
APPENDIX J

TRAFFIC IMPACT ANALYSIS

913 CALIFORNIA STREET MIXED-USE CENTER TRAFFIC IMPACT ANALYSIS

City of Redlands

April 2, 2025

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prepared by

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Project No. 19713

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EXECUTIVE SUMMARY

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in this study.

Project Description

The approximately 4.9-acre project site (APN 0631-032-04) is located at 913 California Street in the City of Redlands, California. The project site is currently vacant and zoned commercial.

The proposed project involves development of a 90-room business hotel, a 1,450 square foot coffee shop with drive-through window and a 3,588 square foot one-tunnel automatic car wash. Vehicle access for the project site is proposed via one full access driveway and one restricted right turn in/out driveway on California Street.

Project Trip Generation

The proposed project is forecast to generate a total of approximately 1,619 new daily trips, including 124 new trips during the AM peak hour and 130 new trips during PM peak hour.

Level of Service Analysis

The study intersections currently operate and are forecast to continue operating within acceptable Levels of Service (C or better) during the peak hours for the Existing and Existing Plus Project analysis scenarios, except for the following study intersections that are forecast to continue operating at Level of Service D during the PM peak hour:

1. California Street (NS) at I-10 Westbound Ramps (EW)
3. California Street (NS) at Project Main Driveway (EW)

Summary of Improvements

Project design features, necessary to provide project access, are outlined in the Site Access & On-Site Circulation (see Section 6).

To maintain an acceptable Level of Service at the study intersection and provide sufficient storage capacity for the northbound left-turn lane, the following improvements are recommended for Existing Plus Project conditions:

3. California Street (NS) at Project Main Driveway (EW)
 - Install traffic signal.
 - Modify striping to provide 150+ foot northbound left turn bay on California Street for westbound site access.

The addition of the project does not degrade the Level of Service at the study area intersections below the current Level of Service grade with the proposed improvements listed above; therefore, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.

1. INTRODUCTION

This section provides an overview of the proposed project and the general scope of the analysis.

PURPOSE AND OBJECTIVES

The purpose of this study is to evaluate the potential for transportation impacts resulting from the development of the proposed project in the context of the City of Redlands's discretionary authority for conformance with locally established operational standards. Although this is a technical report, effort has been made to prepare the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms.

This study was prepared in consultation with the City of Redlands staff following the procedures and methodologies for assessing transportation impacts established by the City of Redlands. To assess the project's conformance with local operational standards, this study evaluates the project's effect on traffic operations and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project. For compliance with California Environmental Quality Act (CEQA) requirements, a vehicle miles traveled (VMT) assessment is documented separately.

PROJECT DESCRIPTION

The approximately 4.9-acre project site (APN 0631-032-04) is located at 913 California Street in the City of Redlands, California. The project site is currently vacant and zoned commercial. Figure 1 and Figure 2 show the regional and project location maps.

The proposed project involves development of a 90-room business hotel, a 1,450 square foot coffee shop with drive-through window and a 3,588 square foot one-tunnel automatic car wash. Vehicle access for the project site is proposed via one full access driveway and one restricted right turn in/out driveway on California Street. Figure 3 illustrates the project site plan.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with the City of Redlands as documented in the City-approved scoping agreement provided in Appendix B.

Study Area

Figure 4 illustrates the study area. In accordance with the City of Redlands requirements, the study area was determined in consultation with the City of Redlands engineering staff and consists of classified roadway intersections to which the project is forecast to contribute 50 or more peak hour trips. Based on the project trip generation and distribution forecasts presented later in this report, the study area consists of the following study intersections:

1. California Street (NS) at I-10 Westbound Ramps (EW)¹
2. California Street (NS) at I-10 Eastbound Ramps (EW)
3. California Street (NS) at Project Main Driveway (EW)
4. California Street (NS) at Redlands Boulevard (EW)

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

5. California Street (NS) at Project South Driveway (EW)

Analysis Scenarios

This study includes an evaluation of the following analysis scenarios for weekday AM and PM peak hour conditions:

- Existing
- Existing Plus Project

Congestion Management Program

According to the San Bernardino County Transportation Authority *Recommended Traffic Impact Analysis Guidelines*, February 2020, traffic impact analysis (TIA) reports prepared within a local jurisdiction should be provided to the County congestion management program (CMP) and other jurisdictions based on the number of project trips contributed to the CMP network. Projects forecast to generate the CMP threshold of 250 two-way peak hour trips and contribute 50 or more peak hour trips to a State highway facility are required to provide a traffic impact analysis report for California Department of Transportation (Caltrans) review. While projects generating 100 to 250 peak hour trips and contribute 50 or more peak hour trips to a State highway facility are required to consult with Caltrans to determine the need to provide a traffic impact analysis report for Caltrans review. Additionally, if the project is expected to contribute 50 or more two-way trips to a CMP arterial within another jurisdiction, a copy of the traffic impact analysis report should be provided to the local jurisdiction.

The City of Redlands should provide review copies of the TIA report to the potentially impacted jurisdictions so that interagency review will occur in concert with the permitting jurisdiction's project review schedule and prior to any approval or permitting activity.

The project is located on California Street between the I-10 freeway and Redlands Boulevard. While the project is forecast to contribute far less than 100 two-way peak hour trips on the adjacent freeway, it is forecast to contribute slightly more than 50 peak hour trips at the nearest freeway ramp intersection. As shown above, both adjacent freeway ramp intersections are included in the study area. At the south end of the study area, the Redlands intersection is forecast to have more than 50 peak hour trips and is at the city boundary between the City of Redlands and the City of Loma Linda.

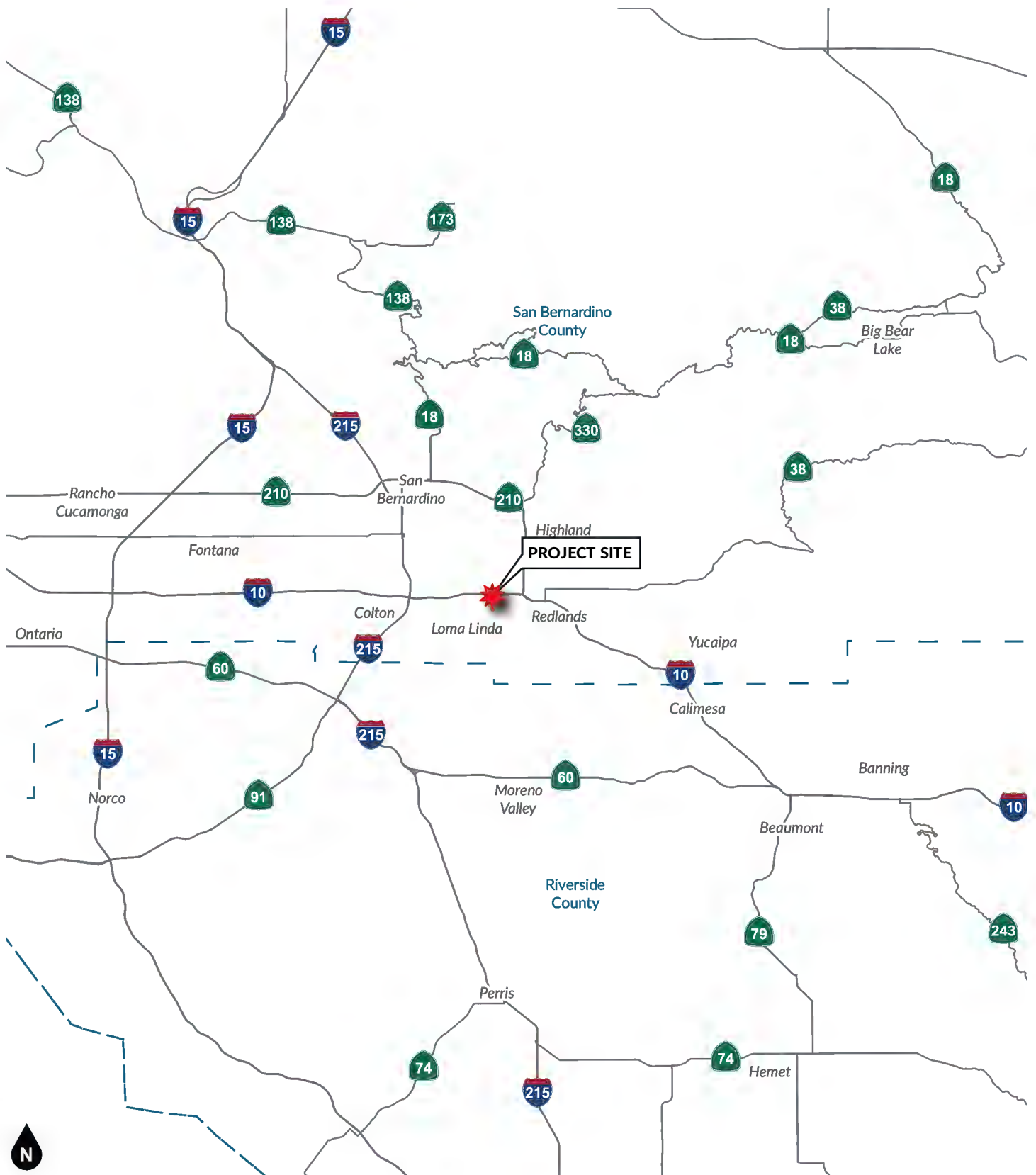


Figure 1
Regional Location Map

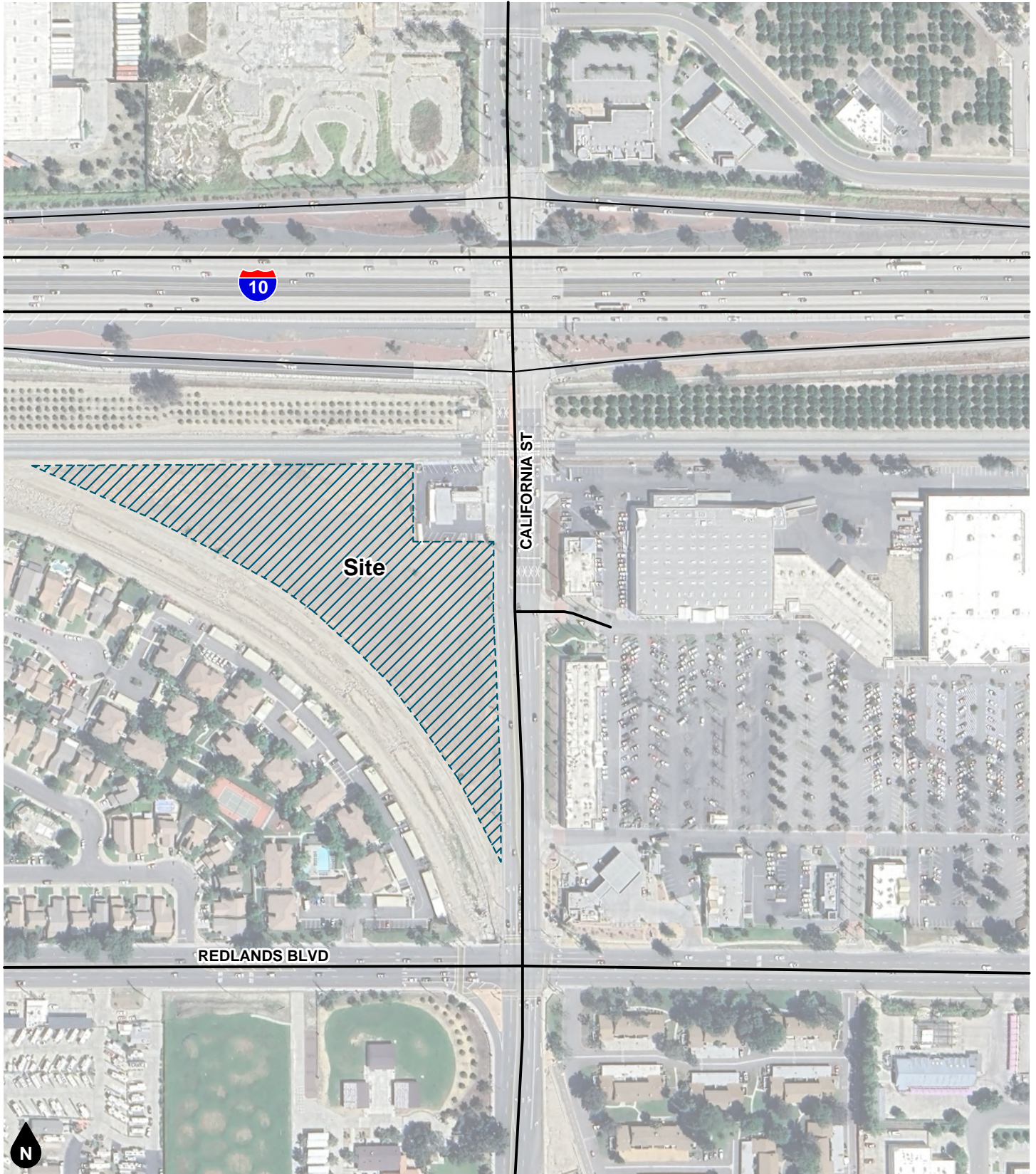


Figure 2
Project Location Map

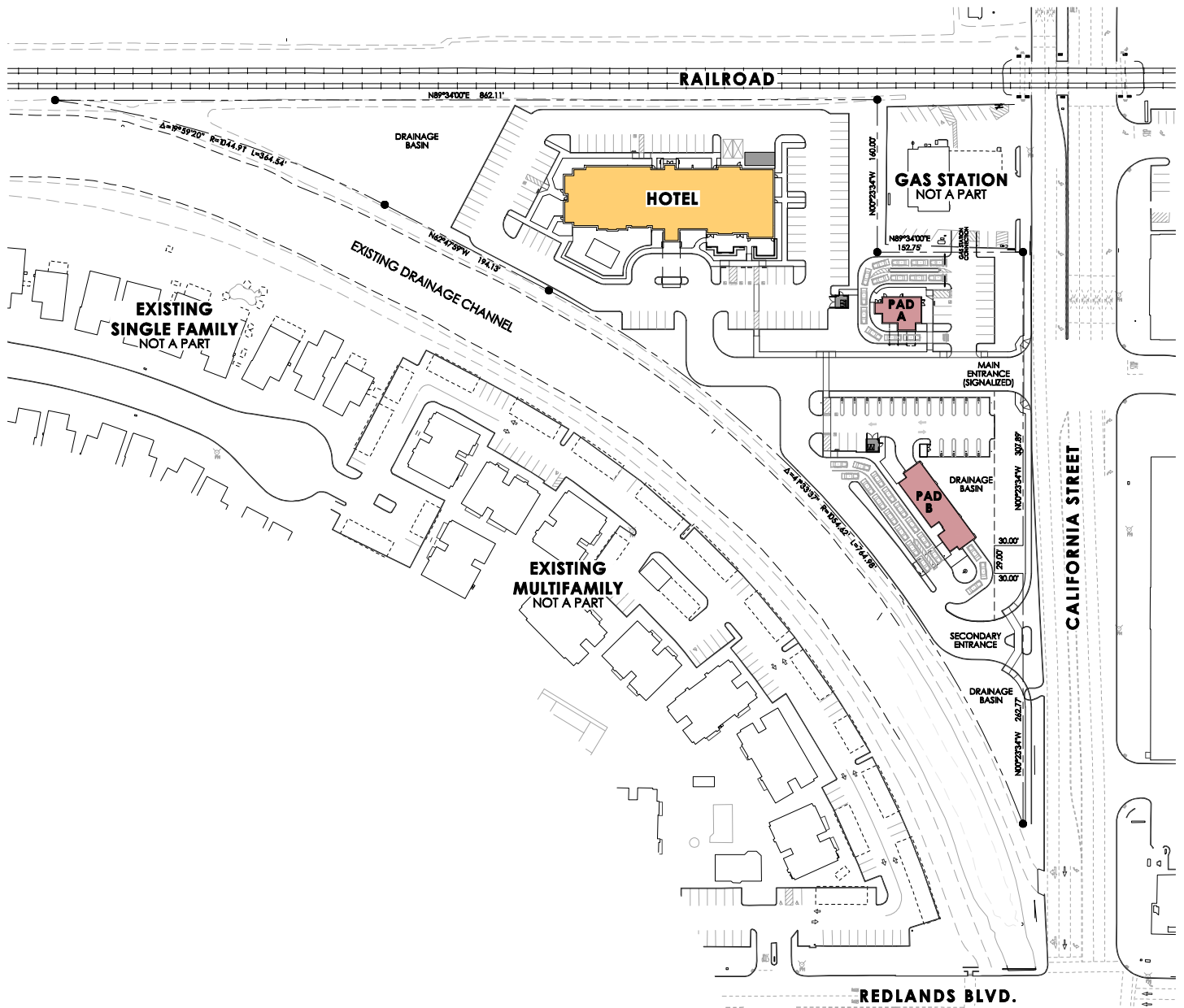
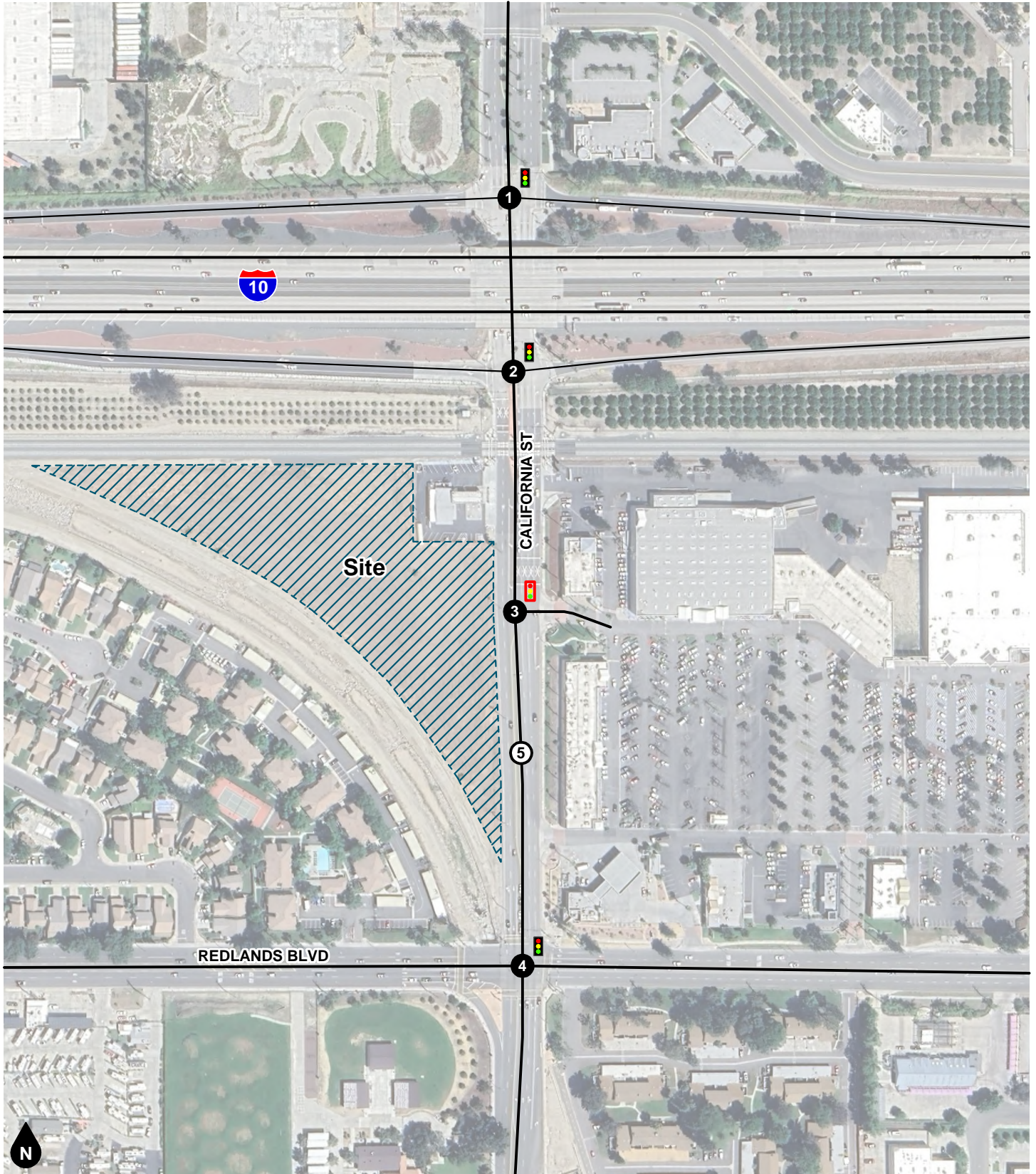


Figure 3
Site Plan



- Legend**
- # Study Intersection
 - # Project Driveway
 - Traffic Signal Existing
 - Traffic Signal Proposed

Figure 4
Study Area

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This traffic impact analysis is based on the City of Redlands standard procedures, and the *County of San Bernardino Transportation Impact Study Guidelines* (July 2019) ["County TIA Guidelines"].

LEVEL OF SERVICE/OPERATIONAL ANALYSIS METHODOLOGY (Non-CEQA)

Level of Service analysis is performed to assess conformance with General Plan and operational standards established by the applicable agencies.

Intersections Delay Methodology

City of Redlands intersections are analyzed using the intersection delay methodology based on procedures contained in the *Highway Capacity Manual* (HCM) (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. Intersection delay analysis was performed with default capacity values and adjustment factors recommended in the HCM. The intersection Level of Service is based on the thresholds contained within the HCM.

Level of Service	Delay Methodology	
	Signalized Intersection	Unsignalized Intersection
	Seconds per Vehicle	Seconds per Vehicle
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 Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). Intersection analysis was performed using the Vistro software. The Level of Service analysis was performed in accordance with parameters specified in the County TIA Guidelines.

At intersections with either 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 minor street approach or major street left-turn movement.

Performance Standards

The City of Redlands General Plan and Measure U Section 1A.60 Principle Six has established the minimum acceptable Level of Service (C or better) for roadway segment and peak hour intersection operations. Where the current Level of Service is lower than C, roadway improvements shall be provided such that the LOS is not reduced below the LOS at the time of the application, or as provided in Section 5.20 of the Redlands General Plan where a more intense Level of Service is specifically permitted, for Existing Plus Project conditions.

Substantial Operational Deficiency Criteria

For study intersections within the City of Redlands, a project traffic impact requires improvement if the addition of project-generated trips is forecast to cause a degradation in Level of Service D, E, or F at a study intersection. For project impacts at facilities with existing acceptable Level of Service (C or better), the project shall provide improvements that would, at a minimum, provide Level of Service C or better. For project impacts at facilities with existing unacceptable Level of Service (D, E, or F), the project shall provide improvements that would, at a minimum, provide Level of Service that is equal to or better than existing conditions.

3. EXISTING CONDITIONS

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

EXISTING ROADWAY SYSTEM

Figure 5 shows the lane geometry and intersection traffic controls for existing conditions based on a field survey of the study area. Regional access to the project site is provided by Interstate 10 approximately one-tenth of a mile to the north of the project site. Local north-south circulation is provided by California Street and east-west circulation is provided by Redlands Boulevard.

California Street: This five-lane to six-lane divided roadway trends in a north-south direction and is classified as a Major Arterial (4 to 6 Lane divided) on the City of Redlands General Plan Circulation Element as well as a four-lane undivided roadway south of Redlands Boulevard on the City Loma Linda General Plan Circulation Element. On-street parking is prohibited in the study area. There are no designated bicycle facilities in the project vicinity; however, a proposed bike route is shown on the City of Redlands General Plan Circulation Element. Sidewalks are provided on the east side of the roadway and on the west side of the roadway north of the project site. The speed limit is not posted in the project vicinity.

Redlands Boulevard: This four to six lane divided roadway trends in an east-west direction and is classified as a Major Arterial (4 to 6 Lane divided) on the City of Redlands General Plan Circulation Element as well as a modified four-lane undivided roadway west of California Street on the City Loma Linda General Plan Circulation Element. On-street parking is prohibited in the study area. There are no designated bicycle facilities in the project vicinity; however, a proposed bike route is shown on the City of Redlands General Plan Circulation Element. Sidewalks are currently not provided on both sides of the street west of California Street and on the north side of the street east of California Street in the project vicinity. The posted speed is 45 miles per hour in the project vicinity.

There are no designated bicycle facilities in the project vicinity. Sidewalks are currently provided adjacent to commercial development. The speed limit is not posted in the project vicinity.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown on Figure 6. As shown on Figure 6, currently sidewalks are not provided on California Street along the project site frontage.

TRANSIT FACILITIES

Figure 7 shows the existing Omnitrans system map in the project vicinity. Bus route 8 east-west on Redlands Boulevard in the study area. The closest bus stop to the project is 350 feet west of the California Street and Redlands Boulevard intersection.

GENERAL PLAN CONTEXT

Figure 8 shows the City of Redlands General Plan Circulation 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. The City of Redlands standard roadway cross-sections are illustrated on Figure 9.

BICYCLE FACILITIES MASTER PLAN

The City of Redlands Bicycle Master Plan is shown on Figure 10.. As shown on Figure 10, there currently are no designated bicycle facilities; however, bike routes are on California Street and Redlands Boulevard.

DESIGNATED TRUCK ROUTES

The City of Redlands Truck Routes are shown on Figure 11.. As shown on Figure 11, designated truck routes in the study area include California Street, Redlands Boulevard, and Interstate 10.

EXISTING ROADWAY VOLUMES

Figure 12 shows the existing average daily traffic volumes. The existing average daily traffic volumes have been factored from peak hour intersection turning movement volumes at locations using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach Volume + Exit Volume)} \times 11.5 = \text{Leg Volume}$$

Figure 13 and Figure 14 show the existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection turning movement volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in April 2024 during typical weekday conditions. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM; these periods capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume entering the intersection. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM and may vary at other intersections depending on the four consecutive 15-minute periods that have the highest total volume. The existing peak hour factor (PHF) and passenger car equivalent (PCE) volumes were determined from the counts and used in the analysis. Intersection turning movement count worksheets are provided in Appendix C.

EXISTING INTERSECTION LEVEL OF SERVICE

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

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (C or better) during peak hours, except for the following intersections that currently operate at Level of Service D during the PM peak hour:

1. California Street (NS) at I-10 Westbound Ramps (EW)
3. California Street (NS) at Project Main Driveway (EW)

Table 1
Existing Intersection Levels of Service

Study Intersection	Traffic Control ¹	AM Peak Hour		PM Peak Hour	
		Delay ²	LOS ³	Delay ²	LOS
1. California Street at I-10 Westbound Ramps	TS	31.5	C	37.0	D
2. California Street at I-10 Eastbound Ramps	TS	27.5	C	34.5	C
3. California Street at Project Main Driveway	CSS	12.9	B	28.0	D
4. California Street at Redlands Boulevard	TS	29.4	C	30.1	C

Notes:

1. TS = Traffic Signal; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.
3. LOS = Level of Service

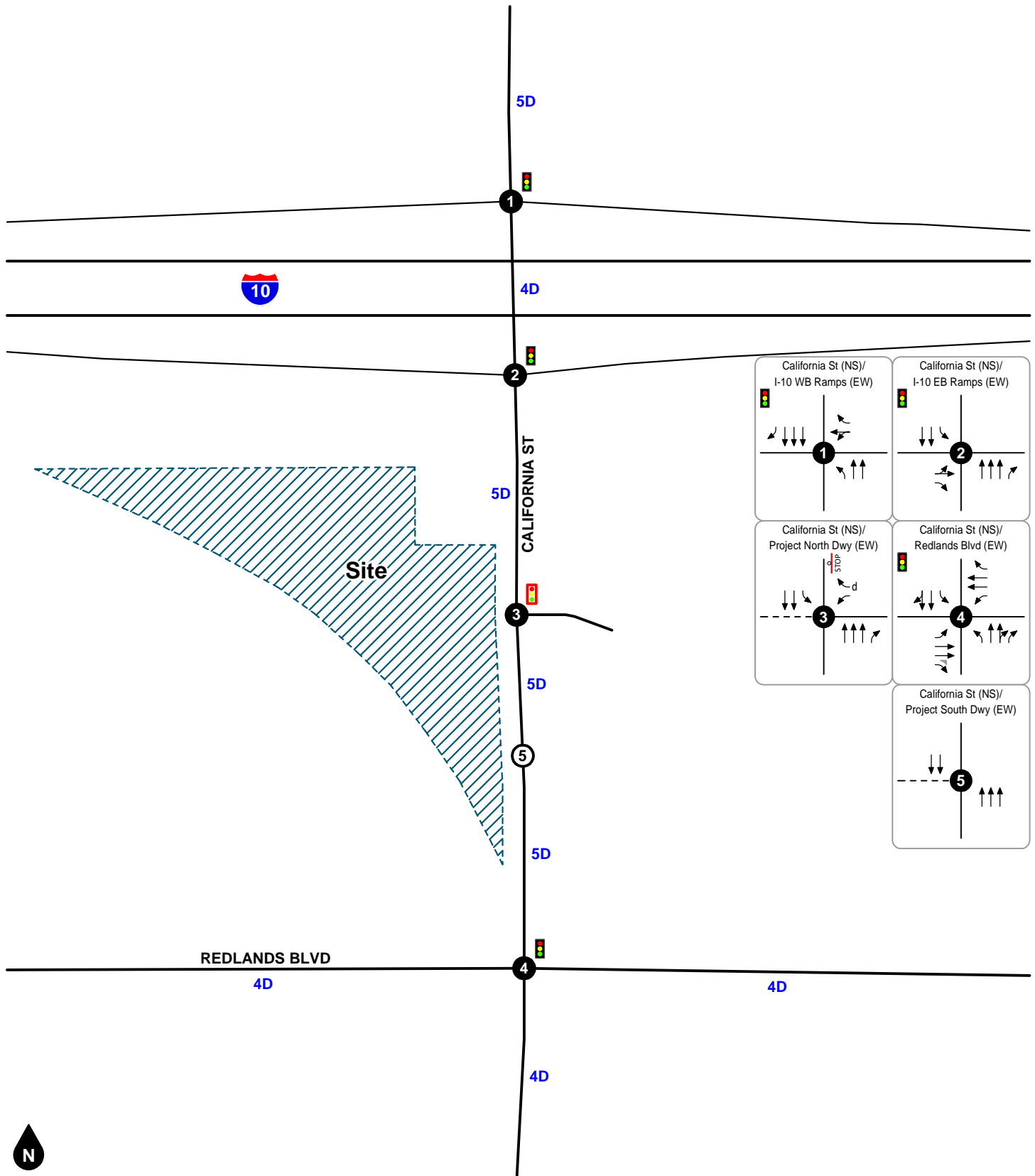
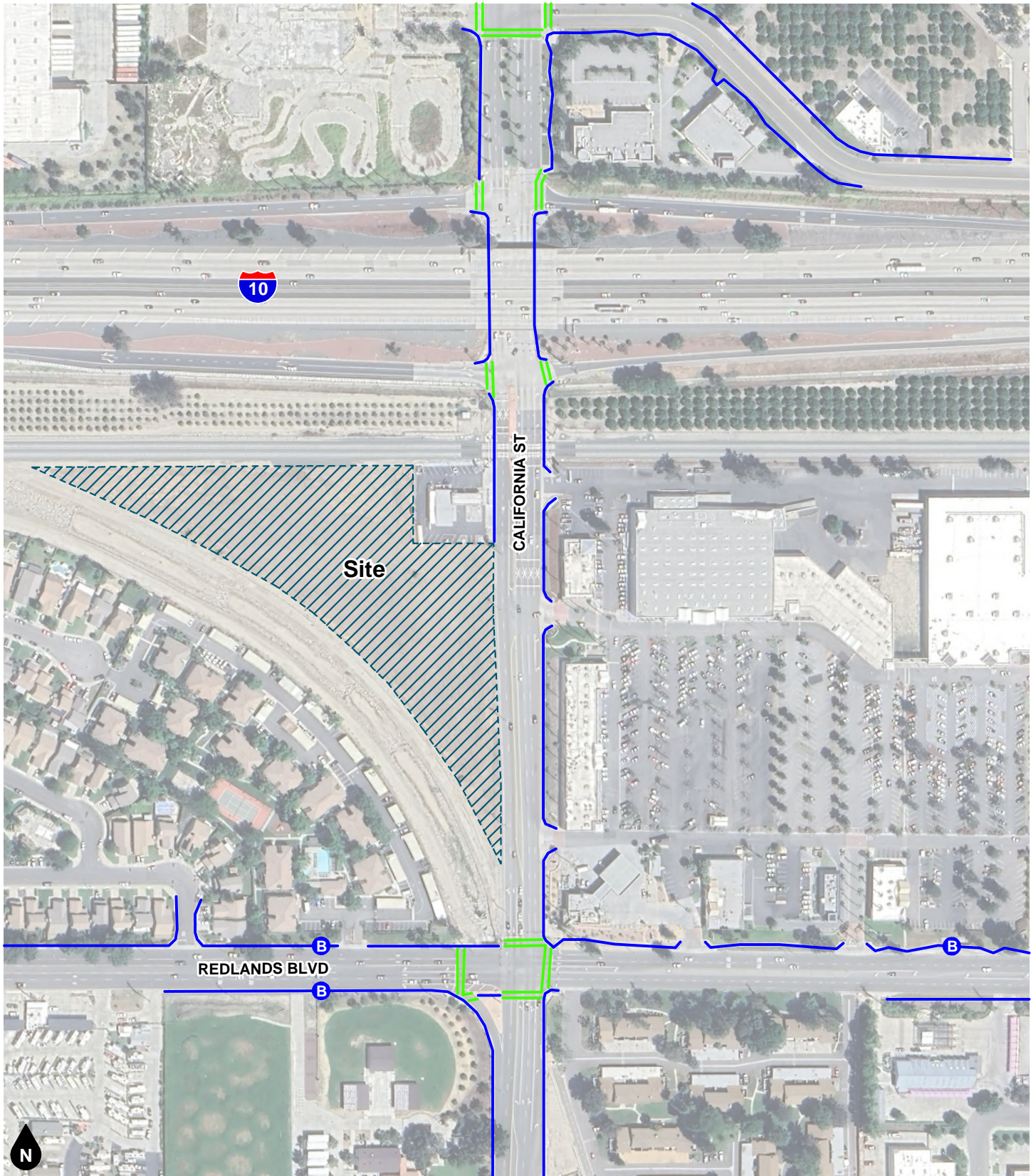


Figure 5
Existing Lane Geometry and Intersection Traffic Controls



- Legend**
- Sidewalk
 - Cross Walk
 - B Bus Stop

Figure 6
Existing Pedestrian Facilities

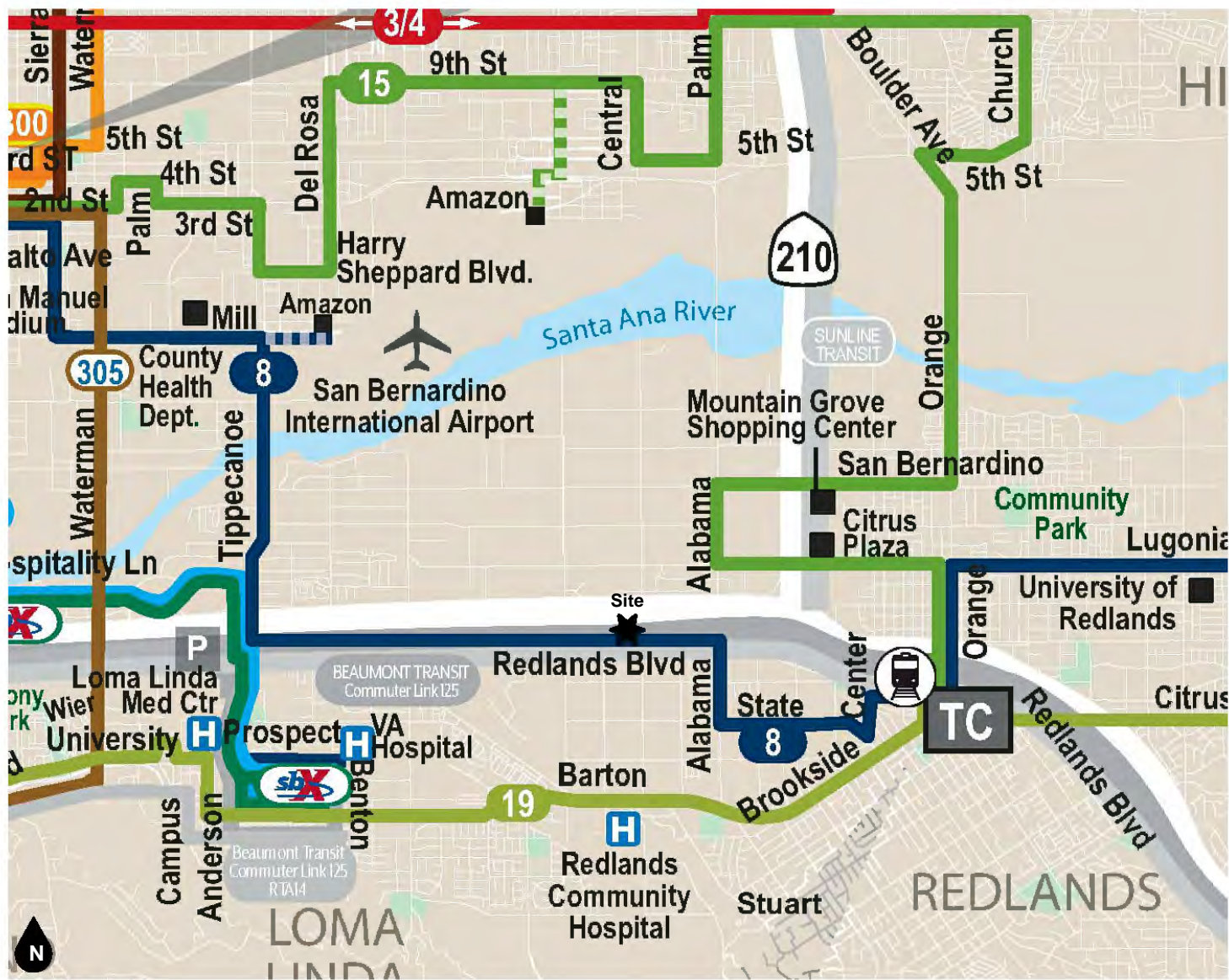


Figure 7
Existing Transit Routes

Source: Omitrans

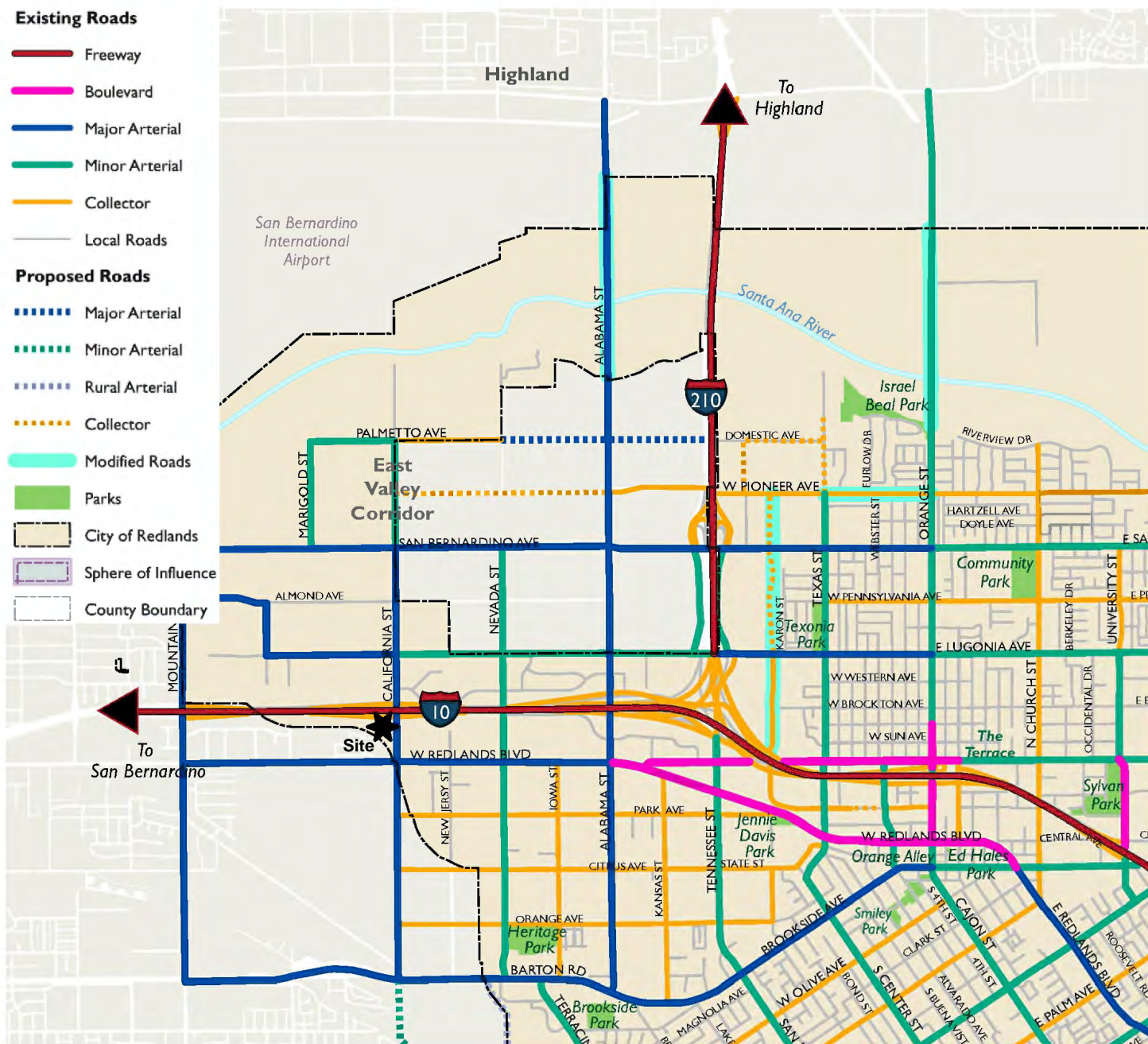


Figure 8
City of Redlands General Plan Circulation Element

Source: City of Redlands

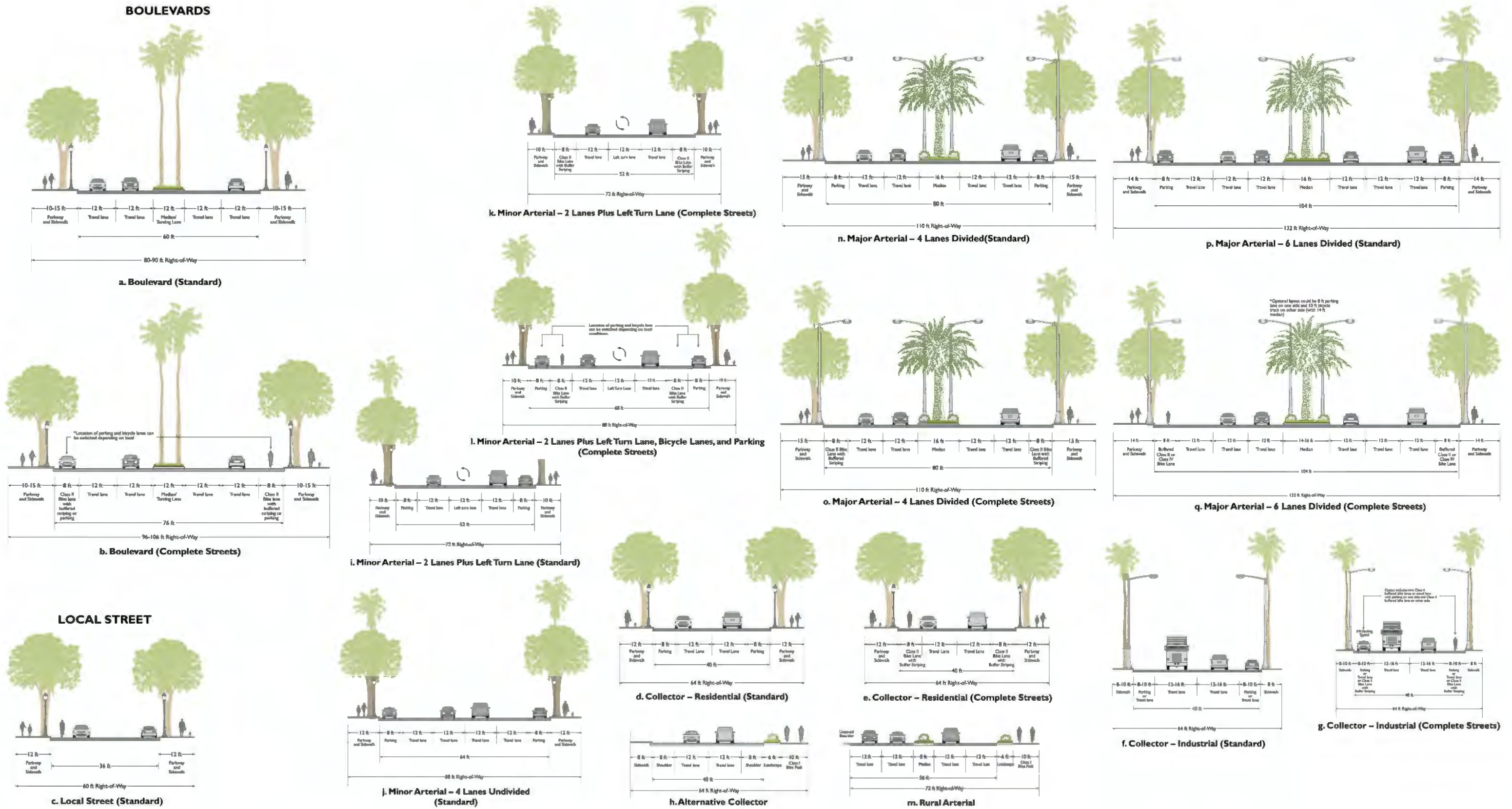
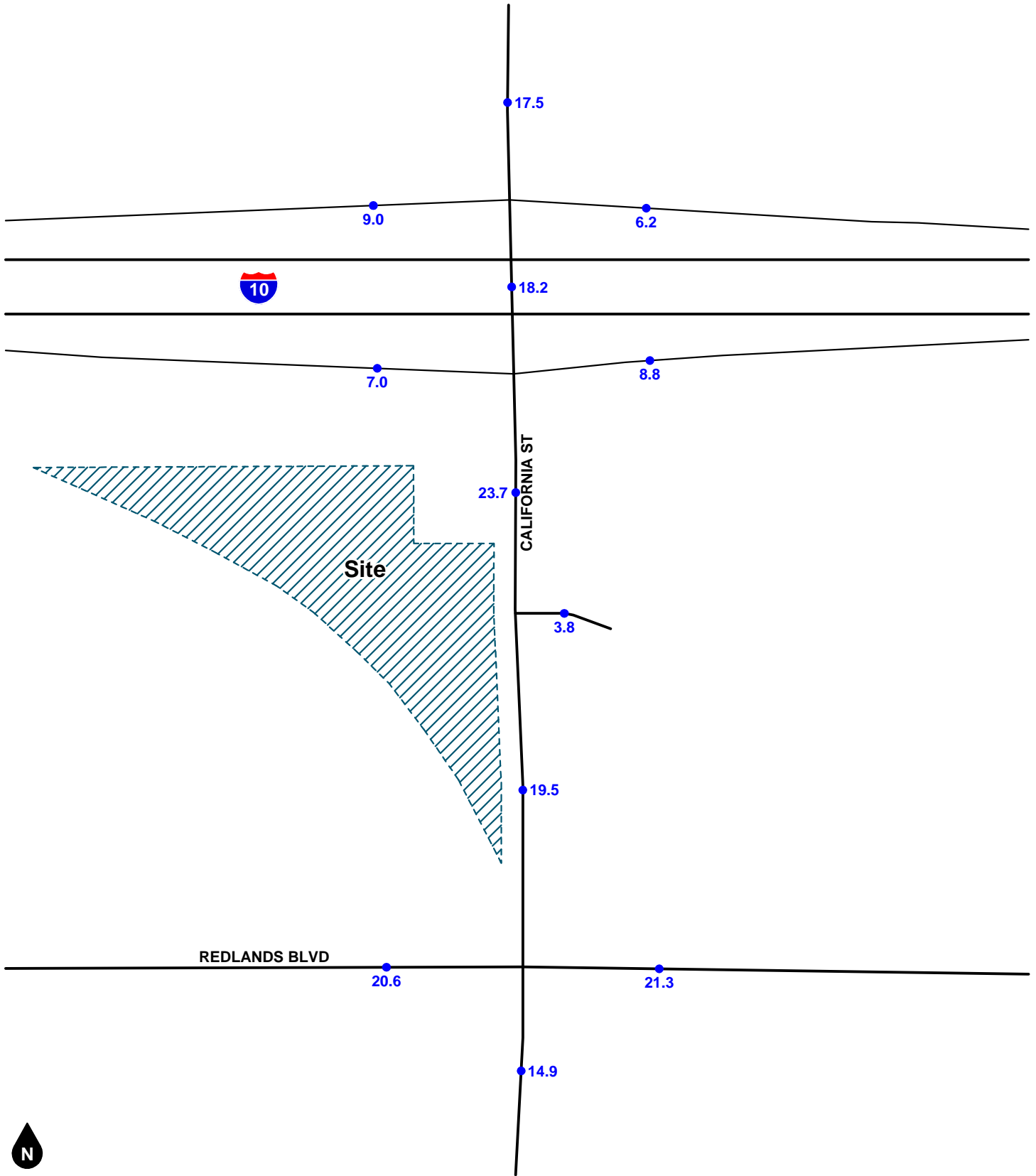


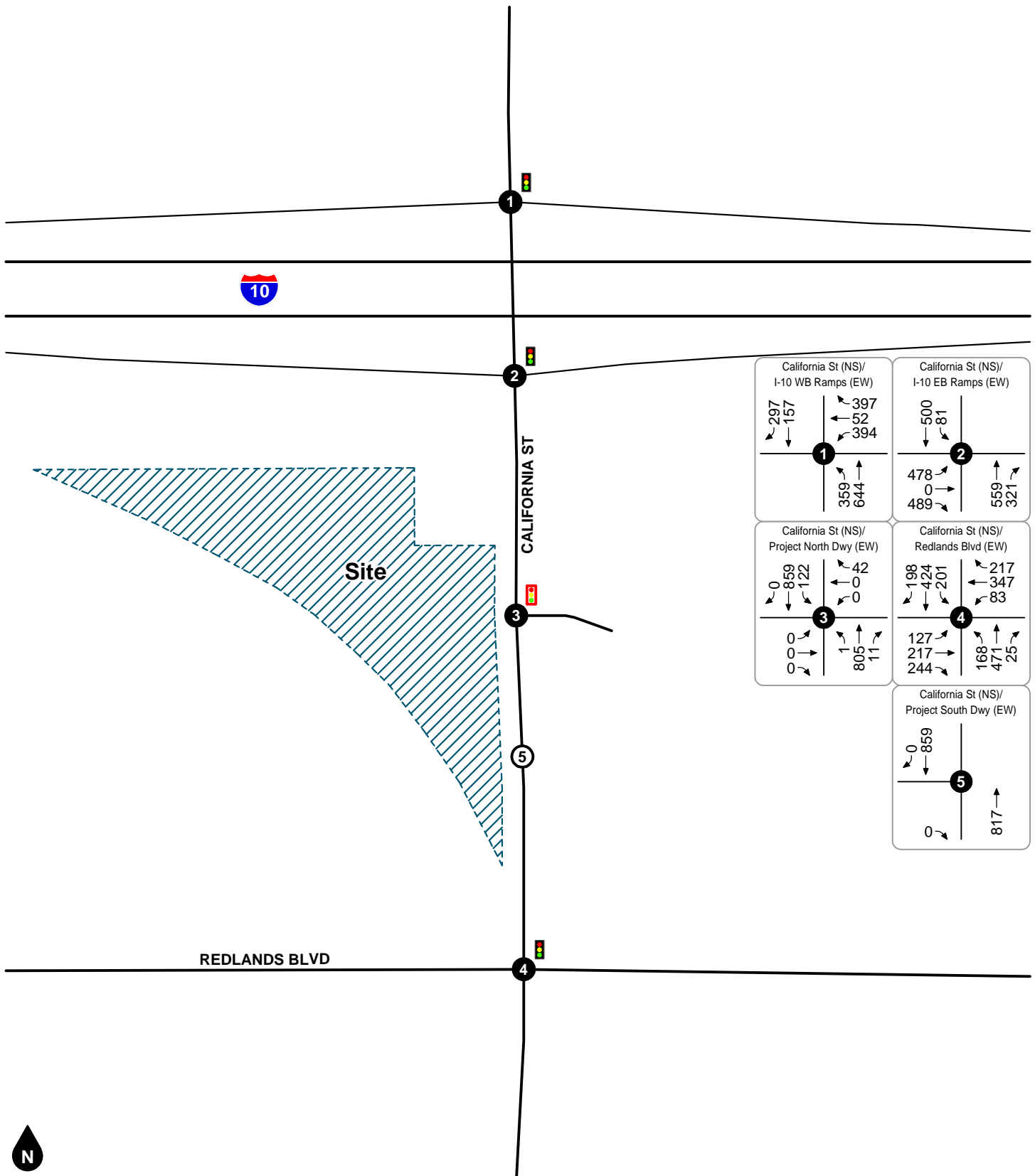
Figure 9
City of Redlands General Plan Roadway Cross-Sections





Legend
 ●## Vehicles Per Day (1,000's)

Figure 12
Existing Average Daily Traffic Volumes



California St (NS)/ I-10 WB Ramps (EW) 	California St (NS)/ I-10 EB Ramps (EW)
California St (NS)/ Project North Dwy (EW) 	California St (NS)/ Redlands Blvd (EW)
	California St (NS)/ Project South Dwy (EW)

Legend

- # Study Intersection
- # Project Driveway
- Traffic Signal Existing
- Traffic Signal Proposed

Figure 13
Existing AM Peak Hour Intersection Turning Movement Volumes

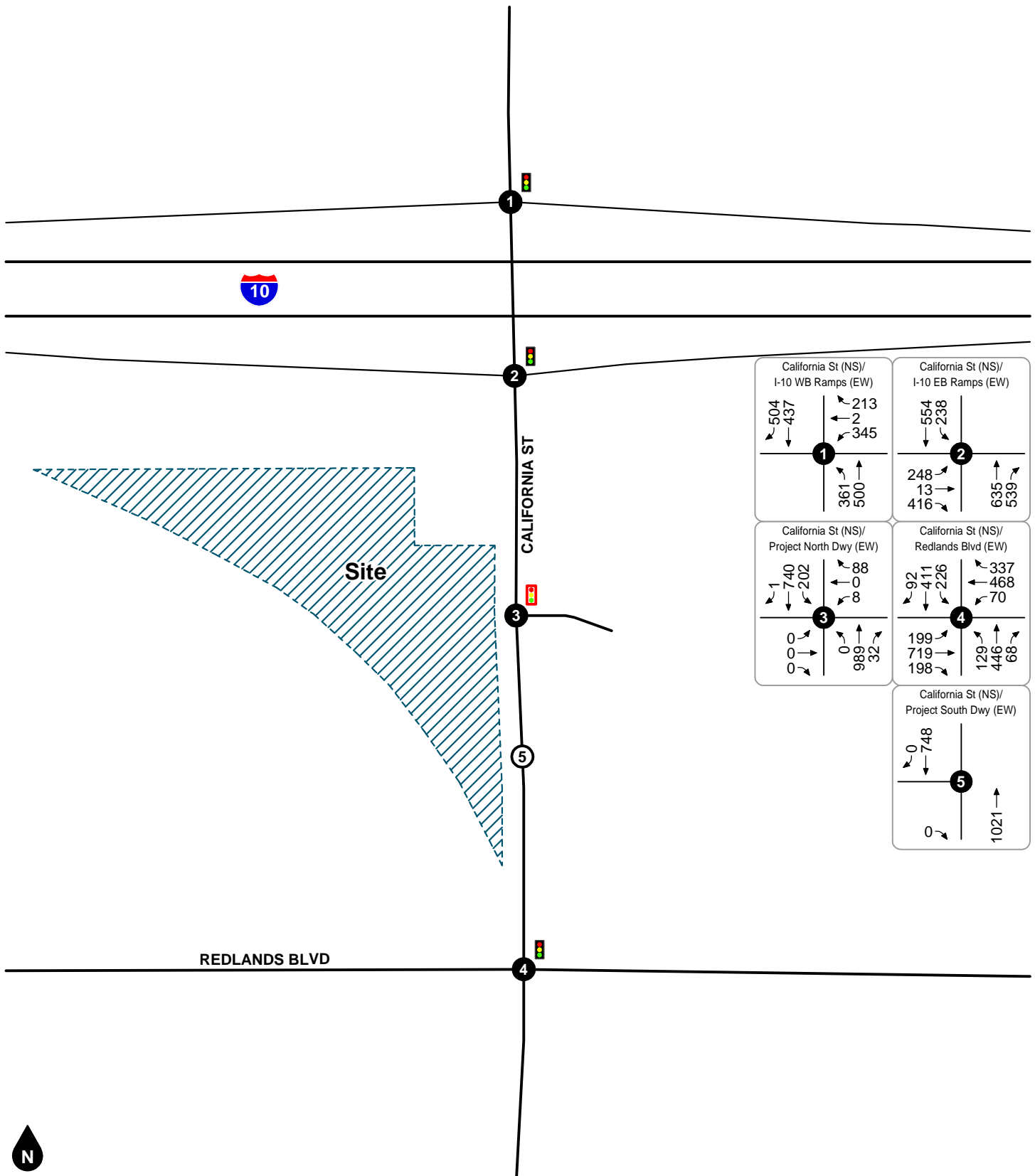


Figure 14
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

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

TRIP GENERATION

The proposed project trip generation forecast is based on average rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) for Land Use Code 312 (Business Hotel), Land Use Code 937 (Coffee Donut Shop with Drive-through Window) and Land Use Code 948 (Automated Car Wash). Applicable project internal capture and peak hour pass-by trip adjustments were determined based on average pass-by rates published by ITE have been applied to the net trip generation.

