	16	46
11:45	34	13	47
12:00	23	19	42
12:15	27	39	66
12:30	24	18	42
12:45	32	32	64
13:00	26	25	51

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

City:	San Diego
Location:	936 N Coast Highway
Location:	TOTAL
Date:	Thursday, May 12, 2022
Count Type:	Driveway

	Entering	Exiting	Total
13:15	28	27	55
13:30	31	43	74
13:45	32	27	59
14:00	25	20	45
14:15	22	26	48
14:30	28	22	50
14:45	13	22	35
15:00	26	13	39
15:15	14	17	31
15:30	17	25	42
15:45	21	17	38
16:00	21	28	49
16:15	20	32	52
16:30	28	21	49
16:45	22	24	46
17:00	28	23	51
17:15	18	23	41
17:30	17	20	37
17:45	21	24	45
18:00	23	29	52
18:15	32	30	62
18:30	27	32	59
18:45	23	23	46
19:00	30	31	61
19:15	29	37	66
19:30	33	26	59
19:45	26	30	56
20:00	26	29	55
20:15	25	37	62
20:30	34	23	57
20:45	30	24	54
21:00	19	24	43
21:15	23	25	48
21:30	32	42	74
21:45	31	31	62
22:00	23	30	53
22:15	26	20	46
22:30	38	22	60
22:45	26	25	51
23:00	18	20	38
23:15	21	12	33
23:30	15	16	31
23:45	14	16	30
TOTAL	**1412**	**1413**	**2825**

Counts Unlimited, Inc.
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APPENDIX G

EMPLOYEE TRIP GENERATION ASSESSMENT

TECHNICAL MEMORANDUM

TO: Brigid Williams | IN-N-OUT BURGERS, INC.

FROM: Tom Huang, Senior Traffic Engineer | GANDDINI GROUP, INC.

DATE: July 3, 2024

SUBJECT: In-N-Out Burger (972 El Camino Real) Project Employee Trip Generation Assessment (GGI Project No. 19710)

The purpose of this trip generation assessment is to estimate the daily employee trip generation for the proposed In-N-Out Burger (972 El Camino Real) Project in the City of South San Francisco.

PROJECT DESCRIPTION

The 1.5-acre project site is located east of El Camino Real (State Route 82) approximately mid-block between Westborough Boulevard/Chestnut Avenue and Southwood Drive/1st Street in the City of South San Francisco, California. The overall project site consists of two parcels: The northern parcel has an address of 972 El Camino Real, and the southern parcel has an address of 934 El Camino Real. The northern parcel is currently a retail use occupied by a 3,000 square foot fast food restaurant with drive-through lane (Burger King – to be demolished). The southern parcel is currently occupied by a 1,224 square foot commercial office building ("Psychic Boutique" – to be demolished).

The proposed project involves redevelopment of the project site with a new 3,887 square foot In-N-Out Burger restaurant with drive through window and associated landscaping and parking lot improvements. The drive through lane proposes storage capacity for up to 39 vehicles. Vehicular access is proposed via two right-in/right-out only driveways on El Camino Real. The parking lot has 51 parking spaces accessible via the Project North Driveway and the Project South Driveway.

EMPLOYEE TRIP GENERATION

Typical In-N-Out Burger restaurants, as proposed for this project, operate with approximately 15 store associates per shift with three overlapping shifts per day. Lunch and dinner peak hours are accommodated by the overlap of shifts. Conservatively assuming each store associate drives to the site individually (i.e., no carpool or bike/transit commuters), the number of trips estimated to be generated by these store associates is shown below:

Shift	Number of Store Associates	Inbound Trips	Outbound Trips	Total Associate Trips Per Day
1	15	15	15	30
2	15	15	15	30
3	15	15	15	30
Total	45	45	45	90

Based on the operational information provided by In-N-Out, the proposed project is estimated to generate approximately 90 store associate trips per day.

