

## **Appendix K – Traffic Impact Assessment and VMT Assessment**

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*Traffic Impact Study*

for:

# Beaumont Potrero Interchange Industrial Warehouse Project

In the City of Beaumont

August, 2021

**Kimley»»Horn**

TRAFFIC IMPACT STUDY  
BEAUMONT POTRERO INTERCHANGE INDUSTRIAL  
WAREHOUSE PROJECT

IN THE  
CITY OF BEAUMONT

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*August, 2021*

TRAFFIC IMPACT STUDY  
BEAUMONT POTRERO INTERCHANGE INDUSTRIAL WAREHOUSE PROJECT

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TRAFFIC IMPACT STUDY  
FOR THE  
BEAUMONT POTRERO INTERCHANGE INDUSTRIAL WAREHOUSE PROJECT

## INTRODUCTION

This traffic impact study has been prepared to evaluate the project-related traffic impacts associated with the proposed Beaumont Potrero Interchange Industrial Warehouse Project (Project) in the City of Beaumont.

## PROJECT DESCRIPTION

The Project site is located in the northwestern area of the City of Beaumont (City), south of State Route 60 (SR-60) and approximately 1.0 mile west of Interstate 10 (I-10). A project vicinity map is provided on Figure 1. The Project site is comprised of two vacant parcels. The northern parcel is located in the City of Beaumont and the southern parcel is in the County of Riverside. Annexation of the southern parcel into the City is required.

The site is bounded by SR-60 to the north, the future alignment of Potrero Boulevard (when extended south of SR-60) to the east, the unpaved alignment of 4th Street to the south, and undeveloped parcels to the west.

The Project consists of a 577,920-square-foot high-cube logistics warehouse building with 20,000 square feet of office space. A copy of the Project site plan is provided on Figure 2. The site plan shows 314 automobile parking stalls and 106 truck trailer stalls on the site, and 112 truck dock doors on the north and south sides of the building. Project access would consist of two site driveways, one on 4th Street and the other on Potrero Boulevard.

## ANALYSIS SCENARIOS AND METHODOLOGY

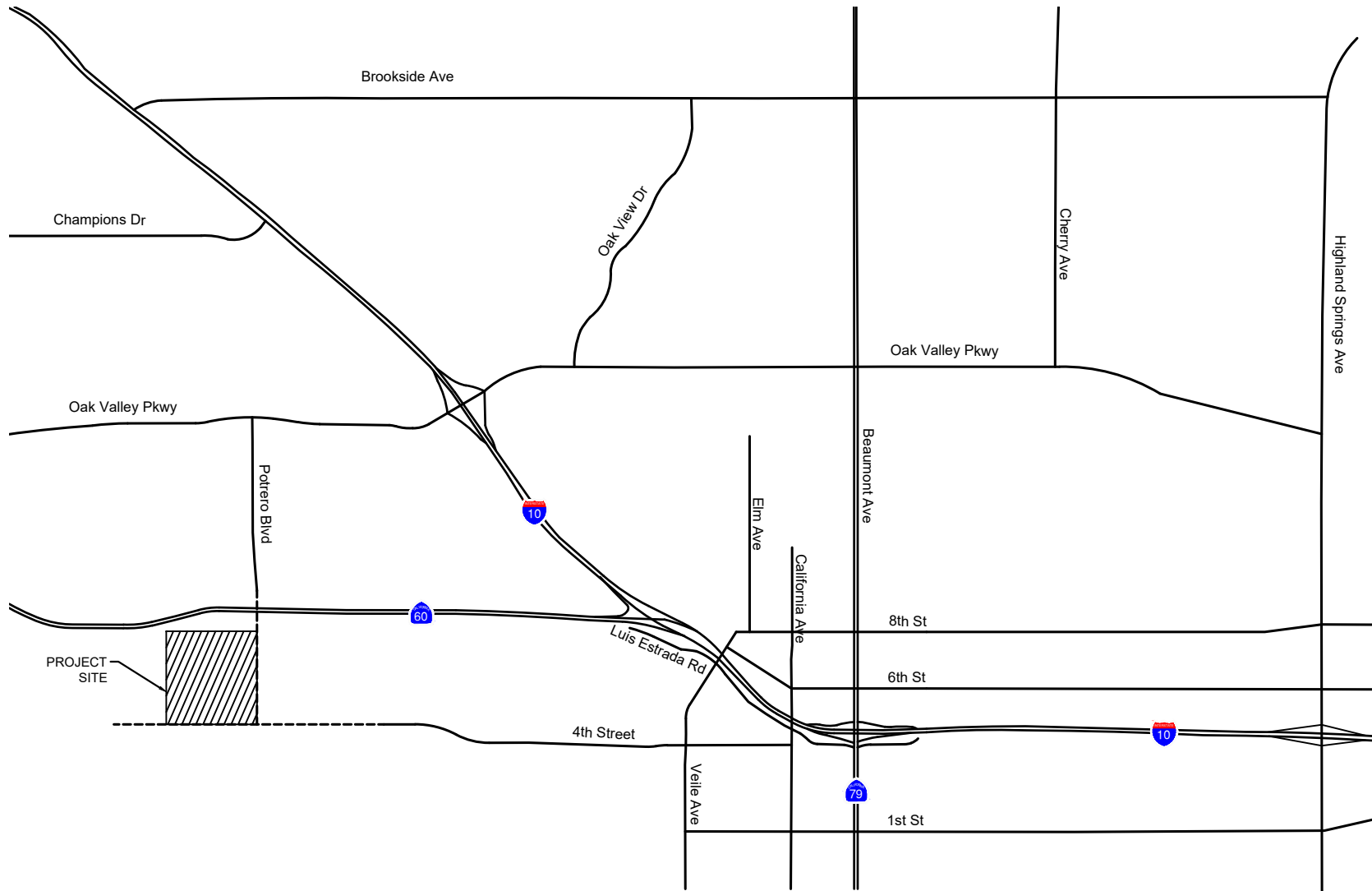
### Analysis Scenarios

This traffic analysis will provide an evaluation of weekday morning and evening peak hour operations for the following scenarios:

- Existing Conditions
- Existing Plus Project Conditions
- Opening Year 2021 without Project
- Opening Year 2021 with Project
- Opening Year 2021 with Project Plus Cumulative Projects
- Opening Year 2021 with Project Plus Cumulative Projects with Potrero Interchange
- Build-Out 2040
- Build-Out 2040 with Project



NOT TO SCALE



- 2 -

**FIGURE 1  
VICINITY MAP**

LEGEND:

--- = Future Roadway





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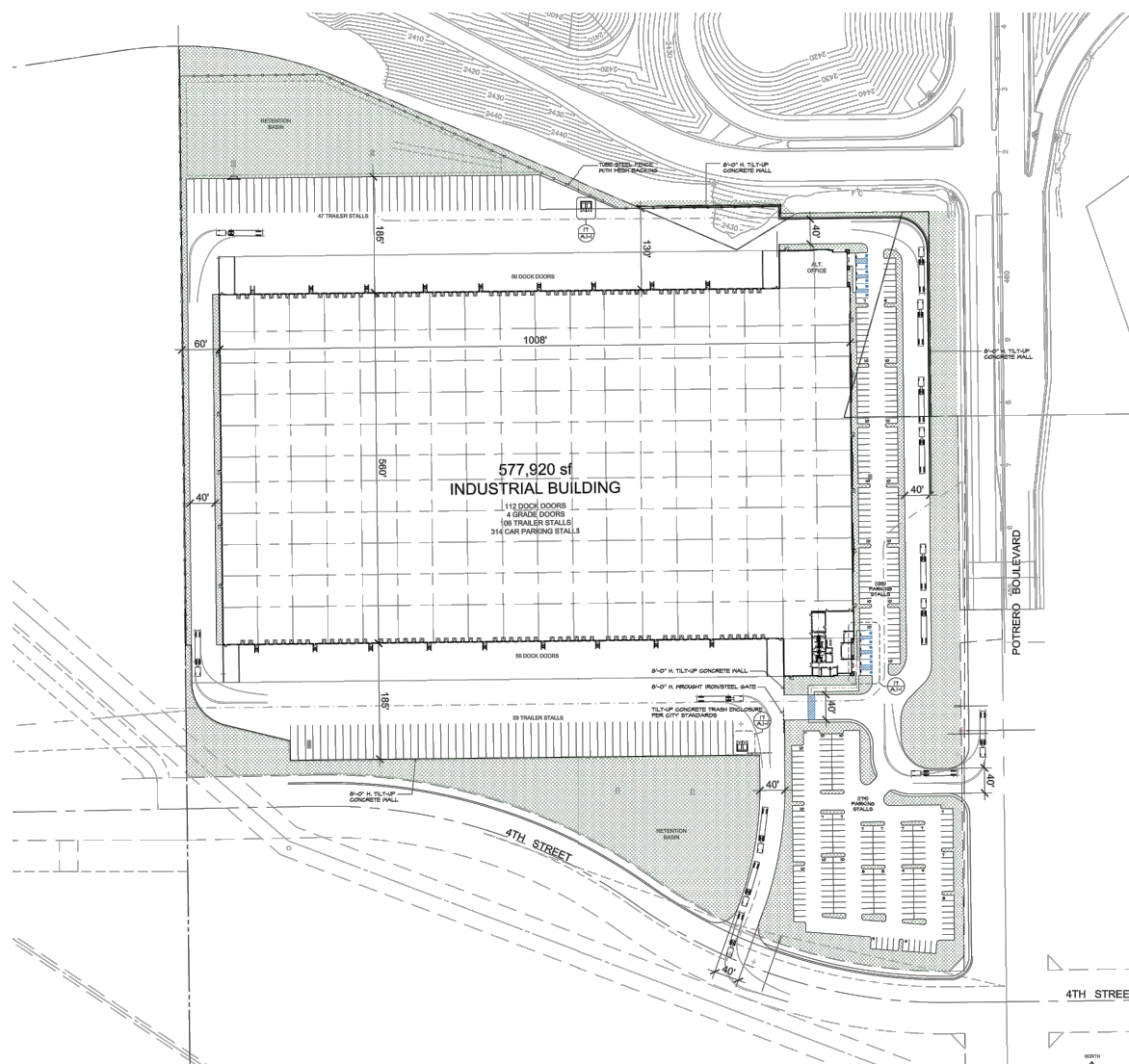


FIGURE 2  
PROJECT SITE PLAN



The study intersections for this traffic impact analysis were determined through the Scoping Agreement process with the City of Beaumont. A copy of the approved Scoping Agreement is provided in *Appendix A*. The study intersections are:

1. W. 4<sup>th</sup> Street at Veile Avenue
2. W. 4<sup>th</sup> Street at California Avenue
3. Luis Estrada Road/E. 4<sup>th</sup> Street at Beaumont Avenue
4. Beaumont Avenue at I-10 EB Ramps
5. Beaumont Avenue at I-10 WB Ramps
6. Oak Valley Parkway at Potrero Boulevard
7. Oak Valley Parkway at I-10 EB Ramps
8. Oak Valley Parkway at I-10 WB Ramps
9. W. 4<sup>th</sup> Street at Potrero Boulevard (Future Intersection)
- D1. Potrero Boulevard at Driveway 1
- D2. W. 4<sup>th</sup> St at Driveway 2

The study intersection locations are shown on Figure 3.

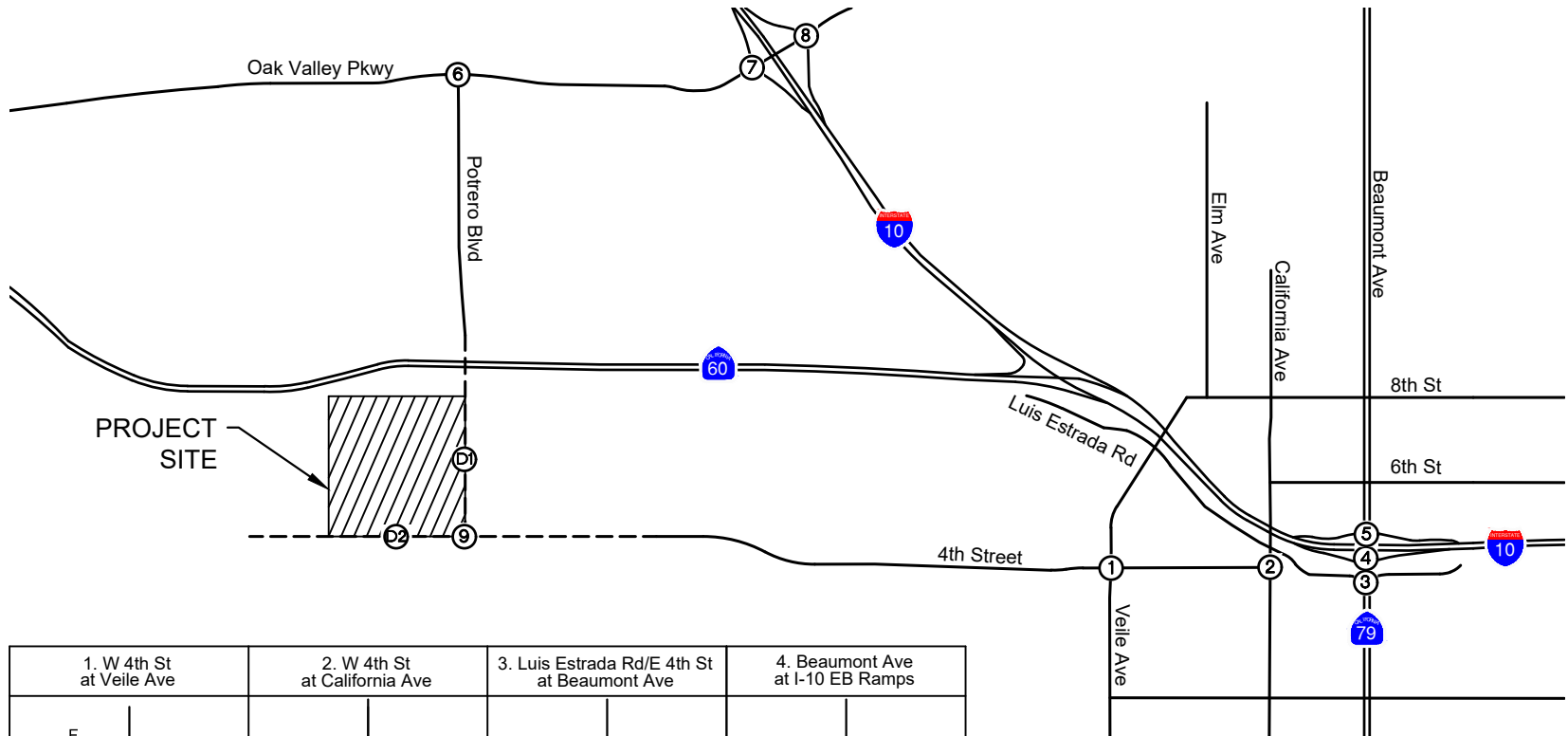
#### Intersection Analysis – HCM Methodology