Internal Capture Adjustments

The project trip generation includes the applicable internal capture adjustments based on the methodology recommended by ITE. Since the proposed project includes two different land uses, a portion of the trips generated by the proposed land uses are expected to remain internal to the commercial center (e.g., a patron of the grocery store may also visit one of the on-site restaurants). Since the trip generation rates contained in the ITE *Trip Generation Manual* represent vehicles entering and exiting at the site driveway(s), it is appropriate to reduce the initial trip generation forecast by the applicable internal capture rate when calculating the new trips generated by the project and added to the external roadway network. The ITE *Trip Generation Handbook* recommends use of the Transportation Research Board (TRB) *NCHRP Report 684* (2013) estimation tool worksheet to determine internal capture rates for trips within a mixed-use development. Internal capture worksheets are included in the scoping agreement provided in Appendix B.

Pass-by Trip Adjustments

The project trip generation includes pass-by trip adjustments based on average pass-by rates obtained from the ITE *Trip Generation Manual*. Land uses such as shopping centers, restaurants, gas stations, and convenience stores will often locate next to busy roadways to attract motorists already on the street. Since the trip generation rates contained in the ITE *Trip Generation Manual* 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 street system. Pass-by trips are included at the project driveways and the adjacent intersection of California Street and Redlands Boulevard and applied after internal capture adjustments.

Project Trips

As shown in Table 2, the proposed project is forecast to generate a total of 1,619 new daily trips, including 124 new trips during the AM peak hour and 130 new trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION & ASSIGNMENT

Figure 15 and Figure 16 show the forecast outbound and inbound directional distribution patterns for the project generated trips, respectively. . The project trip distribution patterns were developed using engineering judgment in consultation with the City engineering staff based on a review of existing traffic data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, the number of trips generated is determined by multiplying the trip generation rates and directional distributions by the land use quantity. The project-

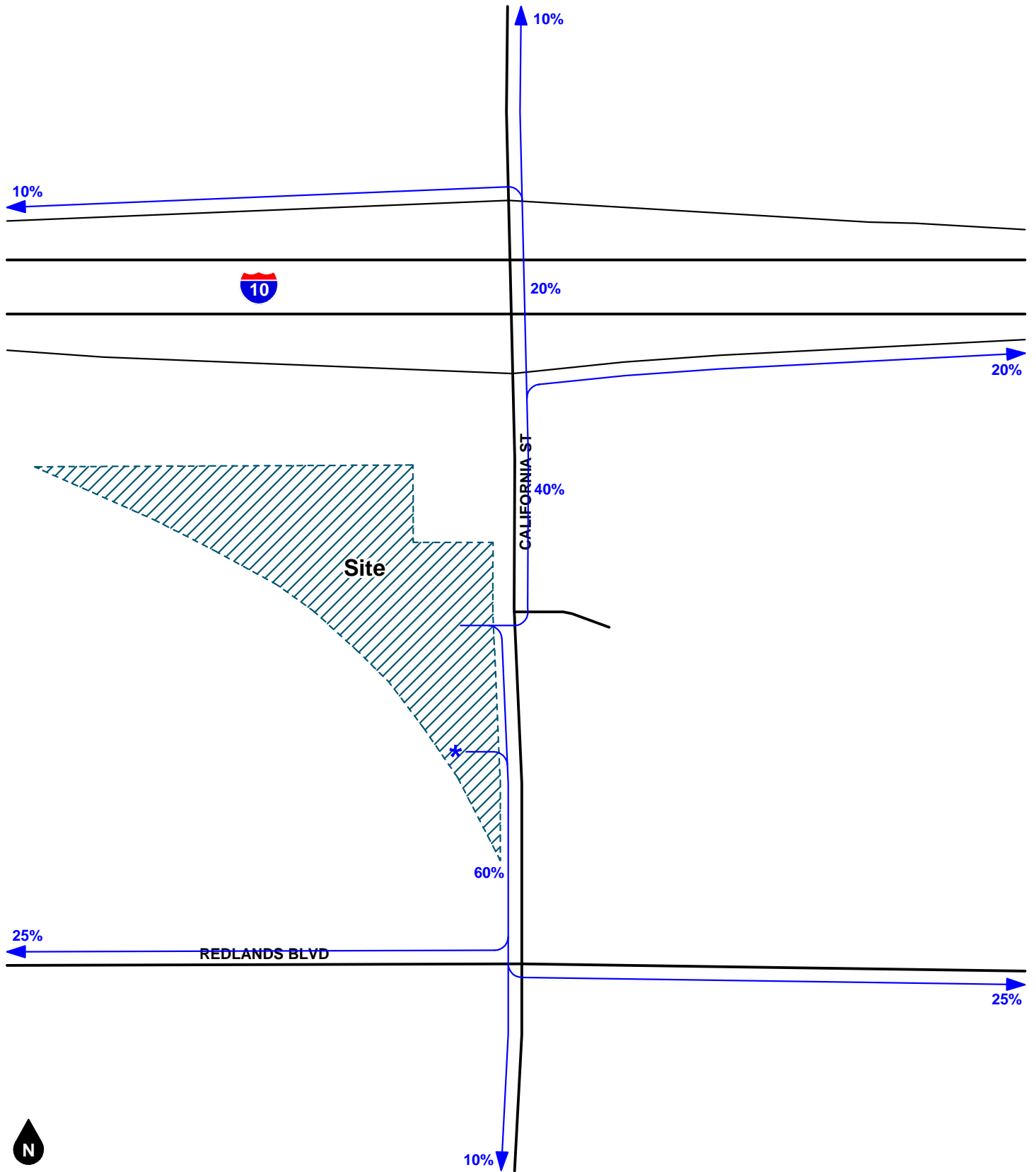
generated average daily traffic volumes are shown on Figure 17. The project-generated AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 18 and Figure 19.

Table 2
Project Trip Generation

Trip Generation Rates									
Land Use	Source ¹	Land Use Variable ²	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Business Hotel	ITE 312	RM	39%	61%	0.36	55%	45%	0.31	4.02
Coffee Donut Shop with Drive-Through Window	ITE 937	TSF	51%	49%	85.88	50%	50%	38.99	533.57
Automated Car Wash	ITE 948 ³	CWT	50%	50%	34.44	50%	50%	77.50	861.11
Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Business Hotel	ITE 312	90 RM	13	19	32	15	13	28	362
Internal Capture Trips	ITE ⁴		-1	-2	-3	-2	-1	-3	-18
Subtotal			12	17	29	13	12	25	344
Coffee Donut Shop with Drive-Through Window	ITE 937	1.450 TSF	64	61	125	28	29	57	774
Internal Capture Trips	ITE ⁴		-2	-1	-3	-1	-2	-3	-15
Pass-by Trips (50%AM, 50%PM, 50%Daily)	ITE 938 ⁵		-31	-30	-61	-14	-13	-27	-345
Subtotal			31	30	61	13	14	27	414
Automated Car Wash	ITE 948	1 CWT	17	17	34	39	39	78	861
Subtotal Project Trips (Gross)			94	97	191	82	81	163	1,997
Total Internal Capture Trips			-3	-3	-6	-3	-3	-6	-33
Subtotal - External Project Trips			91	94	185	79	78	157	1,964
Total Pass-by Trips			-31	-30	-61	-14	-13	-27	-345
TOTAL NEW TRIPS GENERATED			60	64	124	65	65	130	1,619

Notes:

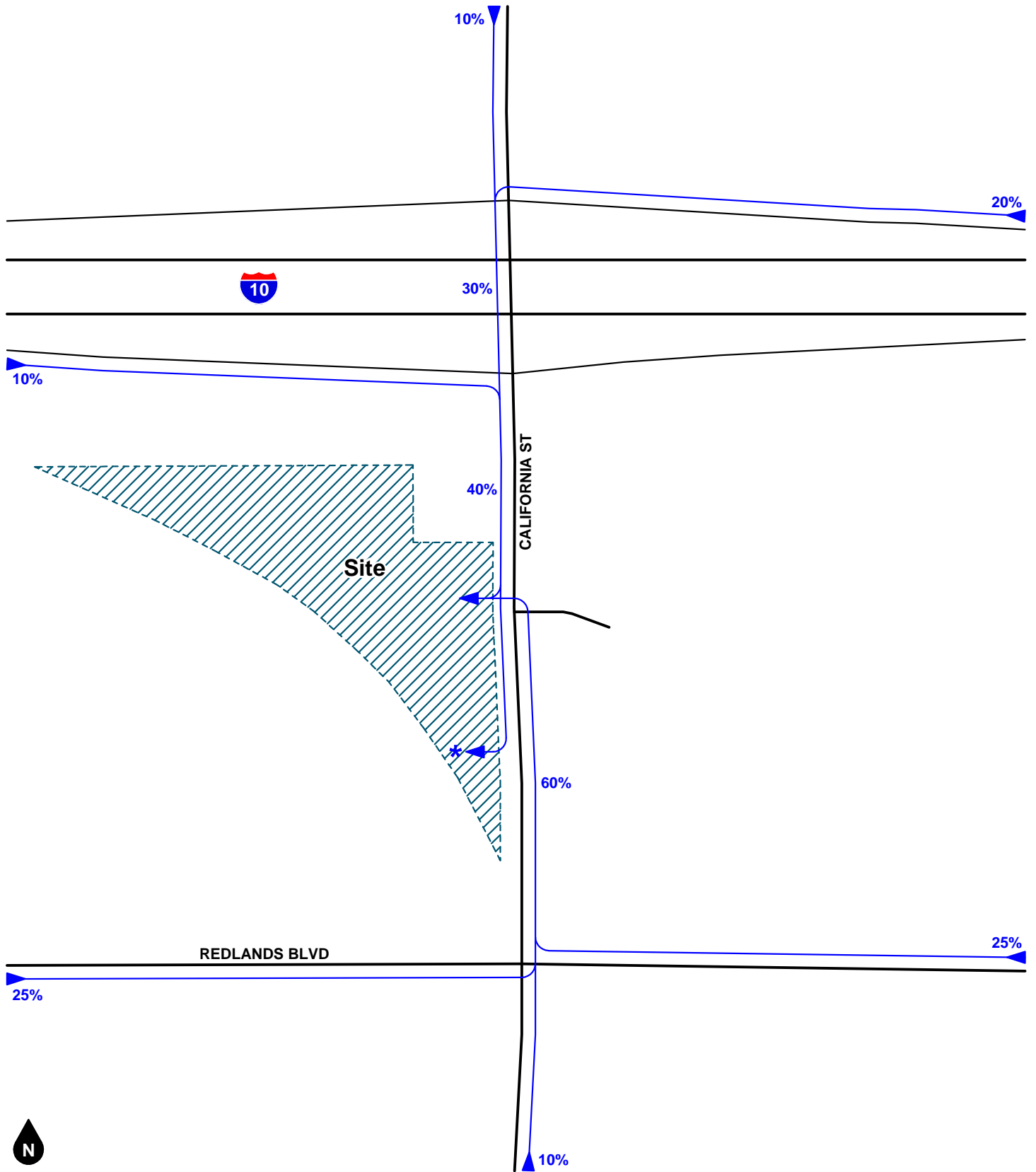
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.
All rates based on General Urban/Suburban setting.
2. RM = Hotel Room; TSF = Thousand Square Feet; CWT = Car Wash Tunnel.
3. ITE rates with data from San Diego Association of Governments (SANDAG) *Vehicular Traffic Generation Rates* (April 2002). Where the daily or peak hour rate is not provided by ITE, the SANDAG percentage of peak hour to daily rate is used to calculate the missing data. Where the peak hour distribution is not provided by ITE, the SANDAG peak hour distribution is used.
4. Internal capture trips calculated in accordance with procedures in the ITE Trip Generation Handbook (3rd Edition, 2017). The daily internal capture rate is equal to half of the AM and PM peak hour average internal rates. See Appendix B for internal capture worksheets.
5. In the absence of pass-by rates for ITE 937 (Coffee Shop with Drive-thru), a conservative estimate of 50% pass-by rates are used based on ITE 938 (Coffee Shop with Drive-thru with No internal seating) which has average pass-by rates of 90%-98% during the peak hours.



Legend

- 10% Percent From Project
- * Right Turn In/Out Only

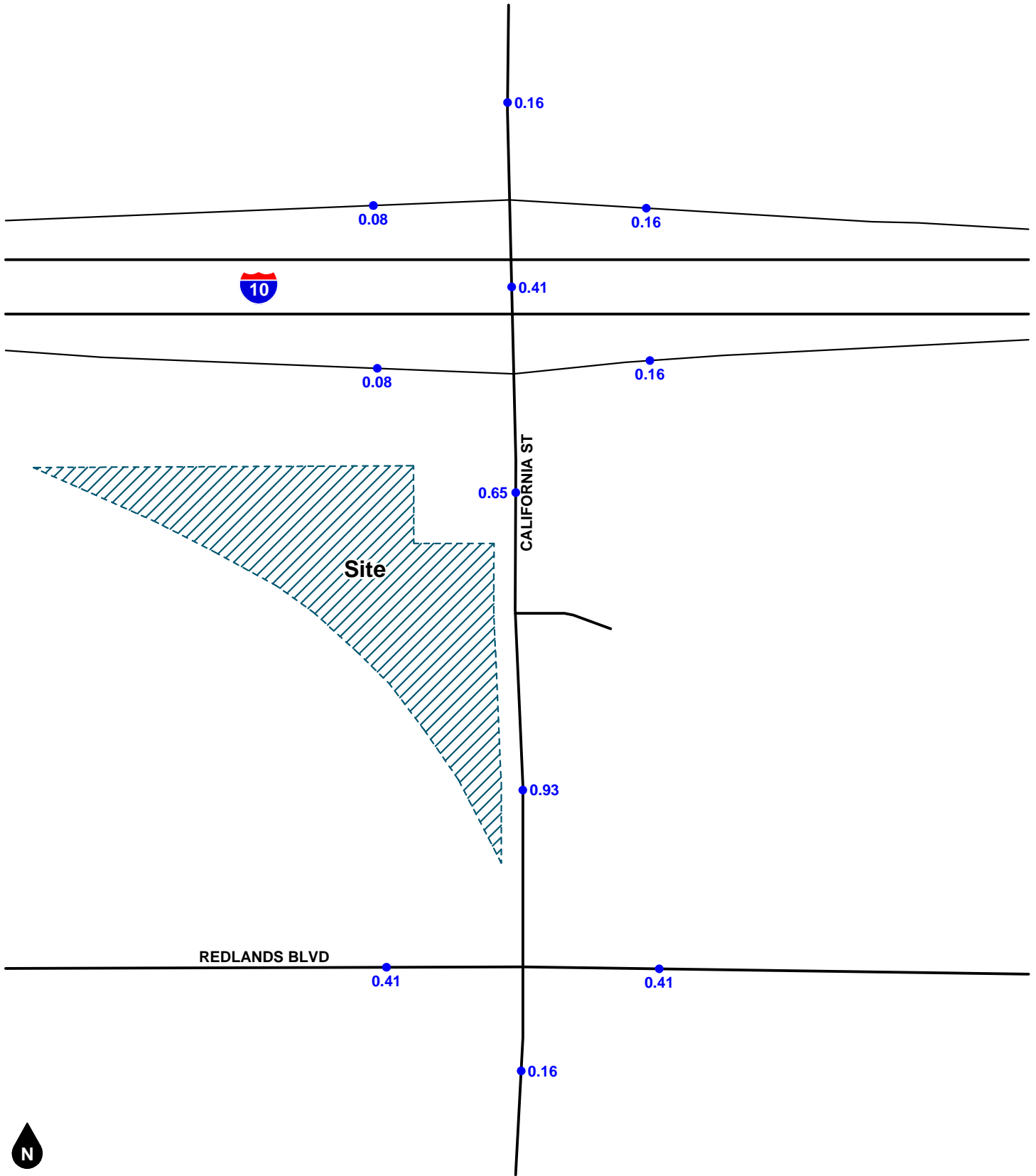
Figure 15
Project Trip Distribution (Outbound)



Legend

- 10% Percent To Project
- * Right Turn In/Out Only

Figure 16
Project Trip Distribution (Inbound)



Legend
 ●## Vehicles Per Day (1,000's)

Figure 17
Project Average Daily Traffic Volumes

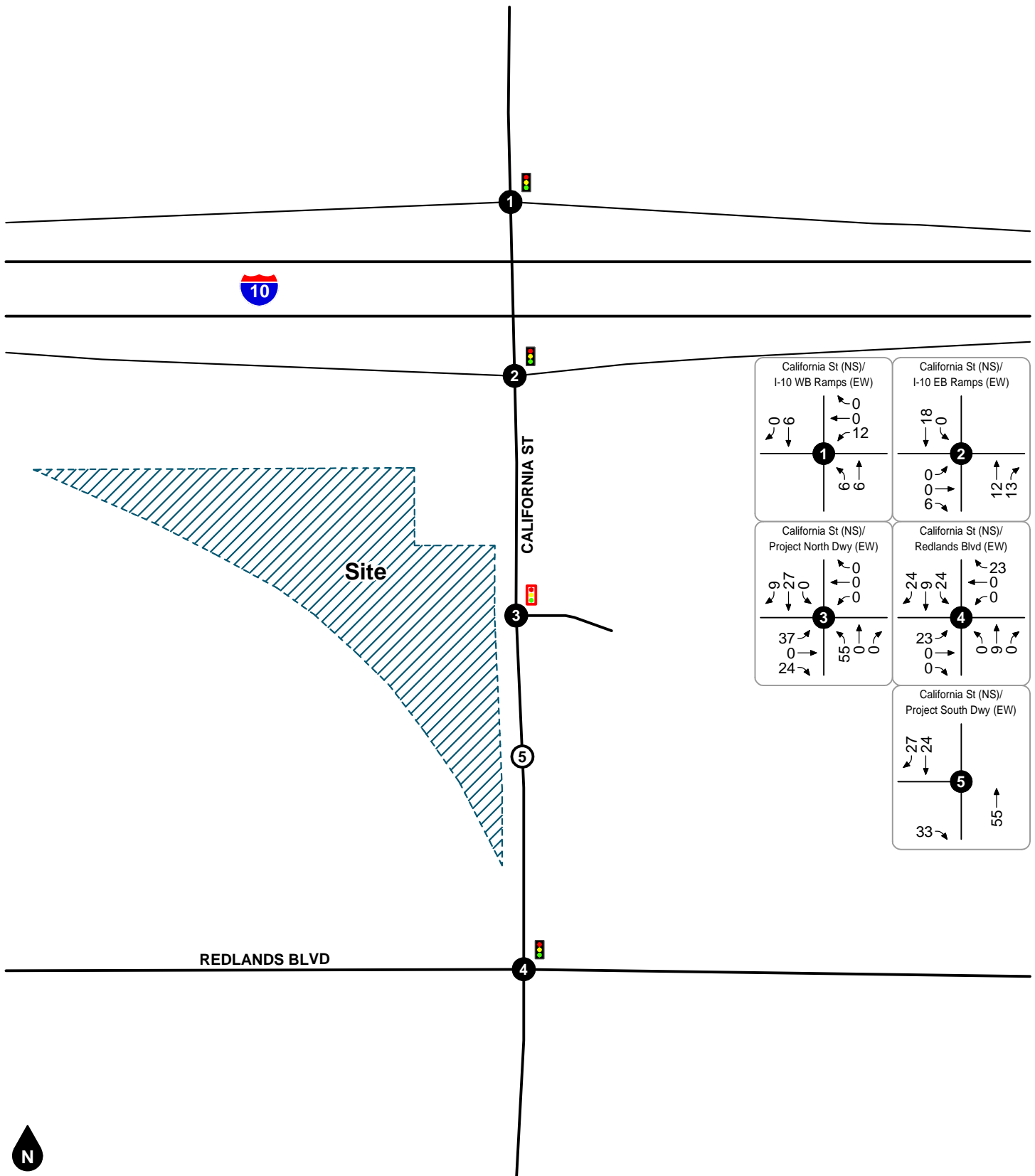


Figure 18
Project AM Peak Hour Intersection Turning Movement Volumes

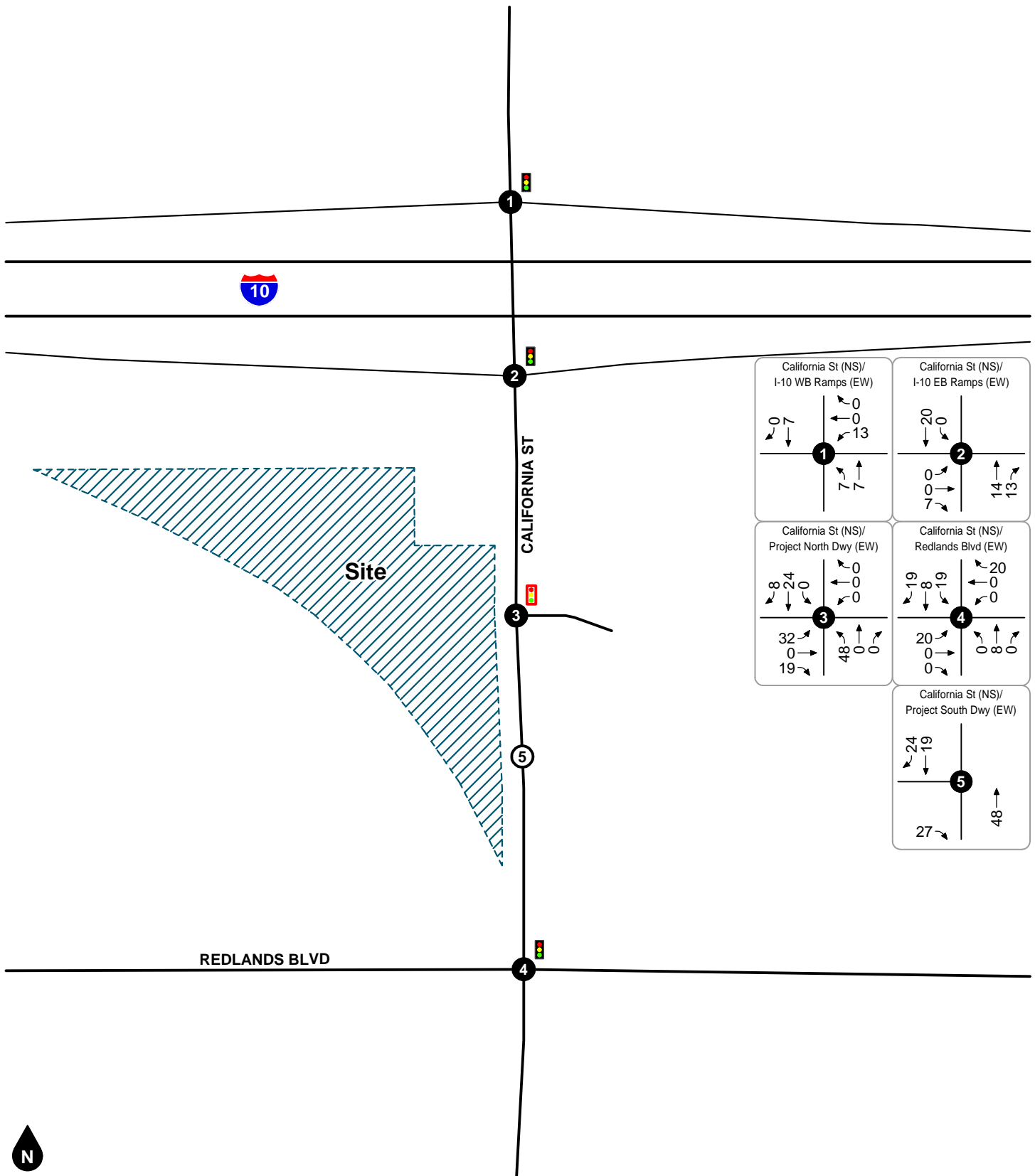


Figure 19
Project PM Peak Hour Intersection Turning Movement Volumes

5. EXISTING PLUS PROJECT

This section describes how future volume forecasts were developed and Levels of Service results. Forecast study area volumes are illustrated in the figures contained in this section. Detailed intersection Level of Service calculation worksheets are provided in Appendix D.

Project design features, such as improvements necessary to provide project site access, are assumed to be constructed by the proposed project and are described in further detail in the Site Access & Circulation section presented later in this report.

VOLUME FORECAST

The Existing Plus Project volume forecast was developed by adding project-generated trips to existing volumes. Existing Plus Project average daily traffic volumes are shown on Figure 20. Existing Plus Project AM peak hour and PM peak hour intersection turning movement volumes are shown on Figure 21 and Figure 22.

LEVEL OF SERVICE ANALYSIS

The study intersection 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 (C or better) during the peak hours for Existing Plus Project conditions, except for the following study intersections that are forecast to continue operating at Level of Service D during the PM peak hour:

1. California Street (NS) at I-10 Westbound Ramps (EW)

To maintain an acceptable Level of Service at the study intersection and provide sufficient storage capacity for the northbound left-turn lane, the following improvements are recommended for Existing Plus Project conditions:

3. California Street (NS) at Project Main Driveway (EW)
 - Install traffic signal.
 - Modify striping to provide 150+ foot northbound left turn bay on California Street for westbound site access.

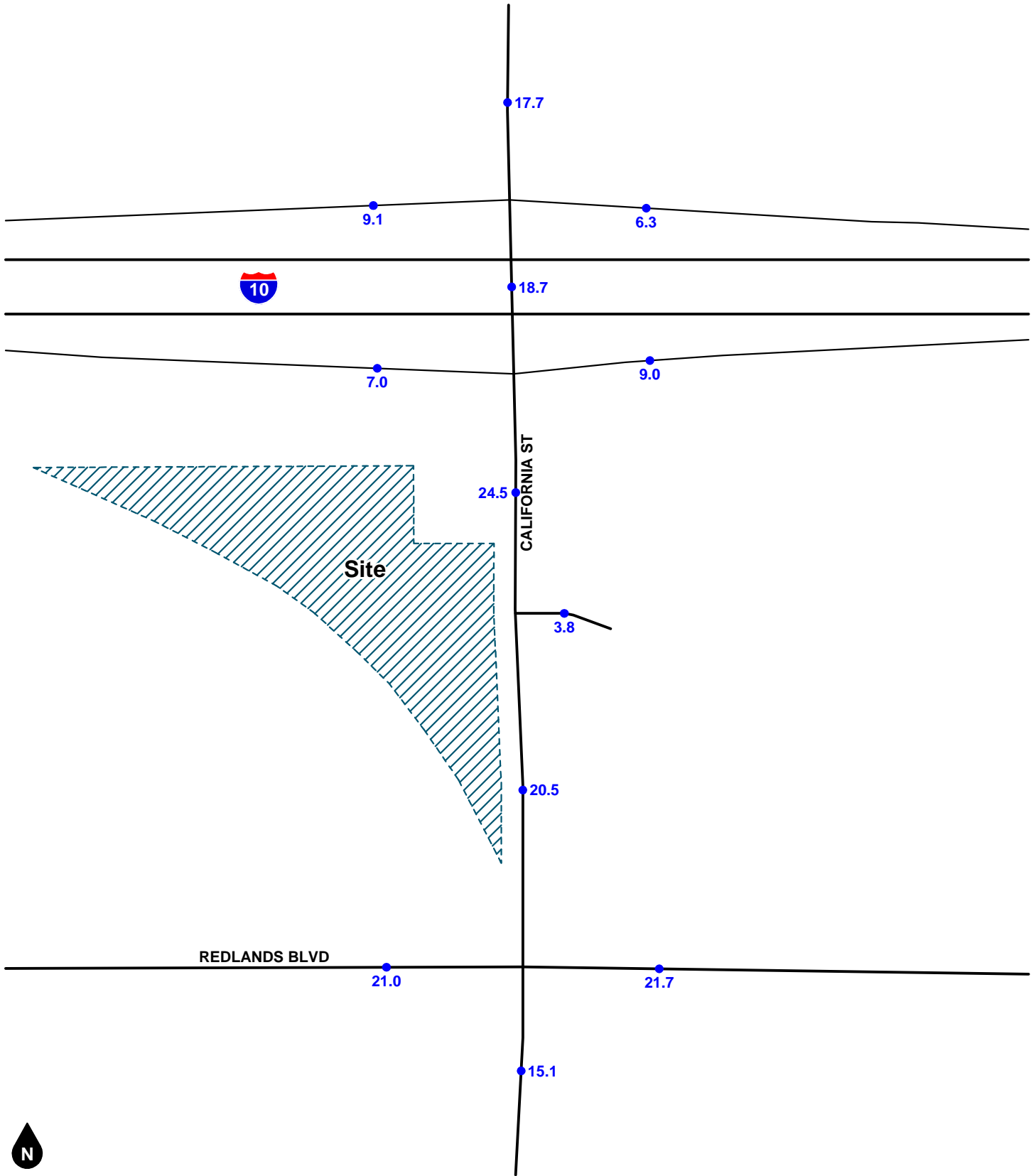
As shown in Table 3, the addition of the project does not degrade the Level of Service at the study area intersections below the current Level of Service grade with the proposed improvements listed above; therefore, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.

Table 3
Existing Plus Project Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control ¹	Existing				Existing Plus Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		Change	Substantia l Effect?	Change	Substantia l Effect?
		Delay ²	LOS ³	Delay ²	LOS	Delay ²	LOS ³	Delay ²	LOS				
1. California Street at I-10 Westbound Ramps	TS	31.5	C	37.0	D	32.1	C	40.3	D	+0.6	NO	+3.3	NO
2. California Street at I-10 Eastbound Ramps	TS	27.5	C	34.5	C	27.6	C	34.9	C	+0.1	NO	+0.4	NO
3. California Street at Project Main Driveway With Project	CSS	12.9	B	28.0	D	-	-	-	-	-	-	-	-
	TS	-	-	-	-	12.8	B	13.8	B	-0.1	NO	-14.2	NO
4. California Street at Redlands Boulevard	TS	29.4	C	30.1	C	34.1	C	34.0	C	+4.7	NO	+3.9	NO
5. California Street at Project South Driveway	CSS	-	-	-	-	13.7	B	12.7	B	+13.7	NO	+12.7	NO

Notes:

1. TS = Traffic Signal; CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown.
For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.
3. LOS = Level of Service



Legend
 ●## Vehicles Per Day (1,000's)

Figure 20
Existing Plus Project Average Daily Traffic Volumes

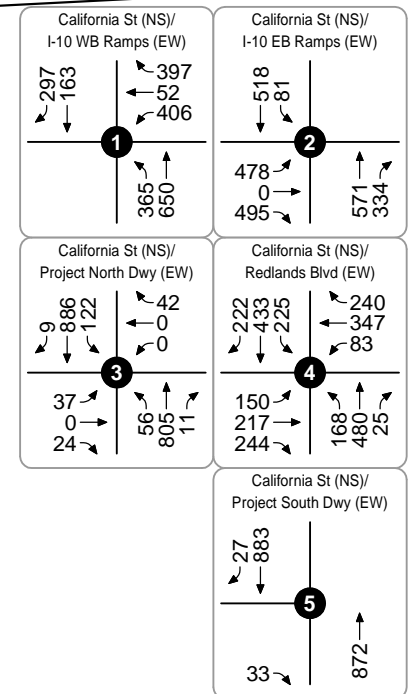
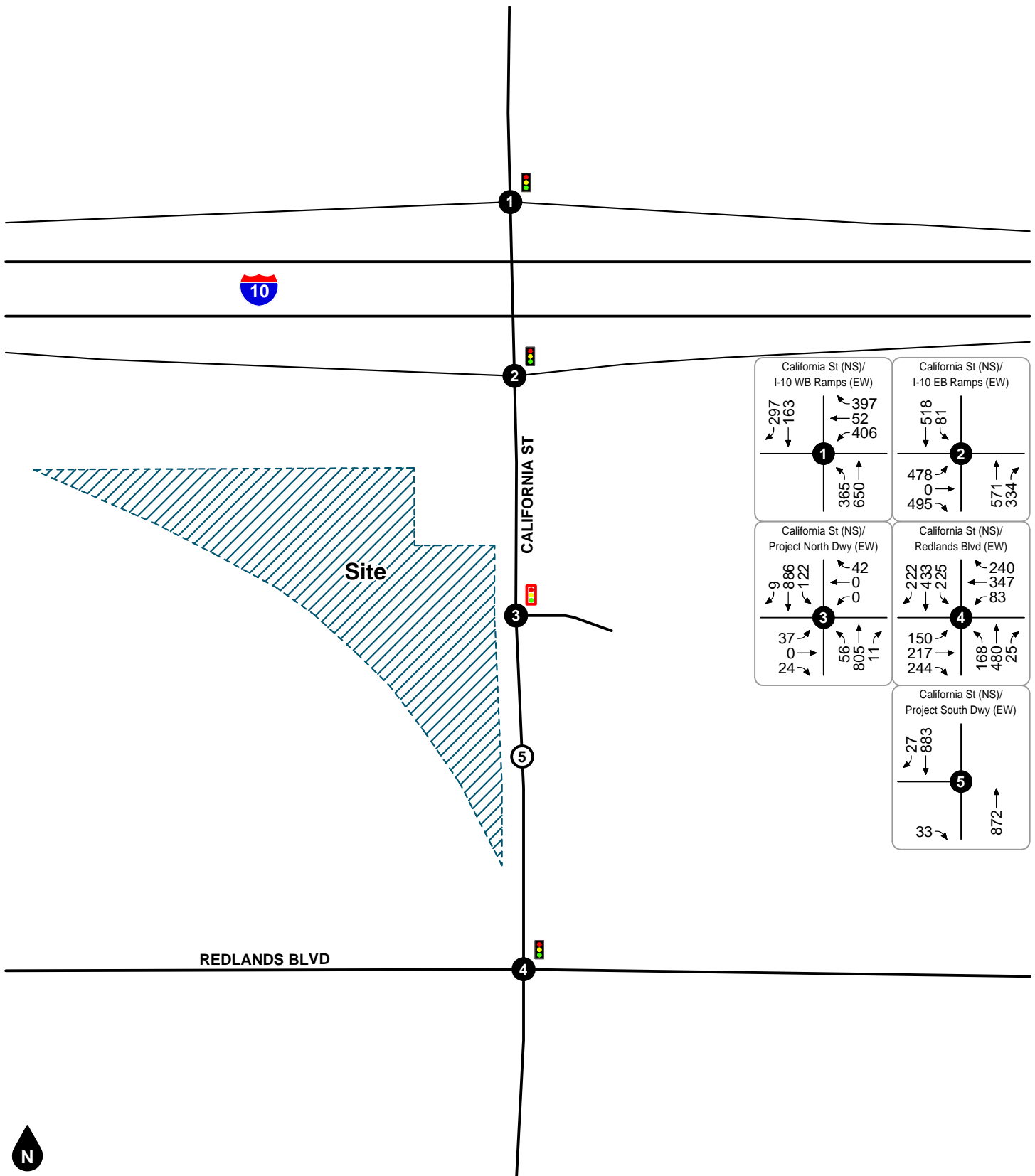


Figure 21
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes

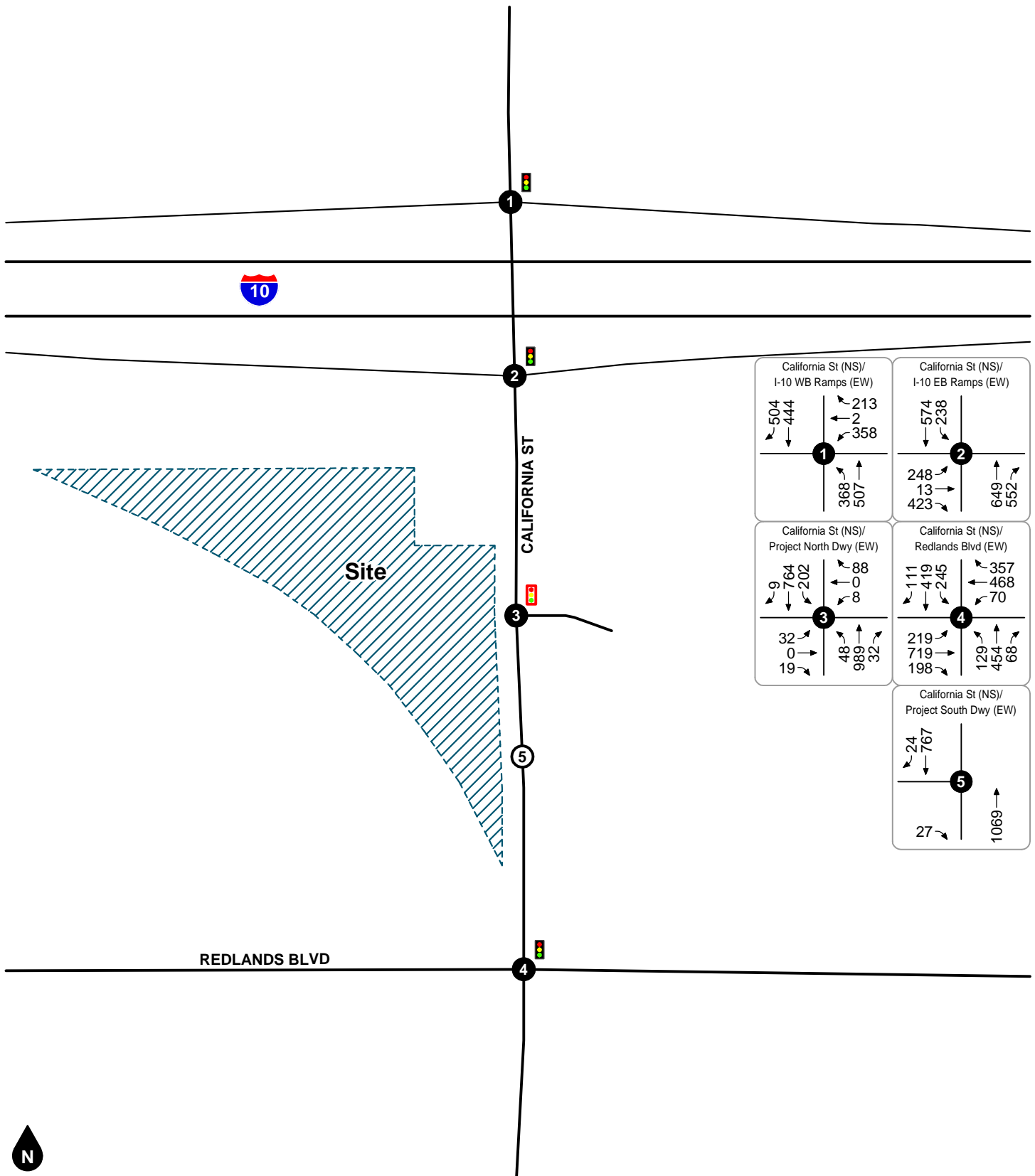


Figure 22
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes

6. SITE ACCESS & ON-SITE CIRCULATION

This section evaluates the project site access and on-site circulation. Vehicular access for the project site is proposed via one full access driveway and one restricted right-turn in/out driveway on California Street.

PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project to provide project site access:

3. California Street (NS) at Project Main Driveway (EW)
 - Construct the western leg of intersection with one eastbound lane and one westbound lane.
 - Install traffic signal.
 - Modify striping to provide 150+ foot northbound left turn bay on California Street for westbound site access.
5. California Street (NS) at Project South Driveway (EW)
 - Construct the project driveway with one inbound lane and one outbound lane.
 - Install eastbound stop control for eastbound right-turn lane site egress.
 - Maintain southbound shared through/right-turn lane providing site ingress.

This analysis also assumes the project shall comply with the following conditions as part of the City of Redlands standard development review process to ensure adequate geometric design and emergency access:

- Site-adjacent roadways shall 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 Redlands.
- All on-site and off-site roadway design, signing/striping, and traffic control improvements relating to the proposed project shall be submitted to the City for review and constructed following applicable State/Federal engineering standards to the satisfaction of the City of Redlands.
- The final grading, landscaping, and street improvement plans shall demonstrate that applicable sight distance requirements are met.
- The project shall comply with the City of Redlands municipal parking requirements which will be reviewed as a part of the standard development review process.
- Final project plans shall demonstrate adequate emergency vehicle access and circulation to the satisfaction of the City of Redlands Public Works and Fire Departments.
- A construction worksite traffic control plan shall comply with applicable engineering standards outlined in the *California Manual of Uniform Traffic Control Devices* and shall be submitted to the City for review and approval before the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.

SITE ACCESS QUEUING ANALYSIS

Table 4 summarizes the results of the queue analysis to check for potential conflicts between the project driveways and the immediately adjacent intersection on California Street at Main Project Access. The forecasted queue lengths shown in Table 4, are based on the HCM 95th-percentile back-of-queue

methodology. Queuing calculations for the project driveways and the adjacent intersection are shown in the Level of Service worksheets provided in Appendix D.

As shown in Table 4, vehicle queue lengths at the project driveways are forecast to operate within the available storage lengths during the peak hours for the Existing Plus Project conditions.

TRAFFIC SIGNAL WARRANT ANALYSIS AT PROJECT DRIVEWAYS

The potential need for installation of a traffic signal at the project driveways was evaluated based on the *California Manual on Uniform Traffic Control Devices* (“California MUTCD,” November 2014), Section 4C-04, peak hour volume warrant (Warrant 3). The *California MUTCD* Section 4C-01 states “satisfaction of one or more traffic signal warrants shall not in itself require the installation of a traffic signal” as engineering judgement should be applied to the physical considerations of the location. Traffic signal warrant worksheets are provided in Appendix E.

The peak hour volume warrant (Warrant 3) is satisfied at the intersection of California Street at Project Main Driveway (#3).

Table 4
Site Access Queuing Analysis

Study Intersection	Approach	Lane	Storage Length (Feet) ²	Peak Hour 95th-Percentile Queue Length (Feet) ¹		Adequate Storage Provided
				Existing Plus Project		
			AM	PM		
3. California Street at Project Main Driveway	Northbound	Left	150	70	30	YES
	Northbound	Right	70	<20	<20	YES
	Southbound	Left	200	130	90	YES
	Southbound	Thru-Right	135	135	90	YES
	Eastbound	Left	75	45	<20	YES
	Eastbound	Right	75	25	<20	YES
	Westbound	Left	102	<20	<20	YES
	Westbound	Right	100	50	45	YES
5. California Street at Project South Driveway	Southbound	Right	250	<20	<20	YES
	Eastbound	Right	75	<20	<20	YES

Notes:

1. The forecast 95th-percentile queue lengths shown in the delay calculation worksheets have been rounded up to nearest 5-foot increment.
2. Length of turning lane storage or distance to the adjacent driveway.

7. IMPROVEMENTS & FEE PROGRAMS

This section summarizes the recommended improvements identified in the previous sections of this report and the project's fair share toward any improvements required for cumulative conditions.

Project design features (as detailed in the Site Access & On-Site Circulation Section 6) involve improvements necessary to provide project site, and the construction along the project site frontage.

The addition of the project does not degrade the Level of Service at the study area intersections below the current Level of Service grade; therefore, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.

DEVELOPMENT IMPACT FEE

The proposed project shall contribute towards the City of Redlands Development Impact Fee program as adopted in 2019 (Resolution No. 7951) and regional transportation development mitigation fee (County of San Bernardino Measure I). The Development Impact Fee provides a funding mechanism for arterial streets, traffic signals, interchange improvements as well as emergency services. The purpose of such fees is to minimize, to the greatest extent practicable, the impact that new development has on the City's public services and public facilities. The City intends for new development project applicants to pay their fair share of the costs of providing such public services and public facilities. Unless otherwise approved by the City, all development projects are required to pay the Development Impact Fee as a condition of development.

8. CONCLUSIONS

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in previous sections of this study. Figure 23 summarizes the recommended improvements.

PROJECT TRIP GENERATION

The proposed project is forecast to generate total of approximately of 1,619 new daily trips, including 124 new trips during the AM peak hour and 130 new trips during the PM peak hour.

LEVEL OF SERVICE ANALYSIS

The study intersections currently operate and are forecast to continue operating within acceptable Levels of Service (C or better) during the peak hours for the Existing and Existing Plus Project analysis scenarios, except for the following study intersections that are forecast to continue operating at Level of Service D during the PM peak hour:

1. California Street (NS) at I-10 Westbound Ramps (EW)
3. California Street (NS) at Project Main Driveway (EW)

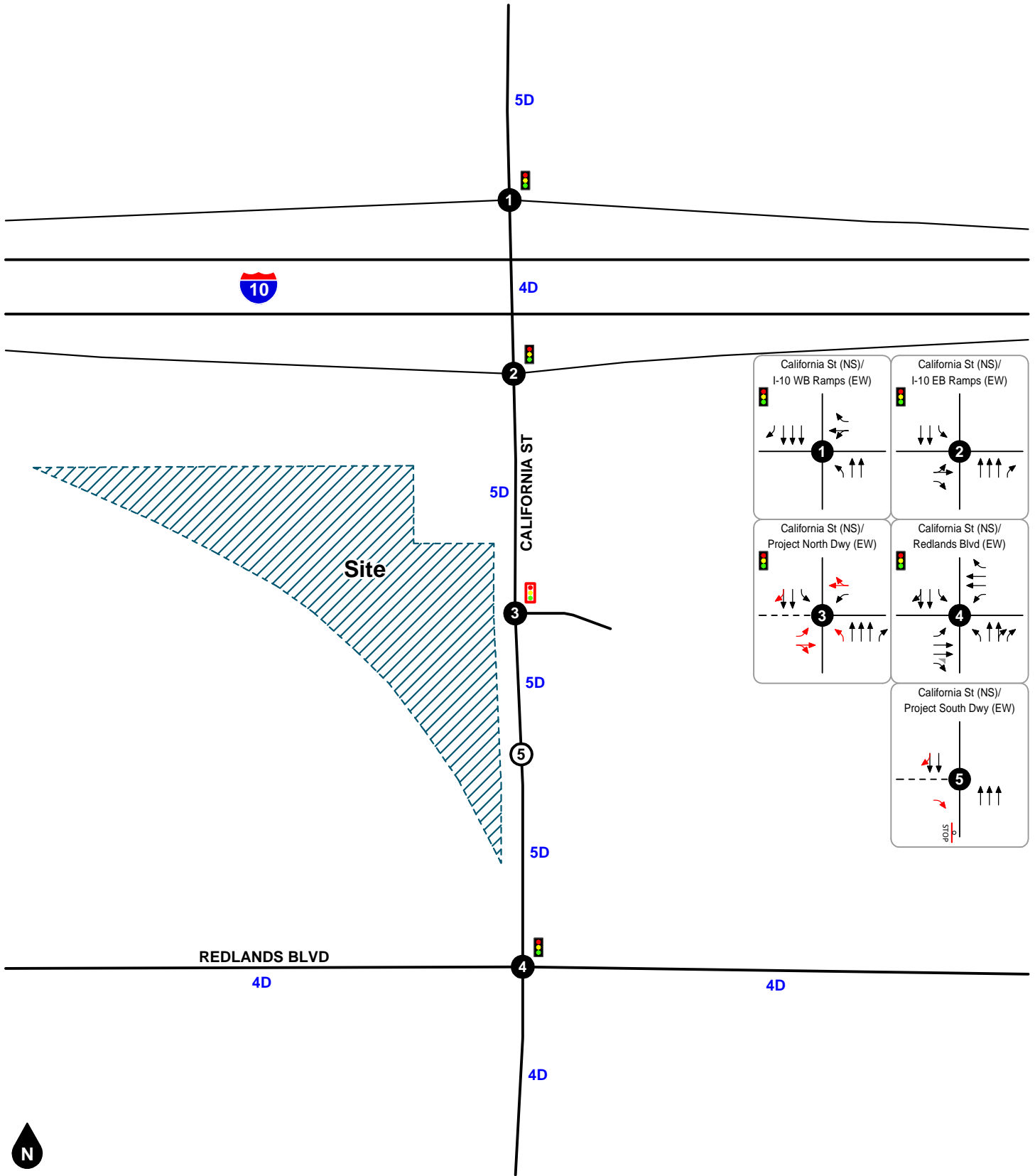
SUMMARY OF IMPROVEMENTS

Project design features, necessary to provide project access, are outlined in the Site Access & On-Site Circulation (see Section 6).

To maintain an acceptable Level of Service at the study intersection and provide sufficient storage capacity for the northbound left-turn lane, the following improvements are recommended for Existing Plus Project conditions:

3. California Street (NS) at Project Main Driveway (EW)
 - Install traffic signal.
 - Modify striping to provide 150+ foot northbound left turn bay on California Street for westbound site access.

The addition of the project does not degrade the Level of Service at the study area intersections below the current Level of Service grade with the proposed improvements listed above; therefore, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.



- Legend**
- Traffic Signal
 - Stop Sign
 - #D #-Lane Divided Roadway
 - #U #-Lane Undivided Roadway

- Existing Lane
- Recommended
- d De Facto Right Turn Lane
- Project Driveway

Figure 23
Recommended Lane Geometry and Intersection Traffic Controls

APPENDICES

Appendix A Glossary

Appendix B Scoping Agreement

Appendix C Traffic Count Data

Appendix D Intersection Level of Service Worksheets

Appendix E Traffic Signal Warrant Worksheets

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
SF	Square Foot
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume to Capacity Ratio
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 is 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. Also known as a signal cycle.

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). Also known as gap.

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 is 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.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors. Also known as a demand responsive signal.

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.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheelbase as well as the steering mechanism of the vehicle.

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

From: Ryan Murphy
Sent: Tuesday, April 9, 2024 12:03 PM
To: Perrie Ilercil
Cc: Giancarlo Ganddini
Subject: FW: 913 California Business Hotel and Retail Mixed-Use Project

From: Don Young
Sent: Wednesday, March 20, 2024 1:33 PM
To: Ryan Murphy
Subject: RE: 913 California Business Hotel and Retail Mixed-Use Project

With the indicated changes, the scoping memo is approved.

Donald Young
Manager - One Stop Permit Center
City of Redlands
909-798-7585 x6
dyoung@cityofredlands.org

From: Perrie Ilercil
Sent: Wednesday, March 20, 2024 11:57 AM
To: Don Young; Ryan Murphy
Cc: Giancarlo Ganddini
Subject: RE: 913 California Business Hotel and Retail Mixed-Use Project

[NOTICE: This message originated outside of City of Redlands -- DO NOT CLICK on links or open attachments unless you are sure the content is safe.]

Hi Don,
See the revised Screening agreement for your review and approval and VMT memo.

SA

The Figure 1 has been revised to show existing traffic signals and the traffic signal proposed at the project's main entry.

The trip distribution has been revised to include figures for the inbound and outbound trips.

VMT

Page 3 has been revised to clarify the statement.

.. project TAZ is equal to 36.4, which does not satisfy the County screening threshold. The County baseline (33.5 VMT per service population) with a 15 percent reduction results in a VMT threshold of 28.5.

VTM popup shows the baseline “Jurisdiction VMT” is 33.5 and the input for the run is for 15% below County baseline resulting in a threshold of 28.5 as shown on the exhibit.
On Page 5, the “low VMT area” screening has been removed.

Ryan,

I will have the AQ analyst contact me if there are any GHG changes; however, the client is being sensitive to any changes which could affect GHG or traffic.

Sincerely,

Perrie Ilercil, PE (AZ)

Senior Engineer

GANDDINI GROUP, INC

949 257-3126

From: Don Young

Sent: Tuesday, March 19, 2024 2:00 PM

To: Perrie Ilercil; Sean Reilly; Ryan Murphy

Cc: Giancarlo Ganddini

Subject: RE: 913 California Business Hotel and Retail Mixed-Use Project

Perrie

LOS Scoping

Figure 1

Label intersections as signalized.

Figure 3

Trip distribution diagram is for outbound traffic. There should also be an inbound diagram. Or put both on a single diagram.



TECHNICAL MEMORANDUM

TO: Mr. Don Young, Land Use Engineering Manager | CITY OF REDLANDS

FROM: Perrie Ilercil, Senior Engineer | GANDDINI GROUP, INC.

DATE: March 13, 2024

SUBJECT: 913 California Street Mixed-Use Center Project Scoping Agreement
GGI Project No. 19713

The purpose of this Scoping Agreement memorandum is to outline the proposed traffic analysis parameters and assumptions for the 913 California Street Mixed-Use Center project for review/concurrence by the City of Redlands staff.

PROJECT DESCRIPTION

The approximately 4.9-acre project site (APN 0631-032-04) is located at 913 California Street in the City of Redlands, California. The project site is currently vacant and zoned commercial. The project location map is shown on Figure 1.

The proposed project involves development of a 90-room business hotel, a 1,450 square foot coffee shop with drive-through window and a 2,995 square foot one-tunnel automatic car wash. Vehicle access for the project site is proposed via one full access driveway and one restricted right turn in/out driveway on California Street. The project site plan is illustrated on Figure 2.

PROJECT TRIP GENERATION & DISTRIBUTION

Trip Generation

Table 1 shows the project trip generation forecast based on rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for ITE Land Use Codes 312 (Business Hotel), Land Use Code 937 (Coffee Donut Shop with Drive-through Window) and Land Use Code 948 (Automated Car Wash). Applicable project internal capture and peak hour pass-by trip adjustments were determined based on average pass-by rates published by ITE have been applied to the net trip generation. The internal capture worksheets are included in Attachment A.

As shown in Table 1, the proposed project is forecast to generate a total of approximately 1,619 daily new trips, including 124 new trips during the AM peak hour and 130 new trips during the PM peak hour.

Project Trip Distributions

Figure 3 illustrates the forecast directional distribution patterns of the project generated trips. The project trip distribution patterns are developed from engineering judgement based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

STUDY AREA

Based on of the project trip generation and distribution patterns consists of the following study intersections:

1. California Street (NS) at I-10 Westbound Ramps (EW)¹
2. California Street (NS) at I-10 Eastbound Ramps (EW)
3. California Street (NS) at Project Main Driveway (EW))
4. California Street (NS) at Redlands Boulevard (EW)
5. California Street (NS) at Project South Driveway (EW)

TRAFFIC COUNTS

New intersection turning movement counts will be collected at the study intersections during the typical weekday AM and PM peak hours (7:00 AM – 9:00 AM and 4:00 - 6:00 PM). The peak hour factor will be determined from the counts for study area intersections.

INTERSECTION ANALYSIS METHODOLOGY

In accordance with the City of Redlands standard procedures, and the County of San Bernardino *Transportation Impact Study Guidelines* (July 2019), intersections shall be analyzed using the intersection delay methodology based on procedures contained in the Transportation Research Board *Highway Capacity Manual* (HCM). Default values not specifically identified in the County guidelines will be based *Highway Capacity Manual* recommended values. Intersection analysis shall be performed using the Vistro software.

PERFORMANCE STANDARDS

The City of Redlands General Plan and Measure U Section 1A.60 Principle Six has established the minimum acceptable Level of Service (C or better) for roadway segment and peak hour intersection operations. Where the current Level of Service is lower C, roadway improvements shall be provided such that the LOS is not reduced below the LOS at the time of the application, or as provided in Section 5.20 of the Redlands General Plan where a more intense Level of Service is specifically permitted, for Existing Plus Project conditions.