Brigid Williams
IN-N-OUT BURGERS, INC.
July 3, 2024

CONCLUSIONS

The project is estimated to generate fewer than 100 daily store associate trips.

Should you have any questions or if we can be of further assistance, please do not hesitate to contact us at (714) 795-3100 x 102.

APPENDIX H

IN-N-OUT DRIVE THROUGH QUEUE SURVEY DATA SHEETS

Drive-Through Lane Queue Study

In-N-Out Fairfield

02.04.16	Thursday
Time	Vehicles
16:00-16:15	5
16:15-16:30	8
16:30-16:45	9
16:45-17:00	16
17:00-17:15	17
17:15-17:30	16
17:30-17:45	8
17:45-18:00	17

02.06.16	Saturday
Time	Vehicles
12:00-12:15	13
12:15-12:30	18
12:30-12:45	17
12:45-13:00	18
13:00-13:15	23
13:15-13:30	17
13:30-13:45	15
13:45-14:00	18

Prepared by AimTD LLC tel. 714 253 7888

cs@aimtd.com

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Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Thursday
Date: 9/14/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View				3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**52**	**40**	**2**	**42**	**161**
4:00 PM	21	1	22	26	1	2	29	34	0	34	**85**
4:30 PM	23	2	25	22	1	3	26	32	2	34	**85**
5:00 PM	22	2	24	26	0	1	27	23	1	24	**75**
5:30 PM	24	1	25	28	0	1	29	29	0	29	**83**
6:00 PM	28	1	29	36	0	2	38	25	1	26	**93**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View Drive-Thru Max Queue	2. 53 El Camino Real, Mountain View Drive-Thru Max Queue	3. 32060 Union Landing, Union City Drive-Thru Max Queue
4:00 PM	7	6	17
4:15 PM	4	3	17
4:30 PM	8	9	13
4:45 PM	9	11	2
5:00 PM	7	7	14
5:15 PM	10	11	12
5:30 PM	13	17	12
5:45 PM	12	16	12
6:00 PM	6	17	6

NOTES:

2. 53 El Camino Real,Mountain View

- At 5:30pm an In-N-Out employee came out to the drive-thru to manually take orders - didn't appear to have an impact on the queue wait time or shrinking the line at drive-thru.
- The drive-thru can hold 12-13 cars in queue before extending to the street.

Driveway In & Outs

	Site	1		2		3	
	Time	IN	OUT	IN	OUT	IN	OUT
15 Minute Intervals Peak	4:00 PM	13	15	21	28	27	25
	4:15 PM	19	12	19	20	25	32
	4:30 PM	19	24	23	15	11	22
	4:45 PM	19	19	22	23	23	23
	5:00 PM	14	13	26	19	29	28
	5:15 PM	24	15	28	22	27	21
	5:30 PM	24	21	27	24	23	24
	5:45 PM	23	24	32	24	27	24
	Sum	155	143	198	175	192	199
1 Hour Intervals	10:30 AM	68	35	78	60	77	68
	11:30 AM	154	123	178	157	136	108
	12:30 PM	131	159	164	170	154	150
	1:30 PM	116	119	113	114	131	132
	2:30 PM	67	77	99	112	82	102
	3:30 PM	65	67	75	83	118	100
	4:30 PM	76	71	99	79	90	94
	5:30 PM	109	96	117	114	116	105
	6:30 PM	110	113	141	138	137	133
	7:30 PM	107	100	108	111	131	130
	8:30 PM	76	90	113	125	133	136
	9:30 PM	83	81	102	100	110	123
	10:30 PM	52	67	59	66	90	102
	11:30 PM	35	50	29	35	61	67
	12:30 AM	17	21	11	12	11	26
	Sum	1266	1269	1486	1476	1577	1576