The City of Beaumont follows the County of Riverside traffic study procedures (*Riverside County Transportation Department Traffic Impact Analysis Preparation Guide – 2008*). Peak hour intersection operations are evaluated using the methodology outlined in the Highway Capacity Manual (HCM 2010), consistent with the requirements of the City of Beaumont and the County of Riverside. The intersection analysis was conducted using the Vistro software program and using the specified input parameters required by the City.

Per the HCM Methodology, Level of Service (LOS) for signalized intersections is defined in terms of average control delay per vehicle during the peak hours. The average control delay includes initial deceleration delay, queue move-up time, and final acceleration time in addition to the stop delay. The charts on page 6 provide a description of the operating characteristics of each Level of Service and average seconds of delay for signalized and unsignalized intersections.



NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
									FUTURE INTERSECTION	FUTURE INTERSECTION

**LEGEND:**

- = Study Intersection
- = Signal
- = Stop Sign

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**FIGURE 3  
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL**



LEVEL OF SERVICE DEFINITIONS	
Level of Service	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction, approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED AND UNSIGNALIZED INTERSECTIONS		
Level of Service	Signalized Intersection (Average delay per vehicle, in seconds) <sup>1</sup>	Unsignalized Intersections (Average delay per vehicle, in seconds) <sup>2</sup>
A	≤ 10	0 – 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80	> 50

<sup>1</sup> Source: Highway Capacity Manual (HCM 6<sup>th</sup> Edition), Exhibit 18-4.

<sup>2</sup> Source: Highway Capacity Manual (HCM 6<sup>th</sup> Edition), Exhibits 19-1 and 20-2.

## Performance Criteria

The City of Beaumont General Plan states that Level of Service "D" is considered acceptable during the peak hours.

## Significance Thresholds

A project -related traffic impact would be considered to be significant when the project traffic, when added to existing traffic, causes the Level of Service to deteriorate to below the target Level of Service, and impacts cannot be mitigated through project conditions of approval. A cumulative impact would occur when cumulative traffic (existing plus ambient growth plus Cumulative Projects plus project traffic) exceeds the target Level of Service, and impacts cannot be mitigated through the Transportation Uniform Mitigation Fee (TUMF) network, project conditions of approval, or other implementation mechanisms.

## EXISTING TRANSPORTATION SYSTEM

### Existing Roadway System

Regional vehicular access to the site is provided by the SR-60 and I-10 Freeways. The I-10 Freeway is an east-west freeway, located approximately 1.75 miles east of the project site. The I-10 Freeway provides three travel lanes in each direction and connects directly to SR-79 and SR-60. SR-60 is an east-west freeway located immediately north of the project site. SR-60 provides two travel lanes in each direction. East of the project site, SR-60 merges into the I-10 Freeway.

Local access to the project vicinity is provided by surrounding arterial and commuter roadways.

Oak Valley Parkway is an east-west roadway located approximately  $\frac{3}{4}$ -mile north of the project site. Oak Valley Parkway provides two travel lanes in each direction west of Potrero Boulevard and one lane in each direction east of Potrero Boulevard. Oak Valley Parkway is shown as a Major Frontage Road west of Potrero Boulevard and an Urban Arterial east of Potrero Boulevard on the City of Beaumont Circulation Element of the General Plan (Circulation Element).

W. 4<sup>th</sup> Street is an east-west roadway that currently extends between Logistics Way and California Avenue. As part of future project construction by others, W. 4<sup>th</sup> Street is planned to be extended westward from its current terminus and past the future extension of Potrero Boulevard. W. 4<sup>th</sup> Street will form the south boundary of the Project. W. 4<sup>th</sup> Street is shown as a Major roadway on the City of Beaumont Circulation Element.

Potrero Boulevard is a north-south roadway that extends northward from SR-60. Potrero Boulevard is planned to be extended southward from its current terminus to intersect with W. 4<sup>th</sup> Street, and to have an interchange with SR-60. When extended, Potrero Boulevard will form the east boundary of the Project site. Potrero Boulevard is shown as an Urban Arterial north of W. 4<sup>th</sup> Street and a Secondary roadway south of 4<sup>th</sup> Street on the City of Beaumont Circulation Element.

Veile Avenue is a north-south roadway located approximately 1.5 miles east of the project site. Veile

Avenue provides one travel lane in each direction, and is shown as a Major roadway on the City of Beaumont Circulation Element.

Beaumont Avenue/SR-79 is a north-south State highway located 2-1/4 miles east of the Project site. Beaumont Avenue provides two travel lanes in each direction, with direct access to the I-10 Freeway. Beaumont Avenue is shown as an Expressway south of the I-10 Freeway and a Secondary roadway north of the I-10 Freeway on the City of Beaumont Circulation Element.

#### Existing Transit Service

Public transportation within the City of Beaumont is provided by PASS Transit, operated by the Riverside County Transportation Commission (RCTC); the Riverside Transit Authority (RTA) and the Sunline Transit Agency lines. The PASS Beaumont Lines 2, 3, and 4 service the business area of Beaumont, east of California Avenue. The nearest bus stop to the Project site is located near the intersection of 6<sup>th</sup> Street and California Avenue.

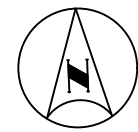
All three Beaumont lines end at the Walmart Supercenter, at Highland Springs Avenue and the I-10 Freeway. This shopping center is a transfer point for the PASS Banning lines, as well as the Riverside Transit Authority (RTA) and the Sunline Transit Agency lines.