ANALYSIS SCENARIOS

The traffic study shall evaluate the following analysis scenarios for typical weekday AM and PM peak hour conditions:

- Existing
- Existing Plus Project

SITE ACCESS & ON-SITE CIRCULATION

The traffic study will review site access considerations such as intersection traffic controls and lane configurations and if necessary, recommend improvements. Additionally, the traffic study will evaluate the project site ingress/egress regarding the proximity of the California/Main Driveway (existing commercial) intersection relative to City of Redlands standards.

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

VEHICLE MILES TRAVELED (VMT) ASSESSMENT

A VMT letter report supplemental to the traffic study shall be submitted to provide VMT screening analysis for CEQA compliance based on screening criteria established by the City of Redlands. The VMT letter report shall include a narrative of VMT requirements under CEQA and documentation of the project screening results based on the applicable criteria.

CONCLUSION

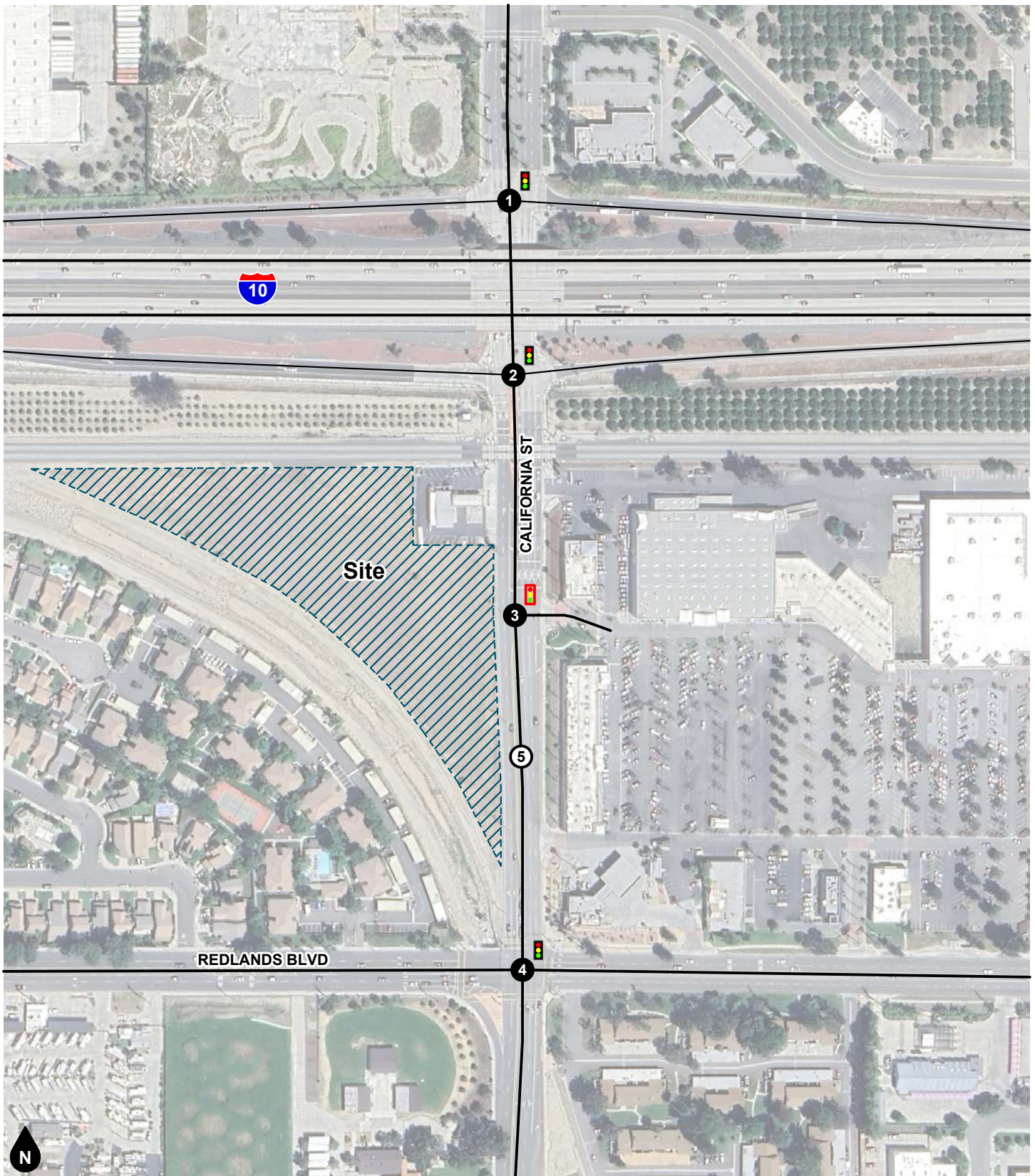
We appreciate the opportunity to provide this memorandum of understanding for your review. Should you have any questions or comments regarding the proposed scope, please contact me at (714) 795-3100 x 103 or 949-257-3126.

Table 1
Project Trip Generation

Trip Generation Rates									
Land Use	Source ¹	Land Use Variable ²	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Business Hotel	ITE 312	RM	39%	61%	0.36	55%	45%	0.31	4.02
Coffee Donut Shop with Drive-Through Window	ITE 937	TSF	51%	49%	85.88	50%	50%	38.99	533.57
Automated Car Wash	ITE 948 ³	CWT	50%	50%	34.44	50%	50%	77.50	861.11
Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Business Hotel	ITE 312	90 RM	13	19	32	15	13	28	362
Internal Capture Trips	ITE ⁴		-1	-2	-3	-2	-1	-3	-18
Subtotal			12	17	29	13	12	25	344
Coffee Donut Shop with Drive-Through Window	ITE 937	1.450 TSF	64	61	125	28	29	57	774
Internal Capture Trips	ITE ⁴		-2	-1	-3	-1	-2	-3	-15
Pass-by Trips (50%AM, 50%PM, 50%Daily)	ITE 938 ⁵		-31	-30	-61	-14	-13	-27	-345
Subtotal			31	30	61	13	14	27	414
Automated Car Wash	ITE 948	1 CWT	17	17	34	39	39	78	861
Subtotal Project Trips (Gross)			94	97	191	82	81	163	1,997
Total Internal Capture Trips			-3	-3	-6	-3	-3	-6	-33
Subtotal - External Project Trips			91	94	185	79	78	157	1,964
Total Pass-by Trips			-31	-30	-61	-14	-13	-27	-345
TOTAL NEW TRIPS GENERATED			60	64	124	65	65	130	1,619

Notes:

- ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code.
All rates based on General Urban/Suburban setting.
- RM = Hotel Room; TSF = Thousand Square Feet; CWT = Car Wash Tunnel.
- ITE rates with data from San Diego Association of Governments (SANDAG) *Vehicular Traffic Generation Rates* (April 2002). Where the daily or peak hour rate is not provided by ITE, the SANDAG percentage of peak hour to daily rate is used to calculate the missing data. Where the peak hour distribution is not provided by ITE, the SANDAG peak hour distribution is used.
- Internal capture trips calculated in accordance with procedures in the ITE Trip Generation Handbook (3rd Edition, 2017). The daily internal capture rate is equal to half of the AM and PM peak hour average internal rates. See Attachment A for internal capture worksheets.
- In the absence of pass-by rates for ITE 937 (Coffee Shop with Drive-thru), a conservative estimate of 50% pass-by rates are used based on ITE 938 (Coffee Shop with Drive-thru with No internal seating) which has average pass-by rates of 90%-98% during the peak hours.



Legend

- # Study Intersection
- # Project Driveway
- Traffic Signal Existing
- Traffic Signal Proposed



Figure 1
Project Location Map

913 California Street Mixed-Use Center
Traffic Impact Analysis
19713



Apx-14

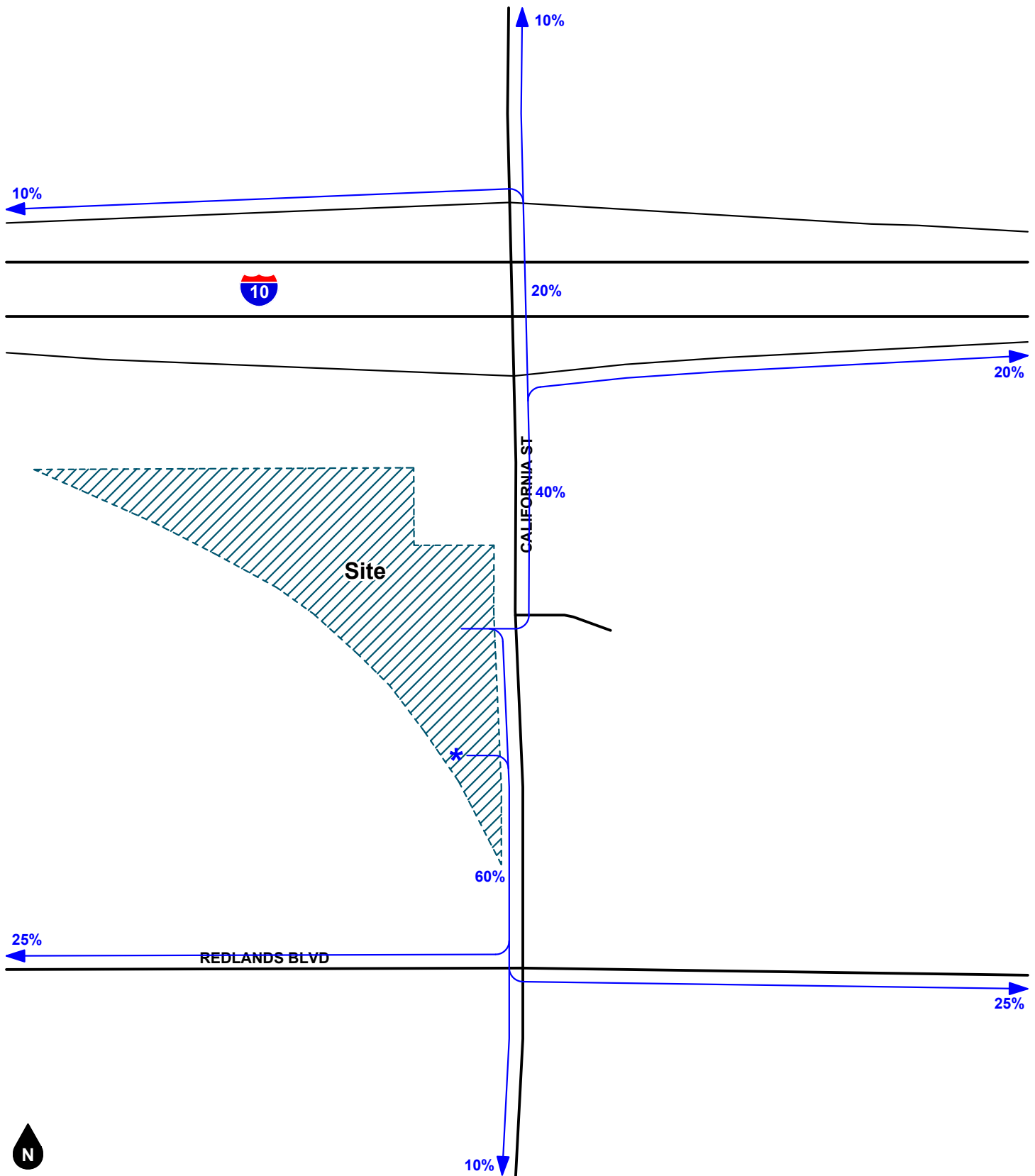
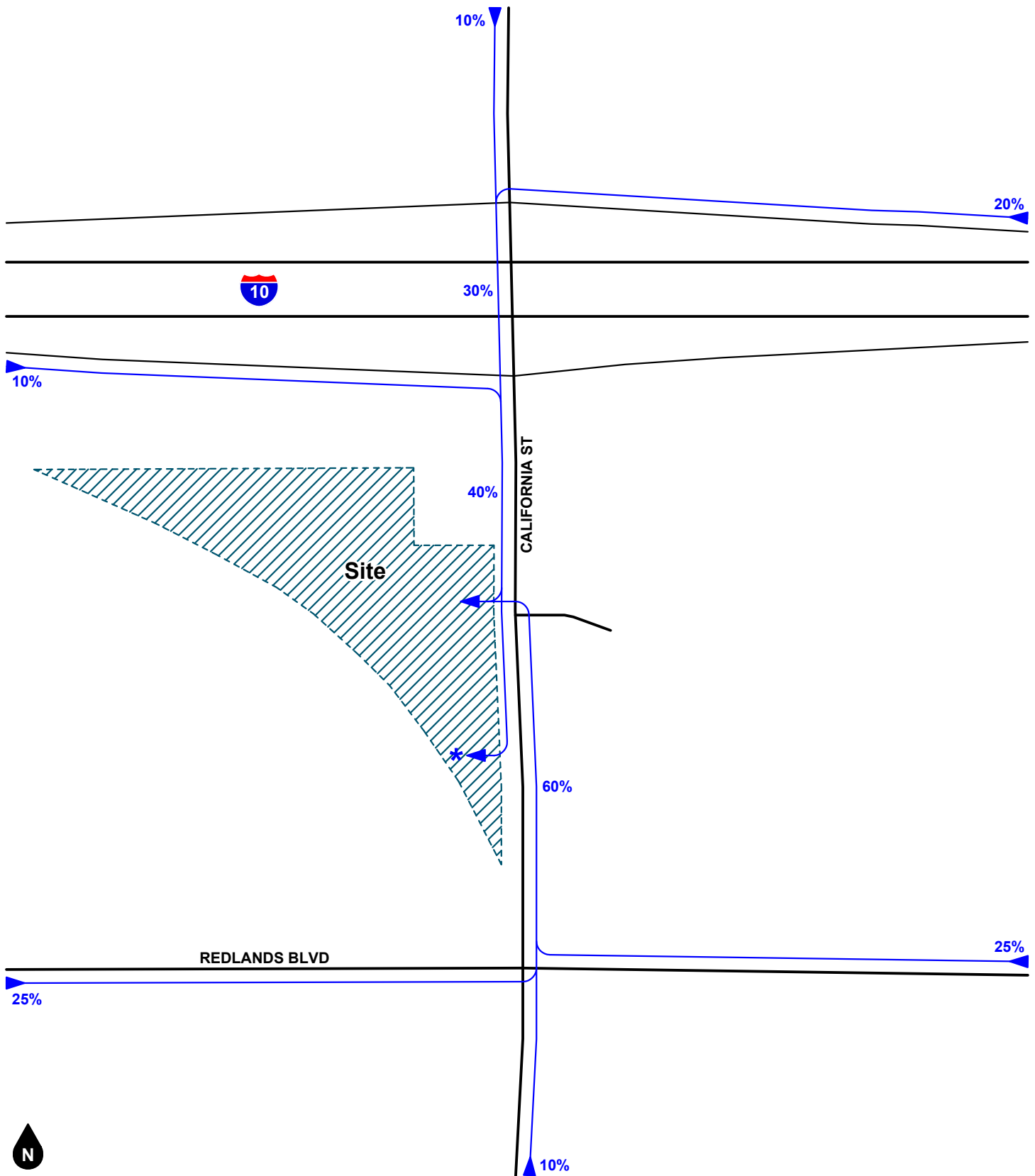


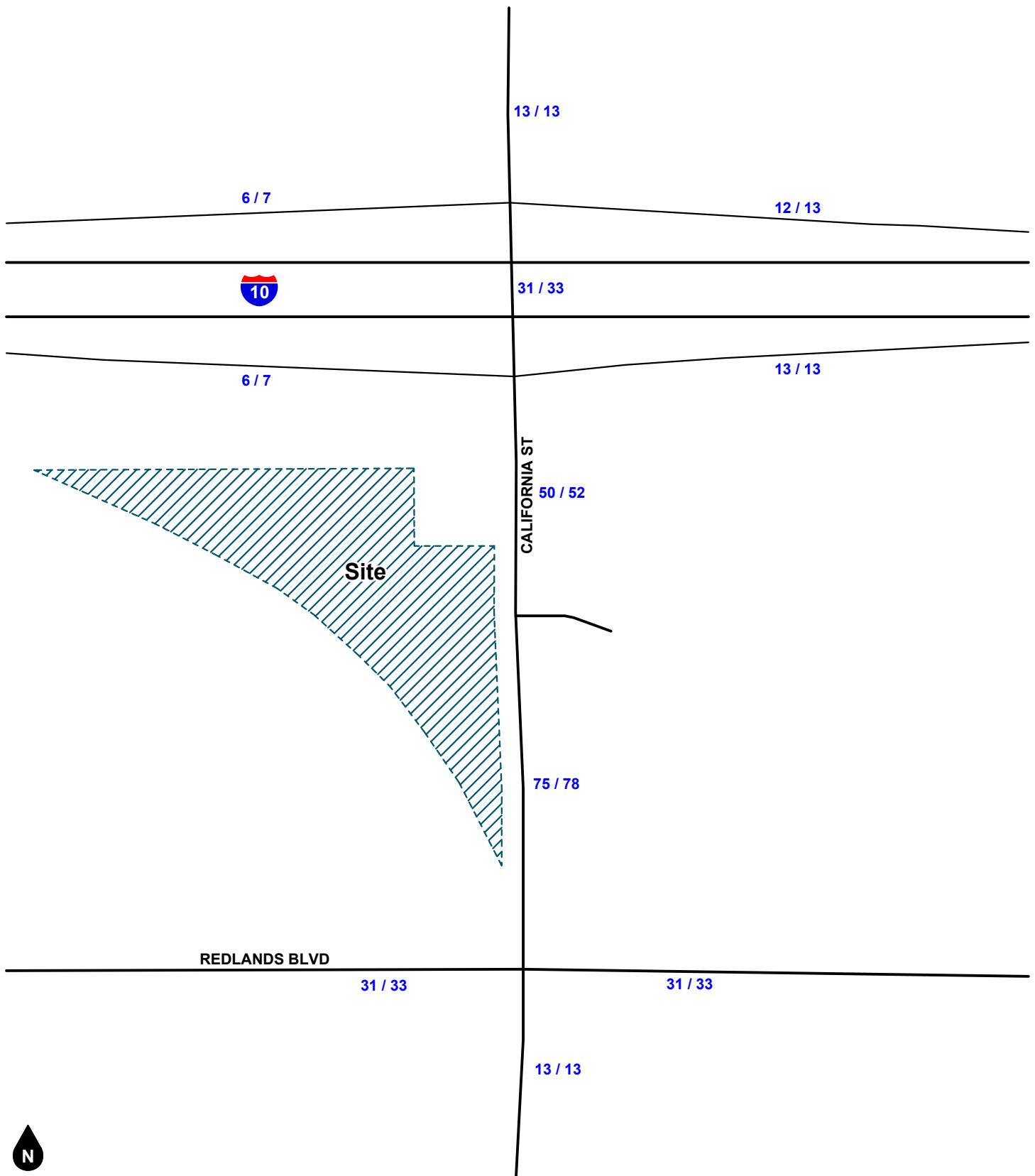
Figure 3
Project Trip Distribution (Outbound)



Legend

- ← 10% Percent To Project
- * Right Turn In/Out Only

Figure 4
Project Trip Distribution (Inbound)



Legend
AM / PM Peak Hour Trips

Figure 5
Project Peak Hour Trip Assignment

ATTACHMENT A

NCHRP INTERNAL CAPTURE WORKSHEETS

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	913 California Street Commercial	Organization:	Ganddini Group		
Project Location:	City of Redlands	Performed By:	PDI		
Scenario Description:	Project Trips	Date:	2024-0313		
Analysis Year:	2024	Checked By:			
Analysis Period:	AM Street Peak Hour	Date:			

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				0	0	0
Restaurant	ITE937	1,450	TSF	125	64	61
Cinema/Entertainment				0	0	0
Residential				0	0	0
Hotel	ITE312	90	RM	32	13	19
All Other Land Uses ²				0	0	0
				157	77	80

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	1
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	2	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	157	77	80
Internal Capture Percentage	4%	4%	4%
External Vehicle-Trips ⁵	151	74	77
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	3%	2%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	8%	11%

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-A vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be made to Tables 5-A, 9-A (O and D). Enter transit, non-motorized percentages that will result with proposed mixed-use project complete.
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

NCHRP 684 Internal Trip Capture Estimation Tool					
Project Name:	913 California Street Commercial	Organization:	Ganddini Group		
Project Location:	City of Redlands	Performed By:	PDI		
Scenario Description:	Project Trips	Date:	2024-0313		
Analysis Year:	2024	Checked By:			
Analysis Period:	PM Street Peak Hour	Date:			

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips ³		
	ITE LUCs ¹	Quantity	Units	Total	Entering	Exiting
Office				0	0	0
Retail				0	0	0
Restaurant	ITE937	1.450	TSF	57	28	29
Cinema/Entertainment				0	0	0
Residential				0	0	0
Hotel	ITE312	90	RM	28	15	13
All Other Land Uses ²				0	0	0
				85	43	42

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ. ⁴	% Transit	% Non-Motorized	Veh. Occ. ⁴	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses ²						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		0	0	0	0
Restaurant	0	0		0	0	2
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	1	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	85	43	42
Internal Capture Percentage	7%	7%	7%
External Vehicle-Trips ⁵	79	40	39
External Transit-Trips ⁶	0	0	0
External Non-Motorized Trips ⁶	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	N/A	N/A
Restaurant	4%	7%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	13%	8%

¹ Land Use Codes (LUCs) from <i>Trip Generation Manual</i> , published by the Institute of Transportation Engineers.
² Total estimate for all other land uses at mixed-use development site is not subject to internal trip capture computations in this estimator.
³ Enter trips assuming no transit or non-motorized trips (as assumed in ITE <i>Trip Generation Manual</i>).
⁴ Enter vehicle occupancy assumed in Table 1-P vehicle trips. If vehicle occupancy changes for proposed mixed-use project, manual adjustments must be
⁵ Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P.
⁶ Person-Trips
*Indicates computation that has been rounded to the nearest whole number.
Estimation Tool Developed by the Texas A&M Transportation Institute - Version 2013.1

APPENDIX C

TRAFFIC COUNT DATA

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

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

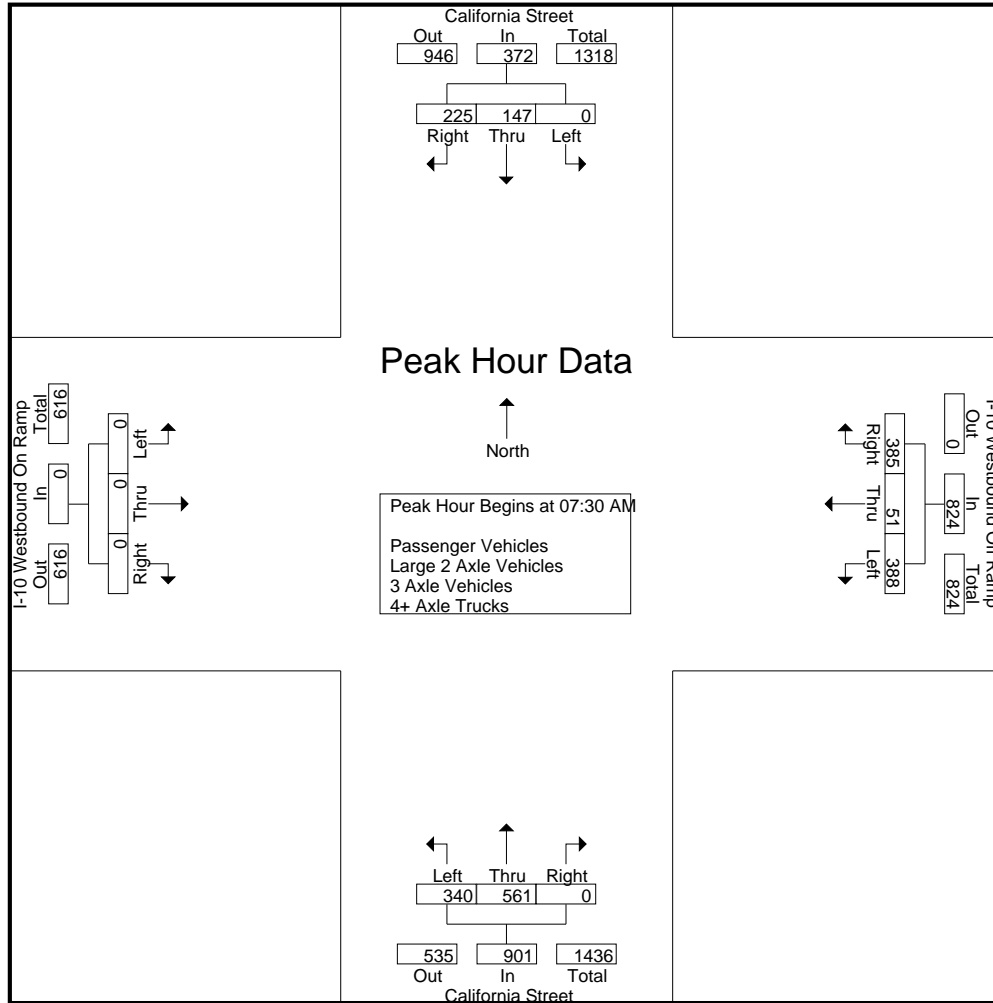
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	57	42	99	94	6	52	152	71	112	0	183	0	0	0	0	434
07:15 AM	0	45	55	100	108	13	59	180	95	123	0	218	0	0	0	0	498
07:30 AM	0	33	58	91	109	18	64	191	93	141	0	234	0	0	0	0	516
07:45 AM	0	33	66	99	115	20	99	234	88	156	0	244	0	0	0	0	577
Total	0	168	221	389	426	57	274	757	347	532	0	879	0	0	0	0	2025
08:00 AM	0	40	37	77	71	8	113	192	90	141	0	231	0	0	0	0	500
08:15 AM	0	41	64	105	93	5	109	207	69	123	0	192	0	0	0	0	504
08:30 AM	0	30	64	94	90	1	91	182	67	121	0	188	0	0	0	0	464
08:45 AM	0	52	40	92	86	4	100	190	69	135	0	204	0	0	0	0	486
Total	0	163	205	368	340	18	413	771	295	520	0	815	0	0	0	0	1954
Grand Total	0	331	426	757	766	75	687	1528	642	1052	0	1694	0	0	0	0	3979
Apprch %	0	43.7	56.3		50.1	4.9	45		37.9	62.1	0		0	0	0		
Total %	0	8.3	10.7	19	19.3	1.9	17.3	38.4	16.1	26.4	0	42.6	0	0	0	0	
Passenger Vehicles	0	282	327	609	753	73	660	1486	595	937	0	1532	0	0	0	0	3627
% Passenger Vehicles	0	85.2	76.8	80.4	98.3	97.3	96.1	97.3	92.7	89.1	0	90.4	0	0	0	0	91.2
Large 2 Axle Vehicles	0	40	32	72	9	2	19	30	24	30	0	54	0	0	0	0	156
% Large 2 Axle Vehicles	0	12.1	7.5	9.5	1.2	2.7	2.8	2	3.7	2.9	0	3.2	0	0	0	0	3.9
3 Axle Vehicles	0	3	14	17	1	0	3	4	7	20	0	27	0	0	0	0	48
% 3 Axle Vehicles	0	0.9	3.3	2.2	0.1	0	0.4	0.3	1.1	1.9	0	1.6	0	0	0	0	1.2
4+ Axle Trucks	0	6	53	59	3	0	5	8	16	65	0	81	0	0	0	0	148
% 4+ Axle Trucks	0	1.8	12.4	7.8	0.4	0	0.7	0.5	2.5	6.2	0	4.8	0	0	0	0	3.7

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	33	58	91	109	18	64	191	93	141	0	234	0	0	0	0	516
07:45 AM	0	33	66	99	115	20	99	234	88	156	0	244	0	0	0	0	577
08:00 AM	0	40	37	77	71	8	113	192	90	141	0	231	0	0	0	0	500
08:15 AM	0	41	64	105	93	5	109	207	69	123	0	192	0	0	0	0	504
Total Volume	0	147	225	372	388	51	385	824	340	561	0	901	0	0	0	0	2097
% App. Total	0	39.5	60.5		47.1	6.2	46.7		37.7	62.3	0		0	0	0		
PHF	.000	.896	.852	.886	.843	.638	.852	.880	.914	.899	.000	.923	.000	.000	.000	.000	.909

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



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

	07:00 AM				07:30 AM				07:15 AM				07:00 AM			
+0 mins.	0	57	42	99	109	18	64	191	95	123	0	218	0	0	0	0
+15 mins.	0	45	55	100	115	20	99	234	93	141	0	234	0	0	0	0
+30 mins.	0	33	58	91	71	8	113	192	88	156	0	244	0	0	0	0
+45 mins.	0	33	66	99	93	5	109	207	90	141	0	231	0	0	0	0
Total Volume	0	168	221	389	388	51	385	824	366	561	0	927	0	0	0	0
% App. Total	0	43.2	56.8		47.1	6.2	46.7		39.5	60.5	0		0	0	0	
PHF	.000	.737	.837	.973	.843	.638	.852	.880	.963	.899	.000	.950	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

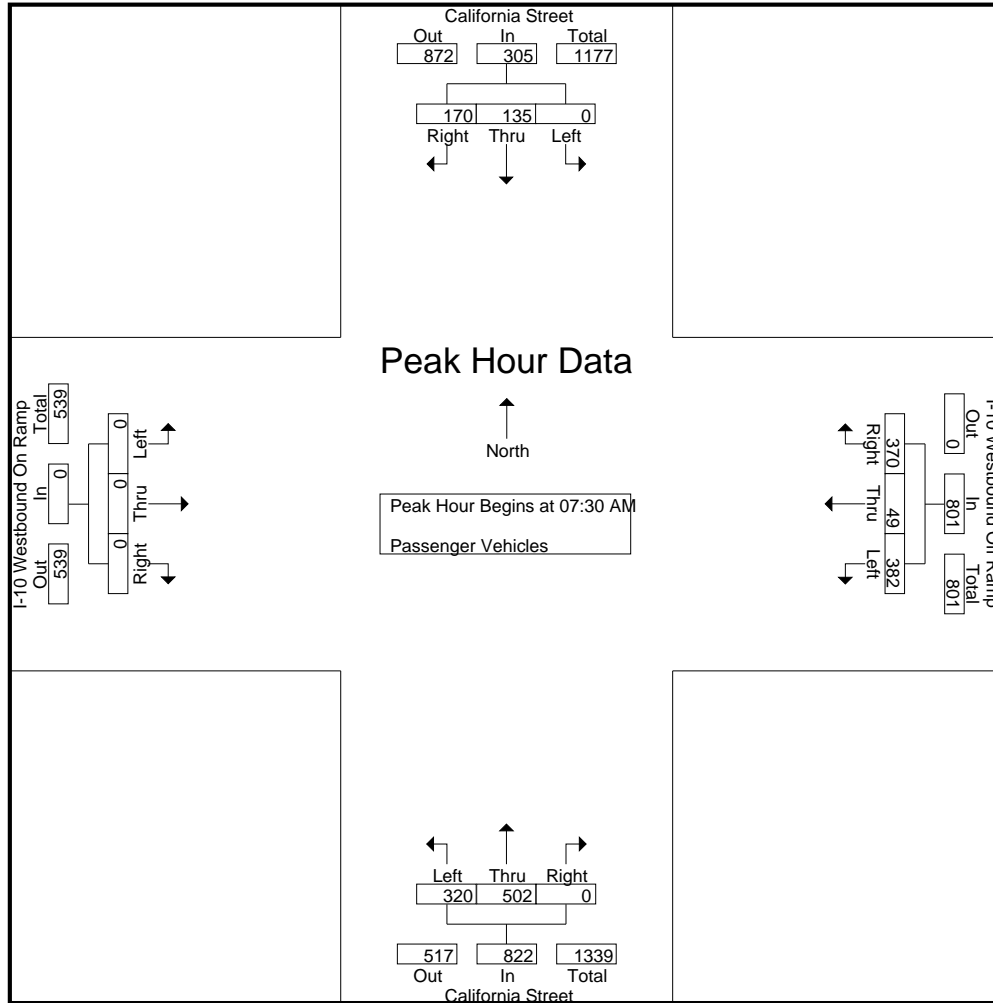
Groups Printed- Passenger Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	45	31	76	92	6	51	149	66	94	0	160	0	0	0	0	385
07:15 AM	0	28	44	72	107	13	56	176	91	110	0	201	0	0	0	0	449
07:30 AM	0	31	45	76	108	18	61	187	89	127	0	216	0	0	0	0	479
07:45 AM	0	29	47	76	113	19	95	227	82	144	0	226	0	0	0	0	529
Total	0	133	167	300	420	56	263	739	328	475	0	803	0	0	0	0	1842
08:00 AM	0	36	29	65	71	7	107	185	85	125	0	210	0	0	0	0	460
08:15 AM	0	39	49	88	90	5	107	202	64	106	0	170	0	0	0	0	460
08:30 AM	0	27	50	77	88	1	89	178	58	106	0	164	0	0	0	0	419
08:45 AM	0	47	32	79	84	4	94	182	60	125	0	185	0	0	0	0	446
Total	0	149	160	309	333	17	397	747	267	462	0	729	0	0	0	0	1785
Grand Total	0	282	327	609	753	73	660	1486	595	937	0	1532	0	0	0	0	3627
Apprch %	0	46.3	53.7		50.7	4.9	44.4		38.8	61.2	0		0	0	0		
Total %	0	7.8	9	16.8	20.8	2	18.2	41	16.4	25.8	0	42.2	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	31	45	76	108	18	61	187	89	127	0	216	0	0	0	0	479
07:45 AM	0	29	47	76	113	19	95	227	82	144	0	226	0	0	0	0	529
08:00 AM	0	36	29	65	71	7	107	185	85	125	0	210	0	0	0	0	460
08:15 AM	0	39	49	88	90	5	107	202	64	106	0	170	0	0	0	0	460
Total Volume	0	135	170	305	382	49	370	801	320	502	0	822	0	0	0	0	1928
% App. Total	0	44.3	55.7		47.7	6.1	46.2		38.9	61.1	0		0	0	0		
PHF	.000	.865	.867	.866	.845	.645	.864	.882	.899	.872	.000	.909	.000	.000	.000	.000	.911

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	31	45	76	108	18	61	187	89	127	0	216	0	0	0	0
+15 mins.	0	29	47	76	113	19	95	227	82	144	0	226	0	0	0	0
+30 mins.	0	36	29	65	71	7	107	185	85	125	0	210	0	0	0	0
+45 mins.	0	39	49	88	90	5	107	202	64	106	0	170	0	0	0	0
Total Volume	0	135	170	305	382	49	370	801	320	502	0	822	0	0	0	0
% App. Total	0	44.3	55.7		47.7	6.1	46.2		38.9	61.1	0		0	0	0	
PHF	.000	.865	.867	.866	.845	.645	.864	.882	.899	.872	.000	.909	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

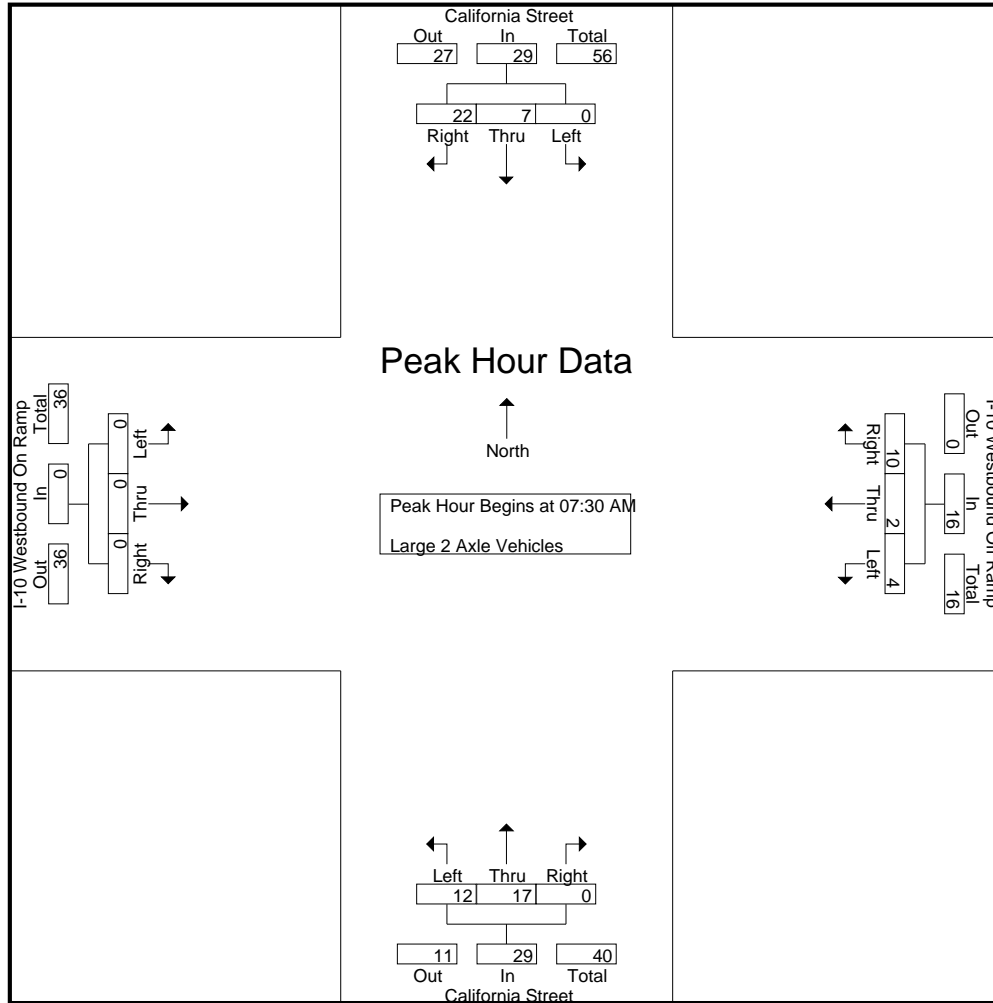
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	12	3	15	1	0	1	2	3	7	0	10	0	0	0	0	27
07:15 AM	0	16	1	17	1	0	3	4	2	2	0	4	0	0	0	0	25
07:30 AM	0	2	8	10	0	0	3	3	2	5	0	7	0	0	0	0	20
07:45 AM	0	1	7	8	2	1	1	4	3	3	0	6	0	0	0	0	18
Total	0	31	19	50	4	1	8	13	10	17	0	27	0	0	0	0	90
08:00 AM	0	3	4	7	0	1	4	5	4	5	0	9	0	0	0	0	21
08:15 AM	0	1	3	4	2	0	2	4	3	4	0	7	0	0	0	0	15
08:30 AM	0	3	4	7	1	0	2	3	2	2	0	4	0	0	0	0	14
08:45 AM	0	2	2	4	2	0	3	5	5	2	0	7	0	0	0	0	16
Total	0	9	13	22	5	1	11	17	14	13	0	27	0	0	0	0	66
Grand Total	0	40	32	72	9	2	19	30	24	30	0	54	0	0	0	0	156
Apprch %	0	55.6	44.4		30	6.7	63.3		44.4	55.6	0		0	0	0		
Total %	0	25.6	20.5	46.2	5.8	1.3	12.2	19.2	15.4	19.2	0	34.6	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	8	10	0	0	3	3	2	5	0	7	0	0	0	0	20
07:45 AM	0	1	7	8	2	1	1	4	3	3	0	6	0	0	0	0	18
08:00 AM	0	3	4	7	0	1	4	5	4	5	0	9	0	0	0	0	21
08:15 AM	0	1	3	4	2	0	2	4	3	4	0	7	0	0	0	0	15
Total Volume	0	7	22	29	4	2	10	16	12	17	0	29	0	0	0	0	74
% App. Total	0	24.1	75.9		25	12.5	62.5		41.4	58.6	0		0	0	0		
PHF	.000	.583	.688	.725	.500	.500	.625	.800	.750	.850	.000	.806	.000	.000	.000	.000	.881

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	2	8	10	0	0	3	3	2	5	0	7	0	0	0	0
+15 mins.	0	1	7	8	2	1	1	4	3	3	0	6	0	0	0	0
+30 mins.	0	3	4	7	0	1	4	5	4	5	0	9	0	0	0	0
+45 mins.	0	1	3	4	2	0	2	4	3	4	0	7	0	0	0	0
Total Volume	0	7	22	29	4	2	10	16	12	17	0	29	0	0	0	0
% App. Total	0	24.1	75.9		25	12.5	62.5		41.4	58.6	0		0	0	0	
PHF	.000	.583	.688	.725	.500	.500	.625	.800	.750	.850	.000	.806	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

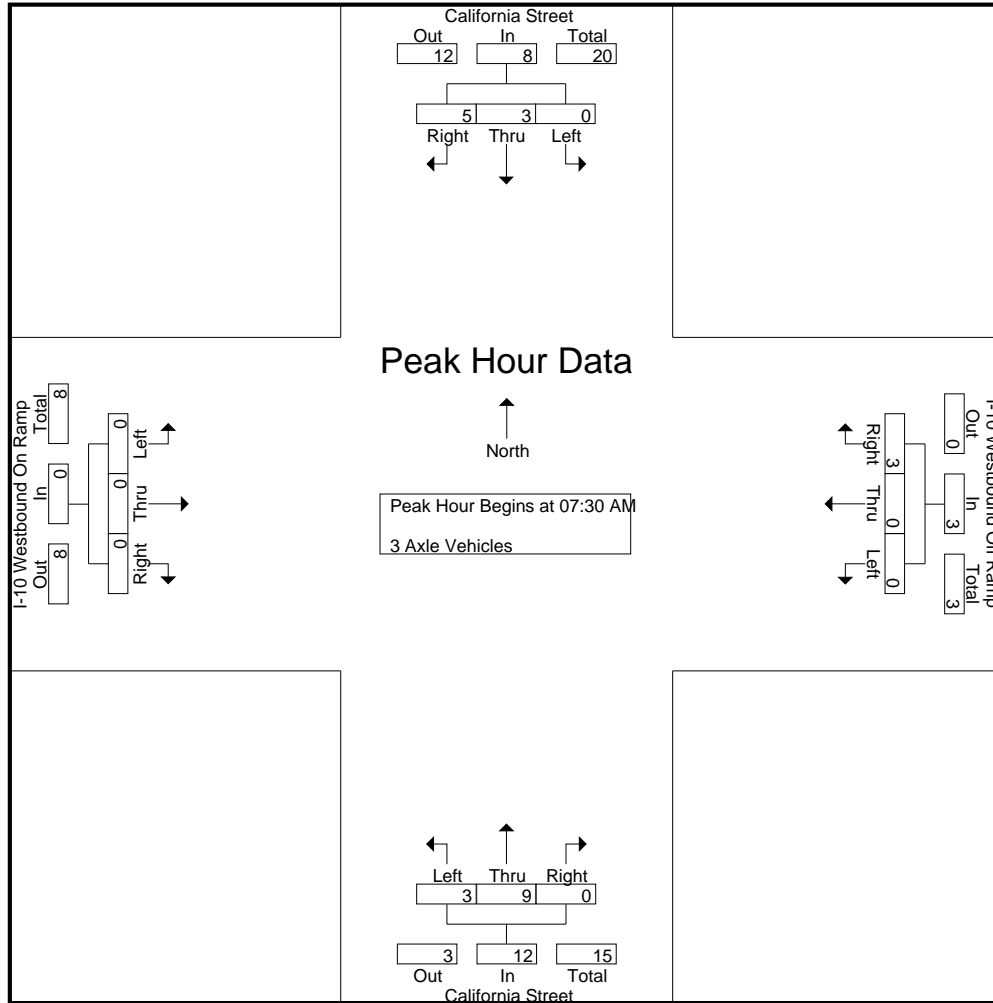
Groups Printed- 3 Axle Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	1	1	1	0	0	1	0	5	0	5	0	0	0	0	7
07:15 AM	0	0	2	2	0	0	0	0	1	4	0	5	0	0	0	0	7
07:30 AM	0	0	1	1	0	0	0	0	1	2	0	3	0	0	0	0	4
07:45 AM	0	2	0	2	0	0	3	3	0	3	0	3	0	0	0	0	8
Total	0	2	4	6	1	0	3	4	2	14	0	16	0	0	0	0	26
08:00 AM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0	4
08:15 AM	0	0	3	3	0	0	0	0	2	2	0	4	0	0	0	0	7
08:30 AM	0	0	4	4	0	0	0	0	2	1	0	3	0	0	0	0	7
08:45 AM	0	0	2	2	0	0	0	0	1	1	0	2	0	0	0	0	4
Total	0	1	10	11	0	0	0	0	5	6	0	11	0	0	0	0	22
Grand Total	0	3	14	17	1	0	3	4	7	20	0	27	0	0	0	0	48
Apprch %	0	17.6	82.4		25	0	75		25.9	74.1	0		0	0	0		
Total %	0	6.2	29.2	35.4	2.1	0	6.2	8.3	14.6	41.7	0	56.2	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	1	1	0	0	0	0	1	2	0	3	0	0	0	0	4
07:45 AM	0	2	0	2	0	0	3	3	0	3	0	3	0	0	0	0	8
08:00 AM	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0	4
08:15 AM	0	0	3	3	0	0	0	0	2	2	0	4	0	0	0	0	7
Total Volume	0	3	5	8	0	0	3	3	3	9	0	12	0	0	0	0	23
% App. Total	0	37.5	62.5		0	0	100		25	75	0		0	0	0		
PHF	.000	.375	.417	.667	.000	.000	.250	.250	.375	.750	.000	.750	.000	.000	.000	.000	.719

City of Redlands
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Weather: Clear

File Name : 01_RED_Cali_10W AM
Site Code : 22524283
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	1	1	0	0	0	0	1	2	0	3	0	0	0	0
+15 mins.	0	2	0	2	0	0	3	3	0	3	0	3	0	0	0	0
+30 mins.	0	1	1	2	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	0	3	3	0	0	0	0	2	2	0	4	0	0	0	0
Total Volume	0	3	5	8	0	0	3	3	3	9	0	12	0	0	0	0
% App. Total	0	37.5	62.5		0	0	100		25	75	0		0	0	0	
PHF	.000	.375	.417	.667	.000	.000	.250	.250	.375	.750	.000	.750	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W AM
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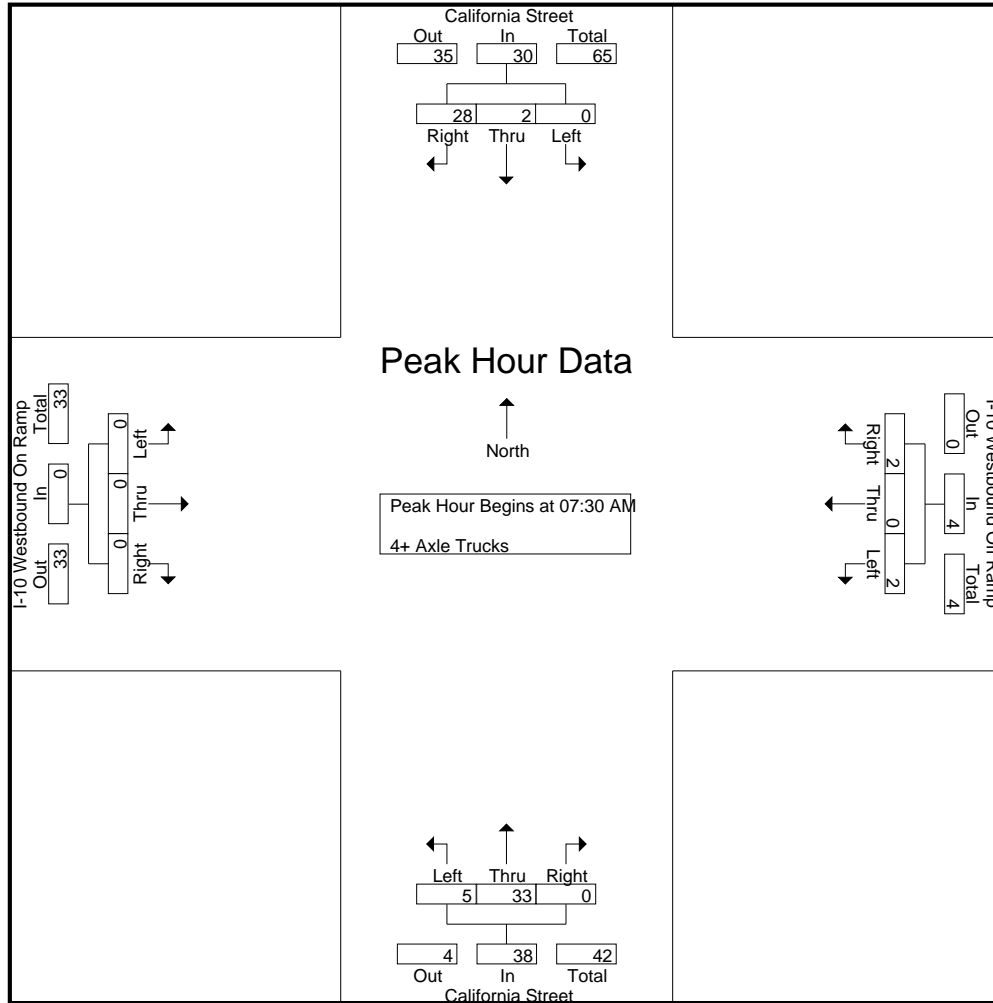
Groups Printed- 4+ Axle Trucks

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	7	7	0	0	0	0	2	6	0	8	0	0	0	0	15
07:15 AM	0	1	8	9	0	0	0	0	1	7	0	8	0	0	0	0	17
07:30 AM	0	0	4	4	1	0	0	1	1	7	0	8	0	0	0	0	13
07:45 AM	0	1	12	13	0	0	0	0	3	6	0	9	0	0	0	0	22
Total	0	2	31	33	1	0	0	1	7	26	0	33	0	0	0	0	67
08:00 AM	0	0	3	3	0	0	2	2	1	9	0	10	0	0	0	0	15
08:15 AM	0	1	9	10	1	0	0	1	0	11	0	11	0	0	0	0	22
08:30 AM	0	0	6	6	1	0	0	1	5	12	0	17	0	0	0	0	24
08:45 AM	0	3	4	7	0	0	3	3	3	7	0	10	0	0	0	0	20
Total	0	4	22	26	2	0	5	7	9	39	0	48	0	0	0	0	81
Grand Total	0	6	53	59	3	0	5	8	16	65	0	81	0	0	0	0	148
Apprch %	0	10.2	89.8		37.5	0	62.5		19.8	80.2	0		0	0	0		
Total %	0	4.1	35.8	39.9	2	0	3.4	5.4	10.8	43.9	0	54.7	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	4	4	1	0	0	1	1	7	0	8	0	0	0	0	13
07:45 AM	0	1	12	13	0	0	0	0	3	6	0	9	0	0	0	0	22
08:00 AM	0	0	3	3	0	0	2	2	1	9	0	10	0	0	0	0	15
08:15 AM	0	1	9	10	1	0	0	1	0	11	0	11	0	0	0	0	22
Total Volume	0	2	28	30	2	0	2	4	5	33	0	38	0	0	0	0	72
% App. Total	0	6.7	93.3		50	0	50		13.2	86.8	0		0	0	0		
PHF	.000	.500	.583	.577	.500	.000	.250	.500	.417	.750	.000	.864	.000	.000	.000	.000	.818

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	4	4	1	0	0	1	1	7	0	8	0	0	0	0
+15 mins.	0	1	12	13	0	0	0	0	3	6	0	9	0	0	0	0
+30 mins.	0	0	3	3	0	0	2	2	1	9	0	10	0	0	0	0
+45 mins.	0	1	9	10	1	0	0	1	0	11	0	11	0	0	0	0
Total Volume	0	2	28	30	2	0	2	4	5	33	0	38	0	0	0	0
% App. Total	0	6.7	93.3		50	0	50		13.2	86.8	0		0	0	0	
PHF	.000	.500	.583	.577	.500	.000	.250	.500	.417	.750	.000	.864	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
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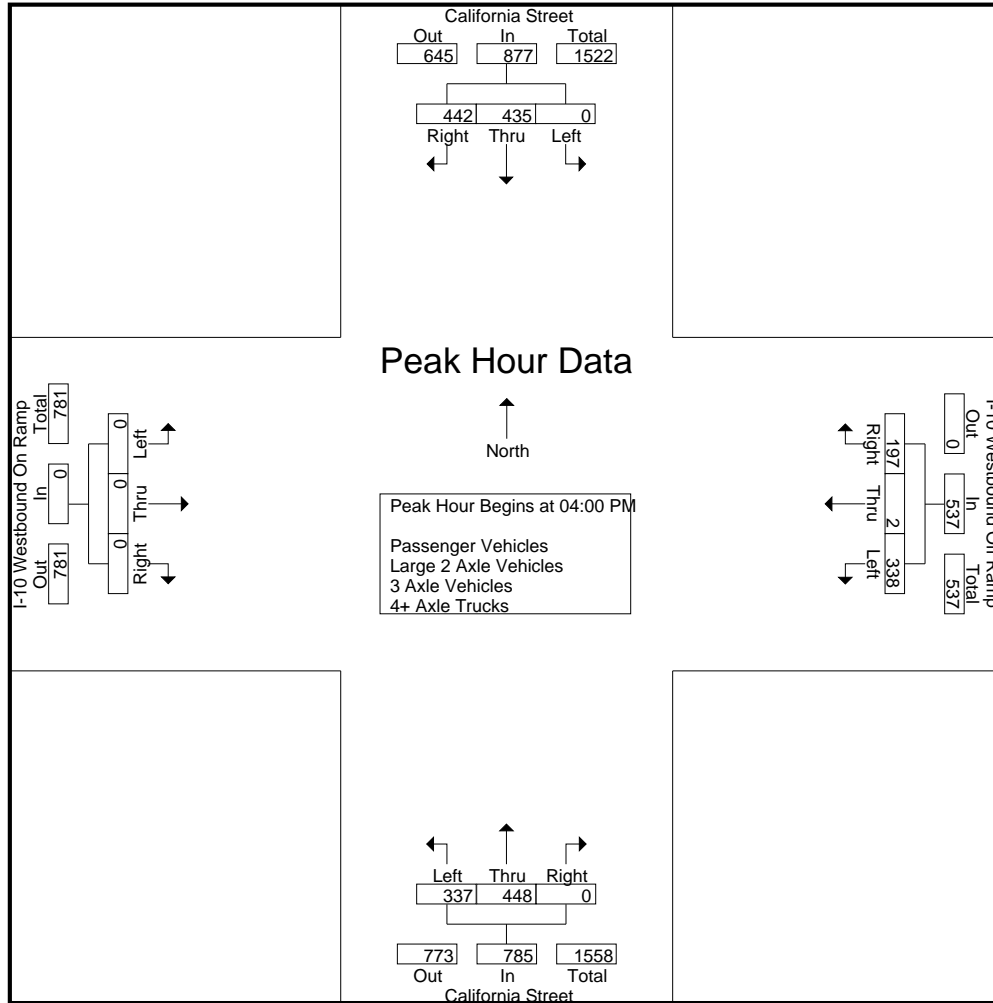
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	109	134	243	83	1	59	143	92	125	0	217	0	0	0	0	603
04:15 PM	0	108	109	217	84	0	47	131	89	101	0	190	0	0	0	0	538
04:30 PM	0	108	123	231	77	0	39	116	70	112	0	182	0	0	0	0	529
04:45 PM	0	110	76	186	94	1	52	147	86	110	0	196	0	0	0	0	529
Total	0	435	442	877	338	2	197	537	337	448	0	785	0	0	0	0	2199
05:00 PM	0	129	126	255	78	0	39	117	83	99	0	182	0	0	0	0	554
05:15 PM	0	104	92	196	78	1	42	121	104	106	0	210	0	0	0	0	527
05:30 PM	0	95	101	196	62	0	31	93	66	100	0	166	0	0	0	0	455
05:45 PM	0	64	60	124	93	0	38	131	74	87	0	161	0	0	0	0	416
Total	0	392	379	771	311	1	150	462	327	392	0	719	0	0	0	0	1952
Grand Total	0	827	821	1648	649	3	347	999	664	840	0	1504	0	0	0	0	4151
Apprch %	0	50.2	49.8		65	0.3	34.7		44.1	55.9	0		0	0	0		
Total %	0	19.9	19.8	39.7	15.6	0.1	8.4	24.1	16	20.2	0	36.2	0	0	0	0	
Passenger Vehicles	0	817	755	1572	640	2	319	961	626	760	0	1386	0	0	0	0	3919
% Passenger Vehicles	0	98.8	92	95.4	98.6	66.7	91.9	96.2	94.3	90.5	0	92.2	0	0	0	0	94.4
Large 2 Axle Vehicles	0	4	7	11	7	1	21	29	19	22	0	41	0	0	0	0	81
% Large 2 Axle Vehicles	0	0.5	0.9	0.7	1.1	33.3	6.1	2.9	2.9	2.6	0	2.7	0	0	0	0	2
3 Axle Vehicles	0	2	6	8	0	0	5	5	2	13	0	15	0	0	0	0	28
% 3 Axle Vehicles	0	0.2	0.7	0.5	0	0	1.4	0.5	0.3	1.5	0	1	0	0	0	0	0.7
4+ Axle Trucks	0	4	53	57	2	0	2	4	17	45	0	62	0	0	0	0	123
% 4+ Axle Trucks	0	0.5	6.5	3.5	0.3	0	0.6	0.4	2.6	5.4	0	4.1	0	0	0	0	3