Prepared by National Data & Surveying Services

In-N-Out Parking & Queues

Locations: 17-7657
City: Mountain View & Union City,CA

Day: Saturday
Date: 9/16/2017

Parking Study

Time	1. 1159 N Rengstorff,Mountain View			2. 53 El Camino Real, Mountain View					3. 32060 Union Landing, Union City			Grand Total
	Reg	HC	Sub Total	Reg	HC	Reserved	NP	Sub Total	Reg	HC	Sub Total	
Spaces	**63**	**4**	**67**	**44**	**4**	**4**	**0**	**52**	**40**	**2**	**42**	**161**
12:00 PM	44	1	45	39	1	3	0	43	38	2	40	**128**
12:30 PM	50	2	52	42	0	4	0	46	36	2	38	**136**
1:00 PM	45	3	48	41	2	3	1	47	39	1	40	**135**
1:30 PM	63	3	66	39	2	1	0	42	40	2	42	**150**
2:00 PM	53	1	54	38	1	0	0	39	36	1	37	**130**

Queue Study

Time	1. 1159 N Rengstorff,Mountain View	2. 53 El Camino Real, Mountain View	3. 32060 Union Landing, Union City
	Drive-Thru Max Queue	Drive-Thru Max Queue	Drive-Thru Max Queue
12:00 PM	25	17	13
12:15 PM	22	15	14
12:30 PM	28	17	17
12:45 PM	31	18	12
1:00 PM	30	19	11
1:15 PM	23	15	14
1:30 PM	28	13	20
1:45 PM	29	15	25
2:00 PM	x	x	14

Driveway In & Outs

Site	1		2		3	
Time	**IN**	**OUT**	**IN**	**OUT**	**IN**	**OUT**
12:00 PM	38	32	45	47	37	23
12:15 PM	36	38	41	38	39	43
12:30 PM	40	27	38	39	34	36
12:45 PM	39	42	47	45	34	40
1:00 PM	39	40	35	37	38	27
1:15 PM	38	29	42	48	44	39
1:30 PM	41	42	28	27	42	43
1:45 PM	29	37	43	45	33	37
Sum	300	287	319	326	301	288

NOTES:

2. 53 El Camino Real,Mountain View

- A In-N-Out employee manually taking orders halted the queue several times.

Drive-Through Lane Queue Study

In-N-Out Rocklin

02.04.16	Thursday
Time	Vehicles
16:00-16:15	5
16:15-16:30	8
16:30-16:45	7
16:45-17:00	6
17:00-17:15	8
17:15-17:30	9
17:30-17:45	11
17:45-18:00	12

02.06.16	Saturday
Time	Vehicles
12:00-12:15	10
12:15-12:30	13
12:30-12:45	12
12:45-13:00	11
13:00-13:15	12
13:15-13:30	14
13:30-13:45	13
13:45-14:00	12

Prepared by AimTD LLC tel. 714 253 7888

cs@aimtd.com

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Site 4 (Q)

PREPARED BY: AimTD LLC. tel: 714 253 7888 pacific@aimtd.com

In N Out
445 Industrial Road, San Carlos
Queue Study

Time	Wed 27/May 15	Notes
16:00	17	
16:15	16	
16:30	16	
16:45	16	
17:00	16	
17:15	16	
17:30	17	
17:45	17	

Drive-Through Lane Queue Study

In-N-Out Vacaville

02.04.16	Thursday
Time	Vehicles
16:00-16:15	11
16:15-16:30	14
16:30-16:45	16
16:45-17:00	17
17:00-17:15	13
17:15-17:30	11
17:30-17:45	13
17:45-18:00	18

02.06.16	Saturday
Time	Vehicles
12:00-12:15	20
12:15-12:30	19
12:30-12:45	15
12:45-13:00	23
13:00-13:15	22
13:15-13:30	28
13:30-13:45	27
13:45-14:00	29

Prepared by AimTD LLC tel. 714 253 7888

cs@aimtd.com

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GANDDINI GROUP INC.

714.795.3100 | ganddini.com