#### Existing Traffic Volumes

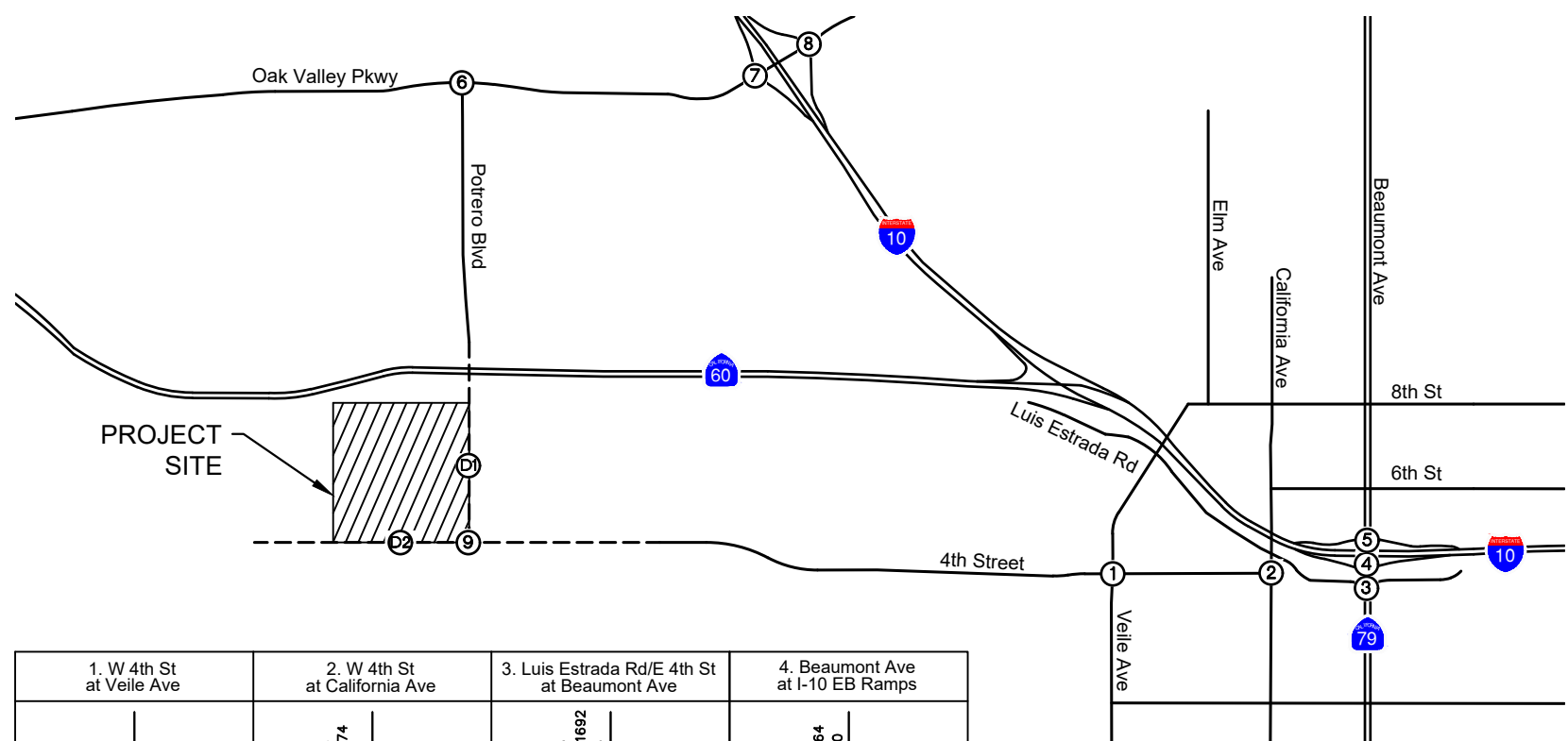
Existing morning and evening peak hour turning movement traffic volumes were collected in late August, 2019 at the study intersections. Existing lane configurations and traffic control are shown on Figure 3 (previously referenced). Copies of the traffic count data worksheets are provided in *Appendix B*.

The intersection count data included vehicle classifications for passenger vehicles and trucks. Vehicle classifications are necessary to compute Passenger Car Equivalent (PCE) volumes, which are used in the traffic analysis to address the impacts of truck traffic on intersection operation.

The PCE volumes were developed by applying a PCE factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with 4 or more axles. PCE volume worksheets are provided in *Appendix C*. Existing morning and evening peak hour volumes with the PCE factors applied are presented on Figure 4.



NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

Note: Existing volumes reflect PCE adjustments. See PCE Worksheets in Appendix C.

**FIGURE 4  
EXISTING TRAFFIC VOLUMES**



## EXISTING TRAFFIC OPERATING CONDITIONS

### Peak Hour Intersection Operations

Intersection Level of Service analysis was conducted for the morning and evening peak hours using the analysis procedures and assumptions described previously in this report. The results of the intersection analysis for Existing Conditions are shown on Table 1. Review of this table indicates that all study intersections are currently operating at an acceptable Level of Service in both peak hours. Intersection analysis worksheets are provided in *Appendix D*.

## PROJECT TRAFFIC

### Project Trip Generation

Trip generation estimates for the project are based on daily and peak hour trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10<sup>th</sup> Edition); ITE Land Use 152: High-Cube Warehouse. Passenger car equivalent (PCE) factors, were applied to the Project truck trips to determine the total PCE trips to be generated by the project.

Trip generation rates and the resulting project PCE trips are summarized on Table 2. Review of this table indicates that the Project is forecasted to generate 1,685 daily PCE trips on a weekday, with 111 trips during the morning peak hour and 120 trips during the evening peak hour.

### Trip Distribution and Assignment

Trip distribution assumptions for the Project were developed based on current traffic patterns observed within the study area, as well as trip distribution assumptions for similar warehouse projects. Separate distribution patterns were assumed for passenger car trips and truck trips. Trip distribution percentages at each study intersection were applied to the Project trip generation estimates to determine the project trips through each intersection. Trip distribution and assignment assumptions for the Project are shown on Figure 5. The resulting project trips at the study intersections are shown on Figure 6.

TABLE 1  
SUMMARY OF INTERSECTION OPERATION  
EXISTING CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	W. 4th Street at Veile Avenue	U	9.1	A	9.1	A
2	W. 4th Street at California Avenue	U	33.2	D	22.5	C
3	Luis Estrada Road at Beaumont Avenue	S	9.4	A	9.9	A
4	Beaumont Avenue at I-10 EB Ramps	S	20.1	C	22.5	C
5	Beaumont Avenue at I-10 WB Ramps	S	28.2	C	28.0	C
6	Oak Valley Parkway at Potrero Boulevard	U	8.9	A	8.6	A
7	Oak Valley Parkway at I-10 EB Ramps	S	18.0	B	23.5	C
8	Oak Valley Parkway at I-10 WB Ramps	S	17.2	B	19.6	B
9	W. 4th Street at Potrero Boulevard	Future Intersection				

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- S = Signalized; U = Unsignalized



TABLE 2  
SUMMARY OF PROJECT TRIP GENERATION  
BEAUMONT POTRERO INTERCHANGE INDUSTRIAL WAREHOUSE

TRIP GENERATION RATES <sup>1</sup>

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Warehouse	152	KSF	1,680	0.076	0.034	0.110	0.037	0.083	0.120

PROJECT TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Warehouse	577,920	KSF	971	44	20	64	21	48	69
Passenger Vehicles	51.00%		495	22	10	32	11	24	35
Trucks	49.00%		476	22	10	32	10	24	34