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	109	134	243	83	1	59	143	92	125	0	217	0	0	0	0	603
04:15 PM	0	108	109	217	84	0	47	131	89	101	0	190	0	0	0	0	538
04:30 PM	0	108	123	231	77	0	39	116	70	112	0	182	0	0	0	0	529
04:45 PM	0	110	76	186	94	1	52	147	86	110	0	196	0	0	0	0	529
Total Volume	0	435	442	877	338	2	197	537	337	448	0	785	0	0	0	0	2199
% App. Total	0	49.6	50.4		62.9	0.4	36.7		42.9	57.1	0		0	0	0		
PHF	.000	.989	.825	.902	.899	.500	.835	.913	.916	.896	.000	.904	.000	.000	.000	.000	.912

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

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

	04:15 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	108	109	217	83	1	59	143	92	125	0	217	0	0	0	0
+15 mins.	0	108	123	231	84	0	47	131	89	101	0	190	0	0	0	0
+30 mins.	0	110	76	186	77	0	39	116	70	112	0	182	0	0	0	0
+45 mins.	0	129	126	255	94	1	52	147	86	110	0	196	0	0	0	0
Total Volume	0	455	434	889	338	2	197	537	337	448	0	785	0	0	0	0
% App. Total	0	51.2	48.8		62.9	0.4	36.7		42.9	57.1	0		0	0	0	
PHF	.000	.882	.861	.872	.899	.500	.835	.913	.916	.896	.000	.904	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
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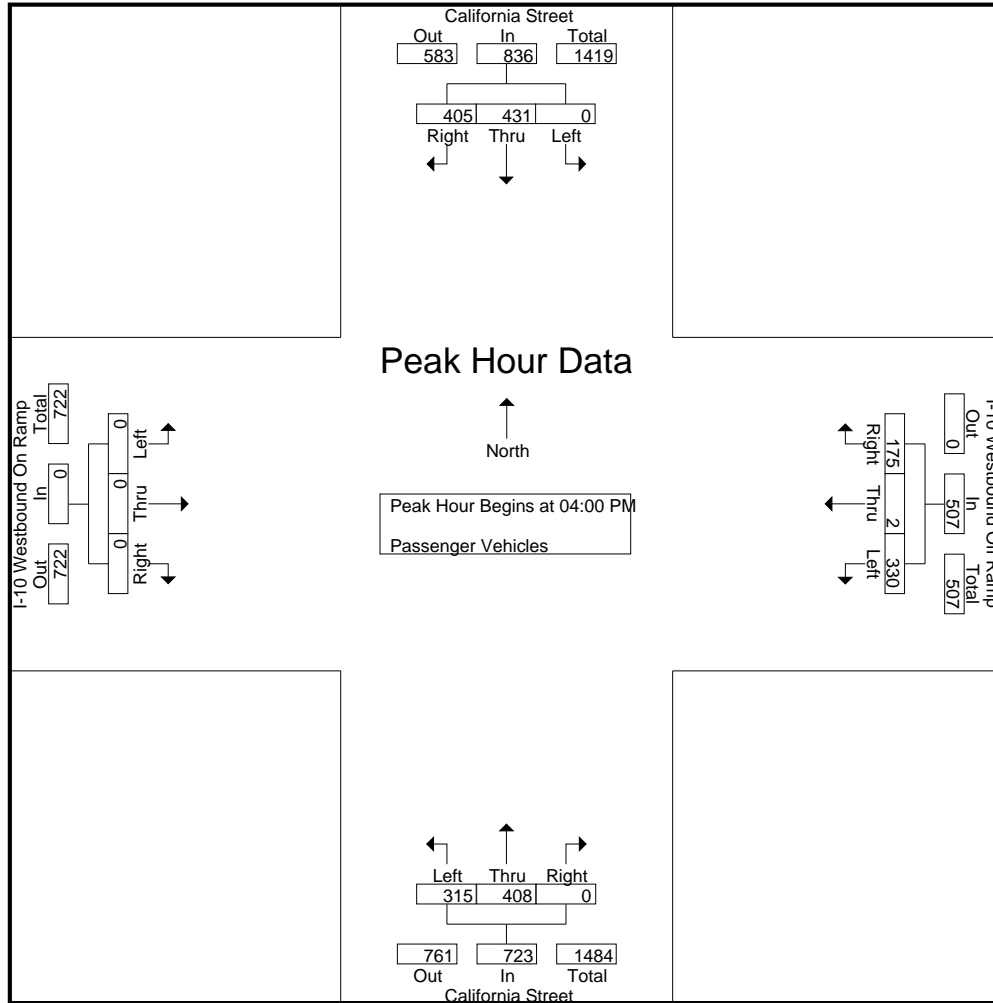
Groups Printed- Passenger Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	107	123	230	81	1	54	136	89	111	0	200	0	0	0	0	566
04:15 PM	0	108	101	209	81	0	44	125	82	95	0	177	0	0	0	0	511
04:30 PM	0	108	115	223	74	0	31	105	62	103	0	165	0	0	0	0	493
04:45 PM	0	108	66	174	94	1	46	141	82	99	0	181	0	0	0	0	496
Total	0	431	405	836	330	2	175	507	315	408	0	723	0	0	0	0	2066
05:00 PM	0	126	120	246	78	0	36	114	79	94	0	173	0	0	0	0	533
05:15 PM	0	103	83	186	78	0	42	120	101	91	0	192	0	0	0	0	498
05:30 PM	0	93	93	186	62	0	30	92	61	91	0	152	0	0	0	0	430
05:45 PM	0	64	54	118	92	0	36	128	70	76	0	146	0	0	0	0	392
Total	0	386	350	736	310	0	144	454	311	352	0	663	0	0	0	0	1853
Grand Total	0	817	755	1572	640	2	319	961	626	760	0	1386	0	0	0	0	3919
Apprch %	0	52	48		66.6	0.2	33.2		45.2	54.8	0		0	0	0		
Total %	0	20.8	19.3	40.1	16.3	0.1	8.1	24.5	16	19.4	0	35.4	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	107	123	230	81	1	54	136	89	111	0	200	0	0	0	0	566
04:15 PM	0	108	101	209	81	0	44	125	82	95	0	177	0	0	0	0	511
04:30 PM	0	108	115	223	74	0	31	105	62	103	0	165	0	0	0	0	493
04:45 PM	0	108	66	174	94	1	46	141	82	99	0	181	0	0	0	0	496
Total Volume	0	431	405	836	330	2	175	507	315	408	0	723	0	0	0	0	2066
% App. Total	0	51.6	48.4		65.1	0.4	34.5		43.6	56.4	0		0	0	0		
PHF	.000	.998	.823	.909	.878	.500	.810	.899	.885	.919	.000	.904	.000	.000	.000	.000	.913

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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	107	123	230	81	1	54	136	89	111	0	200	0	0	0	0
+15 mins.	0	108	101	209	81	0	44	125	82	95	0	177	0	0	0	0
+30 mins.	0	108	115	223	74	0	31	105	62	103	0	165	0	0	0	0
+45 mins.	0	108	66	174	94	1	46	141	82	99	0	181	0	0	0	0
Total Volume	0	431	405	836	330	2	175	507	315	408	0	723	0	0	0	0
% App. Total	0	51.6	48.4		65.1	0.4	34.5		43.6	56.4	0		0	0	0	
PHF	.000	.998	.823	.909	.878	.500	.810	.899	.885	.919	.000	.904	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
Start Date : 4/2/2024
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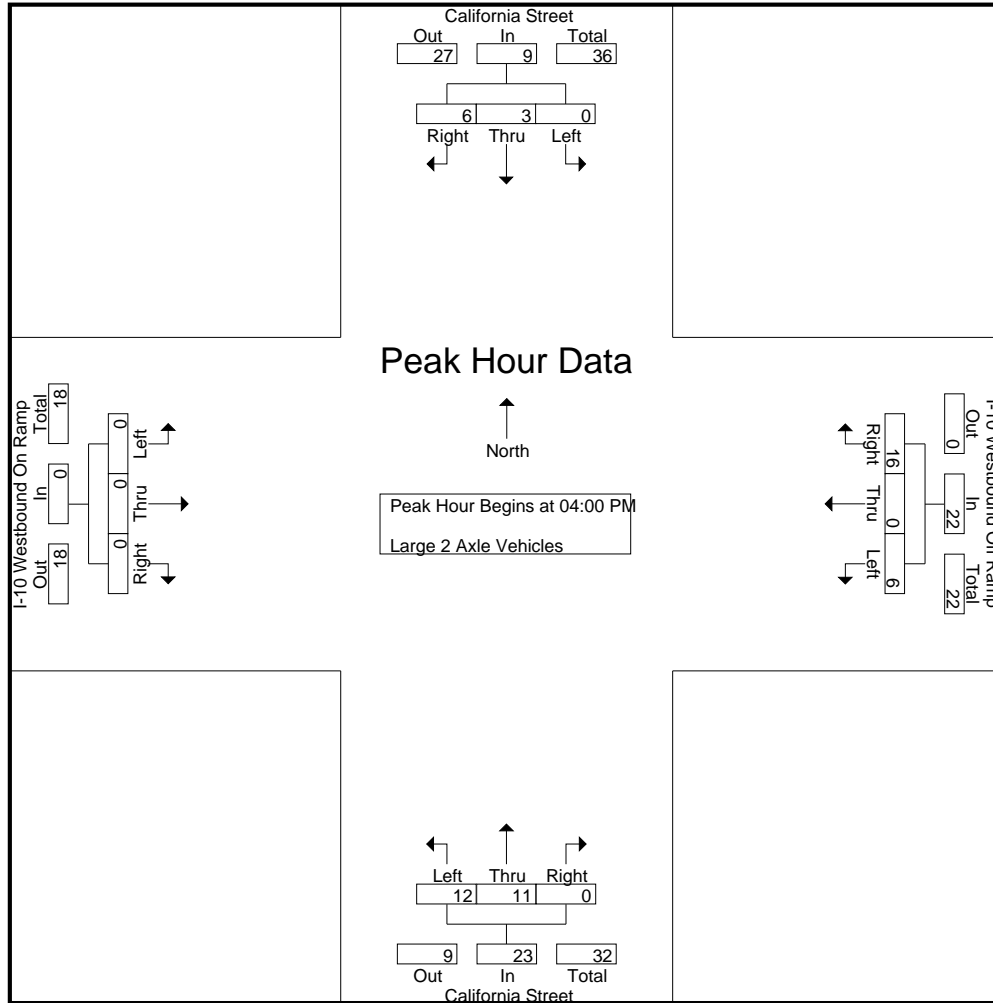
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	4	2	0	4	6	1	4	0	5	0	0	0	0	15
04:15 PM	0	0	1	1	3	0	3	6	4	3	0	7	0	0	0	0	14
04:30 PM	0	0	2	2	1	0	6	7	4	3	0	7	0	0	0	0	16
04:45 PM	0	1	1	2	0	0	3	3	3	1	0	4	0	0	0	0	9
Total	0	3	6	9	6	0	16	22	12	11	0	23	0	0	0	0	54
05:00 PM	0	1	1	2	0	0	2	2	1	0	0	1	0	0	0	0	5
05:15 PM	0	0	0	0	0	1	0	1	2	4	0	6	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	1	1	1	5	0	6	0	0	0	0	7
05:45 PM	0	0	0	0	1	0	2	3	3	2	0	5	0	0	0	0	8
Total	0	1	1	2	1	1	5	7	7	11	0	18	0	0	0	0	27
Grand Total	0	4	7	11	7	1	21	29	19	22	0	41	0	0	0	0	81
Apprch %	0	36.4	63.6		24.1	3.4	72.4		46.3	53.7	0		0	0	0		
Total %	0	4.9	8.6	13.6	8.6	1.2	25.9	35.8	23.5	27.2	0	50.6	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	2	2	4	2	0	4	6	1	4	0	5	0	0	0	0	15
04:15 PM	0	0	1	1	3	0	3	6	4	3	0	7	0	0	0	0	14
04:30 PM	0	0	2	2	1	0	6	7	4	3	0	7	0	0	0	0	16
04:45 PM	0	1	1	2	0	0	3	3	3	1	0	4	0	0	0	0	9
Total Volume	0	3	6	9	6	0	16	22	12	11	0	23	0	0	0	0	54
% App. Total	0	33.3	66.7		27.3	0	72.7		52.2	47.8	0		0	0	0		
PHF	.000	.375	.750	.563	.500	.000	.667	.786	.750	.688	.000	.821	.000	.000	.000	.000	.844

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	2	2	4	2	0	4	6	1	4	0	5	0	0	0	0
+15 mins.	0	0	1	1	3	0	3	6	4	3	0	7	0	0	0	0
+30 mins.	0	0	2	2	1	0	6	7	4	3	0	7	0	0	0	0
+45 mins.	0	1	1	2	0	0	3	3	3	1	0	4	0	0	0	0
Total Volume	0	3	6	9	6	0	16	22	12	11	0	23	0	0	0	0
% App. Total	0	33.3	66.7		27.3	0	72.7		52.2	47.8	0		0	0	0	
PHF	.000	.375	.750	.563	.500	.000	.667	.786	.750	.688	.000	.821	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

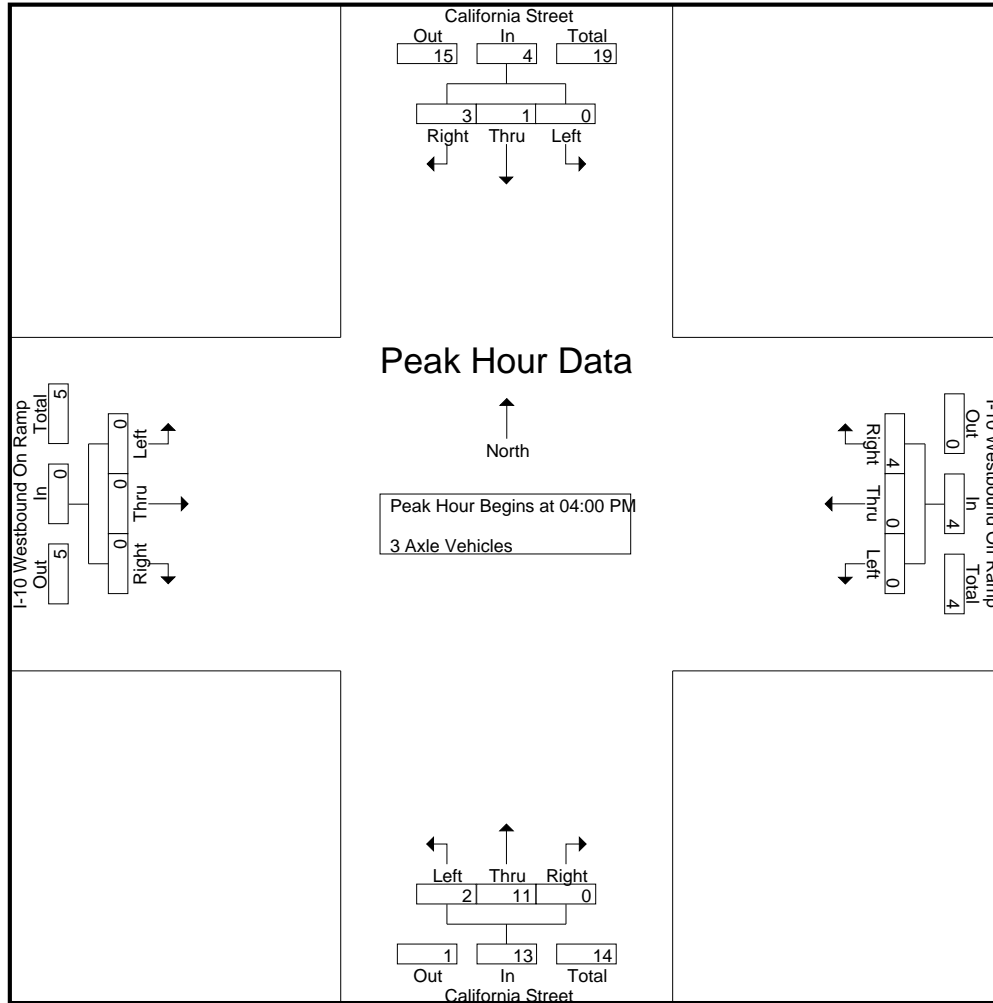
Groups Printed- 3 Axle Vehicles

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	0	1	1	0	3	0	3	0	0	0	0	5
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	2	2	0	0	2	2	1	1	0	2	0	0	0	0	6
04:45 PM	0	1	0	1	0	0	1	1	1	5	0	6	0	0	0	0	8
Total	0	1	3	4	0	0	4	4	2	11	0	13	0	0	0	0	21
05:00 PM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	3	4	0	0	1	1	0	2	0	2	0	0	0	0	7
Grand Total	0	2	6	8	0	0	5	5	2	13	0	15	0	0	0	0	28
Apprch %	0	25	75		0	0	100		13.3	86.7	0		0	0	0		
Total %	0	7.1	21.4	28.6	0	0	17.9	17.9	7.1	46.4	0	53.6	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	1	1	0	0	1	1	0	3	0	3	0	0	0	0	5
04:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
04:30 PM	0	0	2	2	0	0	2	2	1	1	0	2	0	0	0	0	6
04:45 PM	0	1	0	1	0	0	1	1	1	5	0	6	0	0	0	0	8
Total Volume	0	1	3	4	0	0	4	4	2	11	0	13	0	0	0	0	21
% App. Total	0	25	75		0	0	100		15.4	84.6	0		0	0	0		
PHF	.000	.250	.375	.500	.000	.000	.500	.500	.500	.550	.000	.542	.000	.000	.000	.000	.656

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	1	1	0	0	1	1	0	3	0	3	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	0	2	2	0	0	2	2	1	1	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	1	1	1	5	0	6	0	0	0	0
Total Volume	0	1	3	4	0	0	4	4	2	11	0	13	0	0	0	0
% App. Total	0	25	75		0	0	100		15.4	84.6	0		0	0	0	
PHF	.000	.250	.375	.500	.000	.000	.500	.500	.500	.550	.000	.542	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
Start Date : 4/2/2024
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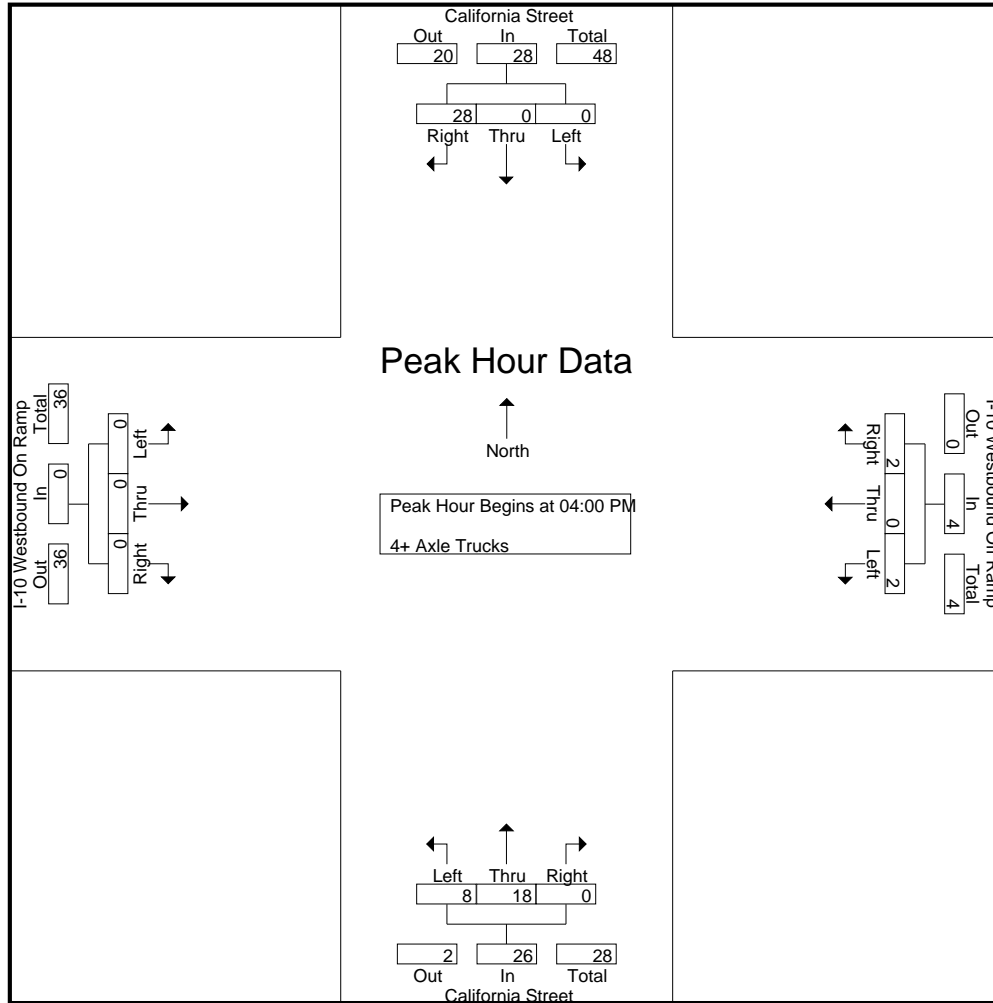
Groups Printed- 4+ Axle Trucks

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	8	8	0	0	0	0	2	7	0	9	0	0	0	0	17
04:15 PM	0	0	7	7	0	0	0	0	3	1	0	4	0	0	0	0	11
04:30 PM	0	0	4	4	2	0	0	2	3	5	0	8	0	0	0	0	14
04:45 PM	0	0	9	9	0	0	2	2	0	5	0	5	0	0	0	0	16
Total	0	0	28	28	2	0	2	4	8	18	0	26	0	0	0	0	58
05:00 PM	0	2	4	6	0	0	0	0	3	5	0	8	0	0	0	0	14
05:15 PM	0	1	8	9	0	0	0	0	1	11	0	12	0	0	0	0	21
05:30 PM	0	1	7	8	0	0	0	0	4	3	0	7	0	0	0	0	15
05:45 PM	0	0	6	6	0	0	0	0	1	8	0	9	0	0	0	0	15
Total	0	4	25	29	0	0	0	0	9	27	0	36	0	0	0	0	65
Grand Total	0	4	53	57	2	0	2	4	17	45	0	62	0	0	0	0	123
Apprch %	0	7	93		50	0	50		27.4	72.6	0		0	0	0		
Total %	0	3.3	43.1	46.3	1.6	0	1.6	3.3	13.8	36.6	0	50.4	0	0	0	0	

	California Street Southbound				I-10 Westbound Off Ramp Westbound				California Street Northbound				I-10 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	8	8	0	0	0	0	2	7	0	9	0	0	0	0	17
04:15 PM	0	0	7	7	0	0	0	0	3	1	0	4	0	0	0	0	11
04:30 PM	0	0	4	4	2	0	0	2	3	5	0	8	0	0	0	0	14
04:45 PM	0	0	9	9	0	0	2	2	0	5	0	5	0	0	0	0	16
Total Volume	0	0	28	28	2	0	2	4	8	18	0	26	0	0	0	0	58
% App. Total	0	0	100		50	0	50		30.8	69.2	0		0	0	0		
PHF	.000	.000	.778	.778	.250	.000	.250	.500	.667	.643	.000	.722	.000	.000	.000	.000	.853

City of Redlands
N/S: California Street
E/W: I-10 Westbound Ramps
Weather: Clear

File Name : 01_RED_Cali_10W PM
Site Code : 22524283
Start Date : 4/2/2024
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	8	8	0	0	0	0	2	7	0	9	0	0	0	0
+15 mins.	0	0	7	7	0	0	0	0	3	1	0	4	0	0	0	0
+30 mins.	0	0	4	4	2	0	0	2	3	5	0	8	0	0	0	0
+45 mins.	0	0	9	9	0	0	2	2	0	5	0	5	0	0	0	0
Total Volume	0	0	28	28	2	0	2	4	8	18	0	26	0	0	0	0
% App. Total	0	0	100		50	0	50		30.8	69.2	0		0	0	0	
PHF	.000	.000	.778	.778	.250	.000	.250	.500	.667	.643	.000	.722	.000	.000	.000	.000

Location: Redlands
 N/S: California Street
 E/W: I-10 WB Ramps



Date: 4/2/2024
 Day: Tuesday

PEDESTRIANS

	North Leg California Street Pedestrians	East Leg I-10 WB Ramps Pedestrians	South Leg California Street Pedestrians	West Leg I-10 WB Ramps Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	2	0	1	3
8:00 AM	0	0	0	0	0
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	2	0	0	2
TOTAL VOLUMES:	0	5	0	1	6

	North Leg California Street Pedestrians	East Leg I-10 WB Ramps Pedestrians	South Leg California Street Pedestrians	West Leg I-10 WB Ramps Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	1	0	0	1
5:00 PM	0	3	0	0	3
5:15 PM	0	2	0	0	2
5:30 PM	0	1	0	0	1
5:45 PM	0	2	0	0	2
TOTAL VOLUMES:	0	9	0	0	9

Location: Redlands
 N/S: California Street
 E/W: I-10 WB Ramps



Date: 4/2/2024
 Day: Tuesday

BICYCLES

		Southbound California Street			Westbound I-10 WB Ramps			Northbound California Street			Eastbound I-10 WB Ramps			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

		Southbound California Street			Westbound I-10 WB Ramps			Northbound California Street			Eastbound I-10 WB Ramps			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2
	5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES:		0	4	0	0	0	0	0	2	0	0	0	0	6

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

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E AM
Site Code : 22524283
Start Date : 4/2/2024
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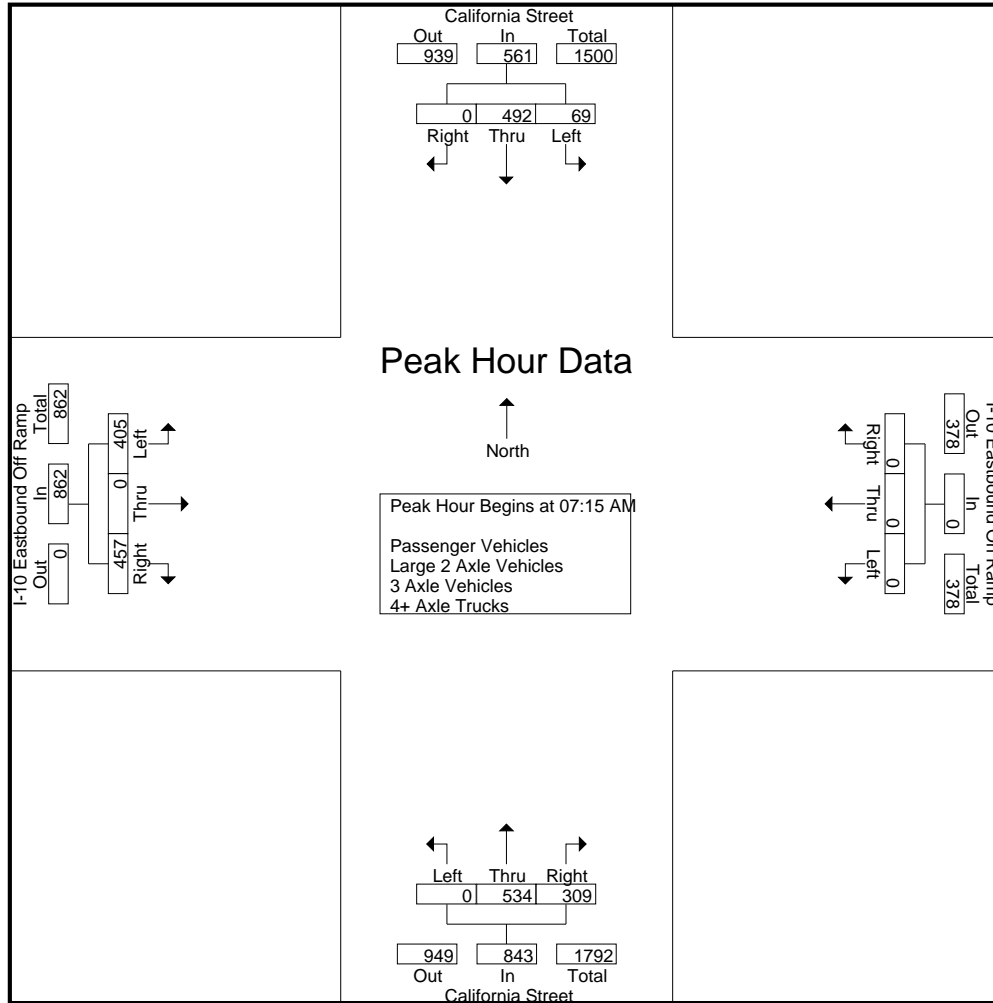
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	17	132	0	149	0	0	0	0	0	110	45	155	77	0	81	158	462
07:15 AM	19	143	0	162	0	0	0	0	0	133	60	193	87	0	107	194	549
07:30 AM	13	130	0	143	0	0	0	0	0	144	88	232	97	0	97	194	569
07:45 AM	9	128	0	137	0	0	0	0	0	123	91	214	119	0	132	251	602
Total	58	533	0	591	0	0	0	0	0	510	284	794	380	0	417	797	2182
08:00 AM	28	91	0	119	0	0	0	0	0	134	70	204	102	0	121	223	546
08:15 AM	17	117	0	134	0	0	0	0	0	114	78	192	90	0	117	207	533
08:30 AM	18	106	0	124	0	0	0	0	0	99	68	167	101	0	122	223	514
08:45 AM	20	114	0	134	0	0	0	0	0	95	63	158	109	0	122	231	523
Total	83	428	0	511	0	0	0	0	0	442	279	721	402	0	482	884	2116
Grand Total	141	961	0	1102	0	0	0	0	0	952	563	1515	782	0	899	1681	4298
Apprch %	12.8	87.2	0		0	0	0		0	62.8	37.2		46.5	0	53.5		
Total %	3.3	22.4	0	25.6	0	0	0	0	0	22.1	13.1	35.2	18.2	0	20.9	39.1	
Passenger Vehicles	115	927	0	1042	0	0	0	0	0	888	532	1420	680	0	840	1520	3982
% Passenger Vehicles	81.6	96.5	0	94.6	0	0	0	0	0	93.3	94.5	93.7	87	0	93.4	90.4	92.6
Large 2 Axle Vehicles	18	29	0	47	0	0	0	0	0	36	23	59	20	0	28	48	154
% Large 2 Axle Vehicles	12.8	3	0	4.3	0	0	0	0	0	3.8	4.1	3.9	2.6	0	3.1	2.9	3.6
3 Axle Vehicles	3	1	0	4	0	0	0	0	0	9	2	11	16	0	6	22	37
% 3 Axle Vehicles	2.1	0.1	0	0.4	0	0	0	0	0	0.9	0.4	0.7	2	0	0.7	1.3	0.9
4+ Axle Trucks	5	4	0	9	0	0	0	0	0	19	6	25	66	0	25	91	125
% 4+ Axle Trucks	3.5	0.4	0	0.8	0	0	0	0	0	2	1.1	1.7	8.4	0	2.8	5.4	2.9

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	19	143	0	162	0	0	0	0	0	133	60	193	87	0	107	194	549
07:30 AM	13	130	0	143	0	0	0	0	0	144	88	232	97	0	97	194	569
07:45 AM	9	128	0	137	0	0	0	0	0	123	91	214	119	0	132	251	602
08:00 AM	28	91	0	119	0	0	0	0	0	134	70	204	102	0	121	223	546
Total Volume	69	492	0	561	0	0	0	0	0	534	309	843	405	0	457	862	2266
% App. Total	12.3	87.7	0		0	0	0		0	63.3	36.7		47	0	53		
PHF	.616	.860	.000	.866	.000	.000	.000	.000	.000	.927	.849	.908	.851	.000	.866	.859	.941

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



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

	07:00 AM				07:00 AM				07:15 AM				07:45 AM			
+0 mins.	17	132	0	149	0	0	0	0	0	133	60	193	119	0	132	251
+15 mins.	19	143	0	162	0	0	0	0	0	144	88	232	102	0	121	223
+30 mins.	13	130	0	143	0	0	0	0	0	123	91	214	90	0	117	207
+45 mins.	9	128	0	137	0	0	0	0	0	134	70	204	101	0	122	223
Total Volume	58	533	0	591	0	0	0	0	0	534	309	843	412	0	492	904
% App. Total	9.8	90.2	0		0	0	0		0	63.3	36.7		45.6	0	54.4	
PHF	.763	.932	.000	.912	.000	.000	.000	.000	.000	.927	.849	.908	.866	.000	.932	.900

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E AM
Site Code : 22524283
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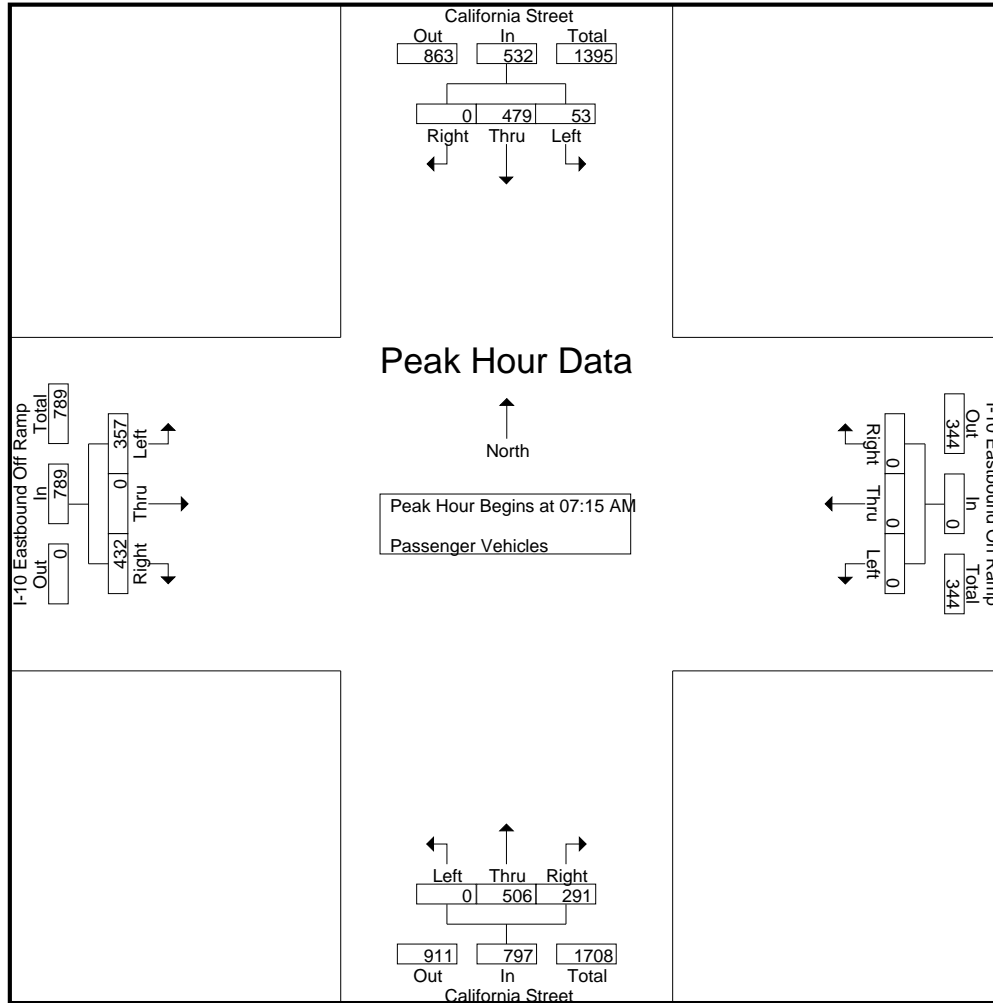
Groups Printed- Passenger Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	124	0	136	0	0	0	0	0	102	44	146	63	0	75	138	420
07:15 AM	10	134	0	144	0	0	0	0	0	128	54	182	75	0	98	173	499
07:30 AM	13	128	0	141	0	0	0	0	0	137	84	221	86	0	95	181	543
07:45 AM	5	127	0	132	0	0	0	0	0	114	84	198	107	0	126	233	563
Total	40	513	0	553	0	0	0	0	0	481	266	747	331	0	394	725	2025
08:00 AM	25	90	0	115	0	0	0	0	0	127	69	196	89	0	113	202	513
08:15 AM	16	112	0	128	0	0	0	0	0	106	73	179	73	0	105	178	485
08:30 AM	16	102	0	118	0	0	0	0	0	90	65	155	88	0	111	199	472
08:45 AM	18	110	0	128	0	0	0	0	0	84	59	143	99	0	117	216	487
Total	75	414	0	489	0	0	0	0	0	407	266	673	349	0	446	795	1957
Grand Total	115	927	0	1042	0	0	0	0	0	888	532	1420	680	0	840	1520	3982
Apprch %	11	89	0		0	0	0		0	62.5	37.5		44.7	0	55.3		
Total %	2.9	23.3	0	26.2	0	0	0	0	0	22.3	13.4	35.7	17.1	0	21.1	38.2	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	10	134	0	144	0	0	0	0	0	128	54	182	75	0	98	173	499
07:30 AM	13	128	0	141	0	0	0	0	0	137	84	221	86	0	95	181	543
07:45 AM	5	127	0	132	0	0	0	0	0	114	84	198	107	0	126	233	563
08:00 AM	25	90	0	115	0	0	0	0	0	127	69	196	89	0	113	202	513
Total Volume	53	479	0	532	0	0	0	0	0	506	291	797	357	0	432	789	2118
% App. Total	10	90	0		0	0	0		0	63.5	36.5		45.2	0	54.8		
PHF	.530	.894	.000	.924	.000	.000	.000	.000	.000	.923	.866	.902	.834	.000	.857	.847	.940

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	10	134	0	144	0	0	0	0	0	128	54	182	75	0	98	173
+15 mins.	13	128	0	141	0	0	0	0	0	137	84	221	86	0	95	181
+30 mins.	5	127	0	132	0	0	0	0	0	114	84	198	107	0	126	233
+45 mins.	25	90	0	115	0	0	0	0	0	127	69	196	89	0	113	202
Total Volume	53	479	0	532	0	0	0	0	0	506	291	797	357	0	432	789
% App. Total	10	90	0		0	0	0		0	63.5	36.5		45.2	0	54.8	
PHF	.530	.894	.000	.924	.000	.000	.000	.000	.000	.923	.866	.902	.834	.000	.857	.847

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E AM
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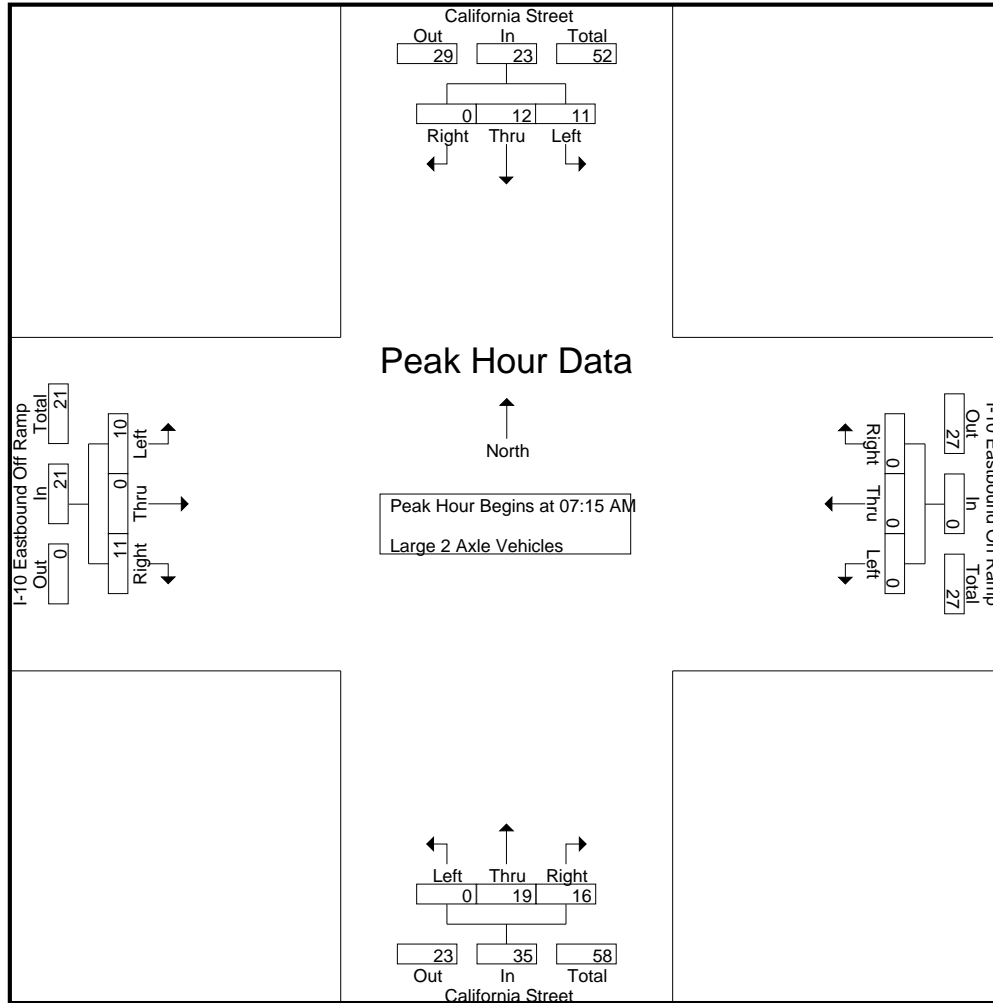
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	7	0	12	0	0	0	0	0	5	0	5	4	0	3	7	24
07:15 AM	8	9	0	17	0	0	0	0	0	3	5	8	2	0	3	5	30
07:30 AM	0	1	0	1	0	0	0	0	0	5	3	8	3	0	2	5	14
07:45 AM	1	1	0	2	0	0	0	0	0	5	7	12	2	0	3	5	19
Total	14	18	0	32	0	0	0	0	0	18	15	33	11	0	11	22	87
08:00 AM	2	1	0	3	0	0	0	0	0	6	1	7	3	0	3	6	16
08:15 AM	0	4	0	4	0	0	0	0	0	3	3	6	5	0	6	11	21
08:30 AM	2	3	0	5	0	0	0	0	0	3	1	4	1	0	6	7	16
08:45 AM	0	3	0	3	0	0	0	0	0	6	3	9	0	0	2	2	14
Total	4	11	0	15	0	0	0	0	0	18	8	26	9	0	17	26	67
Grand Total	18	29	0	47	0	0	0	0	0	36	23	59	20	0	28	48	154
Apprch %	38.3	61.7	0		0	0	0		0	61	39		41.7	0	58.3		
Total %	11.7	18.8	0	30.5	0	0	0	0	0	23.4	14.9	38.3	13	0	18.2	31.2	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	8	9	0	17	0	0	0	0	0	3	5	8	2	0	3	5	30
07:30 AM	0	1	0	1	0	0	0	0	0	5	3	8	3	0	2	5	14
07:45 AM	1	1	0	2	0	0	0	0	0	5	7	12	2	0	3	5	19
08:00 AM	2	1	0	3	0	0	0	0	0	6	1	7	3	0	3	6	16
Total Volume	11	12	0	23	0	0	0	0	0	19	16	35	10	0	11	21	79
% App. Total	47.8	52.2	0		0	0	0		0	54.3	45.7		47.6	0	52.4		
PHF	.344	.333	.000	.338	.000	.000	.000	.000	.000	.792	.571	.729	.833	.000	.917	.875	.658

City of Redlands
N/S: California Street
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	8	9	0	17	0	0	0	0	0	3	5	8	2	0	3	5
+15 mins.	0	1	0	1	0	0	0	0	0	5	3	8	3	0	2	5
+30 mins.	1	1	0	2	0	0	0	0	0	5	7	12	2	0	3	5
+45 mins.	2	1	0	3	0	0	0	0	0	6	1	7	3	0	3	6
Total Volume	11	12	0	23	0	0	0	0	0	19	16	35	10	0	11	21
% App. Total	47.8	52.2	0		0	0	0		0	54.3	45.7		47.6	0	52.4	
PHF	.344	.333	.000	.338	.000	.000	.000	.000	.000	.792	.571	.729	.833	.000	.917	.875

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E AM
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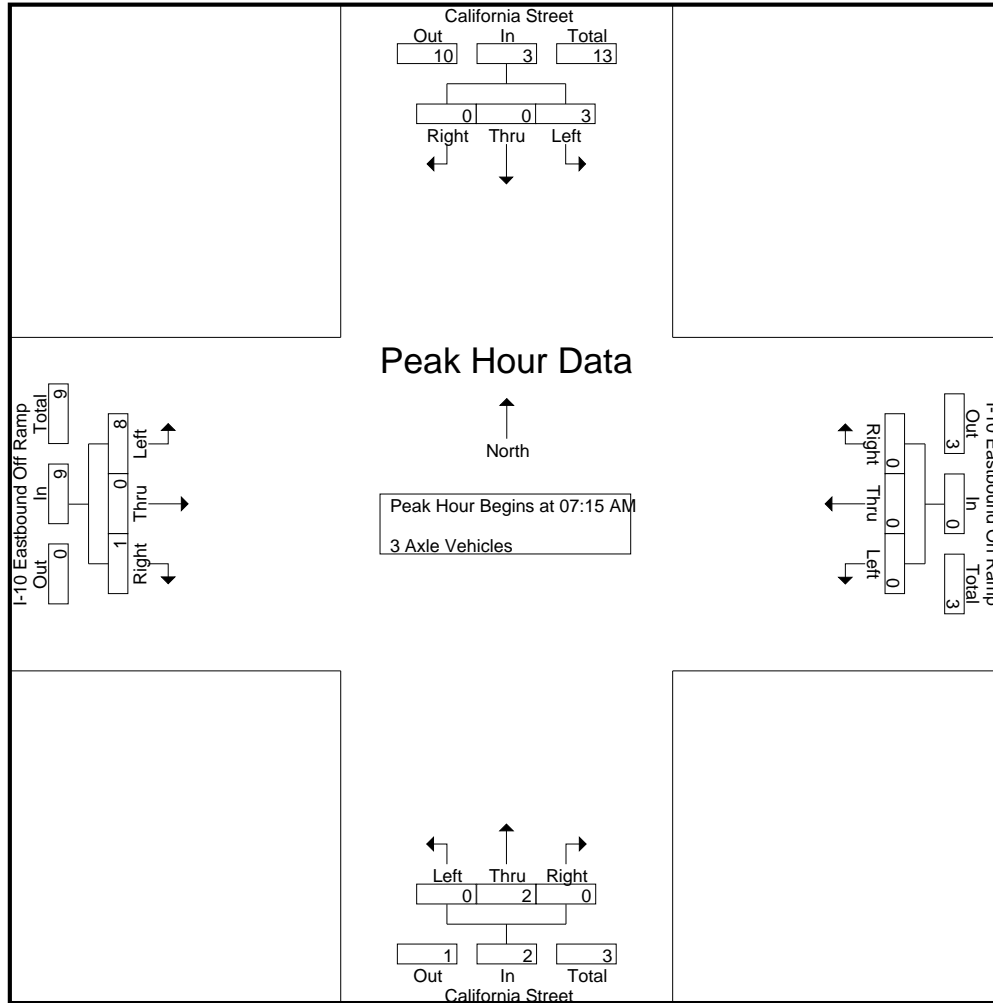
Groups Printed- 3 Axle Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	4	0	0	4	6
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	3	0	1	4	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	4
Total	2	1	0	3	0	0	0	0	0	2	0	2	11	0	1	12	17
08:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
08:15 AM	0	0	0	0	0	0	0	0	0	3	2	5	2	0	2	4	9
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	1	0	2	3	5
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	0	1	2	3
Total	1	0	0	1	0	0	0	0	0	7	2	9	5	0	5	10	20
Grand Total	3	1	0	4	0	0	0	0	0	9	2	11	16	0	6	22	37
Apprch %	75	25	0		0	0	0		0	81.8	18.2		72.7	0	27.3		
Total %	8.1	2.7	0	10.8	0	0	0	0	0	24.3	5.4	29.7	43.2	0	16.2	59.5	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	3	0	1	4	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
07:45 AM	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2	4
08:00 AM	1	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1	3
Total Volume	3	0	0	3	0	0	0	0	0	2	0	2	8	0	1	9	14
% App. Total	100	0	0		0	0	0		0	100	0		88.9	0	11.1		
PHF	.375	.000	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.667	.000	.250	.563	.700

City of Redlands
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	3	0	1	4
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
+30 mins.	2	0	0	2	0	0	0	0	0	0	0	0	2	0	0	2
+45 mins.	1	0	0	1	0	0	0	0	0	1	0	1	1	0	0	1
Total Volume	3	0	0	3	0	0	0	0	0	2	0	2	8	0	1	9
% App. Total	100	0	0		0	0	0		0	100	0		88.9	0	11.1	
PHF	.375	.000	.000	.375	.000	.000	.000	.000	.000	.500	.000	.500	.667	.000	.250	.563

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

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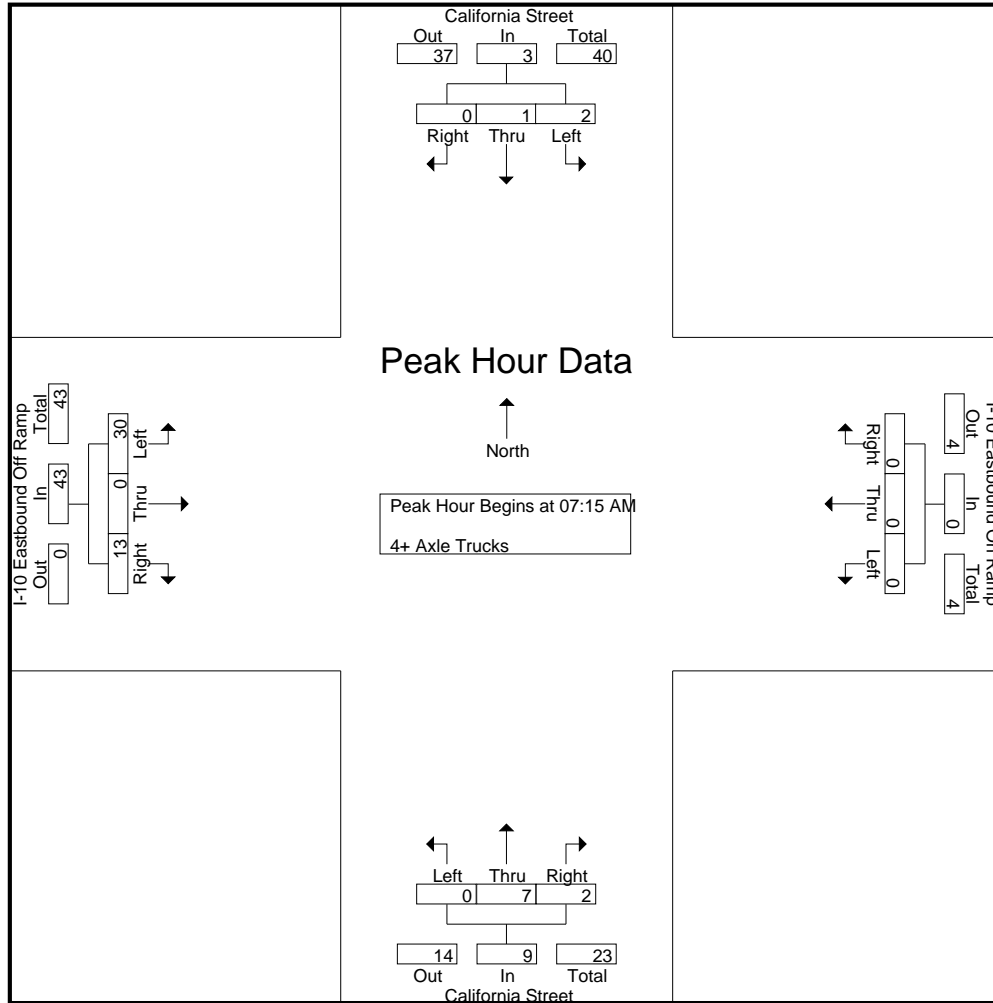
Groups Printed- 4+ Axle Trucks

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	2	1	3	6	0	3	9	12
07:15 AM	1	0	0	1	0	0	0	0	0	1	1	2	7	0	5	12	15
07:30 AM	0	1	0	1	0	0	0	0	0	2	1	3	6	0	0	6	10
07:45 AM	1	0	0	1	0	0	0	0	0	4	0	4	8	0	3	11	16
Total	2	1	0	3	0	0	0	0	0	9	3	12	27	0	11	38	53
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	5	14	14
08:15 AM	1	1	0	2	0	0	0	0	0	2	0	2	10	0	4	14	18
08:30 AM	0	1	0	1	0	0	0	0	0	4	2	6	11	0	3	14	21
08:45 AM	2	1	0	3	0	0	0	0	0	4	1	5	9	0	2	11	19
Total	3	3	0	6	0	0	0	0	0	10	3	13	39	0	14	53	72
Grand Total	5	4	0	9	0	0	0	0	0	19	6	25	66	0	25	91	125
Apprch %	55.6	44.4	0		0	0	0		0	76	24		72.5	0	27.5		
Total %	4	3.2	0	7.2	0	0	0	0	0	15.2	4.8	20	52.8	0	20	72.8	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	0	0	0	0	1	1	2	7	0	5	12	15
07:30 AM	0	1	0	1	0	0	0	0	0	2	1	3	6	0	0	6	10
07:45 AM	1	0	0	1	0	0	0	0	0	4	0	4	8	0	3	11	16
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	9	0	5	14	14
Total Volume	2	1	0	3	0	0	0	0	0	7	2	9	30	0	13	43	55
% App. Total	66.7	33.3	0		0	0	0		0	77.8	22.2		69.8	0	30.2		
PHF	.500	.250	.000	.750	.000	.000	.000	.000	.000	.438	.500	.563	.833	.000	.650	.768	.859

City of Redlands
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	0	0	0	0	0	1	1	2	7	0	5	12
+15 mins.	0	1	0	1	0	0	0	0	0	2	1	3	6	0	0	6
+30 mins.	1	0	0	1	0	0	0	0	0	4	0	4	8	0	3	11
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	9	0	5	14
Total Volume	2	1	0	3	0	0	0	0	0	7	2	9	30	0	13	43
% App. Total	66.7	33.3	0		0	0	0		0	77.8	22.2		69.8	0	30.2	
PHF	.500	.250	.000	.750	.000	.000	.000	.000	.000	.438	.500	.563	.833	.000	.650	.768

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

City of Redlands
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Weather: Clear

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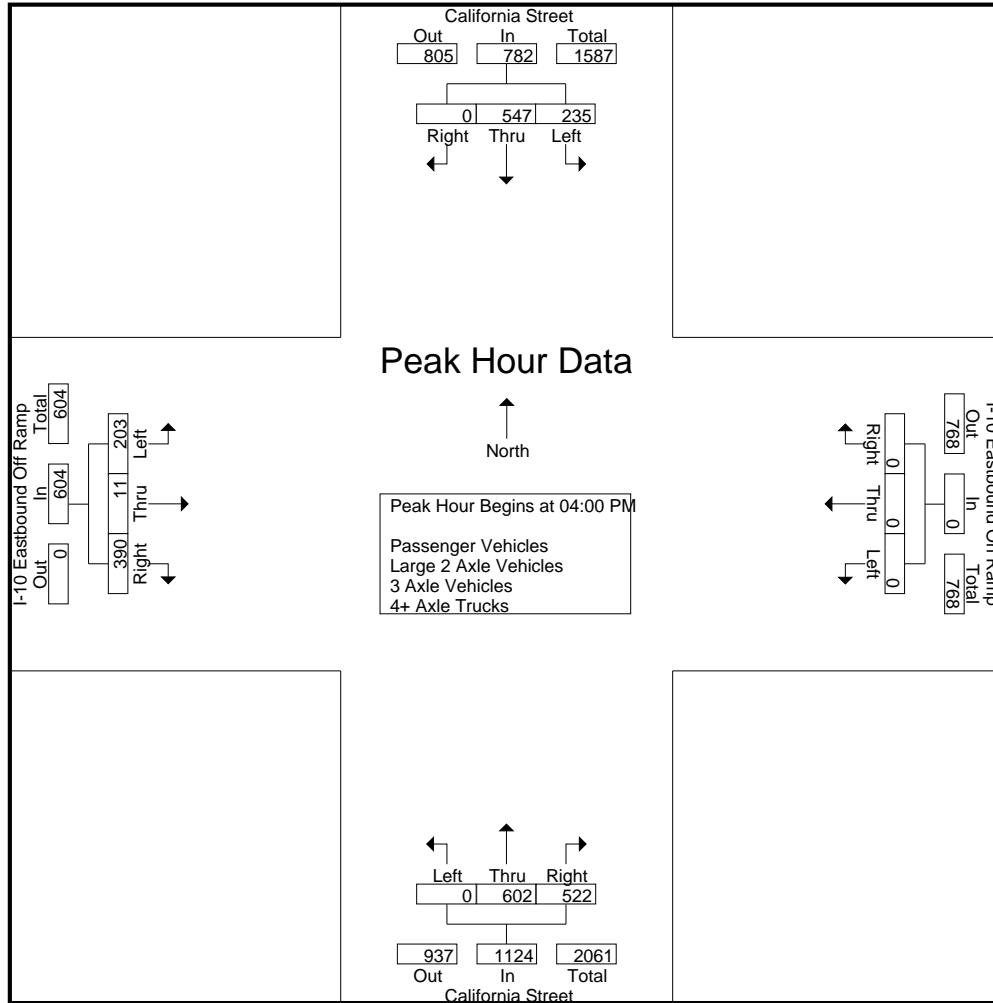
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	57	139	0	196	0	0	0	0	0	176	142	318	55	3	101	159	673
04:15 PM	59	129	0	188	0	0	0	0	0	140	129	269	56	1	100	157	614
04:30 PM	62	130	0	192	0	0	0	0	0	140	123	263	46	3	96	145	600
04:45 PM	57	149	0	206	0	0	0	0	0	146	128	274	46	4	93	143	623
Total	235	547	0	782	0	0	0	0	0	602	522	1124	203	11	390	604	2510
05:00 PM	70	137	0	207	0	0	0	0	0	154	124	278	47	2	102	151	636
05:15 PM	48	142	0	190	0	0	0	0	0	168	109	277	41	2	89	132	599
05:30 PM	29	130	0	159	0	0	0	0	0	120	101	221	44	3	93	140	520
05:45 PM	31	126	0	157	0	0	0	0	0	122	88	210	53	1	92	146	513
Total	178	535	0	713	0	0	0	0	0	564	422	986	185	8	376	569	2268
Grand Total	413	1082	0	1495	0	0	0	0	0	1166	944	2110	388	19	766	1173	4778
Apprch %	27.6	72.4	0		0	0	0		0	55.3	44.7		33.1	1.6	65.3		
Total %	8.6	22.6	0	31.3	0	0	0	0	0	24.4	19.8	44.2	8.1	0.4	16	24.6	
Passenger Vehicles	405	1069	0	1474	0	0	0	0	0	1105	918	2023	328	18	726	1072	4569
% Passenger Vehicles	98.1	98.8	0	98.6	0	0	0	0	0	94.8	97.2	95.9	84.5	94.7	94.8	91.4	95.6
Large 2 Axle Vehicles	3	10	0	13	0	0	0	0	0	39	11	50	4	0	20	24	87
% Large 2 Axle Vehicles	0.7	0.9	0	0.9	0	0	0	0	0	3.3	1.2	2.4	1	0	2.6	2	1.8
3 Axle Vehicles	1	2	0	3	0	0	0	0	0	5	10	15	10	0	5	15	33
% 3 Axle Vehicles	0.2	0.2	0	0.2	0	0	0	0	0	0.4	1.1	0.7	2.6	0	0.7	1.3	0.7
4+ Axle Trucks	4	1	0	5	0	0	0	0	0	17	5	22	46	1	15	62	89
% 4+ Axle Trucks	1	0.1	0	0.3	0	0	0	0	0	1.5	0.5	1	11.9	5.3	2	5.3	1.9

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	57	139	0	196	0	0	0	0	0	176	142	318	55	3	101	159	673
04:15 PM	59	129	0	188	0	0	0	0	0	140	129	269	56	1	100	157	614
04:30 PM	62	130	0	192	0	0	0	0	0	140	123	263	46	3	96	145	600
04:45 PM	57	149	0	206	0	0	0	0	0	146	128	274	46	4	93	143	623
Total Volume	235	547	0	782	0	0	0	0	0	602	522	1124	203	11	390	604	2510
% App. Total	30.1	69.9	0		0	0	0		0	53.6	46.4		33.6	1.8	64.6		
PHF	.948	.918	.000	.949	.000	.000	.000	.000	.000	.855	.919	.884	.906	.688	.965	.950	.932

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

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

	04:30 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	62	130	0	192	0	0	0	0	0	176	142	318	55	3	101	159
+15 mins.	57	149	0	206	0	0	0	0	0	140	129	269	56	1	100	157
+30 mins.	70	137	0	207	0	0	0	0	0	140	123	263	46	3	96	145
+45 mins.	48	142	0	190	0	0	0	0	0	146	128	274	46	4	93	143
Total Volume	237	558	0	795	0	0	0	0	0	602	522	1124	203	11	390	604
% App. Total	29.8	70.2	0		0	0	0		0	53.6	46.4		33.6	1.8	64.6	
PHF	.846	.936	.000	.960	.000	.000	.000	.000	.000	.855	.919	.884	.906	.688	.965	.950

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
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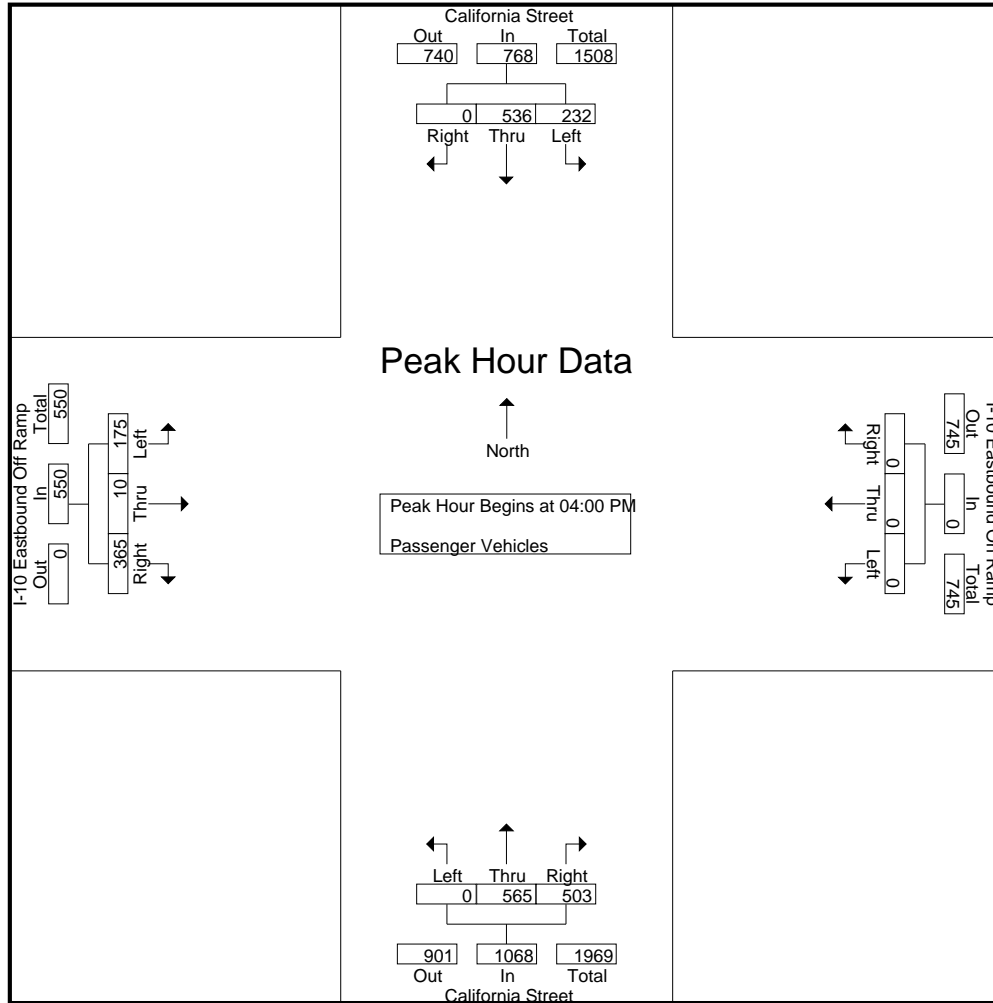
Groups Printed- Passenger Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	56	136	0	192	0	0	0	0	0	170	138	308	44	2	93	139	639
04:15 PM	59	126	0	185	0	0	0	0	0	131	124	255	53	1	93	147	587
04:30 PM	60	127	0	187	0	0	0	0	0	127	120	247	39	3	90	132	566
04:45 PM	57	147	0	204	0	0	0	0	0	137	121	258	39	4	89	132	594
Total	232	536	0	768	0	0	0	0	0	565	503	1068	175	10	365	550	2386
05:00 PM	67	137	0	204	0	0	0	0	0	150	121	271	43	2	96	141	616
05:15 PM	47	141	0	188	0	0	0	0	0	160	109	269	31	2	88	121	578
05:30 PM	29	130	0	159	0	0	0	0	0	111	99	210	39	3	88	130	499
05:45 PM	30	125	0	155	0	0	0	0	0	119	86	205	40	1	89	130	490
Total	173	533	0	706	0	0	0	0	0	540	415	955	153	8	361	522	2183
Grand Total	405	1069	0	1474	0	0	0	0	0	1105	918	2023	328	18	726	1072	4569
Apprch %	27.5	72.5	0		0	0	0		0	54.6	45.4		30.6	1.7	67.7		
Total %	8.9	23.4	0	32.3	0	0	0	0	0	24.2	20.1	44.3	7.2	0.4	15.9	23.5	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	56	136	0	192	0	0	0	0	0	170	138	308	44	2	93	139	639
04:15 PM	59	126	0	185	0	0	0	0	0	131	124	255	53	1	93	147	587
04:30 PM	60	127	0	187	0	0	0	0	0	127	120	247	39	3	90	132	566
04:45 PM	57	147	0	204	0	0	0	0	0	137	121	258	39	4	89	132	594
Total Volume	232	536	0	768	0	0	0	0	0	565	503	1068	175	10	365	550	2386
% App. Total	30.2	69.8	0		0	0	0		0	52.9	47.1		31.8	1.8	66.4		
PHF	.967	.912	.000	.941	.000	.000	.000	.000	.000	.831	.911	.867	.825	.625	.981	.935	.933

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	56	136	0	192	0	0	0	0	0	170	138	308	44	2	93	139
+15 mins.	59	126	0	185	0	0	0	0	0	131	124	255	53	1	93	147
+30 mins.	60	127	0	187	0	0	0	0	0	127	120	247	39	3	90	132
+45 mins.	57	147	0	204	0	0	0	0	0	137	121	258	39	4	89	132
Total Volume	232	536	0	768	0	0	0	0	0	565	503	1068	175	10	365	550
% App. Total	30.2	69.8	0		0	0	0		0	52.9	47.1		31.8	1.8	66.4	
PHF	.967	.912	.000	.941	.000	.000	.000	.000	.000	.831	.911	.867	.825	.625	.981	.935

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

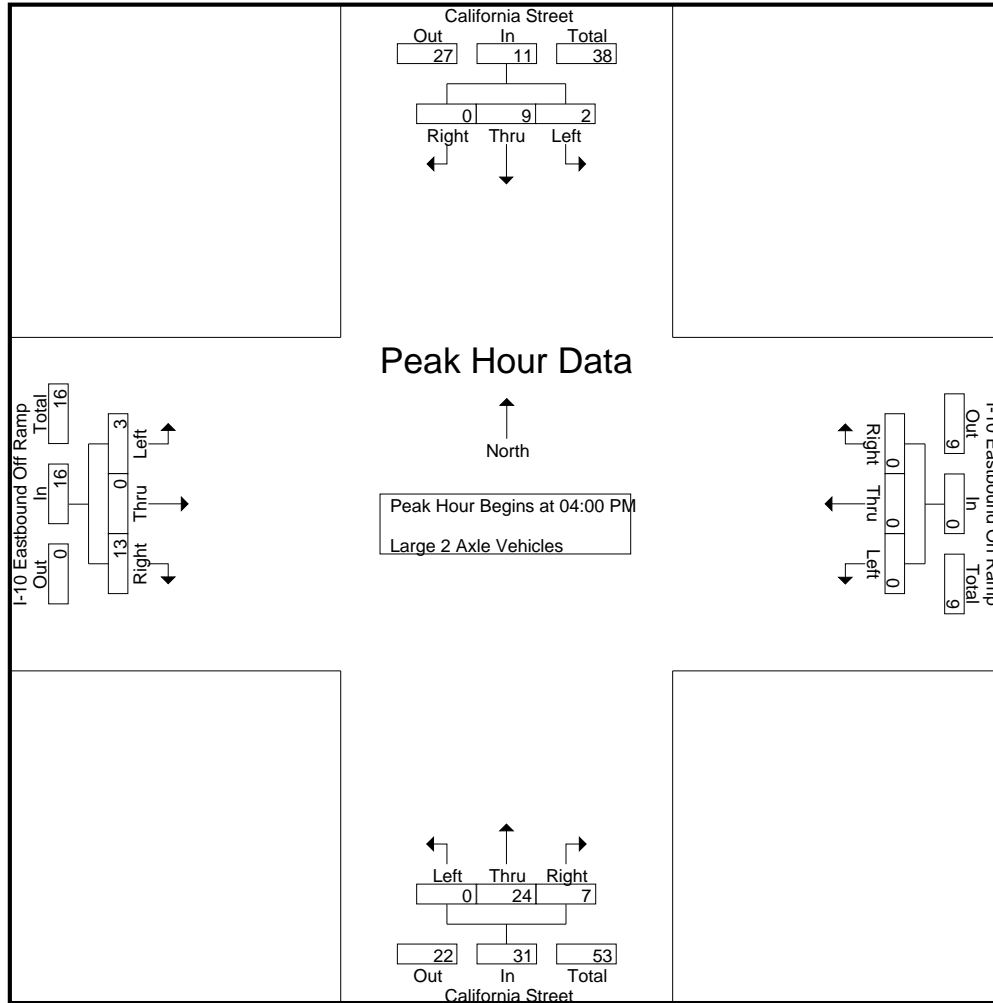
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	3	0	4	0	0	0	0	0	3	3	6	2	0	4	6	16
04:15 PM	0	3	0	3	0	0	0	0	0	6	1	7	0	0	3	3	13
04:30 PM	1	2	0	3	0	0	0	0	0	9	2	11	1	0	4	5	19
04:45 PM	0	1	0	1	0	0	0	0	0	6	1	7	0	0	2	2	10
Total	2	9	0	11	0	0	0	0	0	24	7	31	3	0	13	16	58
05:00 PM	1	0	0	1	0	0	0	0	0	1	3	4	0	0	3	3	8
05:15 PM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
05:30 PM	0	0	0	0	0	0	0	0	0	5	0	5	1	0	3	4	9
05:45 PM	0	0	0	0	0	0	0	0	0	3	1	4	0	0	1	1	5
Total	1	1	0	2	0	0	0	0	0	15	4	19	1	0	7	8	29
Grand Total	3	10	0	13	0	0	0	0	0	39	11	50	4	0	20	24	87
Apprch %	23.1	76.9	0		0	0	0		0	78	22		16.7	0	83.3		
Total %	3.4	11.5	0	14.9	0	0	0	0	0	44.8	12.6	57.5	4.6	0	23	27.6	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	3	0	4	0	0	0	0	0	3	3	6	2	0	4	6	16
04:15 PM	0	3	0	3	0	0	0	0	0	6	1	7	0	0	3	3	13
04:30 PM	1	2	0	3	0	0	0	0	0	9	2	11	1	0	4	5	19
04:45 PM	0	1	0	1	0	0	0	0	0	6	1	7	0	0	2	2	10
Total Volume	2	9	0	11	0	0	0	0	0	24	7	31	3	0	13	16	58
% App. Total	18.2	81.8	0		0	0	0		0	77.4	22.6		18.8	0	81.2		
PHF	.500	.750	.000	.688	.000	.000	.000	.000	.000	.667	.583	.705	.375	.000	.813	.667	.763

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	3	0	4	0	0	0	0	0	3	3	6	2	0	4	6
+15 mins.	0	3	0	3	0	0	0	0	0	6	1	7	0	0	3	3
+30 mins.	1	2	0	3	0	0	0	0	0	9	2	11	1	0	4	5
+45 mins.	0	1	0	1	0	0	0	0	0	6	1	7	0	0	2	2
Total Volume	2	9	0	11	0	0	0	0	0	24	7	31	3	0	13	16
% App. Total	18.2	81.8	0		0	0	0		0	77.4	22.6		18.8	0	81.2	
PHF	.500	.750	.000	.688	.000	.000	.000	.000	.000	.667	.583	.705	.375	.000	.813	.667

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

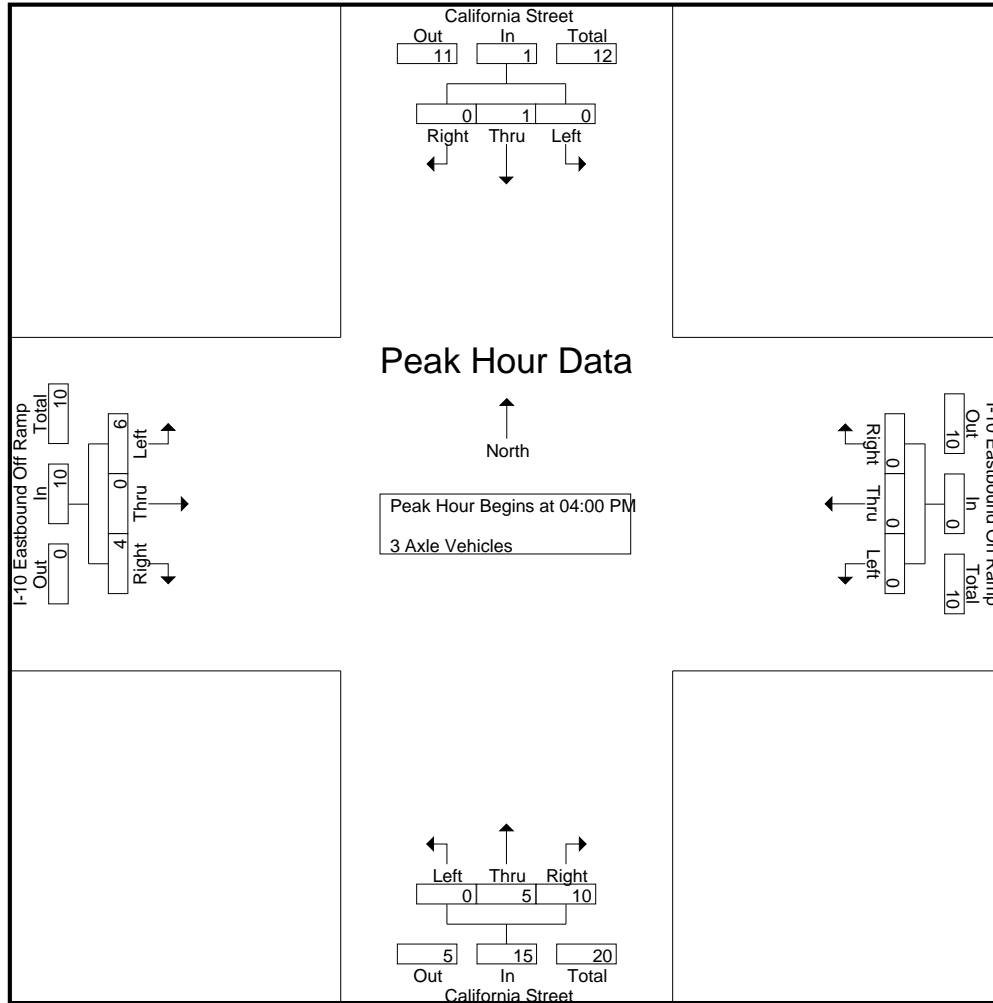
Groups Printed- 3 Axle Vehicles

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	2	0	1	3	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	3	3	2	0	2	4	7
04:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	3	5	8	1	0	1	2	11
Total	0	1	0	1	0	0	0	0	0	5	10	15	6	0	4	10	26
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:45 PM	1	1	0	2	0	0	0	0	0	0	0	0	3	0	0	3	5
Total	1	1	0	2	0	0	0	0	0	0	0	0	4	0	1	5	7
Grand Total	1	2	0	3	0	0	0	0	0	5	10	15	10	0	5	15	33
Apprch %	33.3	66.7	0		0	0	0		0	33.3	66.7		66.7	0	33.3		
Total %	3	6.1	0	9.1	0	0	0	0	0	15.2	30.3	45.5	30.3	0	15.2	45.5	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	1	1	2	2	0	1	3	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	3	3	2	0	2	4	7
04:30 PM	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	3	5	8	1	0	1	2	11
Total Volume	0	1	0	1	0	0	0	0	0	5	10	15	6	0	4	10	26
% App. Total	0	100	0		0	0	0		0	33.3	66.7		60	0	40		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.417	.500	.469	.750	.000	.500	.625	.591

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	1	2	2	0	1	3
+15 mins.	0	0	0	0	0	0	0	0	0	0	3	3	2	0	2	4
+30 mins.	0	0	0	0	0	0	0	0	0	1	1	2	1	0	0	1
+45 mins.	0	1	0	1	0	0	0	0	0	3	5	8	1	0	1	2
Total Volume	0	1	0	1	0	0	0	0	0	5	10	15	6	0	4	10
% App. Total	0	100	0		0	0	0		0	33.3	66.7		60	0	40	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.417	.500	.469	.750	.000	.500	.625

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

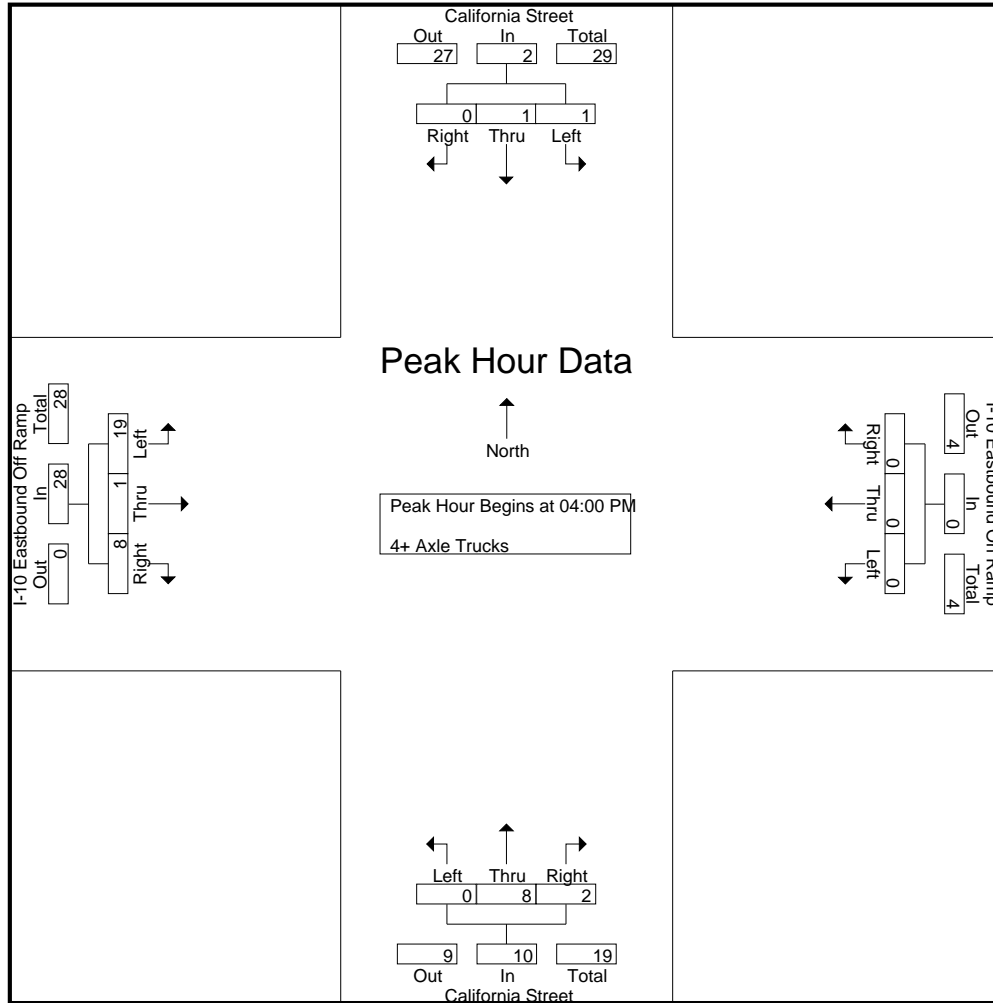
Groups Printed- 4+ Axle Trucks

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	7	1	3	11	13
04:15 PM	0	0	0	0	0	0	0	0	0	3	1	4	1	0	2	3	7
04:30 PM	1	1	0	2	0	0	0	0	0	3	0	3	5	0	2	7	12
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	6	0	1	7	8
Total	1	1	0	2	0	0	0	0	0	8	2	10	19	1	8	28	40
05:00 PM	2	0	0	2	0	0	0	0	0	3	0	3	4	0	3	7	12
05:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	10	0	0	10	13
05:30 PM	0	0	0	0	0	0	0	0	0	4	2	6	3	0	2	5	11
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	10	0	2	12	13
Total	3	0	0	3	0	0	0	0	0	9	3	12	27	0	7	34	49
Grand Total	4	1	0	5	0	0	0	0	0	17	5	22	46	1	15	62	89
Apprch %	80	20	0		0	0	0		0	77.3	22.7		74.2	1.6	24.2		
Total %	4.5	1.1	0	5.6	0	0	0	0	0	19.1	5.6	24.7	51.7	1.1	16.9	69.7	

	California Street Southbound				I-10 Eastbound On Ramp Westbound				California Street Northbound				I-10 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	0	0	0	2	0	2	7	1	3	11	13
04:15 PM	0	0	0	0	0	0	0	0	0	3	1	4	1	0	2	3	7
04:30 PM	1	1	0	2	0	0	0	0	0	3	0	3	5	0	2	7	12
04:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	6	0	1	7	8
Total Volume	1	1	0	2	0	0	0	0	0	8	2	10	19	1	8	28	40
% App. Total	50	50	0		0	0	0		0	80	20		67.9	3.6	28.6		
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.667	.500	.625	.679	.250	.667	.636	.769

City of Redlands
N/S: California Street
E/W: I-10 Eastbound Ramps
Weather: Clear

File Name : 02_RED_Cali_10E PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



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

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	2	0	2	7	1	3	11
+15 mins.	0	0	0	0	0	0	0	0	0	3	1	4	1	0	2	3
+30 mins.	1	1	0	2	0	0	0	0	0	3	0	3	5	0	2	7
+45 mins.	0	0	0	0	0	0	0	0	0	0	1	1	6	0	1	7
Total Volume	1	1	0	2	0	0	0	0	0	8	2	10	19	1	8	28
% App. Total	50	50	0		0	0	0		0	80	20		67.9	3.6	28.6	
PHF	.250	.250	.000	.250	.000	.000	.000	.000	.000	.667	.500	.625	.679	.250	.667	.636

Location: Redlands
 N/S: California Street
 E/W: I-10 EB Ramps



Date: 4/2/2024
 Day: Tuesday

PEDESTRIANS

		North Leg California Street Pedestrians	East Leg I-10 EB Ramps Pedestrians	South Leg California Street Pedestrians	West Leg I-10 EB Ramps Pedestrians	
	7:00 AM	0	0	0	1	1
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	2	0	1	3
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	0	0	0
	8:30 AM	0	1	0	0	1
	8:45 AM	0	1	0	0	1
	TOTAL VOLUMES:	0	4	0	2	6

		North Leg California Street Pedestrians	East Leg I-10 EB Ramps Pedestrians	South Leg California Street Pedestrians	West Leg I-10 EB Ramps Pedestrians	
	4:00 PM	0	0	0	0	0
	4:15 PM	0	1	0	0	1
	4:30 PM	0	0	0	0	0
	4:45 PM	0	2	0	0	2
	5:00 PM	0	3	0	0	3
	5:15 PM	0	3	0	1	4
	5:30 PM	0	3	0	0	3
	5:45 PM	0	0	0	0	0
	TOTAL VOLUMES:	0	12	0	1	13

Location: Redlands
 N/S: California Street
 E/W: I-10 EB Ramps



Date: 4/2/2024
 Day: Tuesday

BICYCLES

	Southbound California Street			Westbound I-10 EB Ramps			Northbound California Street			Eastbound I-10 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	1	1

	Southbound California Street			Westbound I-10 EB Ramps			Northbound California Street			Eastbound I-10 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	1
5:15 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	1	0	0	0	0	0	1	0	0	0	0	2
TOTAL VOLUMES:	0	4	0	0	0	0	1	3	0	0	0	0	8

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

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

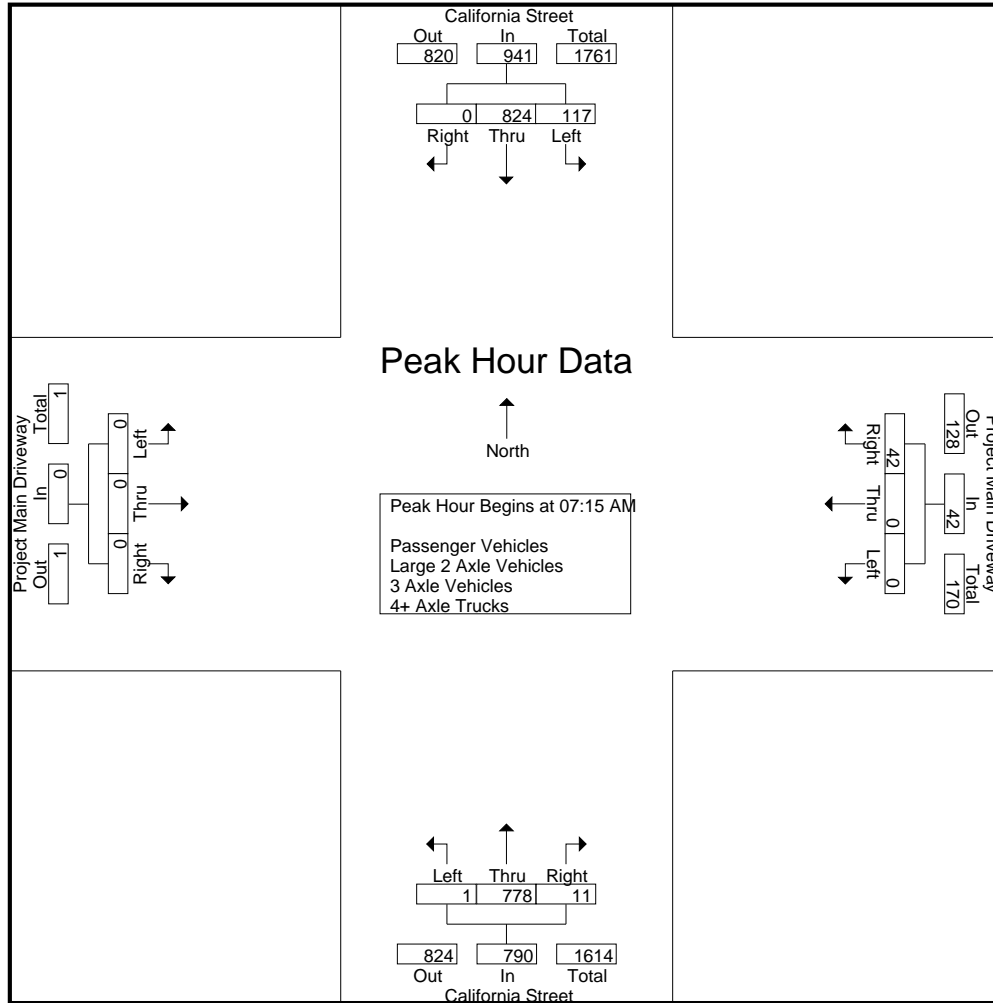
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	29	181	0	210	0	0	10	10	0	144	1	145	0	0	0	0	365
07:15 AM	31	219	0	250	0	0	14	14	0	174	2	176	0	0	0	0	440
07:30 AM	36	190	0	226	0	0	11	11	0	213	3	216	0	0	0	0	453
07:45 AM	21	230	0	251	0	0	10	10	1	202	5	208	0	0	0	0	469
Total	117	820	0	937	0	0	45	45	1	733	11	745	0	0	0	0	1727
08:00 AM	29	185	0	214	0	0	7	7	0	189	1	190	0	0	0	0	411
08:15 AM	37	191	0	228	1	0	10	11	0	170	4	174	0	0	0	0	413
08:30 AM	35	185	0	220	0	0	11	11	0	163	4	167	0	0	0	0	398
08:45 AM	43	191	0	234	0	0	10	10	0	152	2	154	0	0	0	0	398
Total	144	752	0	896	1	0	38	39	0	674	11	685	0	0	0	0	1620
Grand Total	261	1572	0	1833	1	0	83	84	1	1407	22	1430	0	0	0	0	3347
Apprch %	14.2	85.8	0		1.2	0	98.8		0.1	98.4	1.5		0	0	0		
Total %	7.8	47	0	54.8	0	0	2.5	2.5	0	42	0.7	42.7	0	0	0	0	
Passenger Vehicles	244	1506	0	1750	1	0	80	81	1	1342	21	1364	0	0	0	0	3195
% Passenger Vehicles	93.5	95.8	0	95.5	100	0	96.4	96.4	100	95.4	95.5	95.4	0	0	0	0	95.5
Large 2 Axle Vehicles	15	35	0	50	0	0	2	2	0	35	1	36	0	0	0	0	88
% Large 2 Axle Vehicles	5.7	2.2	0	2.7	0	0	2.4	2.4	0	2.5	4.5	2.5	0	0	0	0	2.6
3 Axle Vehicles	0	4	0	4	0	0	0	0	0	9	0	9	0	0	0	0	13
% 3 Axle Vehicles	0	0.3	0	0.2	0	0	0	0	0	0.6	0	0.6	0	0	0	0	0.4
4+ Axle Trucks	2	27	0	29	0	0	1	1	0	21	0	21	0	0	0	0	51
% 4+ Axle Trucks	0.8	1.7	0	1.6	0	0	1.2	1.2	0	1.5	0	1.5	0	0	0	0	1.5

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	31	219	0	250	0	0	14	14	0	174	2	176	0	0	0	0	440
07:30 AM	36	190	0	226	0	0	11	11	0	213	3	216	0	0	0	0	453
07:45 AM	21	230	0	251	0	0	10	10	1	202	5	208	0	0	0	0	469
08:00 AM	29	185	0	214	0	0	7	7	0	189	1	190	0	0	0	0	411
Total Volume	117	824	0	941	0	0	42	42	1	778	11	790	0	0	0	0	1773
% App. Total	12.4	87.6	0		0	0	100		0.1	98.5	1.4		0	0	0		
PHF	.813	.896	.000	.937	.000	.000	.750	.750	.250	.913	.550	.914	.000	.000	.000	.000	.945

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	31	219	0	250	0	0	10	10	0	174	2	176	0	0	0	0
+15 mins.	36	190	0	226	0	0	14	14	0	213	3	216	0	0	0	0
+30 mins.	21	230	0	251	0	0	11	11	1	202	5	208	0	0	0	0
+45 mins.	29	185	0	214	0	0	10	10	0	189	1	190	0	0	0	0
Total Volume	117	824	0	941	0	0	45	45	1	778	11	790	0	0	0	0
% App. Total	12.4	87.6	0		0	0	100		0.1	98.5	1.4		0	0	0	
PHF	.813	.896	.000	.937	.000	.000	.804	.804	.250	.913	.550	.914	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
Start Date : 4/2/2024
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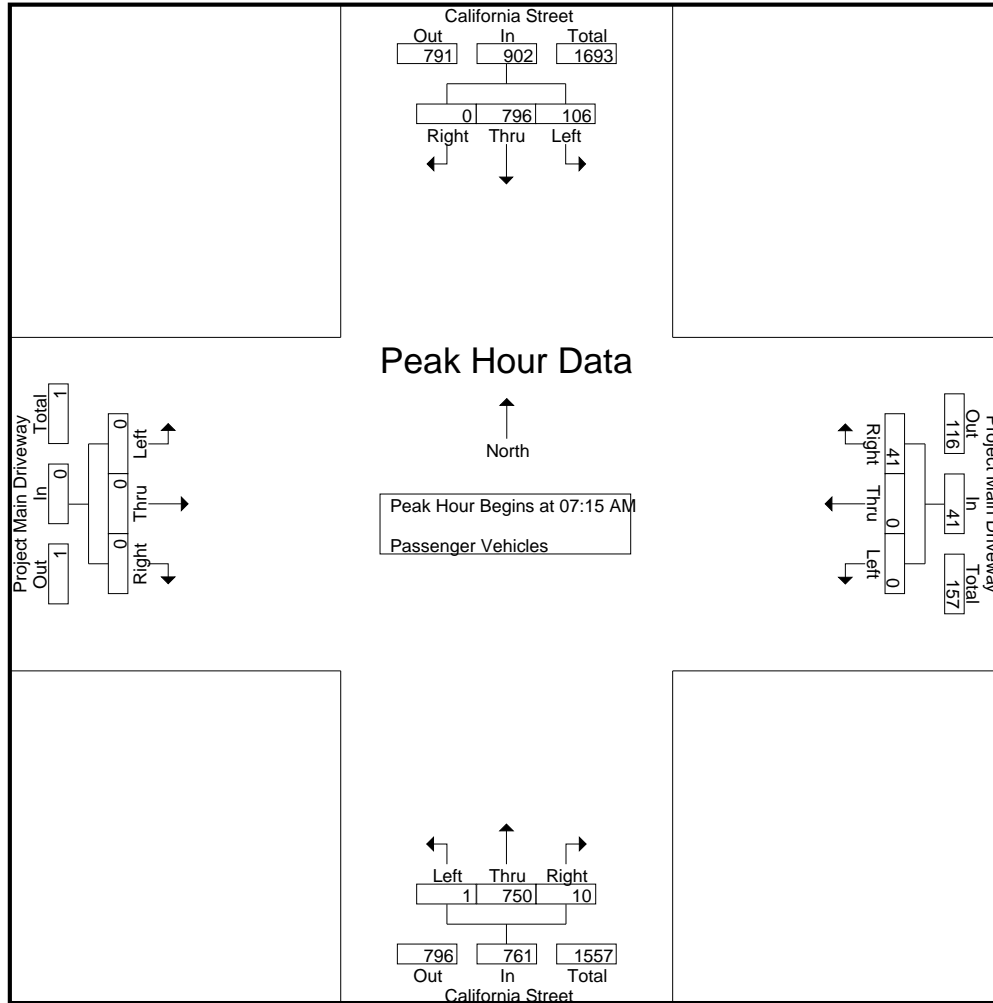
Groups Printed- Passenger Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	29	167	0	196	0	0	9	9	0	136	1	137	0	0	0	0	342
07:15 AM	26	208	0	234	0	0	14	14	0	168	2	170	0	0	0	0	418
07:30 AM	32	187	0	219	0	0	11	11	0	207	3	210	0	0	0	0	440
07:45 AM	20	224	0	244	0	0	10	10	1	191	4	196	0	0	0	0	450
Total	107	786	0	893	0	0	44	44	1	702	10	713	0	0	0	0	1650
08:00 AM	28	177	0	205	0	0	6	6	0	184	1	185	0	0	0	0	396
08:15 AM	37	180	0	217	1	0	10	11	0	158	4	162	0	0	0	0	390
08:30 AM	32	176	0	208	0	0	11	11	0	154	4	158	0	0	0	0	377
08:45 AM	40	187	0	227	0	0	9	9	0	144	2	146	0	0	0	0	382
Total	137	720	0	857	1	0	36	37	0	640	11	651	0	0	0	0	1545
Grand Total	244	1506	0	1750	1	0	80	81	1	1342	21	1364	0	0	0	0	3195
Apprch %	13.9	86.1	0		1.2	0	98.8		0.1	98.4	1.5		0	0	0		
Total %	7.6	47.1	0	54.8	0	0	2.5	2.5	0	42	0.7	42.7	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	26	208	0	234	0	0	14	14	0	168	2	170	0	0	0	0	418
07:30 AM	32	187	0	219	0	0	11	11	0	207	3	210	0	0	0	0	440
07:45 AM	20	224	0	244	0	0	10	10	1	191	4	196	0	0	0	0	450
08:00 AM	28	177	0	205	0	0	6	6	0	184	1	185	0	0	0	0	396
Total Volume	106	796	0	902	0	0	41	41	1	750	10	761	0	0	0	0	1704
% App. Total	11.8	88.2	0		0	0	100		0.1	98.6	1.3		0	0	0		
PHF	.828	.888	.000	.924	.000	.000	.732	.732	.250	.906	.625	.906	.000	.000	.000	.000	.947

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	26	208	0	234	0	0	14	14	0	168	2	170	0	0	0	0
+15 mins.	32	187	0	219	0	0	11	11	0	207	3	210	0	0	0	0
+30 mins.	20	224	0	244	0	0	10	10	1	191	4	196	0	0	0	0
+45 mins.	28	177	0	205	0	0	6	6	0	184	1	185	0	0	0	0
Total Volume	106	796	0	902	0	0	41	41	1	750	10	761	0	0	0	0
% App. Total	11.8	88.2	0		0	0	100		0.1	98.6	1.3		0	0	0	
PHF	.828	.888	.000	.924	.000	.000	.732	.732	.250	.906	.625	.906	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
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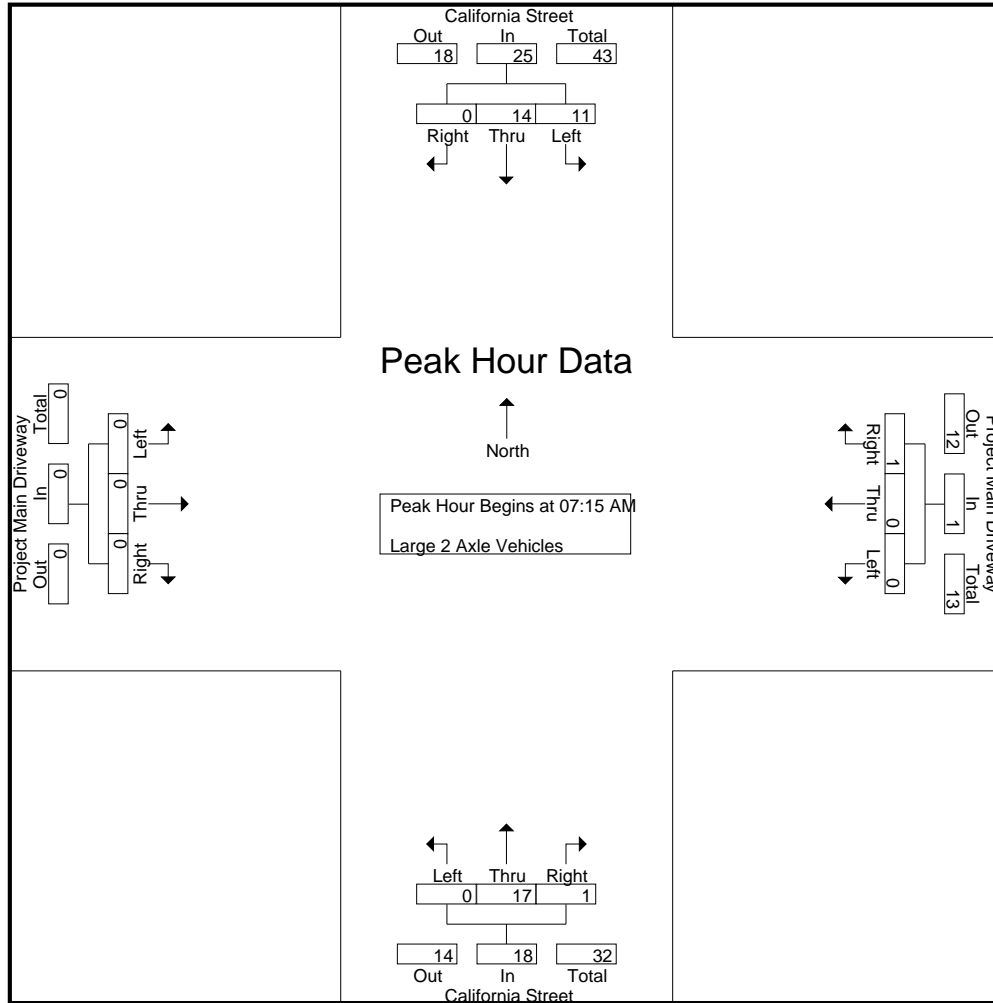
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	0	10	0	0	1	1	0	5	0	5	0	0	0	0	0
07:15 AM	5	6	0	11	0	0	0	0	0	3	0	3	0	0	0	0	16
07:30 AM	4	2	0	6	0	0	0	0	0	3	0	3	0	0	0	0	9
07:45 AM	1	3	0	4	0	0	0	0	0	7	1	8	0	0	0	0	12
Total	10	21	0	31	0	0	1	1	0	18	1	19	0	0	0	0	51
08:00 AM	1	3	0	4	0	0	1	1	0	4	0	4	0	0	0	0	9
08:15 AM	0	4	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
08:30 AM	2	5	0	7	0	0	0	0	0	3	0	3	0	0	0	0	10
08:45 AM	2	2	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
Total	5	14	0	19	0	0	1	1	0	17	0	17	0	0	0	0	37
Grand Total	15	35	0	50	0	0	2	2	0	35	1	36	0	0	0	0	88
Apprch %	30	70	0		0	0	100		0	97.2	2.8		0	0	0		
Total %	17	39.8	0	56.8	0	0	2.3	2.3	0	39.8	1.1	40.9	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	5	6	0	11	0	0	0	0	0	3	0	3	0	0	0	0	14
07:30 AM	4	2	0	6	0	0	0	0	0	3	0	3	0	0	0	0	9
07:45 AM	1	3	0	4	0	0	0	0	0	7	1	8	0	0	0	0	12
08:00 AM	1	3	0	4	0	0	1	1	0	4	0	4	0	0	0	0	9
Total Volume	11	14	0	25	0	0	1	1	0	17	1	18	0	0	0	0	44
% App. Total	44	56	0		0	0	100		0	94.4	5.6		0	0	0		
PHF	.550	.583	.000	.568	.000	.000	.250	.250	.000	.607	.250	.563	.000	.000	.000	.000	.786

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	5	6	0	11	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	4	2	0	6	0	0	0	0	0	3	0	3	0	0	0	0
+30 mins.	1	3	0	4	0	0	0	0	0	7	1	8	0	0	0	0
+45 mins.	1	3	0	4	0	0	1	1	0	4	0	4	0	0	0	0
Total Volume	11	14	0	25	0	0	1	1	0	17	1	18	0	0	0	0
% App. Total	44	56	0		0	0	100		0	94.4	5.6		0	0	0	
PHF	.550	.583	.000	.568	.000	.000	.250	.250	.000	.607	.250	.563	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
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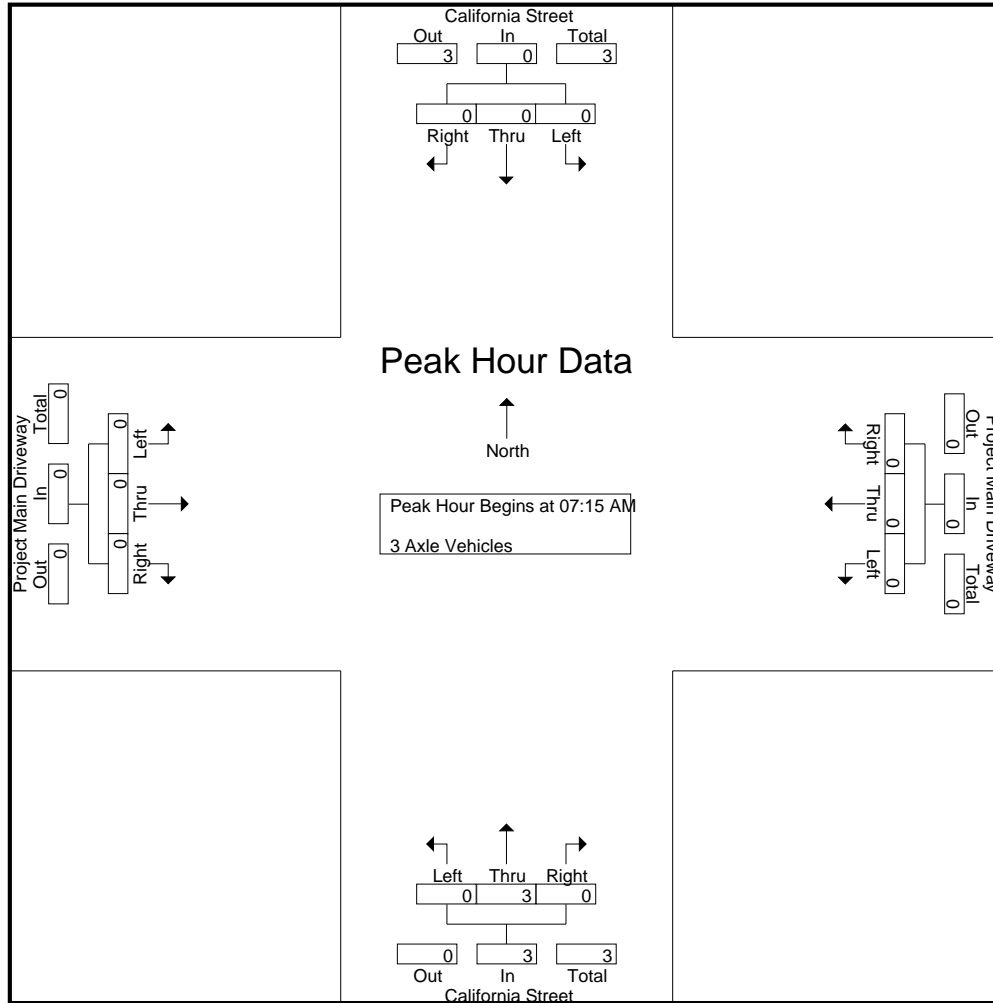
Groups Printed- 3 Axle Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	1	0	1	0	0	0	0	0	4	0	4	0	0	0	0	5
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
08:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	3	0	3	0	0	0	0	0	6	0	6	0	0	0	0	9
Grand Total	0	4	0	4	0	0	0	0	0	9	0	9	0	0	0	0	13
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	30.8	0	30.8	0	0	0	0	0	69.2	0	69.2	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
% App. Total	0	0	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.750

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW AM
Site Code : 22524283
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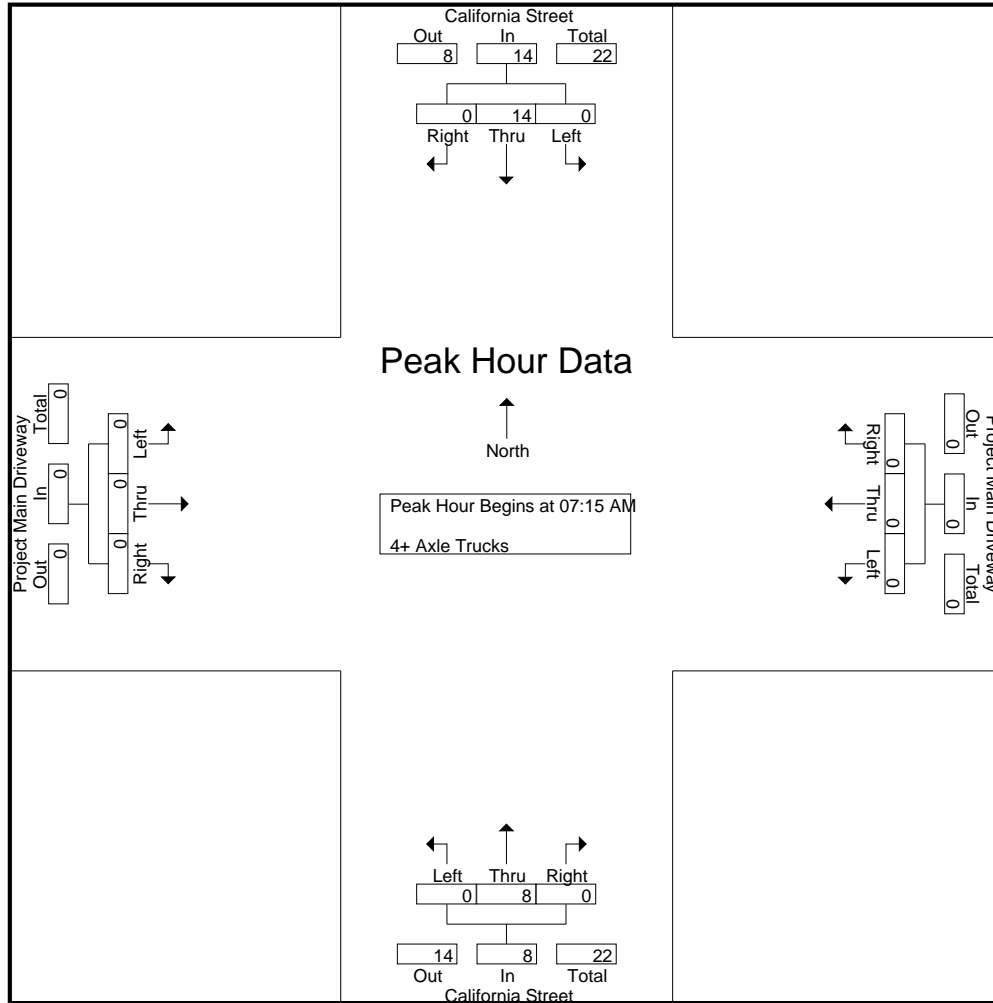
Groups Printed- 4+ Axle Trucks

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
07:15 AM	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
07:30 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:45 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
Total	0	12	0	12	0	0	0	0	0	10	0	10	0	0	0	0	22
08:00 AM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
08:15 AM	0	6	0	6	0	0	0	0	0	3	0	3	0	0	0	0	9
08:30 AM	1	3	0	4	0	0	0	0	0	5	0	5	0	0	0	0	9
08:45 AM	1	1	0	2	0	0	1	1	0	3	0	3	0	0	0	0	6
Total	2	15	0	17	0	0	1	1	0	11	0	11	0	0	0	0	29
Grand Total	2	27	0	29	0	0	1	1	0	21	0	21	0	0	0	0	51
Apprch %	6.9	93.1	0		0	0	100		0	100	0		0	0	0		
Total %	3.9	52.9	0	56.9	0	0	2	2	0	41.2	0	41.2	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
07:30 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:45 AM	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0	7
08:00 AM	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
Total Volume	0	14	0	14	0	0	0	0	0	8	0	8	0	0	0	0	22
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.700	.000	.700	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.786

City of Redlands
N/S: California Street
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Weather: Clear