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

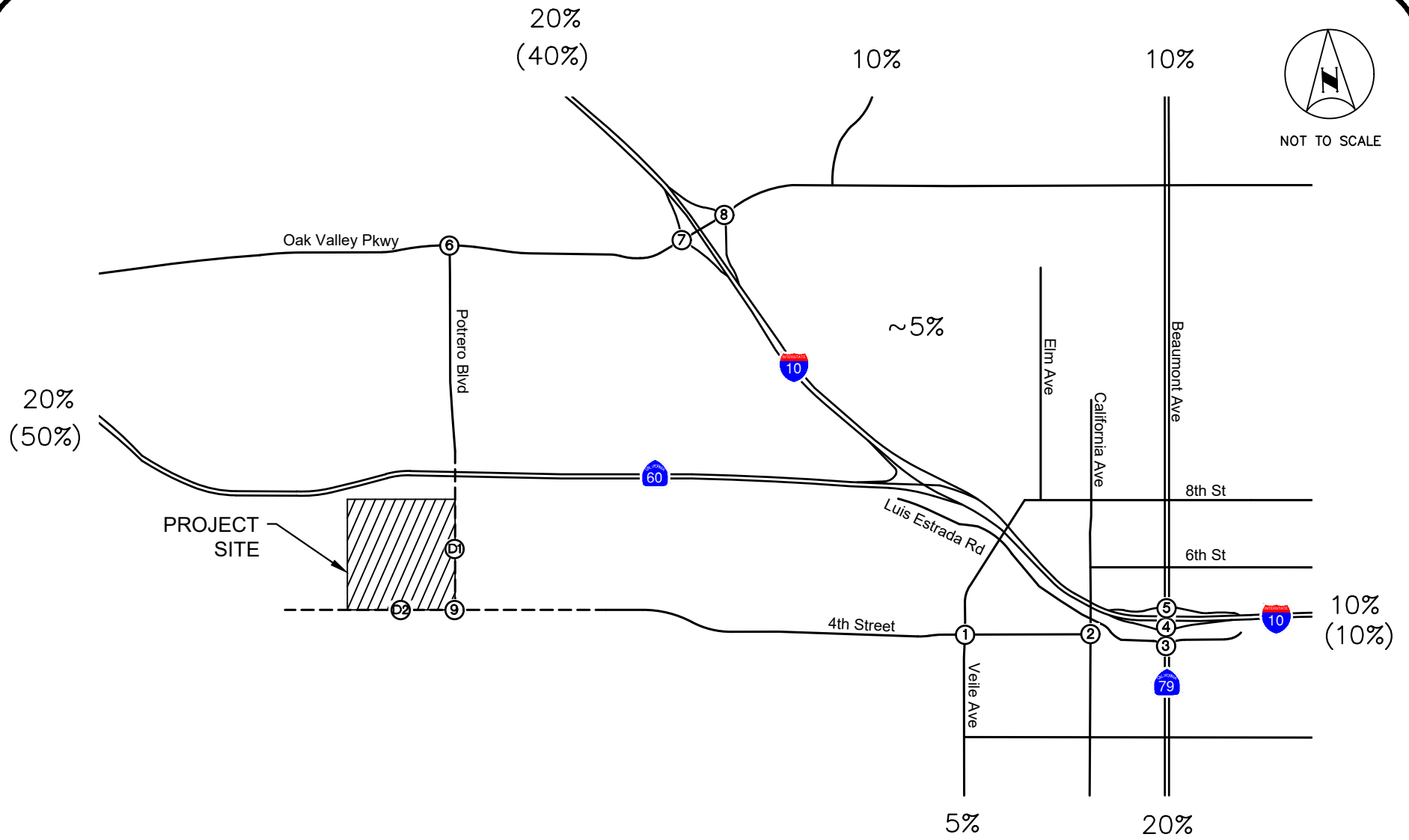
Vehicle Type	Vehicle Mix <sup>2</sup>	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	51.00%	495	1.0	495	22	10	32	11	24	35
2-Axle Trucks	0.00%	0	1.5	0	0	0	0	0	0	0
3-Axle Trucks	0.00%	0	2.0	0	0	0	0	0	0	0
4+ Axle Trucks	49.00%	476	2.5	1,190	54	25	79	26	59	85
Total Truck PCE Trips				1,190	54	25	79	26	59	85
Total Project PCE Trips				1,685	76	35	111	37	83	120

<sup>1</sup> Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

<sup>2</sup> Source: San Bernardino Associated Governments (SANBAG) "Trip Generation Rates for High-Cube Warehouse Distribution Center" Memo (June, 2005)

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet



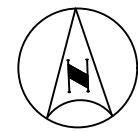
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**LEGEND:**

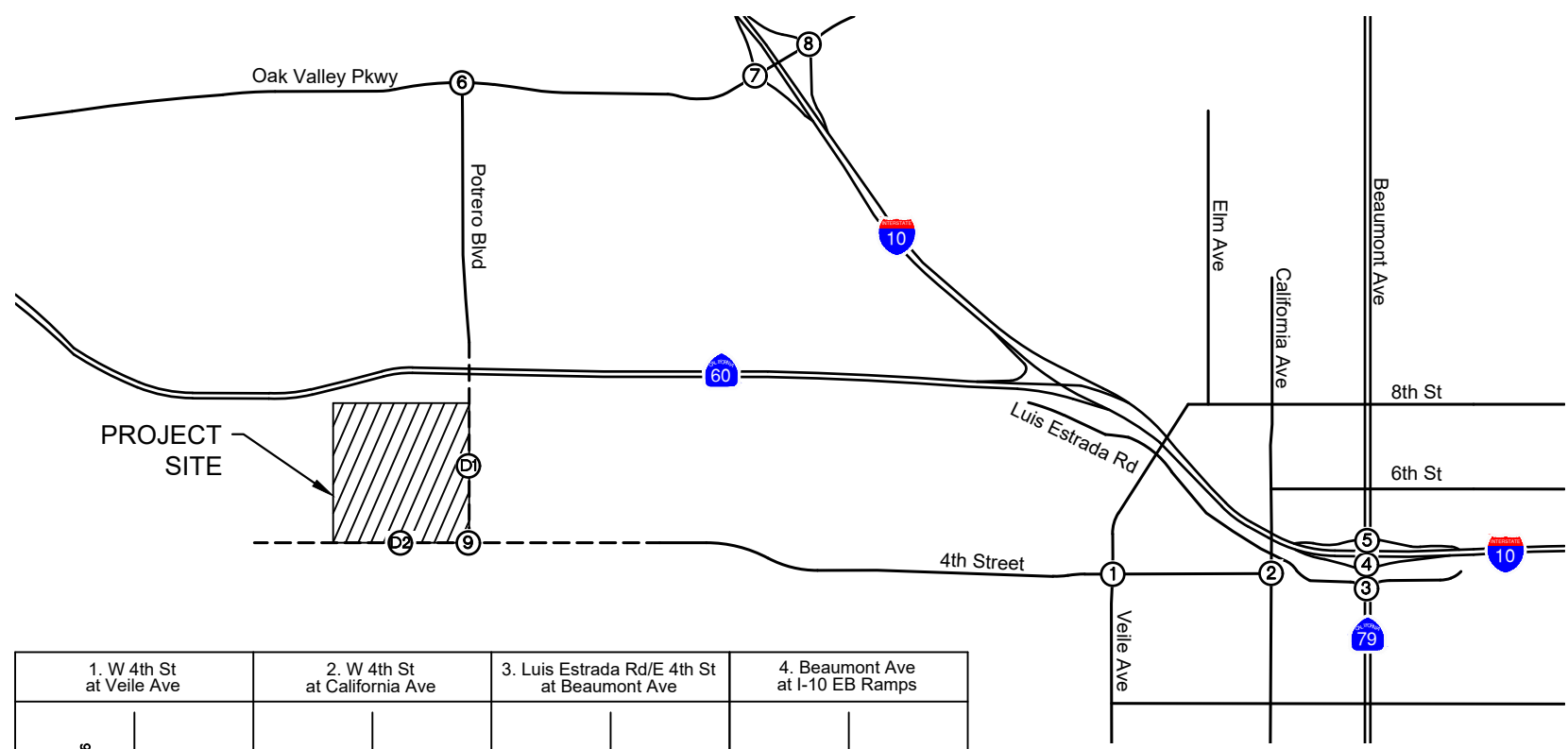
- (X) = Study Intersection
- XX% = Passenger Car Trip Distribution
- (YY%) = Truck Trip Distribution