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	0	4	0	4	0	0	0	0
+45 mins.	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	14	0	14	0	0	0	0	0	8	0	8	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.700	.000	.700	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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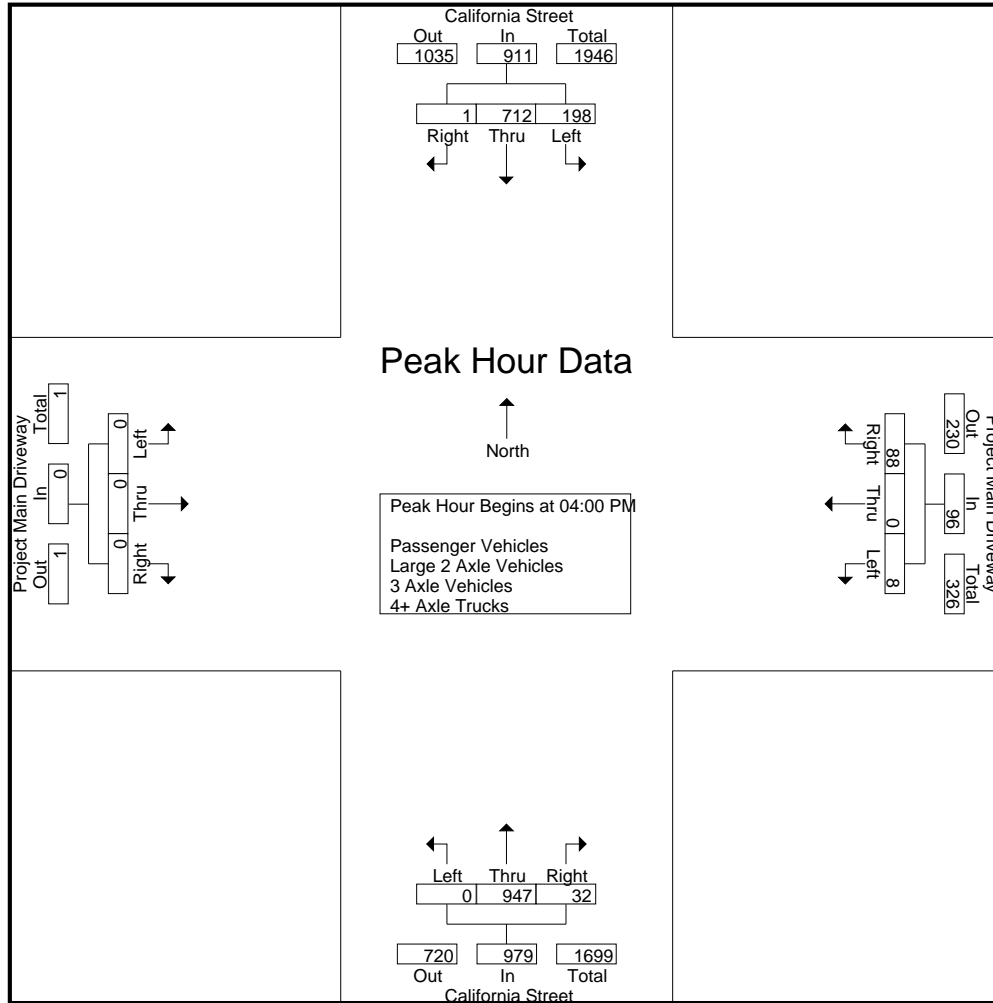
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	51	176	1	228	5	0	22	27	0	272	9	281	0	0	0	0	536
04:15 PM	53	166	0	219	1	0	23	24	0	225	10	235	0	0	0	0	478
04:30 PM	40	176	0	216	1	0	18	19	0	223	5	228	0	0	0	0	463
04:45 PM	54	194	0	248	1	0	25	26	0	227	8	235	0	0	0	0	509
Total	198	712	1	911	8	0	88	96	0	947	32	979	0	0	0	0	1986
05:00 PM	38	193	0	231	1	0	24	25	0	263	7	270	0	0	0	0	526
05:15 PM	41	179	0	220	0	0	32	32	0	220	14	234	0	0	0	0	486
05:30 PM	48	179	0	227	1	0	22	23	0	199	10	209	0	0	0	0	459
05:45 PM	42	172	0	214	6	1	27	34	0	177	11	188	0	0	0	0	436
Total	169	723	0	892	8	1	105	114	0	859	42	901	0	0	0	0	1907
Grand Total	367	1435	1	1803	16	1	193	210	0	1806	74	1880	0	0	0	0	3893
Apprch %	20.4	79.6	0.1		7.6	0.5	91.9		0	96.1	3.9		0	0	0		
Total %	9.4	36.9	0	46.3	0.4	0	5	5.4	0	46.4	1.9	48.3	0	0	0	0	
Passenger Vehicles	360	1400	1	1761	16	1	193	210	0	1735	74	1809	0	0	0	0	3780
% Passenger Vehicles	98.1	97.6	100	97.7	100	100	100	100	0	96.1	100	96.2	0	0	0	0	97.1
Large 2 Axle Vehicles	5	17	0	22	0	0	0	0	0	38	0	38	0	0	0	0	60
% Large 2 Axle Vehicles	1.4	1.2	0	1.2	0	0	0	0	0	2.1	0	2	0	0	0	0	1.5
3 Axle Vehicles	2	2	0	4	0	0	0	0	0	13	0	13	0	0	0	0	17
% 3 Axle Vehicles	0.5	0.1	0	0.2	0	0	0	0	0	0.7	0	0.7	0	0	0	0	0.4
4+ Axle Trucks	0	16	0	16	0	0	0	0	0	20	0	20	0	0	0	0	36
% 4+ Axle Trucks	0	1.1	0	0.9	0	0	0	0	0	1.1	0	1.1	0	0	0	0	0.9

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	51	176	1	228	5	0	22	27	0	272	9	281	0	0	0	0	536
04:15 PM	53	166	0	219	1	0	23	24	0	225	10	235	0	0	0	0	478
04:30 PM	40	176	0	216	1	0	18	19	0	223	5	228	0	0	0	0	463
04:45 PM	54	194	0	248	1	0	25	26	0	227	8	235	0	0	0	0	509
Total Volume	198	712	1	911	8	0	88	96	0	947	32	979	0	0	0	0	1986
% App. Total	21.7	78.2	0.1		8.3	0	91.7		0	96.7	3.3		0	0	0		
PHF	.917	.918	.250	.918	.400	.000	.880	.889	.000	.870	.800	.871	.000	.000	.000	.000	.926

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

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

	04:45 PM				05:00 PM				04:00 PM				04:00 PM			
+0 mins.	54	194	0	248	1	0	24	25	0	272	9	281	0	0	0	0
+15 mins.	38	193	0	231	0	0	32	32	0	225	10	235	0	0	0	0
+30 mins.	41	179	0	220	1	0	22	23	0	223	5	228	0	0	0	0
+45 mins.	48	179	0	227	6	1	27	34	0	227	8	235	0	0	0	0
Total Volume	181	745	0	926	8	1	105	114	0	947	32	979	0	0	0	0
% App. Total	19.5	80.5	0		7	0.9	92.1		0	96.7	3.3		0	0	0	
PHF	.838	.960	.000	.933	.333	.250	.820	.838	.000	.870	.800	.871	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
Site Code : 22524283
Start Date : 4/2/2024
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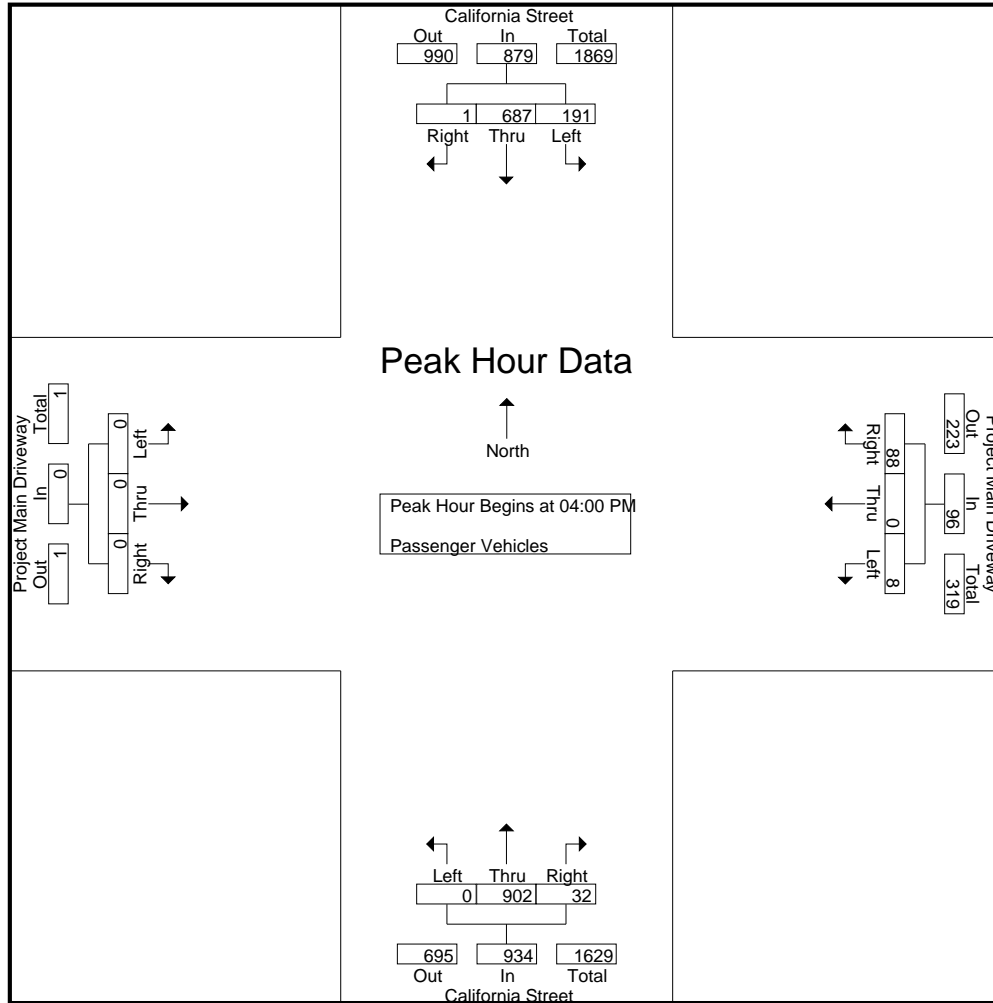
Groups Printed- Passenger Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	51	170	1	222	5	0	22	27	0	261	9	270	0	0	0	0	519
04:15 PM	52	158	0	210	1	0	23	24	0	216	10	226	0	0	0	0	460
04:30 PM	38	169	0	207	1	0	18	19	0	208	5	213	0	0	0	0	439
04:45 PM	50	190	0	240	1	0	25	26	0	217	8	225	0	0	0	0	491
Total	191	687	1	879	8	0	88	96	0	902	32	934	0	0	0	0	1909
05:00 PM	38	189	0	227	1	0	24	25	0	258	7	265	0	0	0	0	517
05:15 PM	41	177	0	218	0	0	32	32	0	213	14	227	0	0	0	0	477
05:30 PM	48	178	0	226	1	0	22	23	0	189	10	199	0	0	0	0	448
05:45 PM	42	169	0	211	6	1	27	34	0	173	11	184	0	0	0	0	429
Total	169	713	0	882	8	1	105	114	0	833	42	875	0	0	0	0	1871
Grand Total	360	1400	1	1761	16	1	193	210	0	1735	74	1809	0	0	0	0	3780
Apprch %	20.4	79.5	0.1		7.6	0.5	91.9		0	95.9	4.1		0	0	0		
Total %	9.5	37	0	46.6	0.4	0	5.1	5.6	0	45.9	2	47.9	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	51	170	1	222	5	0	22	27	0	261	9	270	0	0	0	0	519
04:15 PM	52	158	0	210	1	0	23	24	0	216	10	226	0	0	0	0	460
04:30 PM	38	169	0	207	1	0	18	19	0	208	5	213	0	0	0	0	439
04:45 PM	50	190	0	240	1	0	25	26	0	217	8	225	0	0	0	0	491
Total Volume	191	687	1	879	8	0	88	96	0	902	32	934	0	0	0	0	1909
% App. Total	21.7	78.2	0.1		8.3	0	91.7		0	96.6	3.4		0	0	0		
PHF	.918	.904	.250	.916	.400	.000	.880	.889	.000	.864	.800	.865	.000	.000	.000	.000	.920

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	51	170	1	222	5	0	22	27	0	261	9	270	0	0	0	0
+15 mins.	52	158	0	210	1	0	23	24	0	216	10	226	0	0	0	0
+30 mins.	38	169	0	207	1	0	18	19	0	208	5	213	0	0	0	0
+45 mins.	50	190	0	240	1	0	25	26	0	217	8	225	0	0	0	0
Total Volume	191	687	1	879	8	0	88	96	0	902	32	934	0	0	0	0
% App. Total	21.7	78.2	0.1		8.3	0	91.7		0	96.6	3.4		0	0	0	
PHF	.918	.904	.250	.916	.400	.000	.880	.889	.000	.864	.800	.865	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
Site Code : 22524283
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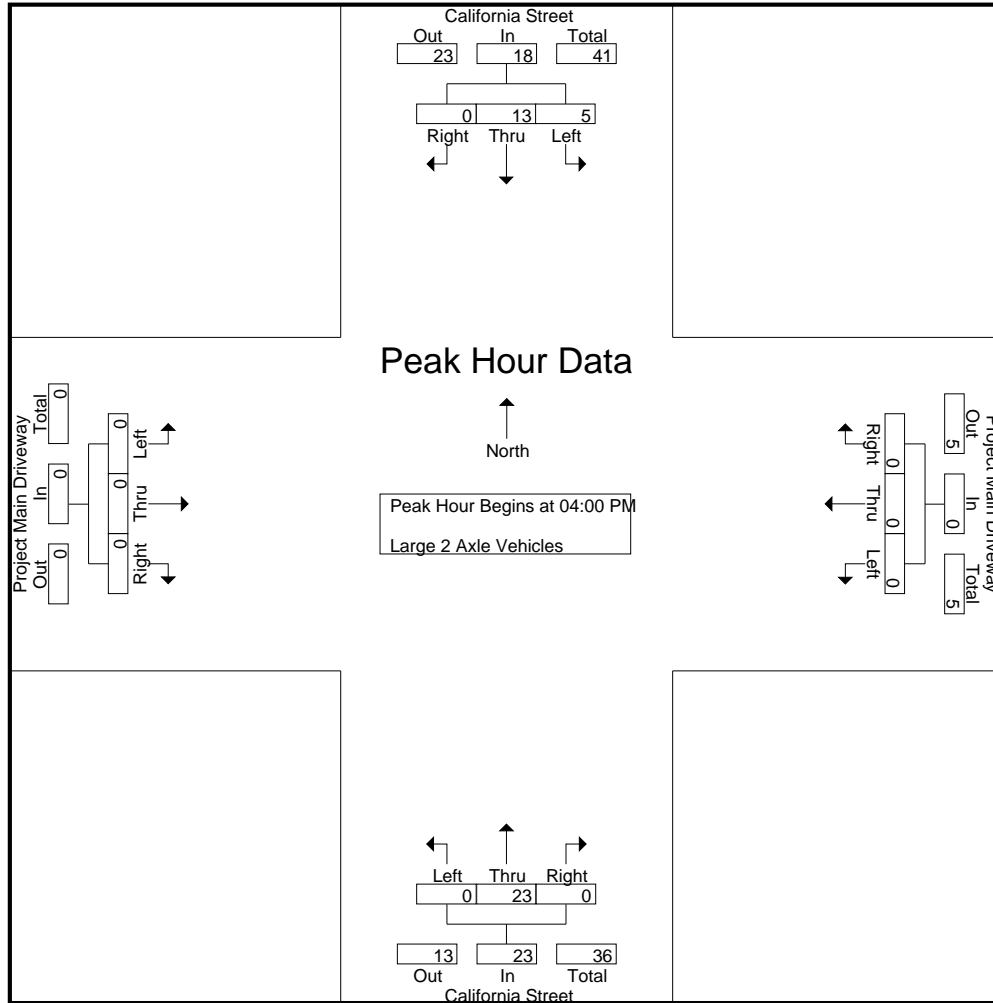
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
04:15 PM	1	5	0	6	0	0	0	0	0	4	0	4	0	0	0	0	10
04:30 PM	2	3	0	5	0	0	0	0	0	10	0	10	0	0	0	0	15
04:45 PM	2	3	0	5	0	0	0	0	0	4	0	4	0	0	0	0	9
Total	5	13	0	18	0	0	0	0	0	23	0	23	0	0	0	0	41
05:00 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
05:15 PM	0	1	0	1	0	0	0	0	0	5	0	5	0	0	0	0	6
05:30 PM	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	4
05:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total	0	4	0	4	0	0	0	0	0	15	0	15	0	0	0	0	19
Grand Total	5	17	0	22	0	0	0	0	0	38	0	38	0	0	0	0	60
Apprch %	22.7	77.3	0		0	0	0		0	100	0		0	0	0		
Total %	8.3	28.3	0	36.7	0	0	0	0	0	63.3	0	63.3	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
04:15 PM	1	5	0	6	0	0	0	0	0	4	0	4	0	0	0	0	10
04:30 PM	2	3	0	5	0	0	0	0	0	10	0	10	0	0	0	0	15
04:45 PM	2	3	0	5	0	0	0	0	0	4	0	4	0	0	0	0	9
Total Volume	5	13	0	18	0	0	0	0	0	23	0	23	0	0	0	0	41
% App. Total	27.8	72.2	0		0	0	0		0	100	0		0	0	0		
PHF	.625	.650	.000	.750	.000	.000	.000	.000	.000	.575	.000	.575	.000	.000	.000	.000	.683

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0
+15 mins.	1	5	0	6	0	0	0	0	0	4	0	4	0	0	0	0
+30 mins.	2	3	0	5	0	0	0	0	0	10	0	10	0	0	0	0
+45 mins.	2	3	0	5	0	0	0	0	0	4	0	4	0	0	0	0
Total Volume	5	13	0	18	0	0	0	0	0	23	0	23	0	0	0	0
% App. Total	27.8	72.2	0		0	0	0		0	100	0		0	0	0	
PHF	.625	.650	.000	.750	.000	.000	.000	.000	.000	.575	.000	.575	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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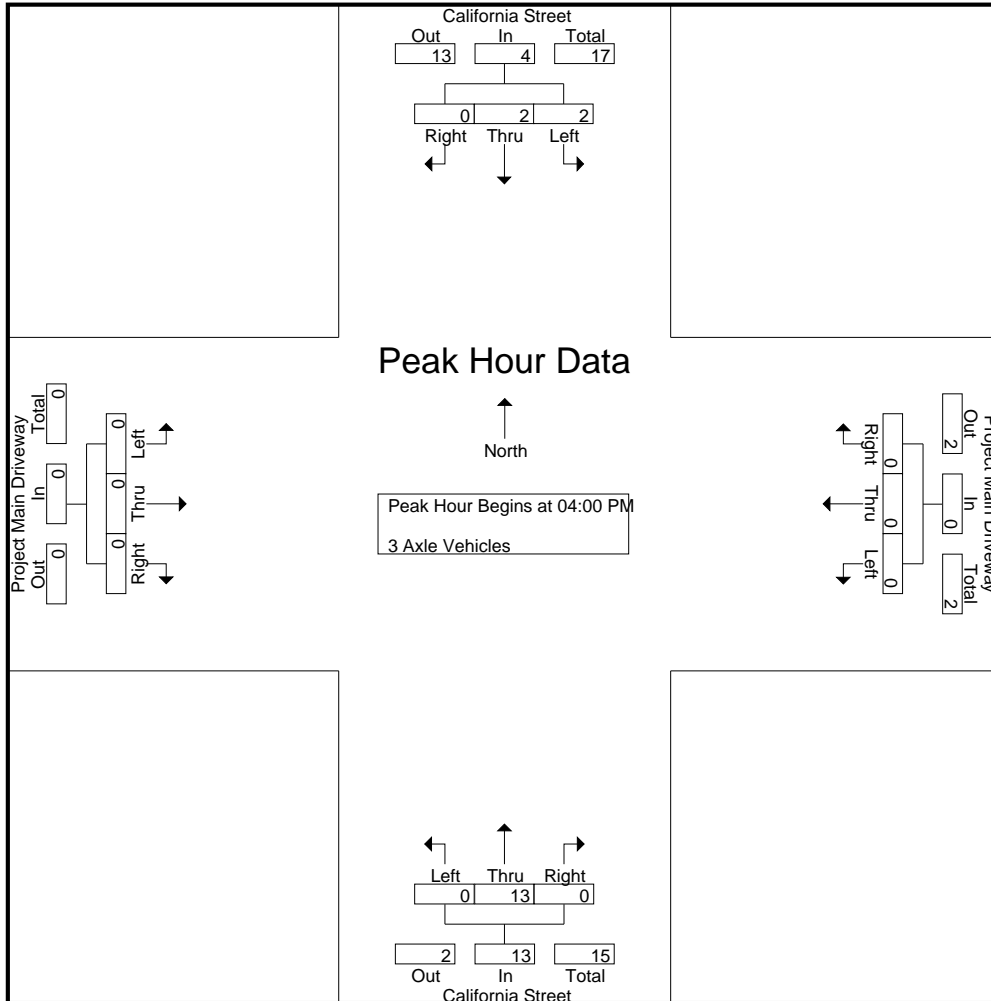
Groups Printed- 3 Axle Vehicles

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:15 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
04:45 PM	2	0	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
Total	2	2	0	4	0	0	0	0	0	13	0	13	0	0	0	0	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	2	0	4	0	0	0	0	0	13	0	13	0	0	0	0	17
Apprch %	50	50	0		0	0	0		0	100	0		0	0	0		
Total %	11.8	11.8	0	23.5	0	0	0	0	0	76.5	0	76.5	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:15 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
04:45 PM	2	0	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
Total Volume	2	2	0	4	0	0	0	0	0	13	0	13	0	0	0	0	17
% App. Total	50	50	0		0	0	0		0	100	0		0	0	0		
PHF	.250	.500	.000	.500	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000	.607

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
+45 mins.	2	0	0	2	0	0	0	0	0	5	0	5	0	0	0	0
Total Volume	2	2	0	4	0	0	0	0	0	13	0	13	0	0	0	0
% App. Total	50	50	0		0	0	0		0	100	0		0	0	0	
PHF	.250	.500	.000	.500	.000	.000	.000	.000	.000	.650	.000	.650	.000	.000	.000	.000

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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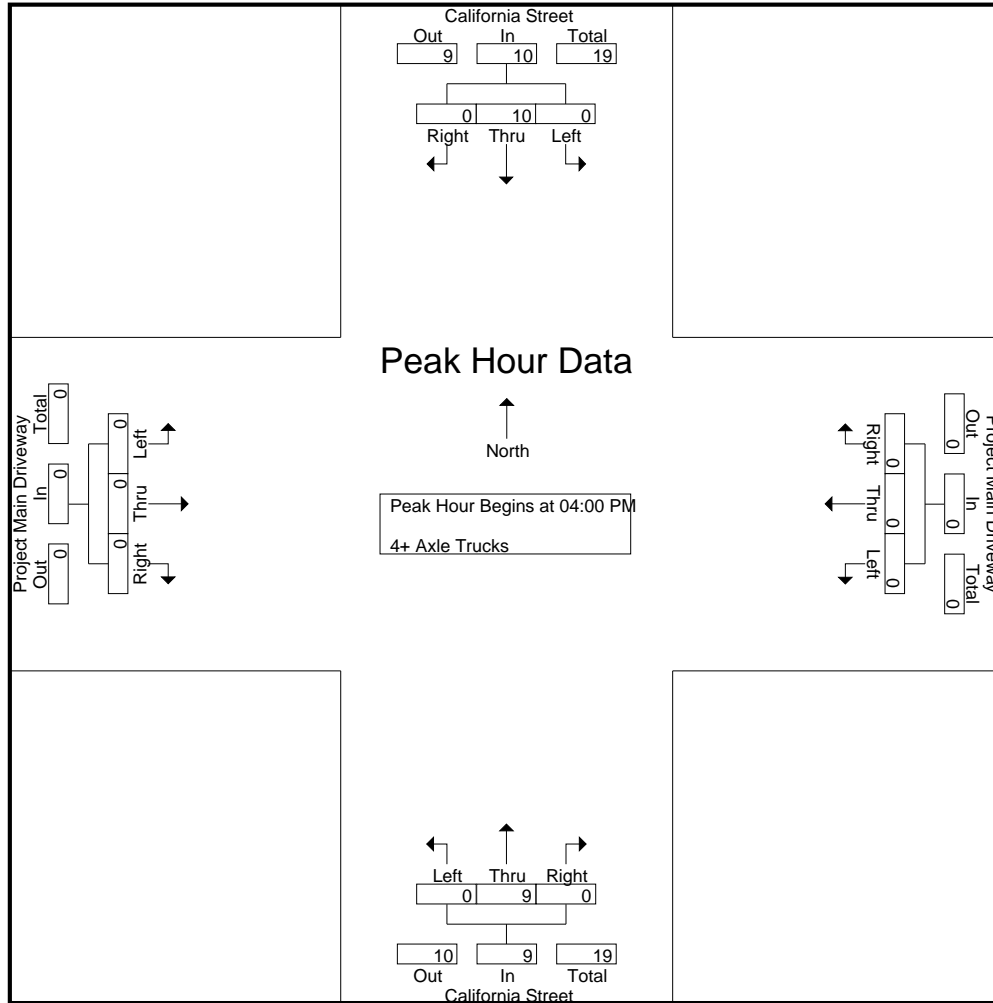
Groups Printed- 4+ Axle Trucks

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
04:15 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:30 PM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	10	0	10	0	0	0	0	0	9	0	9	0	0	0	0	19
05:00 PM	0	2	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
05:15 PM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:30 PM	0	1	0	1	0	0	0	0	0	6	0	6	0	0	0	0	7
05:45 PM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	6	0	6	0	0	0	0	0	11	0	11	0	0	0	0	17
Grand Total	0	16	0	16	0	0	0	0	0	20	0	20	0	0	0	0	36
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	44.4	0	44.4	0	0	0	0	0	55.6	0	55.6	0	0	0	0	

	California Street Southbound				Project Main Driveway Westbound				California Street Northbound				Project Main Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
04:15 PM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
04:30 PM	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0	6
04:45 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total Volume	0	10	0	10	0	0	0	0	0	9	0	9	0	0	0	0	19
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.625	.000	.625	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.792

City of Redlands
N/S: California Street
E/W: Project Main Driveway
Weather: Clear

File Name : 03_RED_Cali_PMDW PM
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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0
+30 mins.	0	4	0	4	0	0	0	0	0	2	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	10	0	10	0	0	0	0	0	9	0	9	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.625	.000	.625	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000

Location: Redlands
 N/S: California Street
 E/W: Project Main Driveway



Date: 4/2/2024
 Day: Tuesday

PEDESTRIANS

		North Leg California Street Pedestrians	East Leg Project Main Driveway Pedestrians	South Leg California Street Pedestrians	West Leg Project Main Driveway Pedestrians	
	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	0	0	0
	8:00 AM	0	1	0	0	1
	8:15 AM	0	0	0	0	0
	8:30 AM	0	1	0	0	1
	8:45 AM	0	0	0	0	0
	TOTAL VOLUMES:	0	2	0	0	2

		North Leg California Street Pedestrians	East Leg Project Main Driveway Pedestrians	South Leg California Street Pedestrians	West Leg Project Main Driveway Pedestrians	
	4:00 PM	0	0	0	0	0
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	0	0	0
	4:45 PM	1	4	0	0	5
	5:00 PM	0	0	0	0	0
	5:15 PM	0	2	0	0	2
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	0	0
	TOTAL VOLUMES:	1	6	0	0	7

Location: Redlands
 N/S: California Street
 E/W: Project Main Driveway



Date: 4/2/2024
 Day: Tuesday

BICYCLES

		Southbound California Street			Westbound Project Main Driveway			Northbound California Street			Eastbound Project Main Driveway			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	1	0	0	0	0	0	0	0	0	0	0	1

		Southbound California Street			Westbound Project Main Driveway			Northbound California Street			Eastbound Project Main Driveway			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	1	0	0	0	1	0	0	0	0	0	0	2
TOTAL VOLUMES:		0	2	0	0	0	1	0	2	0	0	0	0	5

City of Redlands
N/S: California Street
E/W: Redlands Boulevard
Weather: Clear

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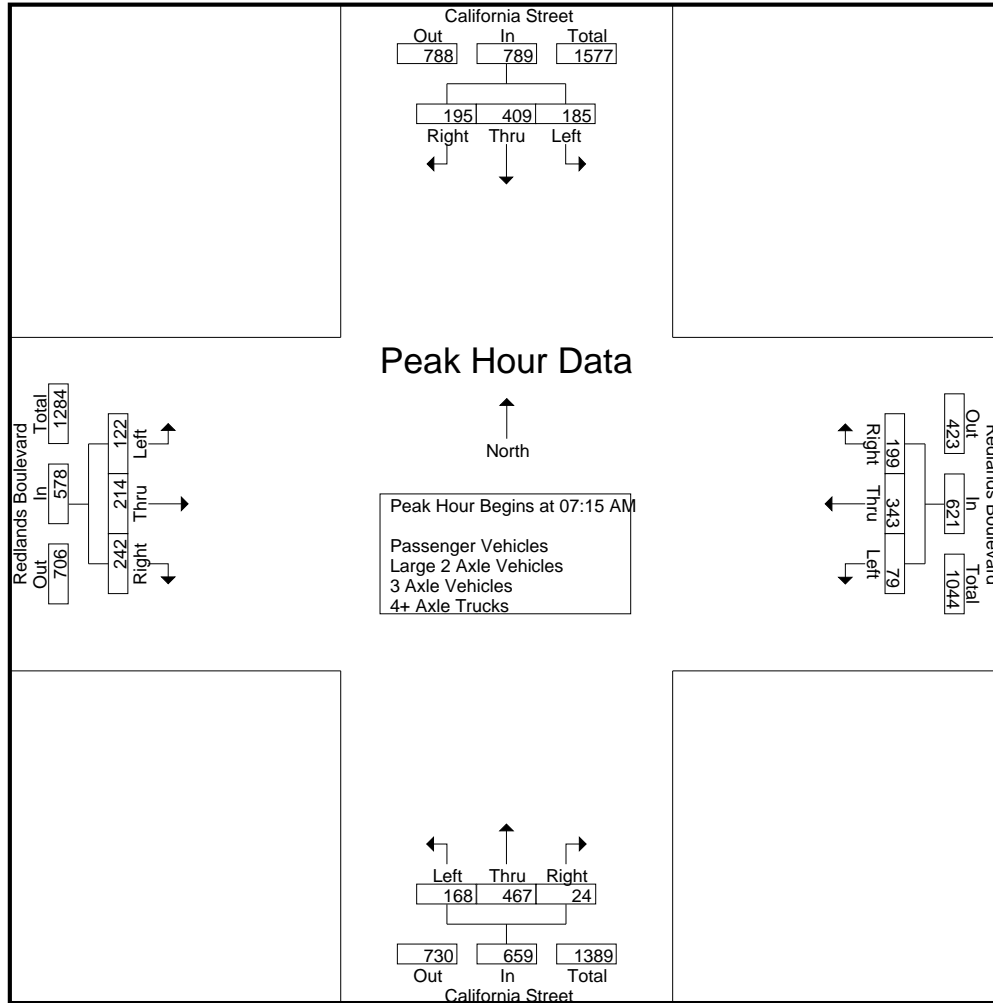
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	37	83	44	164	7	35	24	66	24	91	2	117	19	27	11	57	404
07:15 AM	34	119	56	209	18	53	43	114	28	106	4	138	33	28	32	93	554
07:30 AM	47	96	49	192	31	107	55	193	45	121	2	168	28	41	73	142	695
07:45 AM	59	103	51	213	22	92	52	166	60	125	14	199	31	66	114	211	789
Total	177	401	200	778	78	287	174	539	157	443	22	622	111	162	230	503	2442
08:00 AM	45	91	39	175	8	91	49	148	35	115	4	154	30	79	23	132	609
08:15 AM	48	90	39	177	15	83	47	145	38	97	4	139	25	46	14	85	546
08:30 AM	65	89	29	183	8	85	53	146	30	87	5	122	29	70	12	111	562
08:45 AM	49	103	41	193	13	75	50	138	24	94	19	137	21	48	10	79	547
Total	207	373	148	728	44	334	199	577	127	393	32	552	105	243	59	407	2264
Grand Total	384	774	348	1506	122	621	373	1116	284	836	54	1174	216	405	289	910	4706
Apprch %	25.5	51.4	23.1		10.9	55.6	33.4		24.2	71.2	4.6		23.7	44.5	31.8		
Total %	8.2	16.4	7.4	32	2.6	13.2	7.9	23.7	6	17.8	1.1	24.9	4.6	8.6	6.1	19.3	
Passenger Vehicles	358	734	344	1436	117	603	338	1058	280	816	52	1148	209	393	285	887	4529
% Passenger Vehicles	93.2	94.8	98.9	95.4	95.9	97.1	90.6	94.8	98.6	97.6	96.3	97.8	96.8	97	98.6	97.5	96.2
Large 2 Axle Vehicles	7	25	3	35	3	13	17	33	3	11	1	15	2	9	4	15	98
% Large 2 Axle Vehicles	1.8	3.2	0.9	2.3	2.5	2.1	4.6	3	1.1	1.3	1.9	1.3	0.9	2.2	1.4	1.6	2.1
3 Axle Vehicles	5	4	0	9	1	1	3	5	0	6	1	7	3	2	0	5	26
% 3 Axle Vehicles	1.3	0.5	0	0.6	0.8	0.2	0.8	0.4	0	0.7	1.9	0.6	1.4	0.5	0	0.5	0.6
4+ Axle Trucks	14	11	1	26	1	4	15	20	1	3	0	4	2	1	0	3	53
% 4+ Axle Trucks	3.6	1.4	0.3	1.7	0.8	0.6	4	1.8	0.4	0.4	0	0.3	0.9	0.2	0	0.3	1.1

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	34	119	56	209	18	53	43	114	28	106	4	138	33	28	32	93	554
07:30 AM	47	96	49	192	31	107	55	193	45	121	2	168	28	41	73	142	695
07:45 AM	59	103	51	213	22	92	52	166	60	125	14	199	31	66	114	211	789
08:00 AM	45	91	39	175	8	91	49	148	35	115	4	154	30	79	23	132	609
Total Volume	185	409	195	789	79	343	199	621	168	467	24	659	122	214	242	578	2647
% App. Total	23.4	51.8	24.7		12.7	55.2	32		25.5	70.9	3.6		21.1	37	41.9		
PHF	.784	.859	.871	.926	.637	.801	.905	.804	.700	.934	.429	.828	.924	.677	.531	.685	.839

City of Redlands
N/S: California Street
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:30 AM				07:15 AM			
+0 mins.	34	119	56	209	31	107	55	193	45	121	2	168	33	28	32	93
+15 mins.	47	96	49	192	22	92	52	166	60	125	14	199	28	41	73	142
+30 mins.	59	103	51	213	8	91	49	148	35	115	4	154	31	66	114	211
+45 mins.	45	91	39	175	15	83	47	145	38	97	4	139	30	79	23	132
Total Volume	185	409	195	789	76	373	203	652	178	458	24	660	122	214	242	578
% App. Total	23.4	51.8	24.7		11.7	57.2	31.1		27	69.4	3.6		21.1	37	41.9	
PHF	.784	.859	.871	.926	.613	.871	.923	.845	.742	.916	.429	.829	.924	.677	.531	.685

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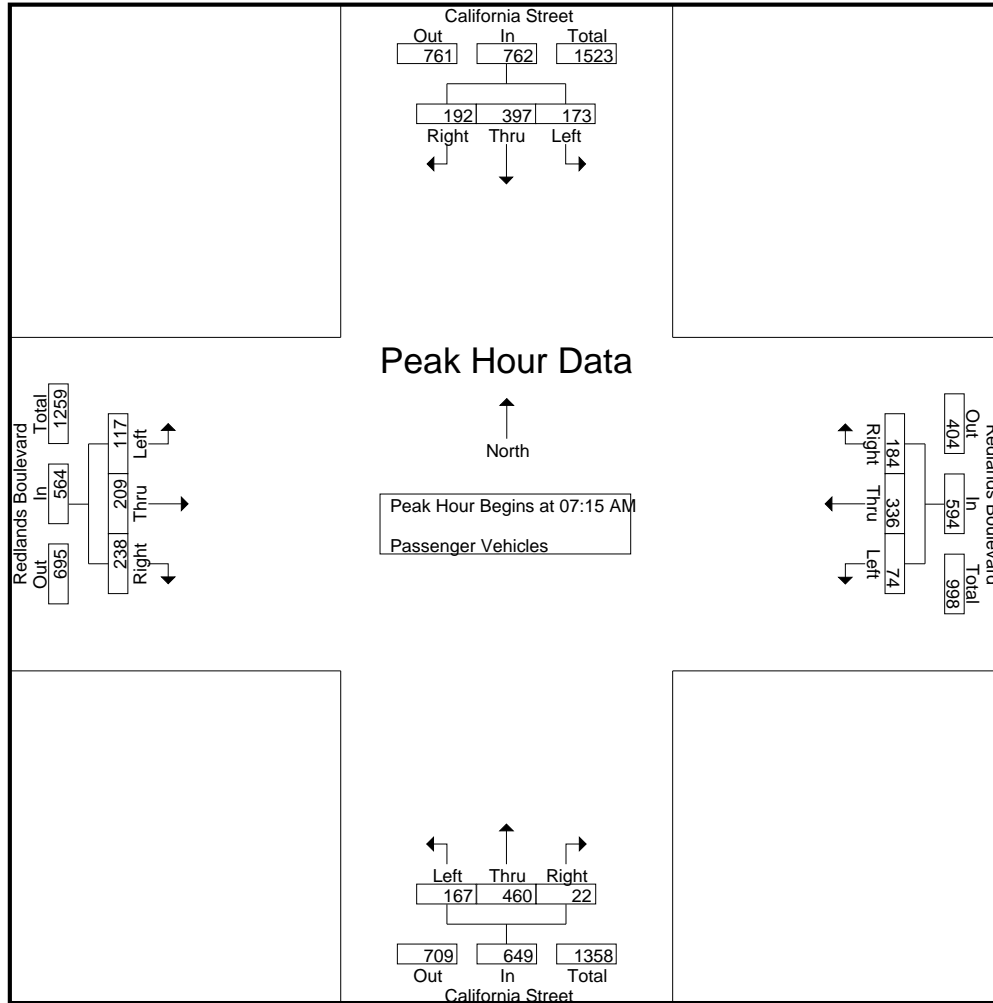
Groups Printed- Passenger Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	34	74	44	152	7	33	20	60	24	90	2	116	19	26	11	56	384
07:15 AM	30	113	56	199	17	52	40	109	28	105	3	136	33	28	31	92	536
07:30 AM	46	95	47	188	30	104	50	184	45	119	2	166	28	40	72	140	678
07:45 AM	57	99	50	206	19	90	48	157	59	122	13	194	28	64	114	206	763
Total	167	381	197	745	73	279	158	510	156	436	20	612	108	158	228	494	2361
08:00 AM	40	90	39	169	8	90	46	144	35	114	4	153	28	77	21	126	592
08:15 AM	43	81	38	162	15	82	41	138	38	93	4	135	25	43	14	82	517
08:30 AM	60	82	29	171	8	79	49	136	29	83	5	117	27	67	12	106	530
08:45 AM	48	100	41	189	13	73	44	130	22	90	19	131	21	48	10	79	529
Total	191	353	147	691	44	324	180	548	124	380	32	536	101	235	57	393	2168
Grand Total	358	734	344	1436	117	603	338	1058	280	816	52	1148	209	393	285	887	4529
Apprch %	24.9	51.1	24		11.1	57	31.9		24.4	71.1	4.5		23.6	44.3	32.1		
Total %	7.9	16.2	7.6	31.7	2.6	13.3	7.5	23.4	6.2	18	1.1	25.3	4.6	8.7	6.3	19.6	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	30	113	56	199	17	52	40	109	28	105	3	136	33	28	31	92	536
07:30 AM	46	95	47	188	30	104	50	184	45	119	2	166	28	40	72	140	678
07:45 AM	57	99	50	206	19	90	48	157	59	122	13	194	28	64	114	206	763
08:00 AM	40	90	39	169	8	90	46	144	35	114	4	153	28	77	21	126	592
Total Volume	173	397	192	762	74	336	184	594	167	460	22	649	117	209	238	564	2569
% App. Total	22.7	52.1	25.2		12.5	56.6	31		25.7	70.9	3.4		20.7	37.1	42.2		
PHF	.759	.878	.857	.925	.617	.808	.920	.807	.708	.943	.423	.836	.886	.679	.522	.684	.842

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	30	113	56	199	17	52	40	109	28	105	3	136	33	28	31	92
+15 mins.	46	95	47	188	30	104	50	184	45	119	2	166	28	40	72	140
+30 mins.	57	99	50	206	19	90	48	157	59	122	13	194	28	64	114	206
+45 mins.	40	90	39	169	8	90	46	144	35	114	4	153	28	77	21	126
Total Volume	173	397	192	762	74	336	184	594	167	460	22	649	117	209	238	564
% App. Total	22.7	52.1	25.2		12.5	56.6	31		25.7	70.9	3.4		20.7	37.1	42.2	
PHF	.759	.878	.857	.925	.617	.808	.920	.807	.708	.943	.423	.836	.886	.679	.522	.684

City of Redlands
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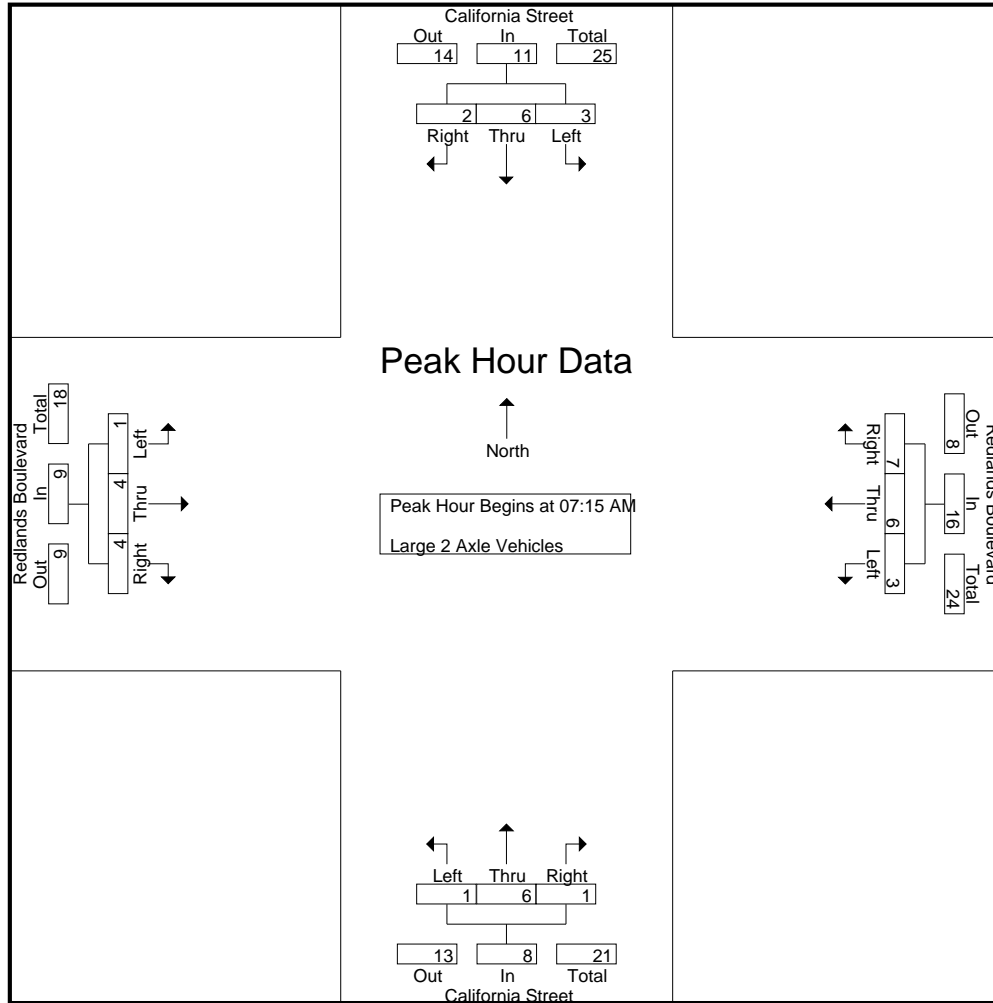
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	7	0	8	0	2	1	3	0	1	0	1	0	0	0	0	12
07:15 AM	1	3	0	4	1	1	1	3	0	1	1	2	0	0	1	1	10
07:30 AM	1	1	1	3	1	2	2	5	0	2	0	2	0	0	1	1	11
07:45 AM	1	2	1	4	1	2	1	4	1	3	0	4	1	2	0	3	15
Total	4	13	2	19	3	7	5	15	1	7	1	9	1	2	2	5	48
08:00 AM	0	0	0	0	0	1	3	4	0	0	0	0	0	2	2	4	8
08:15 AM	1	5	1	7	0	1	4	5	0	0	0	0	0	2	0	2	14
08:30 AM	2	5	0	7	0	3	2	5	1	0	0	1	1	3	0	4	17
08:45 AM	0	2	0	2	0	1	3	4	1	4	0	5	0	0	0	0	11
Total	3	12	1	16	0	6	12	18	2	4	0	6	1	7	2	10	50
Grand Total	7	25	3	35	3	13	17	33	3	11	1	15	2	9	4	15	98
Apprch %	20	71.4	8.6		9.1	39.4	51.5		20	73.3	6.7		13.3	60	26.7		
Total %	7.1	25.5	3.1	35.7	3.1	13.3	17.3	33.7	3.1	11.2	1	15.3	2	9.2	4.1	15.3	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	3	0	4	1	1	1	3	0	1	1	2	0	0	1	1	10
07:30 AM	1	1	1	3	1	2	2	5	0	2	0	2	0	0	1	1	11
07:45 AM	1	2	1	4	1	2	1	4	1	3	0	4	1	2	0	3	15
08:00 AM	0	0	0	0	0	1	3	4	0	0	0	0	0	2	2	4	8
Total Volume	3	6	2	11	3	6	7	16	1	6	1	8	1	4	4	9	44
% App. Total	27.3	54.5	18.2		18.8	37.5	43.8		12.5	75	12.5		11.1	44.4	44.4		
PHF	.750	.500	.500	.688	.750	.750	.583	.800	.250	.500	.250	.500	.250	.500	.500	.563	.733

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	3	0	4	1	1	1	3	0	1	1	2	0	0	1	1
+15 mins.	1	1	1	3	1	2	2	5	0	2	0	2	0	0	1	1
+30 mins.	1	2	1	4	1	2	1	4	1	3	0	4	1	2	0	3
+45 mins.	0	0	0	0	0	1	3	4	0	0	0	0	0	2	2	4
Total Volume	3	6	2	11	3	6	7	16	1	6	1	8	1	4	4	9
% App. Total	27.3	54.5	18.2		18.8	37.5	43.8		12.5	75	12.5		11.1	44.4	44.4	
PHF	.750	.500	.500	.688	.750	.750	.583	.800	.250	.500	.250	.500	.250	.500	.500	.563

City of Redlands
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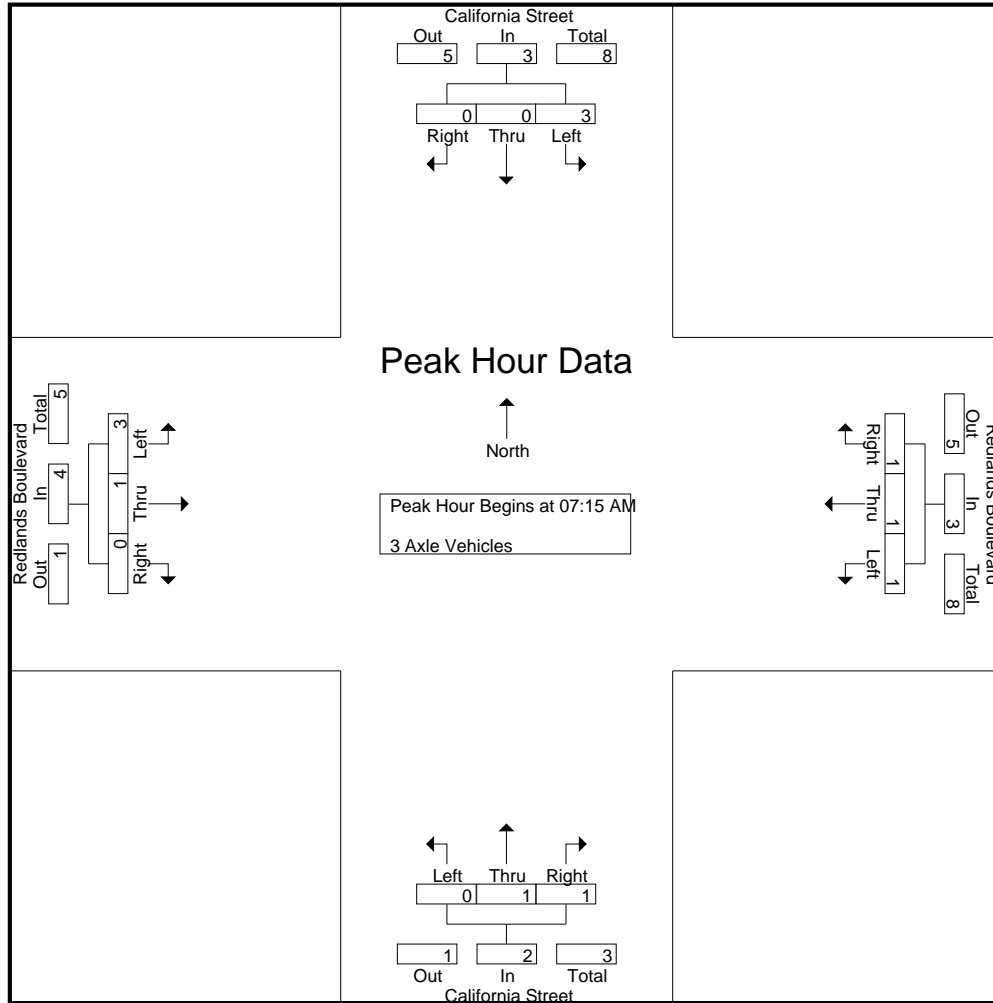
Groups Printed- 3 Axle Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:15 AM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	1	0	0	1	0	0	1	1	2	0	0	2	4
Total	1	1	0	2	1	1	2	4	0	0	1	1	2	1	0	3	10
08:00 AM	2	0	0	2	0	0	0	0	0	1	0	1	1	0	0	1	4
08:15 AM	0	2	0	2	0	0	1	1	0	3	0	3	0	1	0	1	7
08:30 AM	1	1	0	2	0	0	0	0	0	2	0	2	0	0	0	0	4
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	4	3	0	7	0	0	1	1	0	6	0	6	1	1	0	2	16
Grand Total	5	4	0	9	1	1	3	5	0	6	1	7	3	2	0	5	26
Apprch %	55.6	44.4	0		20	20	60		0	85.7	14.3		60	40	0		
Total %	19.2	15.4	0	34.6	3.8	3.8	11.5	19.2	0	23.1	3.8	26.9	11.5	7.7	0	19.2	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	1	0	0	1	0	0	1	1	2	0	0	2	4
08:00 AM	2	0	0	2	0	0	0	0	0	1	0	1	1	0	0	1	4
Total Volume	3	0	0	3	1	1	1	3	0	1	1	2	3	1	0	4	12
% App. Total	100	0	0		33.3	33.3	33.3		0	50	50		75	25	0		
PHF	.375	.000	.000	.375	.250	.250	.250	.750	.000	.250	.250	.500	.375	.250	.000	.500	.750

City of Redlands
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	1	0	0	1	0	0	1	1	2	0	0	2
+45 mins.	2	0	0	2	0	0	0	0	0	1	0	1	1	0	0	1
Total Volume	3	0	0	3	1	1	1	3	0	1	1	2	3	1	0	4
% App. Total	100	0	0		33.3	33.3	33.3		0	50	50		75	25	0	
PHF	.375	.000	.000	.375	.250	.250	.250	.750	.000	.250	.250	.500	.375	.250	.000	.500

City of Redlands
N/S: California Street
E/W: Redlands Boulevard
Weather: Clear

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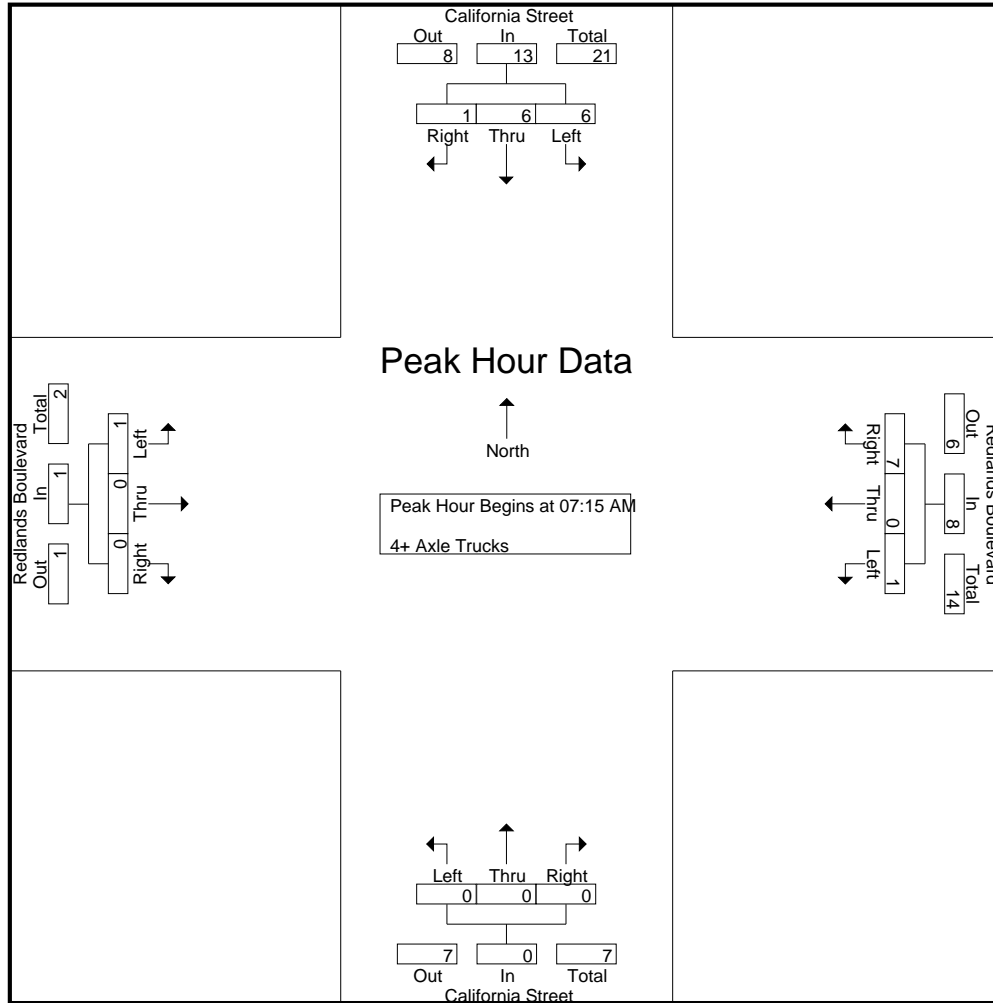
Groups Printed- 4+ Axle Trucks

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	2	1	0	3	0	0	2	2	0	0	0	0	0	1	0	1	6
07:15 AM	2	3	0	5	0	0	1	1	0	0	0	0	0	0	0	0	6
07:30 AM	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	0	4
07:45 AM	1	2	0	3	1	0	3	4	0	0	0	0	0	0	0	0	7
Total	5	6	1	12	1	0	9	10	0	0	0	0	0	1	0	1	23
08:00 AM	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
08:15 AM	4	2	0	6	0	0	1	1	0	1	0	1	0	0	0	0	8
08:30 AM	2	1	0	3	0	3	2	5	0	2	0	2	1	0	0	1	11
08:45 AM	0	1	0	1	0	1	3	4	1	0	0	1	0	0	0	0	6
Total	9	5	0	14	0	4	6	10	1	3	0	4	2	0	0	2	30
Grand Total	14	11	1	26	1	4	15	20	1	3	0	4	2	1	0	3	53
Apprch %	53.8	42.3	3.8		5	20	75		25	75	0		66.7	33.3	0		
Total %	26.4	20.8	1.9	49.1	1.9	7.5	28.3	37.7	1.9	5.7	0	7.5	3.8	1.9	0	5.7	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	2	3	0	5	0	0	1	1	0	0	0	0	0	0	0	0	6
07:30 AM	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	0	4
07:45 AM	1	2	0	3	1	0	3	4	0	0	0	0	0	0	0	0	7
08:00 AM	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	1	5
Total Volume	6	6	1	13	1	0	7	8	0	0	0	0	1	0	0	1	22
% App. Total	46.2	46.2	7.7		12.5	0	87.5		0	0	0		100	0	0		
PHF	.500	.500	.250	.650	.250	.000	.583	.500	.000	.000	.000	.000	.250	.000	.000	.250	.786

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	2	3	0	5	0	0	1	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	1	1	0	0	3	3	0	0	0	0	0	0	0	0
+30 mins.	1	2	0	3	1	0	3	4	0	0	0	0	0	0	0	0
+45 mins.	3	1	0	4	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	6	6	1	13	1	0	7	8	0	0	0	0	1	0	0	1
% App. Total	46.2	46.2	7.7		12.5	0	87.5		0	0	0		100	0	0	
PHF	.500	.500	.250	.650	.250	.000	.583	.500	.000	.000	.000	.000	.250	.000	.000	.250