**FIGURE 5  
PROJECT TRIP DISTRIBUTION**





NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 6**  
**PROJECT-RELATED TRAFFIC VOLUMES**



## EXISTING PLUS PROJECT CONDITIONS

The Existing Plus Project analysis scenario is a hypothetical scenario that assumes completion of the project and full absorption of the project traffic on the surrounding street network at the current time, with no other changes in traffic conditions. The Existing Plus Project scenario is required by the California Environmental Quality Act (CEQA). For purposes of this analysis, the street improvements needed for access to the project site (i.e., the extensions of 4<sup>th</sup> Street and Potrero Boulevard to the project site), are assumed to be in place.

The project-related peak hour trips were added to the existing peak hour volumes to evaluate Existing Plus Project conditions. The resulting traffic volumes are shown on Figure 7. Existing Plus Project intersection results are shown on Table 3. As this table indicates, all study intersections would continue to operate at an acceptable Level of Service D or better with the addition of project traffic with the following exception:

- #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E

A peak-hour signal warrant analysis (Warrant 3) was conducted for the intersection of 4<sup>th</sup> Street at California Avenue using Existing Plus Project volumes. The signal warrant analysis indicates that Warrant 3 is not met during the morning nor the evening peak hours for intersection #2. A future traffic signal at intersection #2 is anticipated with the inclusion of Cumulative Project traffic and is assumed for Opening Year 2021 Cumulative conditions.

Intersection analysis worksheets are provided in *Appendix D*.

## OPENING YEAR 2021 CONDITIONS

The project Opening Year is anticipated to be late 2021. Opening Year 2021 traffic forecasts have been developed by adding an ambient growth factor of 2.0 percent per year to existing traffic volumes at the study intersections.

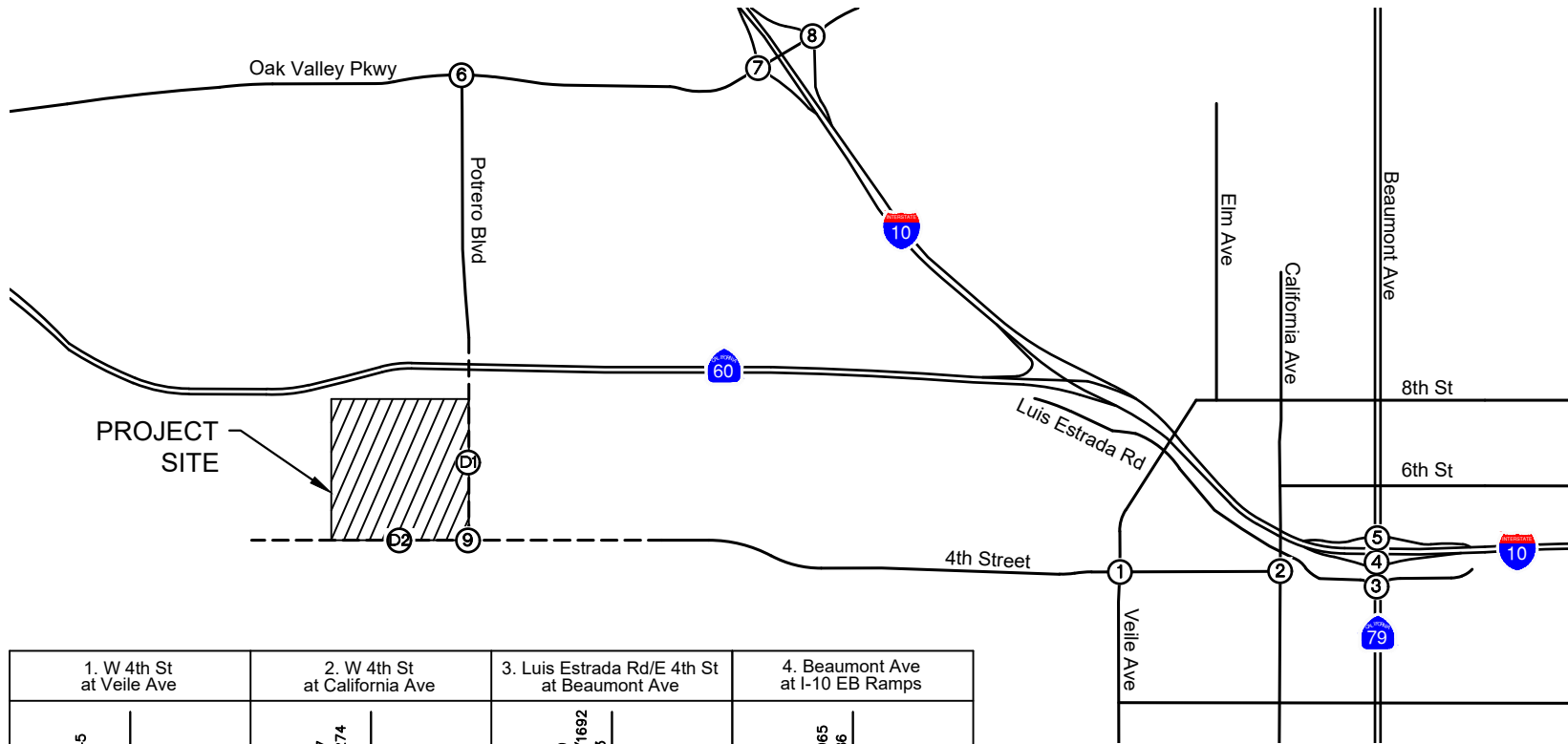
### Opening Year 2021 without Project Conditions

The ambient growth was applied to the existing peak hour volumes to develop Year 2021 without Project traffic forecasts. The resulting traffic volumes are shown on Figure 8.

The results of the Year 2021 without Project intersection analysis are summarized on Table 4. Review of this table shows that, with the addition of ambient growth, the study intersections would operate at an acceptable Level of Service in both peak hours with the following exceptions:

- #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E

Intersection analysis worksheets are provided in *Appendix D*.



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

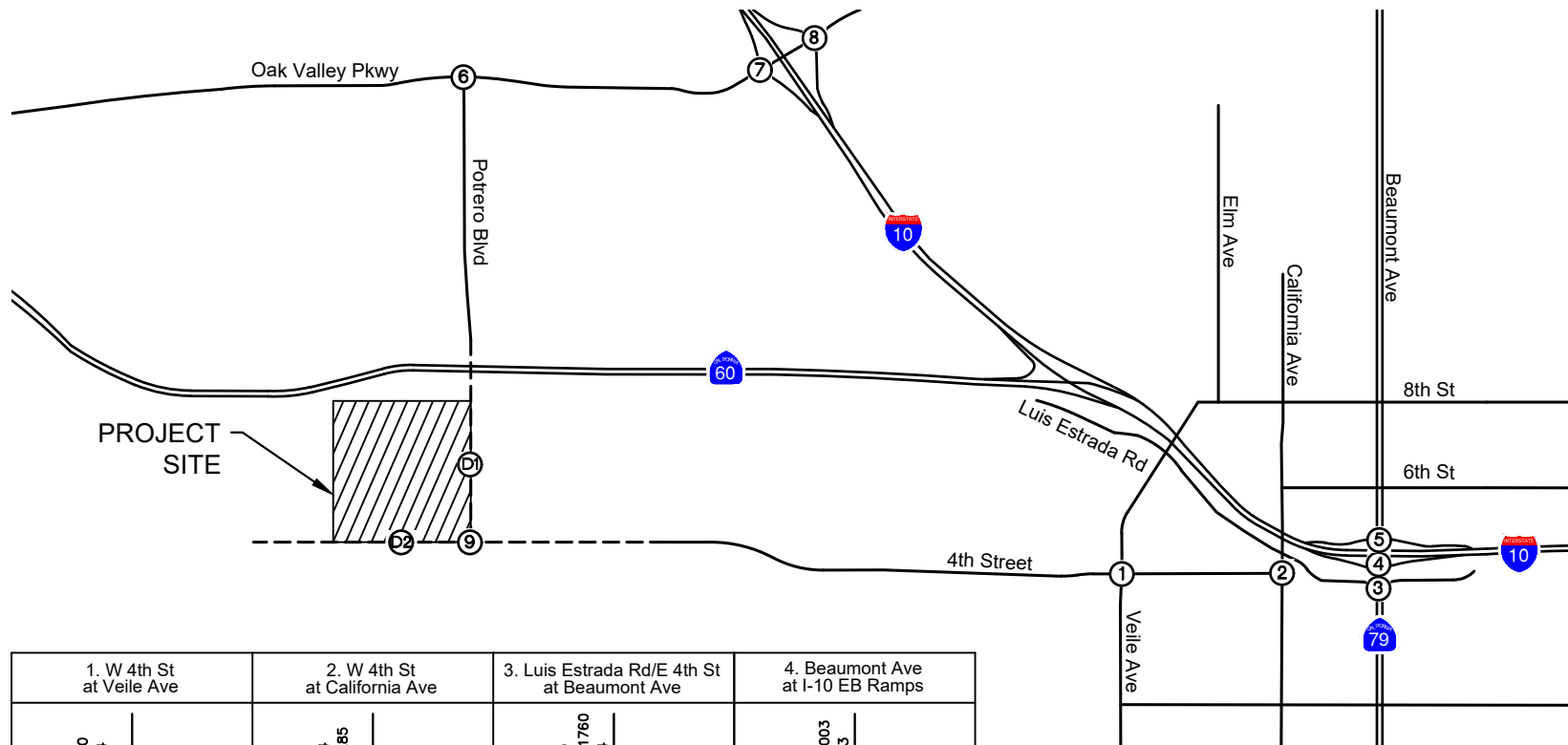
**FIGURE 7  
EXISTING PLUS PROJECT TRAFFIC VOLUMES**

TABLE 3  
SUMMARY OF INTERSECTION OPERATION  
EXISTING PLUS PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Impact Sig?	Without Project		With Project		Project Impact	Impact Sig?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	W. 4th Street at Veile Avenue	U	9.1	A	9.6	A	0.5	No	9.1	A	9.6	A	0.5	No
2	W. 4th Street at California Avenue	U	33.2	D	36.2	E	3.0	Yes	22.5	C	23.8	C	1.3	No
3	Luis Estrada Road at Beaumont Avenue	S	9.4	A	9.4	A	0.0	No	9.9	A	10.0	A	0.1	No
4	Beaumont Avenue at I-10 EB Ramps	S	20.1	C	20.2	C	0.1	No	22.5	C	23.4	C	0.9	No
5	Beaumont Avenue at I-10 WB Ramps	S	28.2	C	29.8	C	1.6	No	28.0	C	28.0	C	0.0	No
6	Oak Valley Parkway at Potrero Boulevard	U	8.9	A	9.1	A	0.2	No	8.6	A	8.8	A	0.2	No
7	Oak Valley Parkway at I-10 EB Ramps	S	18.0	B	18.4	B	0.4	No	23.5	C	24.2	C	0.7	No
8	Oak Valley Parkway at I-10 WB Ramps	S	17.2	B	17.6	B	0.4	No	19.6	B	20.3	C	0.7	No
9	W. 4th Street at Potrero Boulevard	U			7.6	A	--	No			7.9	A	--	No
D1	Potrero Boulevard at Driveway 1	U			9.1	A	--	No			9.1	A	--	No
D2	4th Street at Driveway 2	U			8.7	A	--	No			8.7	A	--	No

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- S = Signalized; U = Unsignalized



1. W 4th St at Veile Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
								FUTURE INTERSECTION	FUTURE INTERSECTION	FUTURE INTERSECTION

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 8**  
**OPENING YEAR 2021 TRAFFIC VOLUMES**

TABLE 4  
SUMMARY OF INTERSECTION OPERATION  
OPENING YEAR 2021 CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	W. 4th Street at Veile Avenue	U	9.2	A	9.2	A
2	W. 4th Street at California Avenue	U	36.8	<b>E</b>	24.2	C
3	Luis Estrada Road at Beaumont Avenue	S	9.6	A	10.5	B
4	Beaumont Avenue at I-10 EB Ramps	S	20.5	C	23.1	C
5	Beaumont Avenue at I-10 WB Ramps	S	29.5	C	28.3	C
6	Oak Valley Parkway at Potrero Boulevard	U	9.0	A	8.7	A
7	Oak Valley Parkway at I-10 EB Ramps	S	18.2	B	24.8	C
8	Oak Valley Parkway at I-10 WB Ramps	S	17.6	B	19.9	B
9	W. 4th Street at Potrero Boulevard	Future Intersection				

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- S = Signalized; U = Unsignalized



## Opening Year 2021 with Project Conditions

Project-related traffic volumes for the Project were added to the Year 2021 without Project forecasts to develop Year 2021 with Project traffic forecast volumes. The resulting traffic volumes are shown on Figure 9.