City of Redlands
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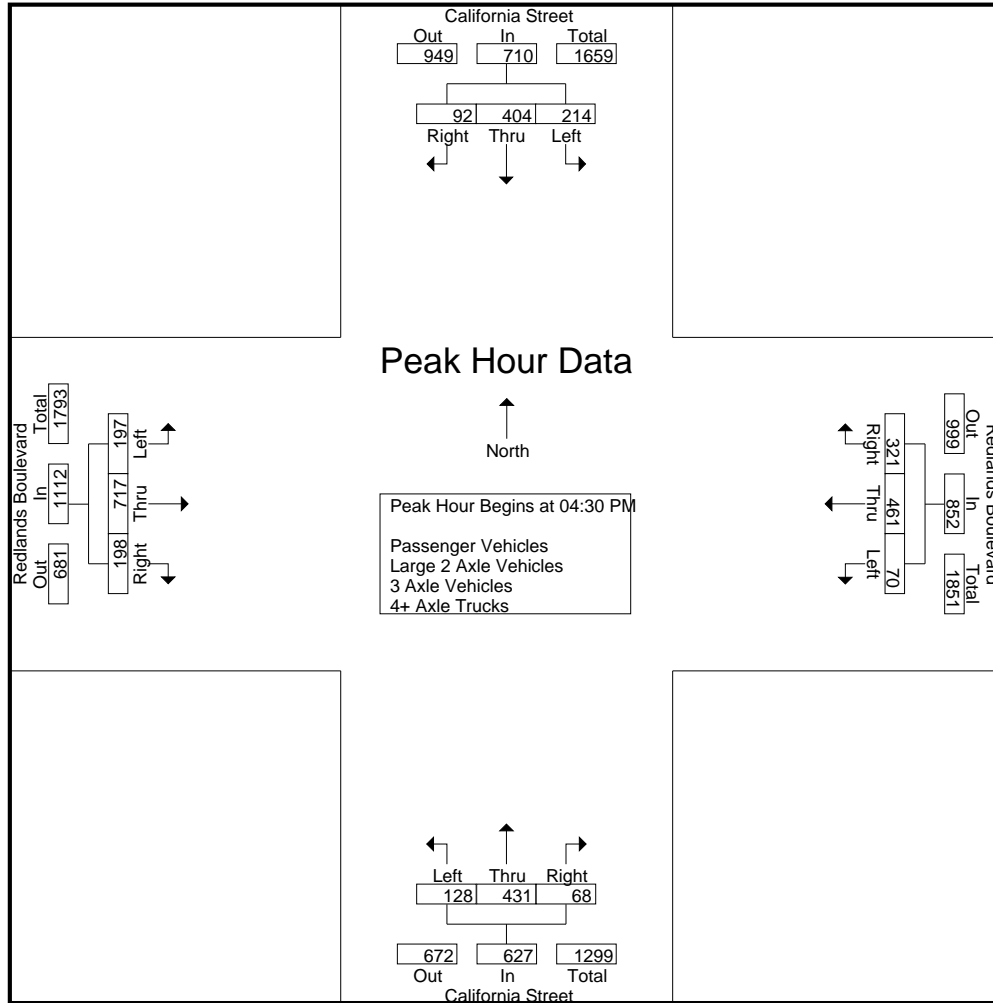
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	48	96	26	170	20	126	83	229	30	124	10	164	62	163	24	249	812
04:15 PM	46	87	18	151	20	128	79	227	20	90	7	117	48	164	37	249	744
04:30 PM	53	109	23	185	13	94	69	176	38	106	10	154	50	165	57	272	787
04:45 PM	63	93	20	176	17	119	85	221	29	99	15	143	47	166	56	269	809
Total	210	385	87	682	70	467	316	853	117	419	42	578	207	658	174	1039	3152
05:00 PM	48	96	25	169	24	116	94	234	41	112	20	173	57	174	51	282	858
05:15 PM	50	106	24	180	16	132	73	221	20	114	23	157	43	212	34	289	847
05:30 PM	39	108	28	175	19	104	68	191	17	102	13	132	45	163	33	241	739
05:45 PM	48	89	26	163	14	136	58	208	22	80	15	117	39	149	34	222	710
Total	185	399	103	687	73	488	293	854	100	408	71	579	184	698	152	1034	3154
Grand Total	395	784	190	1369	143	955	609	1707	217	827	113	1157	391	1356	326	2073	6306
Apprch %	28.9	57.3	13.9		8.4	55.9	35.7		18.8	71.5	9.8		18.9	65.4	15.7		
Total %	6.3	12.4	3	21.7	2.3	15.1	9.7	27.1	3.4	13.1	1.8	18.3	6.2	21.5	5.2	32.9	
Passenger Vehicles	376	765	190	1331	143	940	577	1660	211	798	113	1122	385	1344	326	2055	6168
% Passenger Vehicles	95.2	97.6	100	97.2	100	98.4	94.7	97.2	97.2	96.5	100	97	98.5	99.1	100	99.1	97.8
Large 2 Axle Vehicles	8	11	0	19	0	13	14	27	6	14	0	20	5	9	0	14	80
% Large 2 Axle Vehicles	2	1.4	0	1.4	0	1.4	2.3	1.6	2.8	1.7	0	1.7	1.3	0.7	0	0.7	1.3
3 Axle Vehicles	2	2	0	4	0	0	3	3	0	11	0	11	1	1	0	2	20
% 3 Axle Vehicles	0.5	0.3	0	0.3	0	0	0.5	0.2	0	1.3	0	1	0.3	0.1	0	0.1	0.3
4+ Axle Trucks	9	6	0	15	0	2	15	17	0	4	0	4	0	2	0	2	38
% 4+ Axle Trucks	2.3	0.8	0	1.1	0	0.2	2.5	1	0	0.5	0	0.3	0	0.1	0	0.1	0.6

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	53	109	23	185	13	94	69	176	38	106	10	154	50	165	57	272	787
04:45 PM	63	93	20	176	17	119	85	221	29	99	15	143	47	166	56	269	809
05:00 PM	48	96	25	169	24	116	94	234	41	112	20	173	57	174	51	282	858
05:15 PM	50	106	24	180	16	132	73	221	20	114	23	157	43	212	34	289	847
Total Volume	214	404	92	710	70	461	321	852	128	431	68	627	197	717	198	1112	3301
% App. Total	30.1	56.9	13		8.2	54.1	37.7		20.4	68.7	10.8		17.7	64.5	17.8		
PHF	.849	.927	.920	.959	.729	.873	.854	.910	.780	.945	.739	.906	.864	.846	.868	.962	.962

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

	04:30 PM				04:45 PM				04:30 PM				04:30 PM			
+0 mins.	53	109	23	185	17	119	85	221	38	106	10	154	50	165	57	272
+15 mins.	63	93	20	176	24	116	94	234	29	99	15	143	47	166	56	269
+30 mins.	48	96	25	169	16	132	73	221	41	112	20	173	57	174	51	282
+45 mins.	50	106	24	180	19	104	68	191	20	114	23	157	43	212	34	289
Total Volume	214	404	92	710	76	471	320	867	128	431	68	627	197	717	198	1112
% App. Total	30.1	56.9	13		8.8	54.3	36.9		20.4	68.7	10.8		17.7	64.5	17.8	
PHF	.849	.927	.920	.959	.792	.892	.851	.926	.780	.945	.739	.906	.864	.846	.868	.962

City of Redlands
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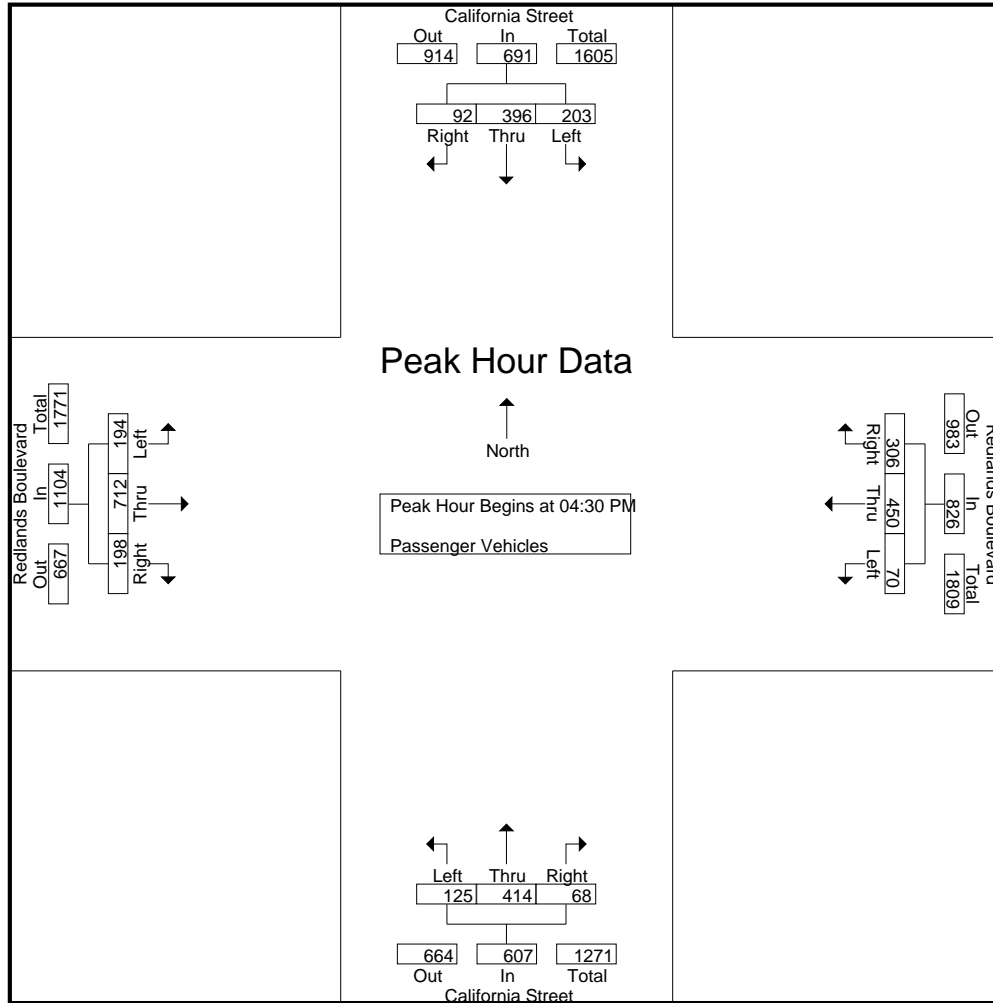
Groups Printed- Passenger Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	46	91	26	163	20	124	77	221	30	120	10	160	61	160	24	245	789
04:15 PM	43	84	18	145	20	127	76	223	18	86	7	111	47	163	37	247	726
04:30 PM	48	106	23	177	13	92	65	170	37	98	10	145	48	162	57	267	759
04:45 PM	59	93	20	172	17	114	81	212	28	95	15	138	46	166	56	268	790
Total	196	374	87	657	70	457	299	826	113	399	42	554	202	651	174	1027	3064
05:00 PM	46	93	25	164	24	115	91	230	40	110	20	170	57	172	51	280	844
05:15 PM	50	104	24	178	16	129	69	214	20	111	23	154	43	212	34	289	835
05:30 PM	38	107	28	173	19	103	62	184	17	99	13	129	45	162	33	240	726
05:45 PM	46	87	26	159	14	136	56	206	21	79	15	115	38	147	34	219	699
Total	180	391	103	674	73	483	278	834	98	399	71	568	183	693	152	1028	3104
Grand Total	376	765	190	1331	143	940	577	1660	211	798	113	1122	385	1344	326	2055	6168
Apprch %	28.2	57.5	14.3		8.6	56.6	34.8		18.8	71.1	10.1		18.7	65.4	15.9		
Total %	6.1	12.4	3.1	21.6	2.3	15.2	9.4	26.9	3.4	12.9	1.8	18.2	6.2	21.8	5.3	33.3	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	48	106	23	177	13	92	65	170	37	98	10	145	48	162	57	267	759
04:45 PM	59	93	20	172	17	114	81	212	28	95	15	138	46	166	56	268	790
05:00 PM	46	93	25	164	24	115	91	230	40	110	20	170	57	172	51	280	844
05:15 PM	50	104	24	178	16	129	69	214	20	111	23	154	43	212	34	289	835
Total Volume	203	396	92	691	70	450	306	826	125	414	68	607	194	712	198	1104	3228
% App. Total	29.4	57.3	13.3		8.5	54.5	37		20.6	68.2	11.2		17.6	64.5	17.9		
PHF	.860	.934	.920	.971	.729	.872	.841	.898	.781	.932	.739	.893	.851	.840	.868	.955	.956

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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	48	106	23	177	13	92	65	170	37	98	10	145	48	162	57	267
+15 mins.	59	93	20	172	17	114	81	212	28	95	15	138	46	166	56	268
+30 mins.	46	93	25	164	24	115	91	230	40	110	20	170	57	172	51	280
+45 mins.	50	104	24	178	16	129	69	214	20	111	23	154	43	212	34	289
Total Volume	203	396	92	691	70	450	306	826	125	414	68	607	194	712	198	1104
% App. Total	29.4	57.3	13.3		8.5	54.5	37		20.6	68.2	11.2		17.6	64.5	17.9	
PHF	.860	.934	.920	.971	.729	.872	.841	.898	.781	.932	.739	.893	.851	.840	.868	.955

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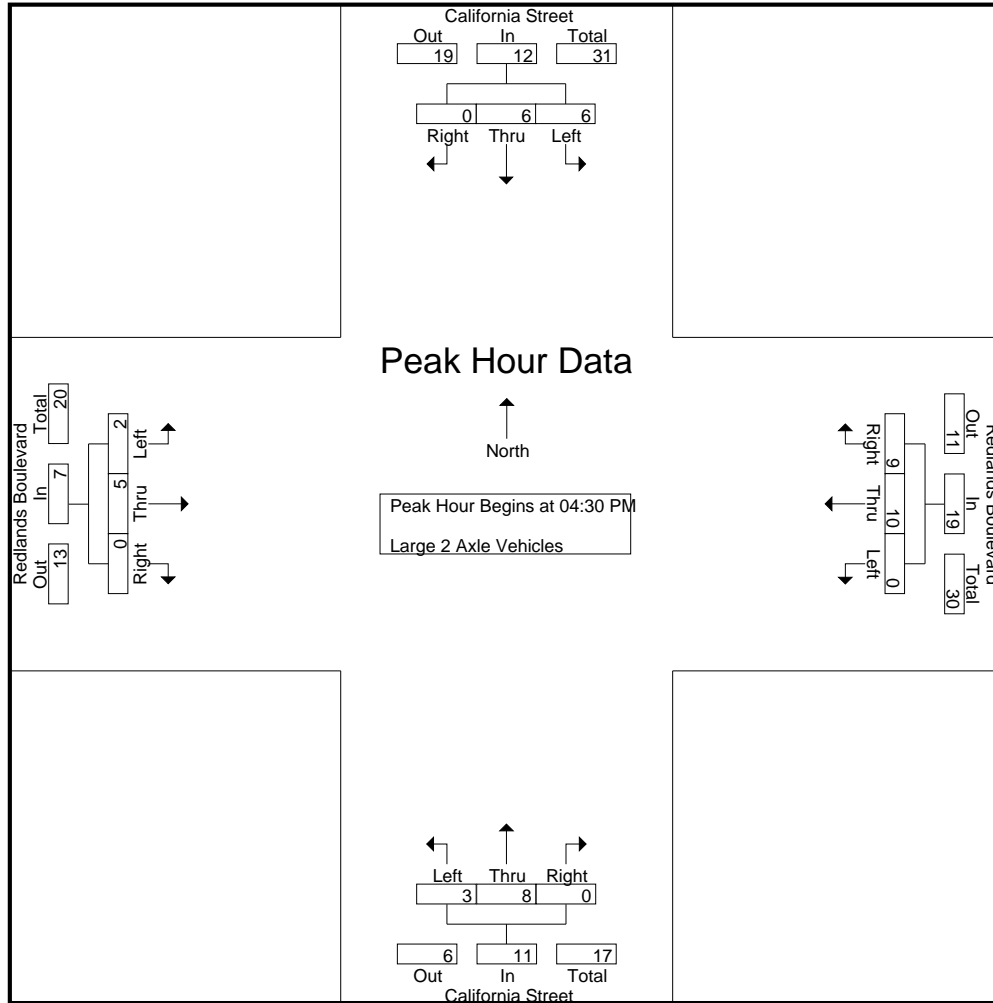
Groups Printed- Large 2 Axle Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	2	0	3	0	1	2	3	0	3	0	3	1	2	0	3	12
04:15 PM	1	1	0	2	0	1	1	2	2	0	0	2	1	1	0	2	8
04:30 PM	2	3	0	5	0	1	3	4	1	4	0	5	2	3	0	5	19
04:45 PM	3	0	0	3	0	5	3	8	1	0	0	1	0	0	0	0	12
Total	7	6	0	13	0	8	9	17	4	7	0	11	4	6	0	10	51
05:00 PM	1	1	0	2	0	1	2	3	1	1	0	2	0	2	0	2	9
05:15 PM	0	2	0	2	0	3	1	4	0	3	0	3	0	0	0	0	9
05:30 PM	0	0	0	0	0	1	1	2	0	2	0	2	0	0	0	0	4
05:45 PM	0	2	0	2	0	0	1	1	1	1	0	2	1	1	0	2	7
Total	1	5	0	6	0	5	5	10	2	7	0	9	1	3	0	4	29
Grand Total	8	11	0	19	0	13	14	27	6	14	0	20	5	9	0	14	80
Apprch %	42.1	57.9	0		0	48.1	51.9		30	70	0		35.7	64.3	0		
Total %	10	13.8	0	23.8	0	16.2	17.5	33.8	7.5	17.5	0	25	6.2	11.2	0	17.5	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	3	0	5	0	1	3	4	1	4	0	5	2	3	0	5	19
04:45 PM	3	0	0	3	0	5	3	8	1	0	0	1	0	0	0	0	12
05:00 PM	1	1	0	2	0	1	2	3	1	1	0	2	0	2	0	2	9
05:15 PM	0	2	0	2	0	3	1	4	0	3	0	3	0	0	0	0	9
Total Volume	6	6	0	12	0	10	9	19	3	8	0	11	2	5	0	7	49
% App. Total	50	50	0		0	52.6	47.4		27.3	72.7	0		28.6	71.4	0		
PHF	.500	.500	.000	.600	.000	.500	.750	.594	.750	.500	.000	.550	.250	.417	.000	.350	.645

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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	2	3	0	5	0	1	3	4	1	4	0	5	2	3	0	5
+15 mins.	3	0	0	3	0	5	3	8	1	0	0	1	0	0	0	0
+30 mins.	1	1	0	2	0	1	2	3	1	1	0	2	0	2	0	2
+45 mins.	0	2	0	2	0	3	1	4	0	3	0	3	0	0	0	0
Total Volume	6	6	0	12	0	10	9	19	3	8	0	11	2	5	0	7
% App. Total	50	50	0		0	52.6	47.4		27.3	72.7	0		28.6	71.4	0	
PHF	.500	.500	.000	.600	.000	.500	.750	.594	.750	.500	.000	.550	.250	.417	.000	.350

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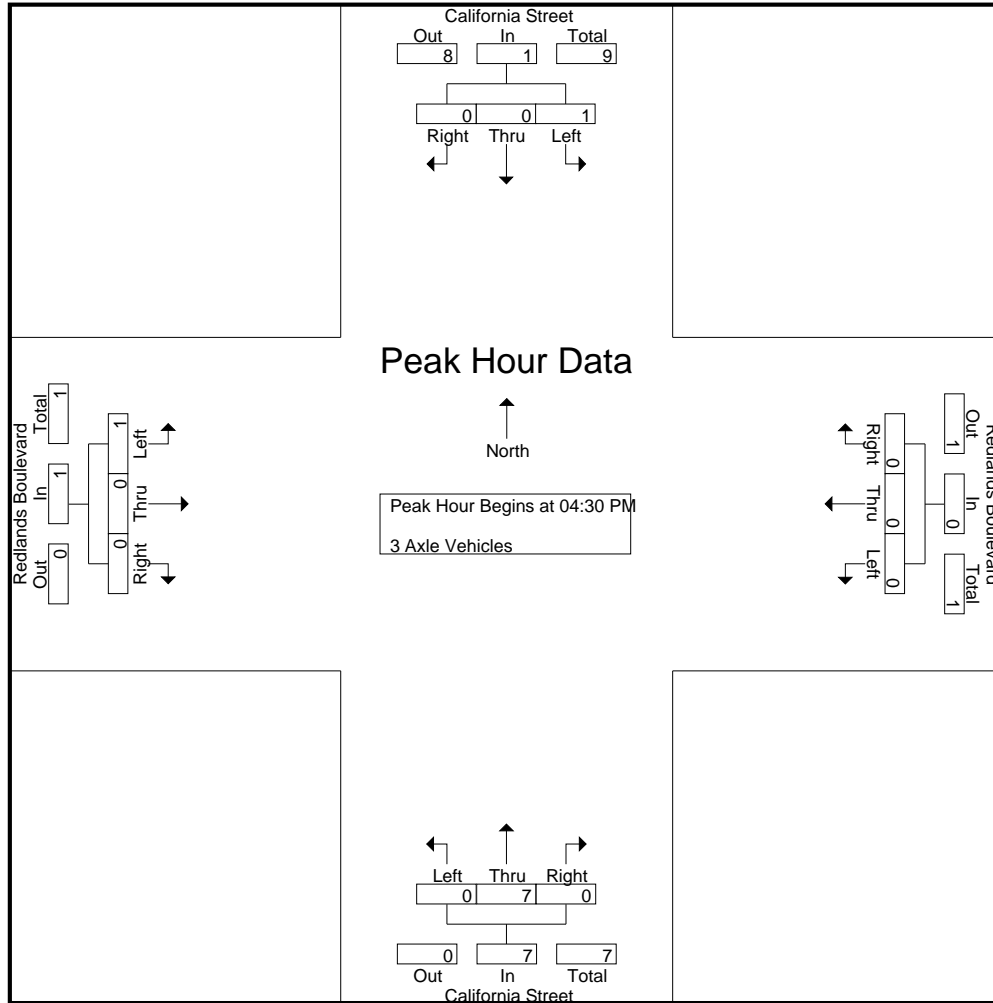
Groups Printed- 3 Axle Vehicles

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	5
04:15 PM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
04:30 PM	1	0	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	4	0	4	1	0	0	1	5
Total	2	2	0	4	0	0	2	2	0	10	0	10	1	0	0	1	17
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	1	1	0	1	0	1	0	1	0	1	3
Grand Total	2	2	0	4	0	0	3	3	0	11	0	11	1	1	0	2	20
Apprch %	50	50	0		0	0	100		0	100	0		50	50	0		
Total %	10	10	0	20	0	0	15	15	0	55	0	55	5	5	0	10	

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	0	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:45 PM	0	0	0	0	0	0	0	0	0	4	0	4	1	0	0	1	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	7	0	7	1	0	0	1	9
% App. Total	100	0	0		0	0	0		0	100	0		100	0	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.438	.000	.438	.250	.000	.000	.250	.450

City of Redlands
N/S: California Street
E/W: Redlands Boulevard
Weather: Clear

File Name : 04_RED_Cali_Redl PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	1	0	0	1	0	0	0	0	0	3	0	3	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	4	0	4	1	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	0	1	0	0	0	0	0	7	0	7	1	0	0	1
% App. Total	100	0	0		0	0	0		0	100	0		100	0	0	
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.438	.000	.438	.250	.000	.000	.250

City of Redlands
N/S: California Street
E/W: Redlands Boulevard
Weather: Clear

File Name : 04_RED_Cali_Redl PM
Site Code : 22524283
Start Date : 4/2/2024
Page No : 1

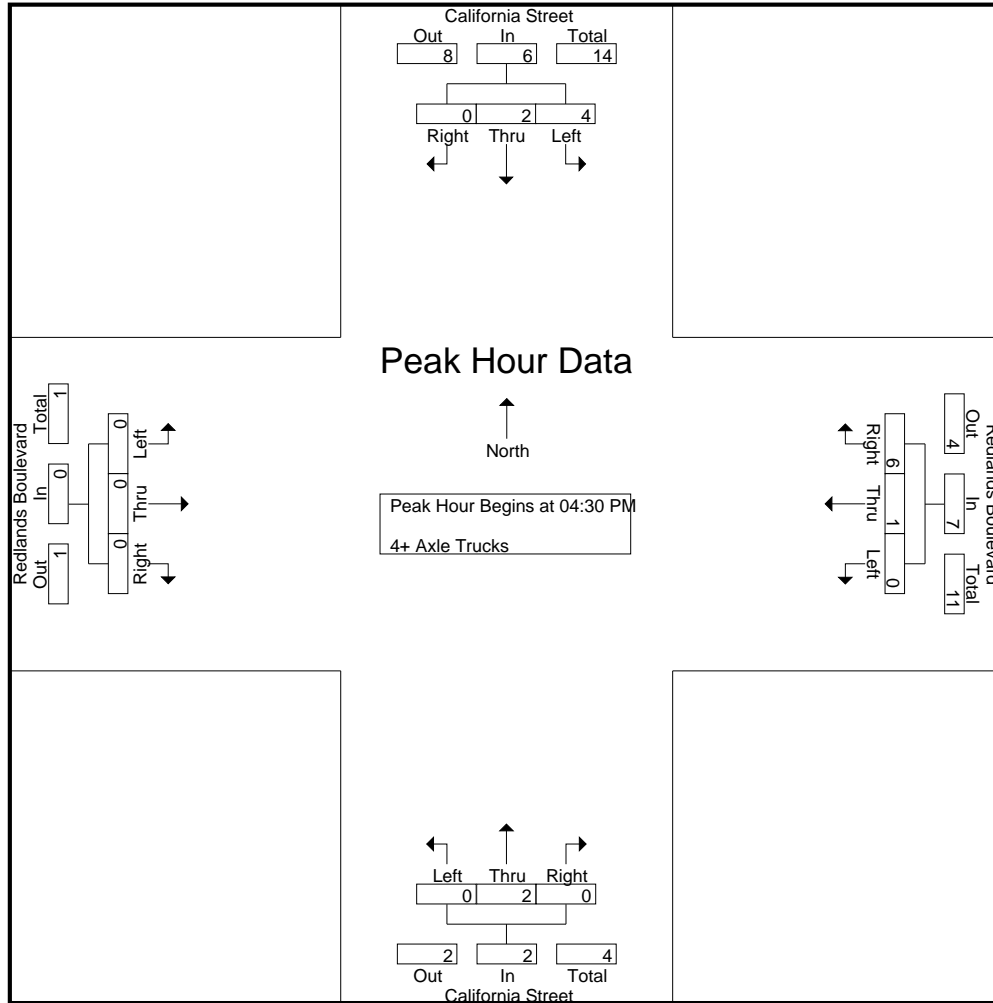
Groups Printed- 4+ Axle Trucks

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound					
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total	
04:00 PM	1	1	0	2	0	1	2	3	0	0	0	0	0	1	0	0	1	6
04:15 PM	1	2	0	3	0	0	2	2	0	2	0	2	0	0	0	0	0	7
04:30 PM	2	0	0	2	0	1	1	2	0	1	0	1	0	0	0	0	0	5
04:45 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	2
Total	5	3	0	8	0	2	6	8	0	3	0	3	0	1	0	1	1	20
05:00 PM	1	2	0	3	0	0	1	1	0	1	0	1	0	0	0	0	0	5
05:15 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	0	3
05:30 PM	1	1	0	2	0	0	4	4	0	0	0	0	0	0	0	0	0	6
05:45 PM	2	0	0	2	0	0	1	1	0	0	0	0	0	1	0	0	1	4
Total	4	3	0	7	0	0	9	9	0	1	0	1	0	1	0	0	1	18
Grand Total	9	6	0	15	0	2	15	17	0	4	0	4	0	2	0	2	2	38
Apprch %	60	40	0		0	11.8	88.2		0	100	0		0	100	0			
Total %	23.7	15.8	0	39.5	0	5.3	39.5	44.7	0	10.5	0	10.5	0	5.3	0	5.3		

	California Street Southbound				Redlands Boulevard Westbound				California Street Northbound				Redlands Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	0	0	2	0	1	1	2	0	1	0	1	0	0	0	0	5
04:45 PM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
05:00 PM	1	2	0	3	0	0	1	1	0	1	0	1	0	0	0	0	5
05:15 PM	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
Total Volume	4	2	0	6	0	1	6	7	0	2	0	2	0	0	0	0	15
% App. Total	66.7	33.3	0		0	14.3	85.7		0	100	0		0	0	0		
PHF	.500	.250	.000	.500	.000	.250	.500	.583	.000	.500	.000	.500	.000	.000	.000	.000	.750

City of Redlands
N/S: California Street
E/W: Redlands Boulevard
Weather: Clear

File Name : 04_RED_Cali_Redl PM
Site Code : 22524283
Start Date : 4/2/2024
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	2	0	0	2	0	1	1	2	0	1	0	1	0	0	0	0
+15 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0
+30 mins.	1	2	0	3	0	0	1	1	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0
Total Volume	4	2	0	6	0	1	6	7	0	2	0	2	0	0	0	0
% App. Total	66.7	33.3	0		0	14.3	85.7		0	100	0		0	0	0	
PHF	.500	.250	.000	.500	.000	.250	.500	.583	.000	.500	.000	.500	.000	.000	.000	.000

Location: Redlands
N/S: California Street
E/W: Redlands Boulevard



Date: 4/2/2024
Day: Tuesday

PEDESTRIANS

		North Leg California Street Pedestrians	East Leg Redlands Boulevard Pedestrians	South Leg California Street Pedestrians	West Leg Redlands Boulevard Pedestrians	
	7:00 AM	0	0	0	0	0
	7:15 AM	0	0	0	0	0
	7:30 AM	0	0	0	0	0
	7:45 AM	0	0	0	0	0
	8:00 AM	0	0	0	0	0
	8:15 AM	0	0	0	0	0
	8:30 AM	0	0	0	0	0
	8:45 AM	0	0	0	0	0
	TOTAL VOLUMES:	0	0	0	0	0

		North Leg California Street Pedestrians	East Leg Redlands Boulevard Pedestrians	South Leg California Street Pedestrians	West Leg Redlands Boulevard Pedestrians	
	4:00 PM	0	0	0	0	0
	4:15 PM	0	0	0	0	0
	4:30 PM	0	0	0	0	0
	4:45 PM	0	0	0	0	0
	5:00 PM	0	0	0	0	0
	5:15 PM	0	0	0	0	0
	5:30 PM	0	0	0	0	0
	5:45 PM	0	0	0	0	0
	TOTAL VOLUMES:	0	0	0	0	0

Location: Redlands
 N/S: California Street
 E/W: Redlands Boulevard



Date: 4/2/2024
 Day: Tuesday

BICYCLES

		Southbound California Street			Westbound Redlands Boulevard			Northbound California Street			Eastbound Redlands Boulevard			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

		Southbound California Street			Westbound Redlands Boulevard			Northbound California Street			Eastbound Redlands Boulevard			
		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:		0	0	0	0	0	0	0	0	0	0	0	0	0

APPENDIX D

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: California St (NS) at I-10 WB Ramps (EW)

Control Type:	Signalized	Delay (sec / veh):	31.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.776

Intersection Setup

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	77.00	100.00	290.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Base Volume Input [veh/h]	359	644	0	0	157	297	0	0	0	394	52	397
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	359	644	0	0	157	297	0	0	0	394	52	397
Peak Hour Factor	0.9086	0.9086	0.9500	0.9500	0.9086	0.9086	0.9500	0.9500	0.9500	0.9086	0.9086	0.9086
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	177	0	0	43	82	0	0	0	108	14	109
Total Analysis Volume [veh/h]	395	709	0	0	173	327	0	0	0	434	57	437
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	10	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	40	60	0	0	60	0	0	0	0	0	50	0
Amber [s]	3.5	3.9	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	4.3	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	29	56	0	0	27	0	0	0	0	0	44	0
Vehicle Extension [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	0	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
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90		5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90		3.30	3.30
g_i, Effective Green Time [s]	25	59	30	30		31	31
g / C, Green / Cycle	0.24	0.59	0.30	0.30		0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.23	0.21	0.04	0.21		0.28	0.29
s, saturation flow rate [veh/h]	1714	3427	4903	1530		1724	1530
c, Capacity [veh/h]	420	2024	1474	460		530	471
d1, Uniform Delay [s]	37.08	10.59	25.39	31.15		33.55	33.59
k, delay calibration	0.08	0.50	0.50	0.50		0.07	0.07
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.24	0.48	0.16	9.01		5.29	6.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.35	0.12	0.71		0.93	0.93
d, Delay for Lane Group [s/veh]	45.32	11.07	25.55	40.16		38.85	39.73
Lane Group LOS	D	B	C	D		D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	9.90	3.62	0.97	7.75		12.02	10.82
50th-Percentile Queue Length [ft/ln]	247.56	90.61	24.27	193.76		300.48	270.43
95th-Percentile Queue Length [veh/ln]	15.06	6.52	1.75	12.32		17.71	16.21
95th-Percentile Queue Length [ft/ln]	376.58	163.10	43.68	307.90		442.63	405.28

Movement, Approach, & Intersection Results

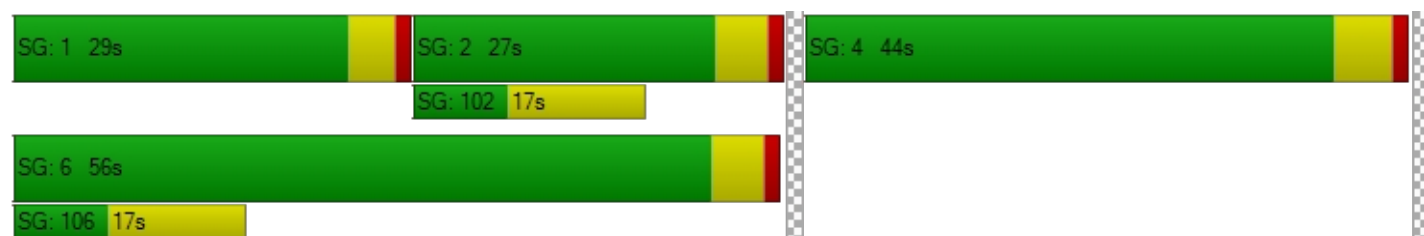
d_M, Delay for Movement [s/veh]	45.32	11.07	0.00	0.00	25.55	40.16	0.00	0.00	0.00	38.85	38.85	39.73
Movement LOS	D	B			C	D				D	D	D
d_A, Approach Delay [s/veh]	23.32			35.11			0.00			39.26		
Approach LOS	C			D			A			D		
d_I, Intersection Delay [s/veh]	31.49											
Intersection LOS	C											
Intersection V/C	0.776											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0				0.0				11.0		11.0	
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				39.64		39.64	
I_p,int, Pedestrian LOS Score for Intersection	0.000				0.000				2.188		2.247	
Crosswalk LOS	F				F				B		B	
s_b, Saturation Flow Rate of the bicycle lane	2000				2000				2000		2000	
c_b, Capacity of the bicycle lane [bicycles/h]	1021				442				0		774	
d_b, Bicycle Delay [s]	11.98				30.37				50.03		18.82	
I_b,int, Bicycle LOS Score for Intersection	2.470				1.835				4.132		3.091	
Bicycle LOS	B				A				D		C	

Sequence

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



Intersection Level Of Service Report
Intersection 2: California St (NS) at I-10 EB Ramps (EW)

Control Type:	Signalized	Delay (sec / veh):	27.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.652

Intersection Setup

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Base Volume Input [veh/h]	0	559	321	81	500	0	478	0	489	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	559	321	81	500	0	478	0	489	0	0	0
Peak Hour Factor	0.9500	0.9410	0.9410	0.9410	0.9410	0.9500	0.9410	0.9410	0.9410	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	149	85	22	133	0	127	0	130	0	0	0
Total Analysis Volume [veh/h]	0	594	341	86	531	0	508	0	520	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	52.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	0	0	0
Maximum Green [s]	0	60	0	40	60	0	0	50	0	0	0	0
Amber [s]	0.0	3.9	0.0	3.5	3.9	0.0	0.0	4.3	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	15	54	0	0	46	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	3.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	10	0	0	0	0
Pedestrian Clearance [s]	0	12	0	0	14	0	0	10	0	0	0	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
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	2.5	2.9	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	C	R	
C, Cycle Length [s]	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.90	4.90	4.50	4.90	5.30	5.30	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.90	2.90	2.50	2.90	3.30	3.30	
g_i, Effective Green Time [s]	40	40	9	54	36	36	
g / C, Green / Cycle	0.40	0.40	0.09	0.54	0.36	0.36	
(v / s)_i Volume / Saturation Flow Rate	0.12	0.22	0.05	0.15	0.30	0.34	
s, saturation flow rate [veh/h]	4903	1530	1714	3427	1714	1530	
c, Capacity [veh/h]	1969	615	157	1844	617	551	
d1, Uniform Delay [s]	20.39	23.06	43.50	12.64	29.14	31.06	
k, delay calibration	0.50	0.50	0.04	0.50	0.09	0.17	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.39	3.59	1.11	0.39	2.43	12.38	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.30	0.55	0.55	0.29	0.82	0.94	
d, Delay for Lane Group [s/veh]	20.79	26.65	44.61	13.03	31.57	43.45	
Lane Group LOS	C	C	D	B	C	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.01	6.34	2.01	3.01	11.18	13.64	
50th-Percentile Queue Length [ft/ln]	75.29	158.45	50.32	75.29	279.62	341.10	
95th-Percentile Queue Length [veh/ln]	5.42	10.47	3.62	5.42	16.67	19.70	
95th-Percentile Queue Length [ft/ln]	135.52	261.67	90.58	135.51	416.74	492.54	

Movement, Approach, & Intersection Results

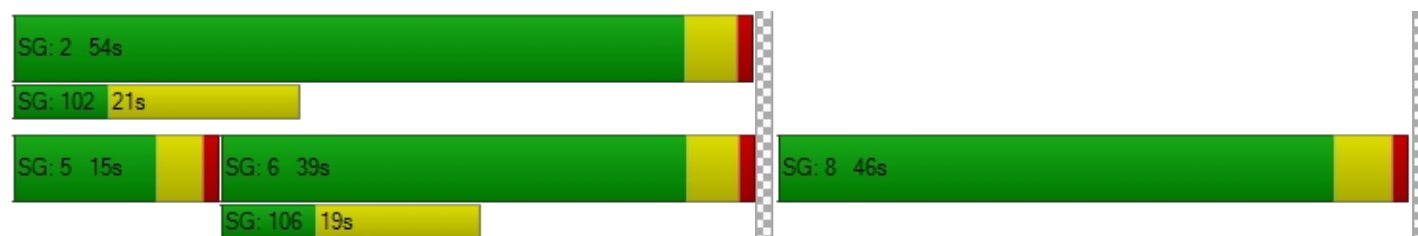
d_M, Delay for Movement [s/veh]	0.00	20.79	26.65	44.61	13.03	0.00	31.57	31.57	43.45	0.00	0.00	0.00
Movement LOS		C	C	D	B		C	C	D			
d_A, Approach Delay [s/veh]	22.93			17.43			37.58			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	27.45											
Intersection LOS	C											
Intersection V/C	0.652											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
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			39.64			39.64		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.279			1.845		
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]	682			981			813			0		
d_b, Bicycle Delay [s]	21.74			12.98			17.61			50.03		
I_b,int, Bicycle LOS Score for Intersection	2.074			2.069			3.256			4.132		
Bicycle LOS	B			B			C			D		

Sequence


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



Intersection Level Of Service Report
Intersection 3: California St (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.280

Intersection Setup

Name	California St			California St			Project North Dwy			Shopping Center		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	180.00	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Project North Dwy			Shopping Center		
Base Volume Input [veh/h]	1	805	11	122	859	0	0	0	0	0	0	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	805	11	122	859	0	0	0	0	0	0	42
Peak Hour Factor	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	213	3	32	227	0	0	0	0	0	0	11
Total Analysis Volume [veh/h]	1	852	12	129	909	0	0	0	0	0	0	44
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	0.00	0.01	0.00	0.28	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.09
d_M, Delay for Movement [s/veh]	9.76	0.00	0.00	15.80	0.00	0.00	47.43	91.57	12.55	41.89	90.79	12.94
Movement LOS	A	A	A	C	A	A	E	F	B	E	F	B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	1.13	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29
95th-Percentile Queue Length [ft/ln]	0.10	0.00	0.00	28.33	0.00	0.00	0.00	0.00	0.00	0.00	7.24	7.24
d_A, Approach Delay [s/veh]	0.01			1.96			50.52			12.94		
Approach LOS	A			A			F			B		
d_I, Intersection Delay [s/veh]	1.34											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 4: California St (NS) at Redlands Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.670

Intersection Setup

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	195.00	100.00	245.00	95.00	100.00	100.00	100.00	100.00	100.00	127.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Base Volume Input [veh/h]	168	471	25	201	424	198	127	217	244	83	347	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	168	471	25	201	424	198	127	217	244	83	347	217
Peak Hour Factor	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	140	7	60	126	59	38	65	73	25	103	65
Total Analysis Volume [veh/h]	200	562	30	240	506	236	151	259	291	99	414	259
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	115
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	20	30	0	20	30	0	20	25	0	20	25	0
Amber [s]	3.5	4.3	0.0	3.5	3.9	0.0	3.5	3.9	0.0	3.5	4.3	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	36	0	25	37	0	18	42	0	12	36	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	23	0	0	23	0	0	25	0	0	23	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.3	0.0	2.5	2.9	0.0	2.5	2.9	0.0	2.5	3.3	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	71	71	71	71	71	71	71	71	71	71	71	71	71
L, Total Lost Time per Cycle [s]	4.50	5.30	5.30	5.30	4.50	4.90	4.90	4.50	4.90	4.90	4.50	5.30	5.30
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	0.00
l2, Clearance Lost Time [s]	2.50	3.30	3.30	3.30	2.50	2.90	2.90	2.50	2.90	2.90	2.50	3.30	3.30
g_i, Effective Green Time [s]	10	17	17	17	12	19	19	8	18	18	5	15	15
g / C, Green / Cycle	0.14	0.23	0.23	0.23	0.17	0.26	0.26	0.11	0.25	0.25	0.08	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.20	0.02	0.14	0.22	0.22	0.09	0.08	0.19	0.06	0.12	0.17
s, saturation flow rate [veh/h]	1714	1800	1800	1530	1714	1800	1609	1714	3427	1530	1714	3427	1530
c, Capacity [veh/h]	247	422	422	359	289	476	426	192	865	386	129	719	321
d1, Uniform Delay [s]	29.57	23.60	26.00	21.30	28.66	24.63	24.63	30.80	21.55	24.60	32.34	25.30	26.78
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.30	0.89	4.54	0.10	6.16	3.62	4.03	6.90	0.19	3.00	9.11	0.73	4.78
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	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	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	1.00

Lane Group Results

X, volume / capacity	0.81	0.49	0.84	0.08	0.83	0.82	0.82	0.79	0.30	0.75	0.77	0.58	0.81
d, Delay for Lane Group [s/veh]	35.87	24.48	30.55	21.40	34.82	28.25	28.66	37.70	21.74	27.59	41.45	26.03	31.56
Lane Group LOS	D	C	C	C	C	C	C	D	C	C	D	C	C
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.45	2.81	5.63	0.36	4.08	5.96	5.38	2.68	1.59	4.34	1.89	2.96	4.25
50th-Percentile Queue Length [ft/ln]	86.27	70.26	140.7	9.08	102.01	149.10	134.47	67.00	39.77	108.59	47.34	73.97	106.21
95th-Percentile Queue Length [veh/ln]	6.21	5.06	9.52	0.65	7.34	9.97	9.18	4.82	2.86	7.76	3.41	5.33	7.63
95th-Percentile Queue Length [ft/ln]	155.2	126.4	238.0	16.34	183.62	249.23	229.56	120.60	71.59	194.04	85.22	133.15	190.72

Movement, Approach, & Intersection Results

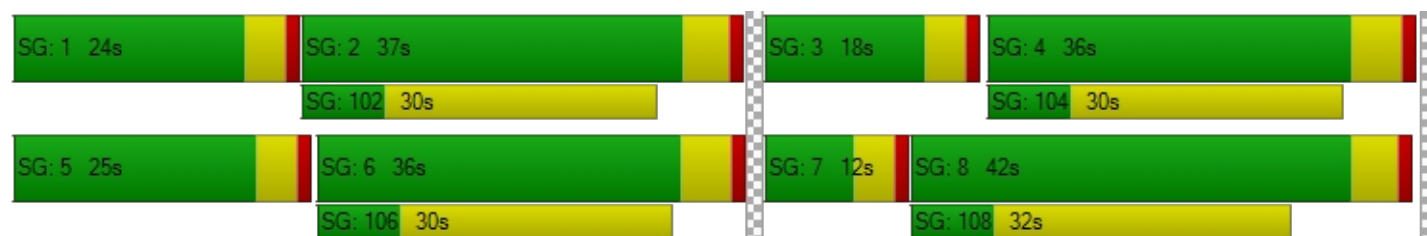
d_M, Delay for Movement [s/veh]	35.87	28.31	21.40	34.82	28.35	28.66	37.70	21.74	27.59	41.45	26.03	31.56
Movement LOS	D	C	C	C	C	C	D	C	C	D	C	C
d_A, Approach Delay [s/veh]	29.96			30.00			27.61			29.86		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	29.44											
Intersection LOS	C											
Intersection V/C	0.670											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	25.37			25.37			25.37			25.37		
I_p,int, Pedestrian LOS Score for Intersection	2.851			2.916			2.818			2.722		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	864			904			1044			864		
d_b, Bicycle Delay [s]	11.46			10.67			8.11			11.46		
I_b,int, Bicycle LOS Score for Intersection	2.213			2.370			2.138			2.197		
Bicycle LOS	B			B			B			B		

Sequence

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



PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: California St (NS) at I-10 WB Ramps (EW)

Control Type:	Signalized	Delay (sec / veh):	37.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.866

Intersection Setup

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	77.00	100.00	290.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Base Volume Input [veh/h]	361	500	0	0	437	504	0	0	0	345	2	213
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	361	500	0	0	437	504	0	0	0	345	2	213
Peak Hour Factor	0.9117	0.9117	0.9500	0.9500	0.9117	0.9117	0.9500	0.9500	0.9500	0.9117	0.9117	0.9117
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	99	137	0	0	120	138	0	0	0	95	1	58
Total Analysis Volume [veh/h]	396	548	0	0	479	553	0	0	0	378	2	234
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	10	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	40	60	0	0	60	0	0	0	0	0	50	0
Amber [s]	3.5	3.9	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	4.3	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	29	74	0	0	45	0	0	0	0	0	26	0
Vehicle Extension [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	0	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
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90		5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90		3.30	3.30
g_i, Effective Green Time [s]	25	69	40	40		21	21
g / C, Green / Cycle	0.24	0.69	0.40	0.40		0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.23	0.16	0.10	0.36		0.22	0.15
s, saturation flow rate [veh/h]	1714	3427	4903	1530		1715	1530
c, Capacity [veh/h]	420	2373	1973	616		353	315
d1, Uniform Delay [s]	37.09	5.63	19.80	27.98		39.74	37.27
k, delay calibration	0.08	0.50	0.50	0.50		0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.54	0.23	0.29	18.39		39.92	1.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.94	0.23	0.24	0.90		1.08	0.74
d, Delay for Lane Group [s/veh]	45.63	5.86	20.09	46.36		79.66	38.59
Lane Group LOS	D	A	C	D		F	D
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	9.96	1.71	2.36	14.45		12.42	5.41
50th-Percentile Queue Length [ft/ln]	249.10	42.64	59.10	361.31		310.51	135.28
95th-Percentile Queue Length [veh/ln]	15.14	3.07	4.25	20.69		18.92	9.23
95th-Percentile Queue Length [ft/ln]	378.52	76.75	106.37	517.18		472.93	230.66

Movement, Approach, & Intersection Results

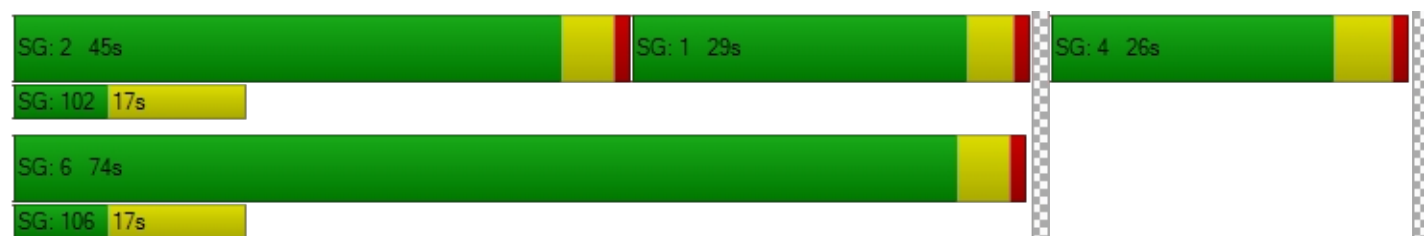
d_M, Delay for Movement [s/veh]	45.63	5.86	0.00	0.00	20.09	46.36	0.00	0.00	0.00	79.66	79.66	38.59
Movement LOS	D	A			C	D				F	E	D
d_A, Approach Delay [s/veh]	22.54			34.17			0.00			64.01		
Approach LOS	C			C			A			E		
d_I, Intersection Delay [s/veh]	37.01											
Intersection LOS	D											
Intersection V/C	0.866											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
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			39.62			39.62		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.355			2.145		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1382			802			0			414		
d_b, Bicycle Delay [s]	4.78			17.95			50.02			31.46		
I_b,int, Bicycle LOS Score for Intersection	2.338			2.127			4.132			2.573		
Bicycle LOS	B			B			D			B		

Sequence

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



Intersection Level Of Service Report
Intersection 2: California St (NS) at I-10 EB Ramps (EW)

Control Type:	Signalized	Delay (sec / veh):	34.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.870

Intersection Setup

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Base Volume Input [veh/h]	0	635	539	238	554	0	248	13	416	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	635	539	238	554	0	248	13	416	0	0	0
Peak Hour Factor	0.9500	0.9324	0.9324	0.9324	0.9324	0.9500	0.9324	0.9324	0.9324	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	170	145	64	149	0	66	3	112	0	0	0
Total Analysis Volume [veh/h]	0	681	578	255	594	0	266	14	446	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	82.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	0	0	0
Maximum Green [s]	0	60	0	50	60	0	0	50	0	0	0	0
Amber [s]	0.0	3.9	0.0	3.5	3.9	0.0	0.0	4.3	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	47	0	20	67	0	0	33	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	10	0	0	0	0
Pedestrian Clearance [s]	0	12	0	0	14	0	0	10	0	0	0	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
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	2.5	2.9	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	C	R	
C, Cycle Length [s]	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.90	4.90	4.50	4.90	5.30	5.30	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.90	2.90	2.50	2.90	3.30	3.30	
g_i, Effective Green Time [s]	42	42	16	62	28	28	
g / C, Green / Cycle	0.42	0.42	0.16	0.62	0.28	0.28	
(v / s)_i Volume / Saturation Flow Rate	0.14	0.38	0.15	0.17	0.16	0.29	
s, saturation flow rate [veh/h]	4903	1530	1714	3427	1718	1530	
c, Capacity [veh/h]	2062	643	267	2129	476	424	
d1, Uniform Delay [s]	19.56	27.07	41.97	8.70	31.31	36.25	
k, delay calibration	0.50	0.50	0.04	0.50	0.04	0.08	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.43	17.81	8.08	0.33	0.43	33.60	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.33	0.90	0.95	0.28	0.59	1.05	
d, Delay for Lane Group [s/veh]	19.99	44.88	50.06	9.03	31.74	69.85	
Lane Group LOS	B	D	D	A	C	F	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.39	14.84	6.57	2.60	5.82	14.06	
50th-Percentile Queue Length [ft/ln]	84.75	371.01	164.25	65.06	145.50	351.44	
95th-Percentile Queue Length [veh/ln]	6.10	21.16	10.77	4.68	9.78	20.82	
95th-Percentile Queue Length [ft/ln]	152.56	528.96	269.34	117.11	244.41	520.55	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	19.99	44.88	50.06	9.03	0.00	31.74	31.74	69.85	0.00	0.00	0.00
Movement LOS		B	D	D	A		C	C	F			
d_A, Approach Delay [s/veh]	31.42			21.35			55.15			0.00		
Approach LOS	C			C			E			A		
d_I, Intersection Delay [s/veh]	34.48											
Intersection LOS	C											
Intersection V/C	0.870											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
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			39.68			39.68		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.181			2.254		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	841			1240			553			0		
d_b, Bicycle Delay [s]	16.82			7.23			26.20			50.07		
I_b,int, Bicycle LOS Score for Intersection	2.252			2.260			2.758			4.132		
Bicycle LOS	B			B			C			D		

Sequence





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



Intersection Level Of Service Report
Intersection 3: California St (NS) at Project North Dwy (EW)

Control Type:	Two-way stop	Delay (sec / veh):	155.8
Analysis Method:	HCM 7th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.280

Intersection Setup

Name	California St			California St			Project North Dwy			Shopping Center		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	180.00	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Project North Dwy			Shopping Center		
Base Volume Input [veh/h]	0	989	32	202	740	1	0	0	0	8	0	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	989	32	202	740	1	0	0	0	8	0	88
Peak Hour Factor	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	267	9	55	200	0	0	0	0	2	0	24
Total Analysis Volume [veh/h]	0	1068	35	218	799	1	0	0	0	9	0	95
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	0.00	0.01	0.00	0.61	0.01	0.00	0.00	0.00	0.00	0.28	0.00	0.22
d_M, Delay for Movement [s/veh]	9.33	0.00	0.00	30.07	0.00	0.00	120.13	257.22	11.97	155.84	247.21	15.92
Movement LOS	A	A	A	D	A	A	F	F	B	F	F	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	3.90	0.00	0.00	0.00	0.00	0.00	0.89	0.85	0.85
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	97.44	0.00	0.00	0.00	0.00	0.00	22.29	21.21	21.21
d_A, Approach Delay [s/veh]	0.00			6.44			129.77			28.03		
Approach LOS	A			A			F			D		
d_I, Intersection Delay [s/veh]	4.26											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 4: California St (NS) at Redlands Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	195.00	100.00	245.00	95.00	100.00	100.00	100.00	100.00	100.00	127.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Base Volume Input [veh/h]	129	446	68	226	411	92	199	719	198	70	468	337
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	446	68	226	411	92	199	719	198	70	468	337
Peak Hour Factor	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	116	18	59	107	24	52	187	51	18	122	88
Total Analysis Volume [veh/h]	134	464	71	235	427	96	207	748	206	73	487	350
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	115
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	7	0	5	5	0
Maximum Green [s]	20	30	0	20	25	0	20	30	0	20	25	0
Amber [s]	3.5	3.9	0.0	3.5	3.9	0.0	3.5	4.3	0.0	3.5	4.3	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	35	0	22	43	0	20	47	0	11	38	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	23	0	0	25	0	0	23	0	0	23	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	2.5	2.9	0.0	2.5	3.3	0.0	2.5	3.3	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	79	79	79	79	79	79	79	79	79	79	79	79	79
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90	4.50	4.90	4.90	4.50	5.30	5.30	4.50	5.30	5.30
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	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90	2.50	2.90	2.90	2.50	3.30	3.30	2.50	3.30	3.30
g_i, Effective Green Time [s]	8	15	15	15	13	20	20	12	28	28	4	21	21
g / C, Green / Cycle	0.10	0.19	0.19	0.19	0.16	0.25	0.25	0.15	0.35	0.35	0.06	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.08	0.10	0.15	0.05	0.14	0.15	0.15	0.12	0.22	0.13	0.04	0.14	0.23
s, saturation flow rate [veh/h]	1714	1800	1800	1530	1714	1800	1687	1714	3427	1530	1714	3427	1530
c, Capacity [veh/h]	170	339	339	288	279	452	424	250	1207	539	95	897	401
d1, Uniform Delay [s]	34.92	29.20	30.93	27.44	32.26	26.18	26.19	32.94	21.30	19.24	37.00	25.21	28.04
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.22
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.78	1.41	4.89	0.44	6.87	1.26	1.36	6.91	0.52	0.45	12.32	0.51	11.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	1.00

Lane Group Results

X, volume / capacity	0.79	0.55	0.82	0.25	0.84	0.60	0.60	0.83	0.62	0.38	0.77	0.54	0.87
d, Delay for Lane Group [s/veh]	42.70	30.60	35.82	27.88	39.13	27.44	27.55	39.85	21.82	19.69	49.32	25.72	39.39
Lane Group LOS	D	C	D	C	D	C	C	D	C	B	D	C	D
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.73	3.11	5.14	1.10	4.58	4.25	4.01	4.06	5.20	2.61	1.65	3.72	7.12
50th-Percentile Queue Length [ft/ln]	68.23	77.82	128.5	27.49	114.43	106.25	100.22	101.58	129.95	65.24	41.35	93.12	177.90
95th-Percentile Queue Length [veh/ln]	4.91	5.60	8.86	1.98	8.09	7.63	7.22	7.31	8.94	4.70	2.98	6.70	11.49
95th-Percentile Queue Length [ft/ln]	122.8	140.0	221.4	49.48	202.14	190.78	180.39	182.85	223.43	117.43	74.43	167.61	287.27

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.70	33.72	27.88	39.13	27.48	27.55	39.85	21.82	19.69	49.32	25.72	39.39
Movement LOS	D	C	C	D	C	C	D	C	B	D	C	D
d_A, Approach Delay [s/veh]	34.90			31.10			24.66			32.87		
Approach LOS	C			C			C			C		
d_I, Intersection Delay [s/veh]	30.15											
Intersection LOS	C											
Intersection V/C	0.713											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	29.35			29.35			29.35			29.35		
I_p,int, Pedestrian LOS Score for Intersection	2.781			2.879			2.903			2.871		
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]	760			963			1054			826		
d_b, Bicycle Delay [s]	15.20			10.65			8.86			13.64		
I_b,int, Bicycle LOS Score for Intersection	2.112			2.185			2.517			2.310		
Bicycle LOS	B			B			B			B		

Sequence

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






EXISTING PLUS PROJECT

AM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: California St (NS) at I-10 WB Ramps (EW)**

Control Type:	Signalized	Delay (sec / veh):	32.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

Intersection Setup

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	77.00	100.00	290.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Base Volume Input [veh/h]	359	644	0	0	157	297	0	0	0	394	52	397
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	6	0	0	6	0	0	0	0	12	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	365	650	0	0	163	297	0	0	0	406	52	397
Peak Hour Factor	0.9086	0.9086	0.9500	0.9500	0.9086	0.9086	0.9500	0.9500	0.9500	0.9086	0.9086	0.9086
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	100	179	0	0	45	82	0	0	0	112	14	109
Total Analysis Volume [veh/h]	402	715	0	0	179	327	0	0	0	447	57	437
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	10	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	40	60	0	0	60	0	0	0	0	0	50	0
Amber [s]	3.5	3.9	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	4.3	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	29	56	0	0	27	0	0	0	0	0	44	0
Vehicle Extension [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	0	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
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90		5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90		3.30	3.30
g_i, Effective Green Time [s]	25	58	29	29		31	31
g / C, Green / Cycle	0.24	0.58	0.29	0.29		0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.23	0.21	0.04	0.21		0.29	0.29
s, saturation flow rate [veh/h]	1714	3427	4903	1530		1724	1530
c, Capacity [veh/h]	420	2001	1442	450		542	481
d1, Uniform Delay [s]	37.28	10.95	25.90	31.74		33.28	32.96
k, delay calibration	0.09	0.50	0.50	0.50		0.09	0.07
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	10.84	0.50	0.18	9.86		6.34	4.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.36	0.12	0.73		0.93	0.91
d, Delay for Lane Group [s/veh]	48.12	11.45	26.08	41.60		39.62	37.89
Lane Group LOS	D	B	C	D		D	D
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	10.41	3.75	1.02	7.91		12.49	10.56
50th-Percentile Queue Length [ft/ln]	260.31	93.70	25.44	197.67		312.14	264.04
95th-Percentile Queue Length [veh/ln]	15.70	6.75	1.83	12.52		18.28	15.89
95th-Percentile Queue Length [ft/ln]	392.61	168.66	45.79	312.96		457.02	397.28

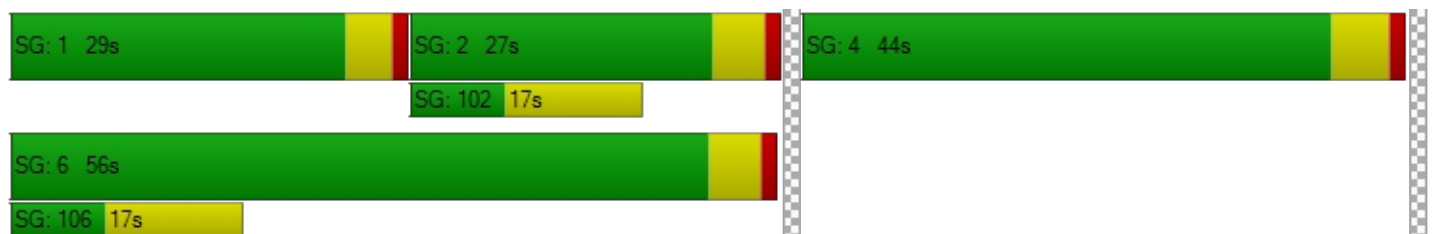
Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	48.12	11.45	0.00	0.00	26.08	41.60	0.00	0.00	0.00	39.62	39.62	37.89
Movement LOS	D	B			C	D				D	D	D
d_A, Approach Delay [s/veh]	24.65			36.11			0.00			38.82		
Approach LOS	C			D			A			D		
d_I, Intersection Delay [s/veh]	32.11											
Intersection LOS	C											
Intersection V/C	0.788											

Other Modes

g_walk,mi, Effective Walk Time [s]	0.0	0.0	11.0	11.0
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	39.64	39.64
I_p,int, Pedestrian LOS Score for Intersectio	0.000	0.000	2.195	2.251
Crosswalk LOS	F	F	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1021	442	0	774
d_b, Bicycle Delay [s]	11.98	30.37	50.03	18.82
I_b,int, Bicycle LOS Score for Intersection	2.481	1.838	4.132	3.112
Bicycle LOS	B	A	D	C



Sequence

[illegible]

Intersection Level Of Service Report**Intersection 2: California St (NS) at I-10 EB Ramps (EW)**

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

Intersection Setup

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Base Volume Input [veh/h]	0	559	321	81	500	0	478	0	489	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	13	0	18	0	0	0	6	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	571	334	81	518	0	478	0	495	0	0	0
Peak Hour Factor	0.9500	0.9410	0.9410	0.9410	0.9410	0.9500	0.9410	0.9410	0.9410	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	152	89	22	138	0	127	0	132	0	0	0
Total Analysis Volume [veh/h]	0	607	355	86	550	0	508	0	526	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	52.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	0	0	0
Maximum Green [s]	0	60	0	40	60	0	0	50	0	0	0	0
Amber [s]	0.0	3.9	0.0	3.5	3.9	0.0	0.0	4.3	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	39	0	15	54	0	0	46	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	3.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	10	0	0	0	0
Pedestrian Clearance [s]	0	12	0	0	14	0	0	10	0	0	0	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
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	2.5	2.9	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	C	R	
C, Cycle Length [s]	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.90	4.90	4.50	4.90	5.30	5.30	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.90	2.90	2.50	2.90	3.30	3.30	
g_i, Effective Green Time [s]	40	40	9	54	36	36	
g / C, Green / Cycle	0.40	0.40	0.09	0.53	0.36	0.36	
(v / s)_i Volume / Saturation Flow Rate	0.12	0.23	0.05	0.16	0.30	0.34	
s, saturation flow rate [veh/h]	4903	1530	1714	3427	1714	1530	
c, Capacity [veh/h]	1952	609	157	1832	623	556	
d1, Uniform Delay [s]	20.70	23.62	43.50	12.92	28.81	30.89	
k, delay calibration	0.50	0.50	0.04	0.50	0.09	0.17	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.42	4.04	1.11	0.42	2.28	12.83	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.31	0.58	0.55	0.30	0.81	0.95	
d, Delay for Lane Group [s/veh]	21.12	27.67	44.61	13.34	31.09	43.72	
Lane Group LOS	C	C	D	B	C	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.11	6.76	2.01	3.17	11.09	13.86	
50th-Percentile Queue Length [ft/ln]	77.79	169.06	50.32	79.37	277.26	346.43	
95th-Percentile Queue Length [veh/ln]	5.60	11.03	3.62	5.71	16.55	19.96	
95th-Percentile Queue Length [ft/ln]	140.02	275.68	90.58	142.87	413.80	499.05	

Movement, Approach, & Intersection Results

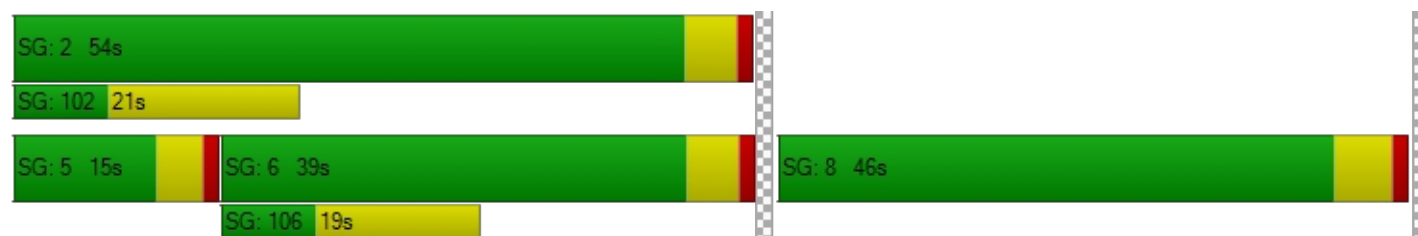
d_M, Delay for Movement [s/veh]	0.00	21.12	27.67	44.61	13.34	0.00	31.09	31.09	43.72	0.00	0.00	0.00
Movement LOS		C	C	D	B		C	C	D			
d_A, Approach Delay [s/veh]	23.54			17.57			37.52			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	27.59											
Intersection LOS	C											
Intersection V/C	0.666											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			39.64			39.64		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.281			1.858		
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]	682			981			813			0		
d_b, Bicycle Delay [s]	21.74			12.98			17.61			50.03		
I_b,int, Bicycle LOS Score for Intersection	2.089			2.084			3.266			4.132		
Bicycle LOS	B			B			C			D		

Sequence




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



Intersection Level Of Service Report**Intersection 3: California St (NS) at Project North Dwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.386

Intersection Setup

Name	California St			California St			Project North Dwy			Shopping Center		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	180.00	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			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	California St			California St			Project North Dwy			Shopping Center		
Base Volume Input [veh/h]	1	805	11	122	859	0	0	0	0	0	0	42
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	36	0	0	0	18	6	25	0	16	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	19	0	0	0	9	3	12	0	8	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	56	805	11	122	886	9	37	0	24	0	0	42
Peak Hour Factor	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451	0.9451
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	213	3	32	234	2	10	0	6	0	0	11
Total Analysis Volume [veh/h]	59	852	12	129	937	10	39	0	25	0	0	44
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	85
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	12	29	0	9	38	0	9	38	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	29	0	0	29	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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
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
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

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	C	L	C	L	C
C, Cycle Length [s]	85	85	85	85	85	85	85	85	85	85
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	53	53	8	58	58	3	8	0	5
g / C, Green / Cycle	0.04	0.63	0.63	0.09	0.68	0.68	0.04	0.09	0.00	0.05
(v / s)_i Volume / Saturation Flow Rate	0.03	0.17	0.01	0.08	0.26	0.26	0.02	0.02	0.00	0.03
s, saturation flow rate [veh/h]	1714	4903	1530	1714	1800	1793	1714	1530	1714	1530
c, Capacity [veh/h]	78	3072	959	161	1215	1210	63	138	2	84
d1, Uniform Delay [s]	40.18	7.19	5.99	37.81	6.11	6.11	40.43	35.84	0.00	39.19
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.54	0.22	0.02	8.81	0.95	0.95	9.38	0.62	0.00	5.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.28	0.01	0.80	0.39	0.39	0.62	0.18	0.00	0.53
d, Delay for Lane Group [s/veh]	53.72	7.42	6.01	46.62	7.06	7.06	49.81	36.46	0.00	44.22
Lane Group LOS	D	A	A	D	A	A	D	D	A	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.46	1.86	0.07	2.89	2.94	2.93	0.97	0.50	0.00	1.01
50th-Percentile Queue Length [ft/ln]	36.40	46.45	1.74	72.16	73.59	73.35	24.20	12.58	0.00	25.24
95th-Percentile Queue Length [veh/ln]	2.62	3.34	0.13	5.20	5.30	5.28	1.74	0.91	0.00	1.82
95th-Percentile Queue Length [ft/ln]	65.52	83.61	3.13	129.89	132.46	132.03	43.56	22.65	0.00	45.43

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.72	7.42	6.01	46.62	7.06	7.06	49.81	36.46	36.46	0.00	44.22	44.22
Movement LOS	D	A	A	D	A	A	D	D	D	A	D	D
d_A, Approach Delay [s/veh]	10.36			11.80			44.60			44.22		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	12.84											
Intersection LOS	B											
Intersection V/C	0.386											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	34.03			34.03			34.03			34.03		
I_p,int, Pedestrian LOS Score for Intersection	2.986			3.013			1.975			1.989		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	517			588			799			799		
d_b, Bicycle Delay [s]	23.39			21.22			15.34			15.34		
I_b,int, Bicycle LOS Score for Intersection	2.067			2.447			1.665			1.632		
Bicycle LOS	B			B			A			A		

Sequence





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



Intersection Level Of Service Report**Intersection 4: California St (NS) at Redlands Blvd (EW)**

Control Type:	Signalized	Delay (sec / veh):	34.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.718

Intersection Setup

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	195.00	100.00	245.00	95.00	100.00	100.00	100.00	100.00	100.00	127.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Base Volume Input [veh/h]	168	471	25	201	424	198	127	217	244	83	347	217
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	16	6	17	15	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	3	0	8	3	7	8	0	0	0	0	8
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	168	480	25	225	433	222	150	217	244	83	347	240
Peak Hour Factor	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387	0.8387
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	143	7	67	129	66	45	65	73	25	103	72
Total Analysis Volume [veh/h]	200	572	30	268	516	265	179	259	291	99	414	286
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	115
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	0	5	5	0
Maximum Green [s]	20	30	0	20	30	0	20	25	0	20	25	0
Amber [s]	3.5	4.3	0.0	3.5	3.9	0.0	3.5	3.9	0.0	3.5	4.3	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	36	0	25	37	0	18	42	0	12	36	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	23	0	0	23	0	0	25	0	0	23	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	3.3	0.0	2.5	2.9	0.0	2.5	2.9	0.0	2.5	3.3	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	82	82	82	82	82	82	82	82	82	82	82	82	82
L, Total Lost Time per Cycle [s]	4.50	5.30	5.30	5.30	4.50	4.90	4.90	4.50	4.90	4.90	4.50	5.30	5.30
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	0.00
l2, Clearance Lost Time [s]	2.50	3.30	3.30	3.30	2.50	2.90	2.90	2.50	2.90	2.90	2.50	3.30	3.30
g_i, Effective Green Time [s]	12	19	19	19	15	23	23	10	23	23	6	18	18
g / C, Green / Cycle	0.14	0.23	0.23	0.23	0.18	0.28	0.28	0.13	0.28	0.28	0.07	0.22	0.22
(v / s)_i Volume / Saturation Flow Rate	0.12	0.12	0.20	0.02	0.16	0.23	0.23	0.10	0.08	0.19	0.06	0.12	0.19
s, saturation flow rate [veh/h]	1714	1800	1800	1530	1714	1800	1597	1714	3427	1530	1714	3427	1530
c, Capacity [veh/h]	241	419	419	356	310	499	443	219	954	426	128	755	337
d1, Uniform Delay [s]	34.35	27.42	30.28	24.69	32.69	27.86	27.86	34.90	23.15	26.43	37.34	28.41	30.73
k, delay calibration	0.11	0.11	0.11	0.11	0.16	0.17	0.17	0.11	0.11	0.16	0.11	0.11	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.15	0.94	5.36	0.10	10.40	5.40	6.08	7.26	0.15	2.78	9.46	0.62	7.62
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	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	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	1.00

Lane Group Results

X, volume / capacity	0.83	0.50	0.86	0.08	0.86	0.83	0.83	0.82	0.27	0.68	0.77	0.55	0.85
d, Delay for Lane Group [s/veh]	41.50	28.36	35.64	24.79	43.09	33.26	33.94	42.17	23.30	29.21	46.80	29.04	38.34
Lane Group LOS	D	C	D	C	D	C	C	D	C	C	D	C	D
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.10	3.43	6.91	0.44	5.69	7.68	6.90	3.70	1.82	4.95	2.20	3.46	5.78
50th-Percentile Queue Length [ft/ln]	102.5	85.84	172.6	10.89	142.23	191.88	172.41	92.48	45.58	123.84	55.00	86.50	144.62
95th-Percentile Queue Length [veh/ln]	7.38	6.18	11.22	0.78	9.60	12.22	11.20	6.66	3.28	8.60	3.96	6.23	9.73
95th-Percentile Queue Length [ft/ln]	184.6	154.5	280.4	19.61	240.03	305.46	280.08	166.47	82.04	215.09	98.99	155.70	243.23

Movement, Approach, & Intersection Results

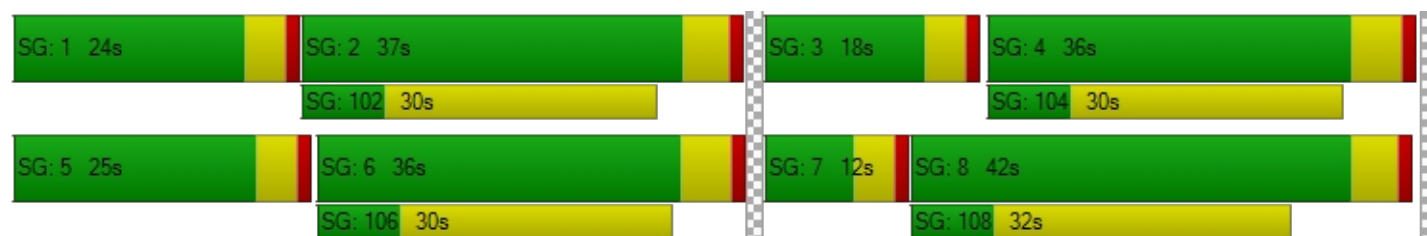
d_M, Delay for Movement [s/veh]	41.50	32.95	24.79	43.09	33.40	33.94	42.17	23.30	29.21	46.80	29.04	38.34
Movement LOS	D	C	C	D	C	C	D	C	C	D	C	D
d_A, Approach Delay [s/veh]	34.78			36.01			30.29			34.57		
Approach LOS	C			D			C			C		
d_I, Intersection Delay [s/veh]	34.14											
Intersection LOS	C											
Intersection V/C	0.718											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
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]	30.72			30.72			30.72			30.72		
I_p,int, Pedestrian LOS Score for Intersection	2.864			2.956			2.839			2.741		
Crosswalk LOS	C			C			C			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	749			783			905			749		
d_b, Bicycle Delay [s]	16.03			15.17			12.28			16.03		
I_b,int, Bicycle LOS Score for Intersection	2.221			2.425			2.161			2.219		
Bicycle LOS	B			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 5: California St (NS) at Project South Dwy (EW)**

Control Type:	Two-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.080

Intersection Setup

Name	California St		California St		Project South Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	California St		California St		Project South Dwy	
Base Volume Input [veh/h]	0	817	859	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	0	36	16	18	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	19	8	9	0	10
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	872	883	27	0	33
Peak Hour Factor	0.9500	0.9200	0.9200	0.9200	0.9500	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	237	240	7	0	9
Total Analysis Volume [veh/h]	0	948	960	29	0	36
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	0.00	0.01	0.01	0.00	0.00	0.08
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	13.70
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.26
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	6.50
d_A, Approach Delay [s/veh]	0.00		0.00		13.70	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	B					

PM PEAK HOUR

Intersection Level Of Service Report**Intersection 1: California St (NS) at I-10 WB Ramps (EW)**

Control Type:	Signalized	Delay (sec / veh):	40.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.880

Intersection Setup

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	77.00	100.00	290.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 WB Ramps			I-10 WB Ramps		
Base Volume Input [veh/h]	361	500	0	0	437	504	0	0	0	345	2	213
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	7	0	0	7	0	0	0	0	13	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	368	507	0	0	444	504	0	0	0	358	2	213
Peak Hour Factor	0.9117	0.9117	0.9500	0.9500	0.9117	0.9117	0.9500	0.9500	0.9500	0.9117	0.9117	0.9117
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	101	139	0	0	122	138	0	0	0	98	1	58
Total Analysis Volume [veh/h]	404	556	0	0	487	553	0	0	0	393	2	234
Presence of On-Street Parking	No		No	No		No				No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	1	6	0	0	2	0	0	0	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lag	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	10	10	0	0	10	0	0	0	0	0	10	0
Maximum Green [s]	40	60	0	0	60	0	0	0	0	0	50	0
Amber [s]	3.5	3.9	0.0	0.0	3.9	0.0	0.0	0.0	0.0	0.0	4.3	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Split [s]	29	74	0	0	45	0	0	0	0	0	26	0
Vehicle Extension [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Walk [s]	0	7	0	0	7	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	0	0	0	0	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
Rest In Walk		No			No						No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Minimum Recall	No	No			No						No	
Maximum Recall	No	No			No						No	
Pedestrian Recall	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R		C	R
C, Cycle Length [s]	100	100	100	100		100	100
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90		5.30	5.30
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90		3.30	3.30
g_i, Effective Green Time [s]	25	69	40	40		21	21
g / C, Green / Cycle	0.24	0.69	0.40	0.40		0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.24	0.16	0.10	0.36		0.23	0.15
s, saturation flow rate [veh/h]	1714	3427	4903	1530		1715	1530
c, Capacity [veh/h]	420	2373	1973	616		353	315
d1, Uniform Delay [s]	37.31	5.65	19.83	27.98		39.74	37.27
k, delay calibration	0.09	0.50	0.50	0.50		0.04	0.04
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	11.67	0.23	0.30	18.39		57.67	1.32
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00		0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00		1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00		1.00	1.00

Lane Group Results

X, volume / capacity	0.96	0.23	0.25	0.90		1.12	0.74
d, Delay for Lane Group [s/veh]	48.98	5.88	20.13	46.36		97.41	38.59
Lane Group LOS	D	A	C	D		F	D
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	10.57	1.74	2.41	14.45		14.16	5.41
50th-Percentile Queue Length [ft/ln]	264.14	43.38	60.20	361.31		353.98	135.28
95th-Percentile Queue Length [veh/ln]	15.90	3.12	4.33	20.69		21.54	9.23
95th-Percentile Queue Length [ft/ln]	397.41	78.09	108.35	517.18		538.61	230.66

Movement, Approach, & Intersection Results

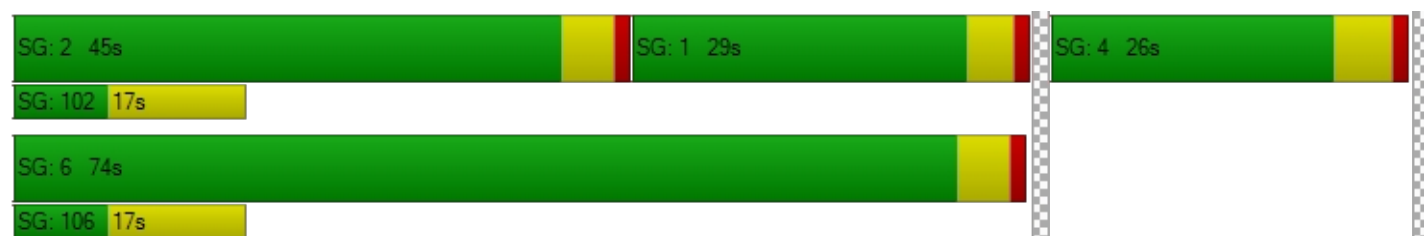
d_M, Delay for Movement [s/veh]	48.98	5.88	0.00	0.00	20.13	46.36	0.00	0.00	0.00	97.41	97.41	38.59
Movement LOS	D	A			C	D				F	F	D
d_A, Approach Delay [s/veh]	24.02			34.08			0.00			75.53		
Approach LOS	C			C			A			E		
d_I, Intersection Delay [s/veh]	40.32											
Intersection LOS	D											
Intersection V/C	0.880											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	0.00			0.00			39.62			39.62		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.363			2.149		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1382			802			0			414		
d_b, Bicycle Delay [s]	4.78			17.95			50.02			31.46		
I_b,int, Bicycle LOS Score for Intersection	2.352			2.132			4.132			2.597		
Bicycle LOS	B			B			D			B		

Sequence


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



Intersection Level Of Service Report**Intersection 2: California St (NS) at I-10 EB Ramps (EW)**

Control Type:	Signalized	Delay (sec / veh):	34.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.885

Intersection Setup

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	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
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
Speed [mph]	45.00			45.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	No			No			Yes			Yes		

Volumes

Name	California St			California St			I-10 EB Ramps			I-10 EB Ramps		
Base Volume Input [veh/h]	0	635	539	238	554	0	248	13	416	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	13	0	20	0	0	0	7	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	649	552	238	574	0	248	13	423	0	0	0
Peak Hour Factor	0.9500	0.9324	0.9324	0.9324	0.9324	0.9500	0.9324	0.9324	0.9324	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	174	148	64	154	0	66	3	113	0	0	0
Total Analysis Volume [veh/h]	0	696	592	255	616	0	266	14	454	0	0	0
Presence of On-Street Parking	No		No	No		No	No		No			
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1 - Coordination Group
Cycle Length [s]	100
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	82.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	6.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	6	0	5	2	0	0	8	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	0	10	0	10	10	0	0	10	0	0	0	0
Maximum Green [s]	0	60	0	50	60	0	0	50	0	0	0	0
Amber [s]	0.0	3.9	0.0	3.5	3.9	0.0	0.0	4.3	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0
Split [s]	0	45	0	20	65	0	0	35	0	0	0	0
Vehicle Extension [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
Walk [s]	0	7	0	0	7	0	0	10	0	0	0	0
Pedestrian Clearance [s]	0	12	0	0	14	0	0	10	0	0	0	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
Rest In Walk		No			No			No				
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.9	0.0	2.5	2.9	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Minimum Recall		No		No	No			No				
Maximum Recall		No		No	No			No				
Pedestrian Recall		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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	C	R	
C, Cycle Length [s]	100	100	100	100	100	100	
L, Total Lost Time per Cycle [s]	4.90	4.90	4.50	4.90	5.30	5.30	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.90	2.90	2.50	2.90	3.30	3.30	
g_i, Effective Green Time [s]	40	40	16	60	30	30	
g / C, Green / Cycle	0.40	0.40	0.16	0.60	0.30	0.30	
(v / s)_i Volume / Saturation Flow Rate	0.14	0.39	0.15	0.18	0.16	0.30	
s, saturation flow rate [veh/h]	4903	1530	1714	3427	1718	1530	
c, Capacity [veh/h]	1964	613	267	2061	510	454	
d1, Uniform Delay [s]	21.00	29.39	41.97	9.71	29.61	35.25	
k, delay calibration	0.50	0.50	0.04	0.50	0.04	0.09	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.50	28.86	8.08	0.37	0.34	18.13	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

Lane Group Results

X, volume / capacity	0.35	0.97	0.95	0.30	0.55	1.00	
d, Delay for Lane Group [s/veh]	21.50	58.25	50.06	10.09	29.96	53.38	
Lane Group LOS	C	E	D	B	C	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	3.63	17.57	6.57	2.93	5.63	13.05	
50th-Percentile Queue Length [ft/ln]	90.86	439.17	164.25	73.34	140.65	326.30	
95th-Percentile Queue Length [veh/ln]	6.54	24.44	10.77	5.28	9.52	18.98	
95th-Percentile Queue Length [ft/ln]	163.54	611.01	269.34	132.01	237.90	474.42	

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	21.50	58.25	50.06	10.09	0.00	29.96	29.96	53.38	0.00	0.00	0.00
Movement LOS		C	E	D	B		C	C	D			
d_A, Approach Delay [s/veh]	38.39			21.79			44.45			0.00		
Approach LOS	D			C			D			A		
d_I, Intersection Delay [s/veh]	34.93											
Intersection LOS	C											
Intersection V/C	0.885											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0			0.0			11.0			11.0		
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			39.68			39.68		
I_p,int, Pedestrian LOS Score for Intersection	0.000			0.000			2.184			2.268		
Crosswalk LOS	F			F			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	801			1200			593			0		
d_b, Bicycle Delay [s]	18.00			8.01			24.78			50.07		
I_b,int, Bicycle LOS Score for Intersection	2.268			2.278			2.771			4.132		
Bicycle LOS	B			B			C			D		

Sequence

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



Intersection Level Of Service Report**Intersection 3: California St (NS) at Project North Dwy (EW)**

Control Type:	Signalized	Delay (sec / veh):	13.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

Intersection Setup

Name	California St			California St			Project North Dwy			Shopping Center		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	70.00	180.00	100.00	100.00	100.00	100.00	100.00	50.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			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	California St			California St			Project North Dwy			Shopping Center		
Base Volume Input [veh/h]	0	989	32	202	740	1	0	0	0	8	0	88
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	39	0	0	0	20	7	27	0	16	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	9	0	0	0	4	1	5	0	3	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	989	32	202	764	9	32	0	19	8	0	88
Peak Hour Factor	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263	0.9263
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	267	9	55	206	2	9	0	5	2	0	24
Total Analysis Volume [veh/h]	52	1068	35	218	825	10	35	0	21	9	0	95
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	105
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	7	0	5	7	0	5	7	0	5	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	24	34	0	24	34	0	9	38	0	9	38	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	29	0	0	29	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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
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
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

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	C	L	C	L	C
C, Cycle Length [s]	44	44	44	44	44	44	44	44	44	44
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	14	14	7	19	19	2	6	1	5
g / C, Green / Cycle	0.05	0.32	0.32	0.17	0.43	0.43	0.04	0.14	0.01	0.11
(v / s)_i Volume / Saturation Flow Rate	0.03	0.22	0.02	0.13	0.23	0.23	0.02	0.01	0.01	0.06
s, saturation flow rate [veh/h]	1714	4903	1530	1714	1800	1792	1714	1530	1714	1530
c, Capacity [veh/h]	93	1569	490	286	779	775	69	211	21	168
d1, Uniform Delay [s]	20.33	13.02	10.42	17.52	9.24	9.24	20.72	16.59	21.61	18.60
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.24	0.53	0.06	4.21	0.58	0.58	5.74	0.20	13.80	2.94
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	0.56	0.68	0.07	0.76	0.54	0.54	0.51	0.10	0.44	0.56
d, Delay for Lane Group [s/veh]	25.56	13.55	10.49	21.73	9.82	9.82	26.46	16.79	35.41	21.54
Lane Group LOS	C	B	B	C	A	A	C	B	D	C
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.56	2.23	0.18	1.98	1.96	1.95	0.43	0.18	0.16	0.97
50th-Percentile Queue Length [ft/ln]	14.07	55.80	4.45	49.62	48.99	48.79	10.83	4.48	4.10	24.21
95th-Percentile Queue Length [veh/ln]	1.01	4.02	0.32	3.57	3.53	3.51	0.78	0.32	0.30	1.74
95th-Percentile Queue Length [ft/ln]	25.32	100.45	8.01	89.32	88.18	87.83	19.49	8.07	7.39	43.58

Movement, Approach, & Intersection Results

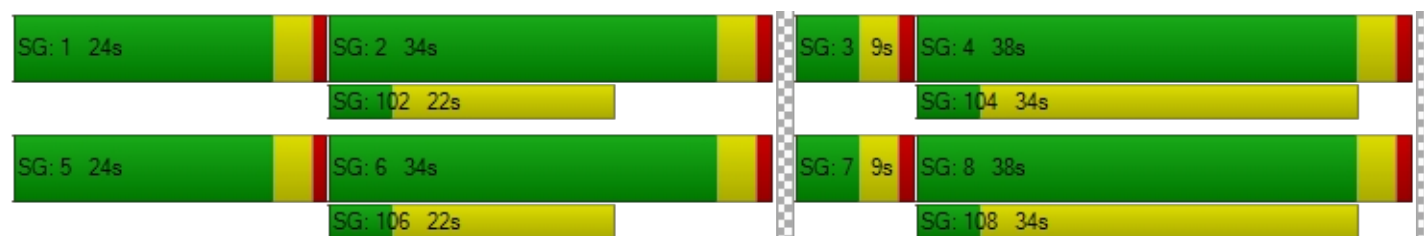
d_M, Delay for Movement [s/veh]	25.56	13.55	10.49	21.73	9.82	9.82	26.46	16.79	16.79	35.41	21.54	21.54
Movement LOS	C	B	B	C	A	A	C	B	B	D	C	C
d_A, Approach Delay [s/veh]	14.00			12.28			22.84			22.74		
Approach LOS	B			B			C			C		
d_I, Intersection Delay [s/veh]	13.83											
Intersection LOS	B											
Intersection V/C	0.523											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	13.89			13.89			13.89			13.89		
I_p,int, Pedestrian LOS Score for Intersection	2.977			3.027			1.935			2.000		
Crosswalk LOS	C			C			A			A		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	1366			1366			1548			1548		
d_b, Bicycle Delay [s]	2.21			2.21			1.12			1.12		
I_b,int, Bicycle LOS Score for Intersection	2.195			2.428			1.652			1.731		
Bicycle LOS	B			B			A			A		

Sequence





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



Intersection Level Of Service Report**Intersection 4: California St (NS) at Redlands Blvd (EW)**

Control Type:	Signalized	Delay (sec / veh):	34.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.749

Intersection Setup

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	195.00	100.00	245.00	95.00	100.00	100.00	100.00	100.00	100.00	127.00	100.00	100.00
No. of Lanes in Exit Pocket	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
Speed [mph]	45.00			45.00			45.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	California St			California St			Redlands Blvd			Redlands Blvd		
Base Volume Input [veh/h]	129	446	68	226	411	92	199	719	198	70	468	337
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	7	0	16	7	15	16	0	0	0	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	1	0	3	1	4	4	0	0	0	0	4
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	129	454	68	245	419	111	219	719	198	70	468	357
Peak Hour Factor	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618	0.9618
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	118	18	64	109	29	57	187	51	18	122	93
Total Analysis Volume [veh/h]	134	472	71	255	436	115	228	748	206	73	487	371
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	115
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]	8.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	7	0	5	5	0
Maximum Green [s]	20	30	0	20	25	0	20	30	0	20	25	0
Amber [s]	3.5	3.9	0.0	3.5	3.9	0.0	3.5	4.3	0.0	3.5	4.3	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	35	0	22	43	0	20	47	0	11	38	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	23	0	0	25	0	0	23	0	0	23	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
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.5	2.9	0.0	2.5	2.9	0.0	2.5	3.3	0.0	2.5	3.3	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
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
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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	C	R	L	C	C	L	C	R	L	C	R
C, Cycle Length [s]	88	88	88	88	88	88	88	88	88	88	88	88	88
L, Total Lost Time per Cycle [s]	4.50	4.90	4.90	4.90	4.50	4.90	4.90	4.50	5.30	5.30	4.50	5.30	5.30
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	0.00
l2, Clearance Lost Time [s]	2.50	2.90	2.90	2.90	2.50	2.90	2.90	2.50	3.30	3.30	2.50	3.30	3.30
g_i, Effective Green Time [s]	9	16	16	16	15	23	23	14	32	32	5	23	23
g / C, Green / Cycle	0.10	0.19	0.19	0.19	0.17	0.26	0.26	0.16	0.37	0.37	0.06	0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.08	0.11	0.16	0.05	0.15	0.16	0.16	0.13	0.22	0.13	0.04	0.14	0.24
s, saturation flow rate [veh/h]	1714	1800	1800	1530	1714	1800	1672	1714	3427	1530	1714	3427	1530
c, Capacity [veh/h]	168	337	337	287	294	469	436	267	1259	562	95	915	408
d1, Uniform Delay [s]	38.77	32.43	34.41	30.43	35.44	28.54	28.55	36.12	22.49	20.32	40.97	27.53	31.18
k, delay calibration	0.11	0.11	0.11	0.11	0.17	0.11	0.11	0.12	0.11	0.11	0.11	0.11	0.31
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.28	1.47	5.49	0.45	11.54	1.28	1.38	8.57	0.45	0.40	12.37	0.48	18.53
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	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	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	1.00

Lane Group Results

X, volume / capacity	0.80	0.56	0.84	0.25	0.87	0.61	0.61	0.85	0.59	0.37	0.77	0.53	0.91
d, Delay for Lane Group [s/veh]	47.05	33.90	39.90	30.87	46.97	29.82	29.94	44.69	22.94	20.72	53.34	28.02	49.72
Lane Group LOS	D	C	D	C	D	C	C	D	C	C	D	C	D
Critical Lane Group	No	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.06	3.58	5.95	1.24	5.92	5.06	4.73	5.11	5.74	2.88	1.83	4.18	9.21
50th-Percentile Queue Length [ft/ln]	76.55	89.48	148.6	31.09	147.99	126.61	118.23	127.65	143.62	72.04	45.63	104.56	230.32
95th-Percentile Queue Length [veh/ln]	5.51	6.44	9.95	2.24	9.91	8.76	8.30	8.81	9.68	5.19	3.29	7.53	14.19
95th-Percentile Queue Length [ft/ln]	137.7	161.0	248.6	55.97	247.74	218.88	207.40	220.29	241.89	129.67	82.14	188.21	354.77

Movement, Approach, & Intersection Results

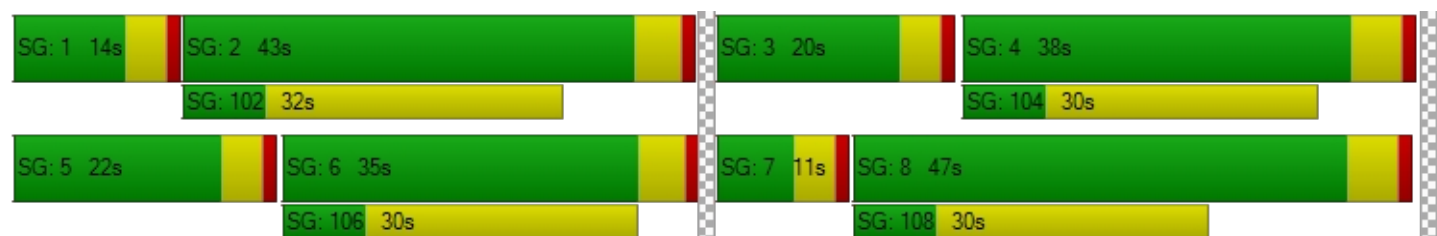
d_M, Delay for Movement [s/veh]	47.05	37.49	30.87	46.97	29.86	29.94	44.69	22.94	20.72	53.34	28.02	49.72
Movement LOS	D	D	C	D	C	C	D	C	C	D	C	D
d_A, Approach Delay [s/veh]	38.69			35.29			26.75			38.65		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	33.99											
Intersection LOS	C											
Intersection V/C	0.749											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0			11.0			11.0			11.0		
M_corner, Corner Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft ² /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	33.53			33.53			33.53			33.53		
I_p,int, Pedestrian LOS Score for Intersection	2.790			2.909			2.919			2.885		
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]	687			869			951			746		
d_b, Bicycle Delay [s]	18.90			14.02			12.05			17.23		
I_b,int, Bicycle LOS Score for Intersection	2.118			2.225			2.535			2.328		
Bicycle LOS	B			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 5: California St (NS) at Project South Dwy (EW)**

Control Type: Two-way stop
 Analysis Method: HCM 7th Edition
 Analysis Period: 15 minutes

Delay (sec / veh): 12.7
 Level Of Service: B
 Volume to Capacity (v/c): 0.059

Intersection Setup

Name	California St		California St		Project South Dwy	
Approach	Northbound		Southbound		Eastbound	
Lane Configuration						
Turning Movement	Left	Thru	Thru	Right	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]	45.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

Volumes

Name	California St		California St		Project South Dwy	
Base Volume Input [veh/h]	0	1021	748	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00
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]	0	39	16	20	0	22
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	9	3	4	0	5
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1069	767	24	0	27
Peak Hour Factor	0.9500	0.9200	0.9200	0.9200	0.9500	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	290	208	7	0	7
Total Analysis Volume [veh/h]	0	1162	834	26	0	29
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	0.00	0.01	0.01	0.00	0.00	0.06
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	12.73
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.19
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	4.66
d_A, Approach Delay [s/veh]	0.00		0.00		12.73	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.18					
Intersection LOS	B					

APPENDIX E

TRAFFIC SIGNAL WARRANT WORKSHEETS

WARRANT 3, PEAK HOUR (Rural Areas)

Traffic Conditions = **Existing Plus Project - AM**

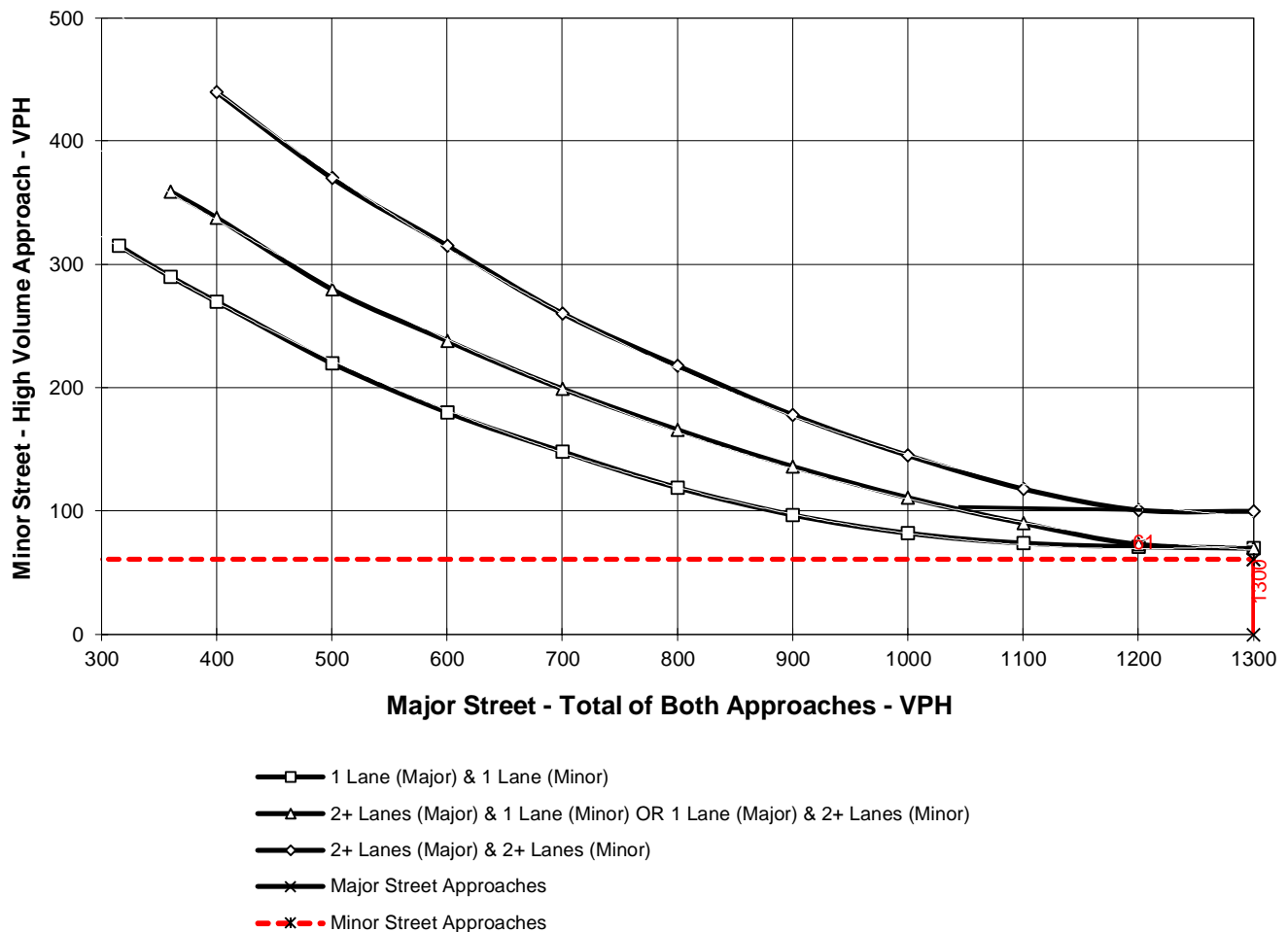
Major Street Name = **California Street**

Total of Both Approaches (VPH) = **1889**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Project Main Driveway**

High Volume Approach (VPH) = **61**
Number of Approach Lanes 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. Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Rural Areas)

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

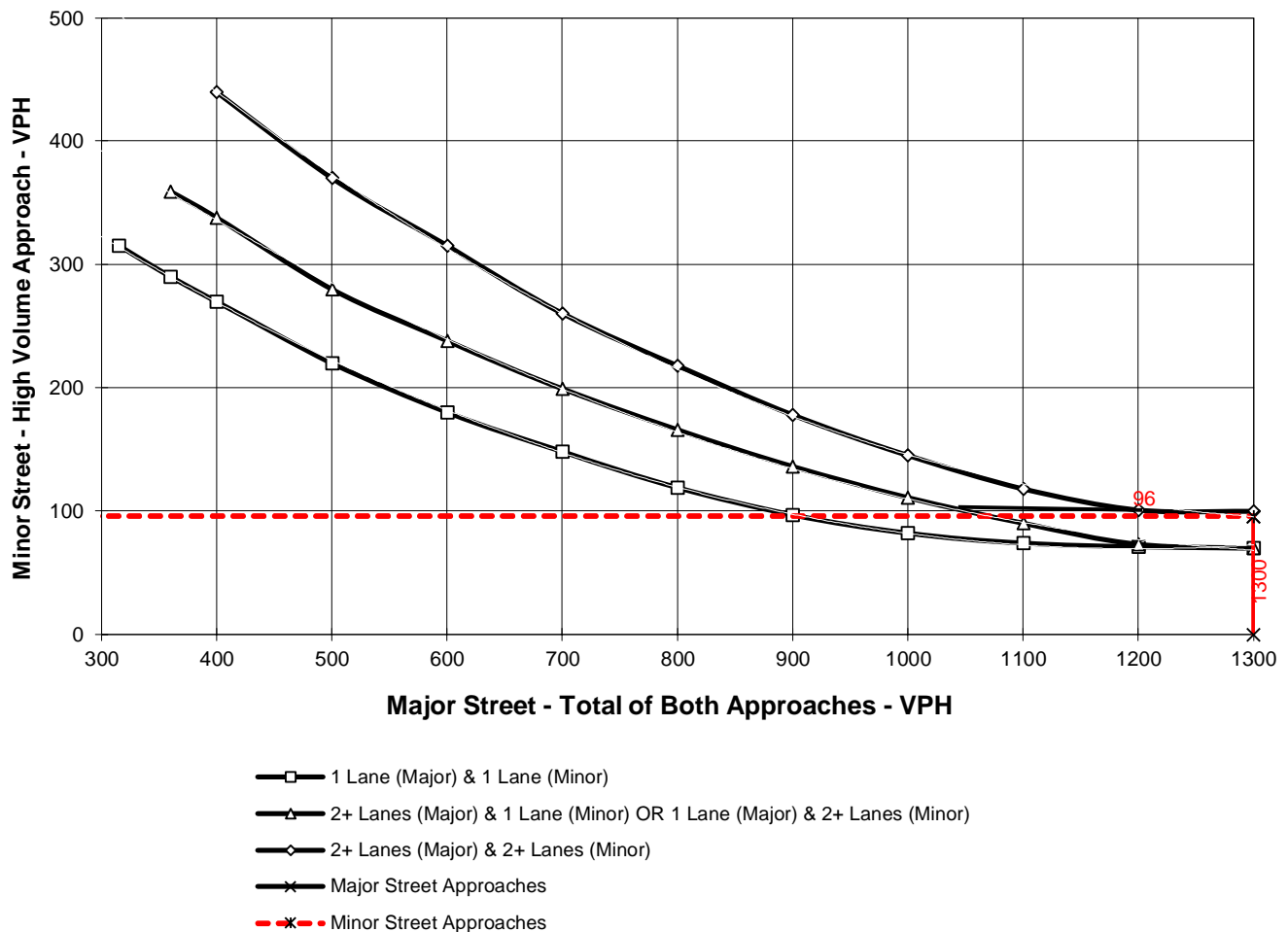
Major Street Name = **California Street**

Total of Both Approaches (VPH) = **2044**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Project Main Driveway**

High Volume Approach (VPH) = **96**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



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. Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Rural Areas)

Traffic Conditions = **Existing Plus Project - AM**

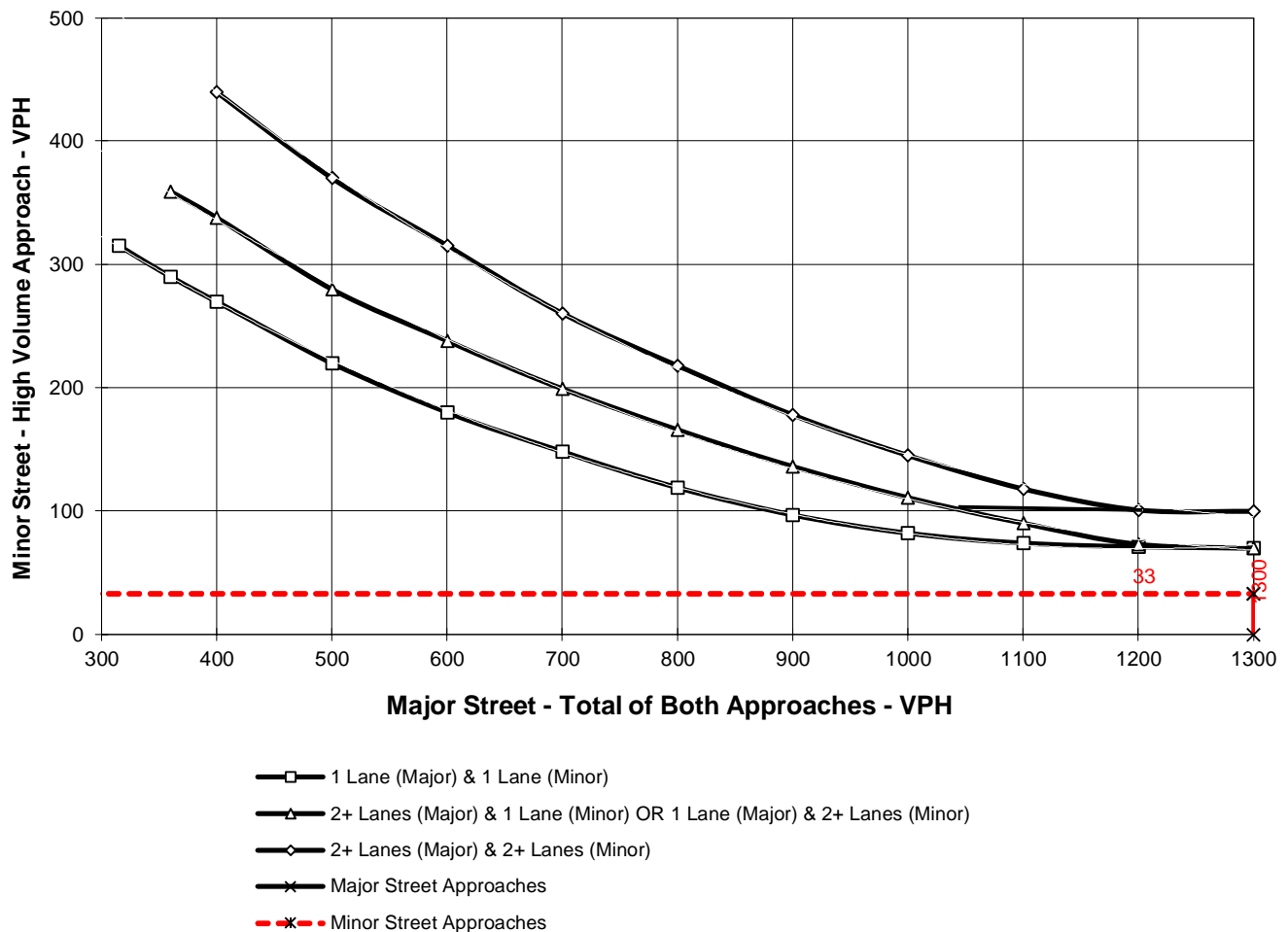
Major Street Name = **California Street**

Total of Both Approaches (VPH) = **1782**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Project Driveway**

High Volume Approach (VPH) = **33**
Number of Approach Lanes 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. Major street approaches with less than 300 vph are low volume and outside the graph boundaries.

WARRANT 3, PEAK HOUR (Rural Areas)

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

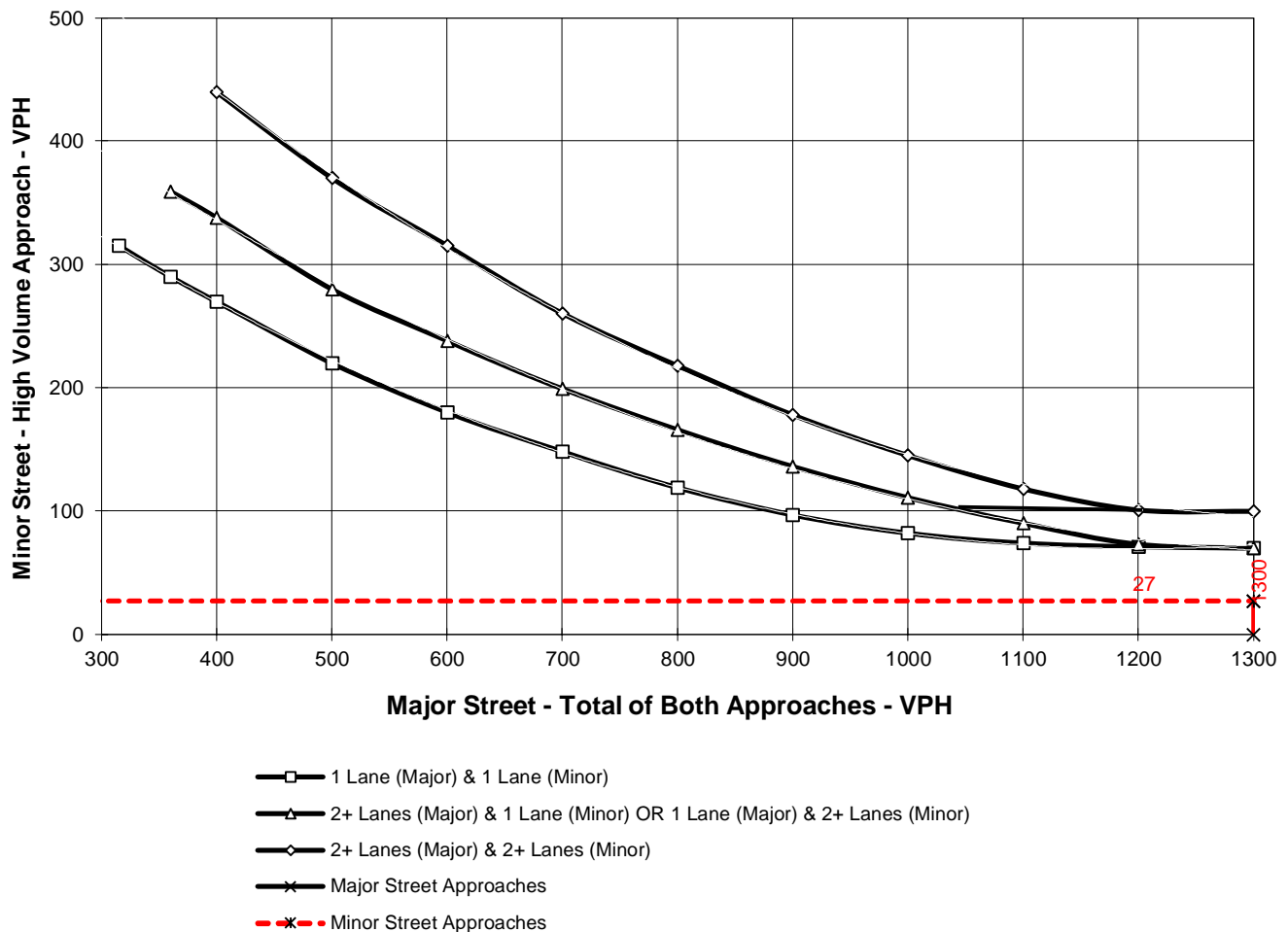
Major Street Name = **California Street**

Total of Both Approaches (VPH) = **1860**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Project Driveway**

High Volume Approach (VPH) = **27**
Number of Approach Lanes 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. Major street approaches with less than 300 vph are low volume and outside the graph boundaries.



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