The results of the Year 2021 with Project intersection analysis are shown on Table 5. Review of this table indicates that the same intersections that would operate at a deficient Level of Service without the project would continue to do so with the addition of project traffic:

- #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E

The Project would not cause any additional intersections to worsen to an unacceptable Level of Service. Intersection analysis worksheets are provided in *Appendix D*.

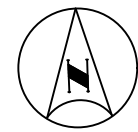
## OPENING YEAR 2021 CUMULATIVE CONDITIONS

### Cumulative Projects

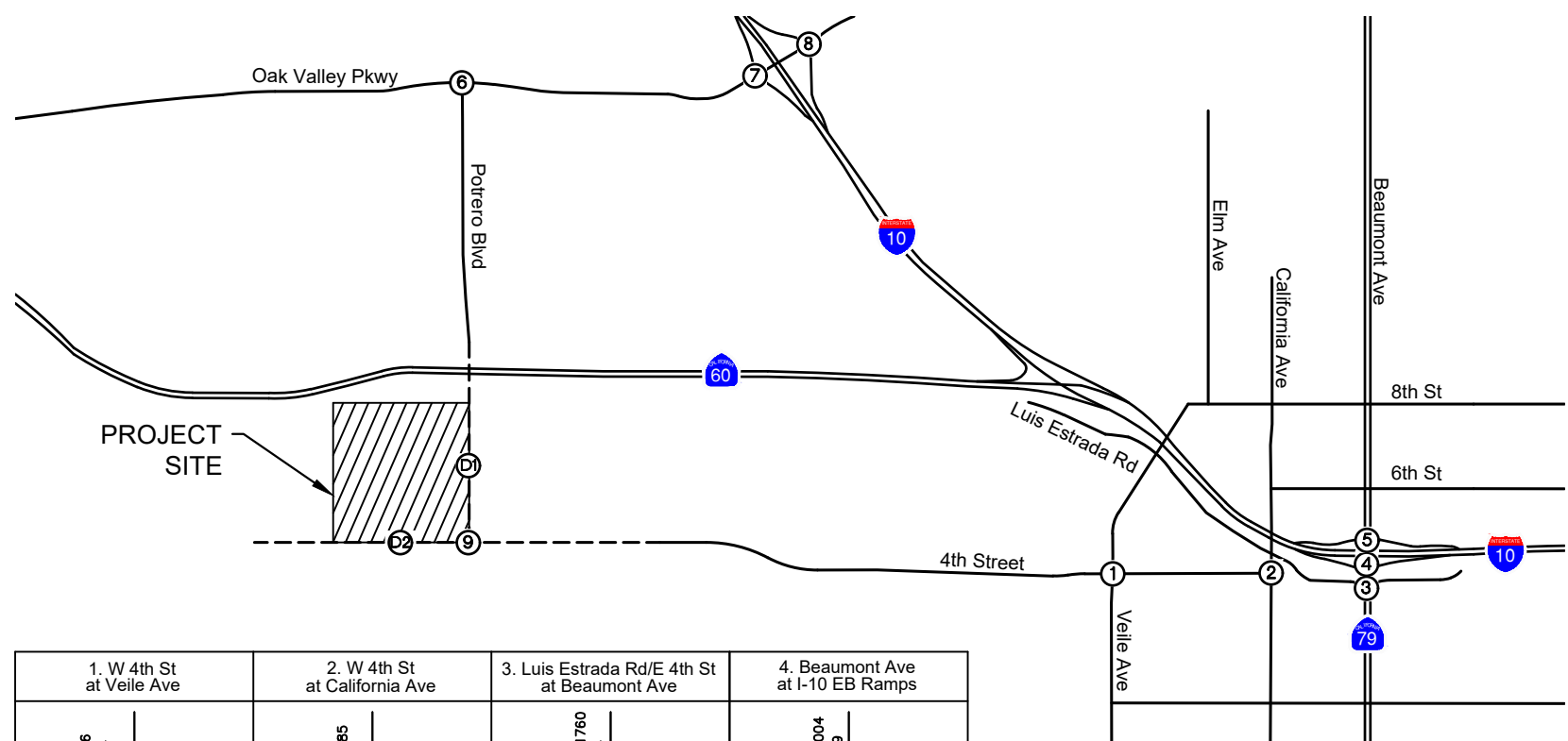
In addition to ambient growth and project-related traffic, traffic from Cumulative Projects in the Project vicinity are added to the Opening Year forecasts to develop Opening Year 2021 Cumulative Conditions forecasts. Cumulative Projects consist of any project that has been approved and is not yet occupied, and projects that are in various stages of the application and approval process, but have not yet been approved.

Information regarding Cumulative Projects in the area was obtained from the Community Development Department. A summary of the Cumulative Projects, including the associated trip generation is provided on Table 6. The trip generation estimates for the Cumulative Projects were obtained from approved traffic studies, where available; and were developed by Kimley-Horn if approved traffic studies were not available. The locations of the Cumulative Projects are shown on Figure 10.

Trip distribution and assignment for the Cumulative Projects were obtained from approved traffic studies, where available; and were developed by Kimley-Horn if approved traffic studies were not available. Traffic volumes associated with the Cumulative Projects were compiled for each of the study intersections and are shown on Figure 11. The Cumulative Projects traffic volumes were added to the Opening Year 2021 with Project traffic volumes. The resulting traffic volumes for Opening Year 2021 Cumulative Conditions are shown on Figure 12.



NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 9**  
**OPENING YEAR 2021 WITH PROJECT TRAFFIC VOLUMES**



TABLE 5  
SUMMARY OF INTERSECTION OPERATION  
OPENING YEAR 2021 WITH PROJECT CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Impact Sig?	Without Project		With Project		Project Impact	Impact Sig?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	W. 4th Street at Veile Avenue	U	9.2	A	9.7	A	0.5	No	9.2	A	9.7	A	0.5	No
2	W. 4th Street at California Avenue	U	36.8	<b>E</b>	40.7	<b>E</b>	3.9	<b>Yes</b>	24.2	C	25.7	D	1.5	No
3	Luis Estrada Road at Beaumont Avenue	S	9.6	A	9.7	A	0.1	No	10.5	B	10.6	B	0.1	No
4	Beaumont Avenue at I-10 EB Ramps	S	20.5	C	20.6	C	0.1	No	23.1	C	24.3	C	1.2	No
5	Beaumont Avenue at I-10 WB Ramps	S	29.5	C	29.7	C	0.2	No	28.3	C	28.3	C	0.0	No
6	Oak Valley Parkway at Potrero Boulevard	U	9.0	A	9.2	A	0.2	No	8.7	A	8.8	A	0.1	No
7	Oak Valley Parkway at I-10 EB Ramps	S	18.2	B	19.0	B	0.8	No	24.8	C	25.2	C	0.4	No
8	Oak Valley Parkway at I-10 WB Ramps	S	17.6	B	18.0	B	0.4	No	19.9	B	20.5	C	0.6	No
9	W. 4th Street at Potrero Boulevard	U			7.6	A	--	No			7.9	A	--	No
D1	Potrero Boulevard at Driveway 1	U			9.1	A	--	No			9.1	A	--	No
D2	4th Street at Driveway 2	U			8.7	A	--	No			8.7	A	--	No

Notes:

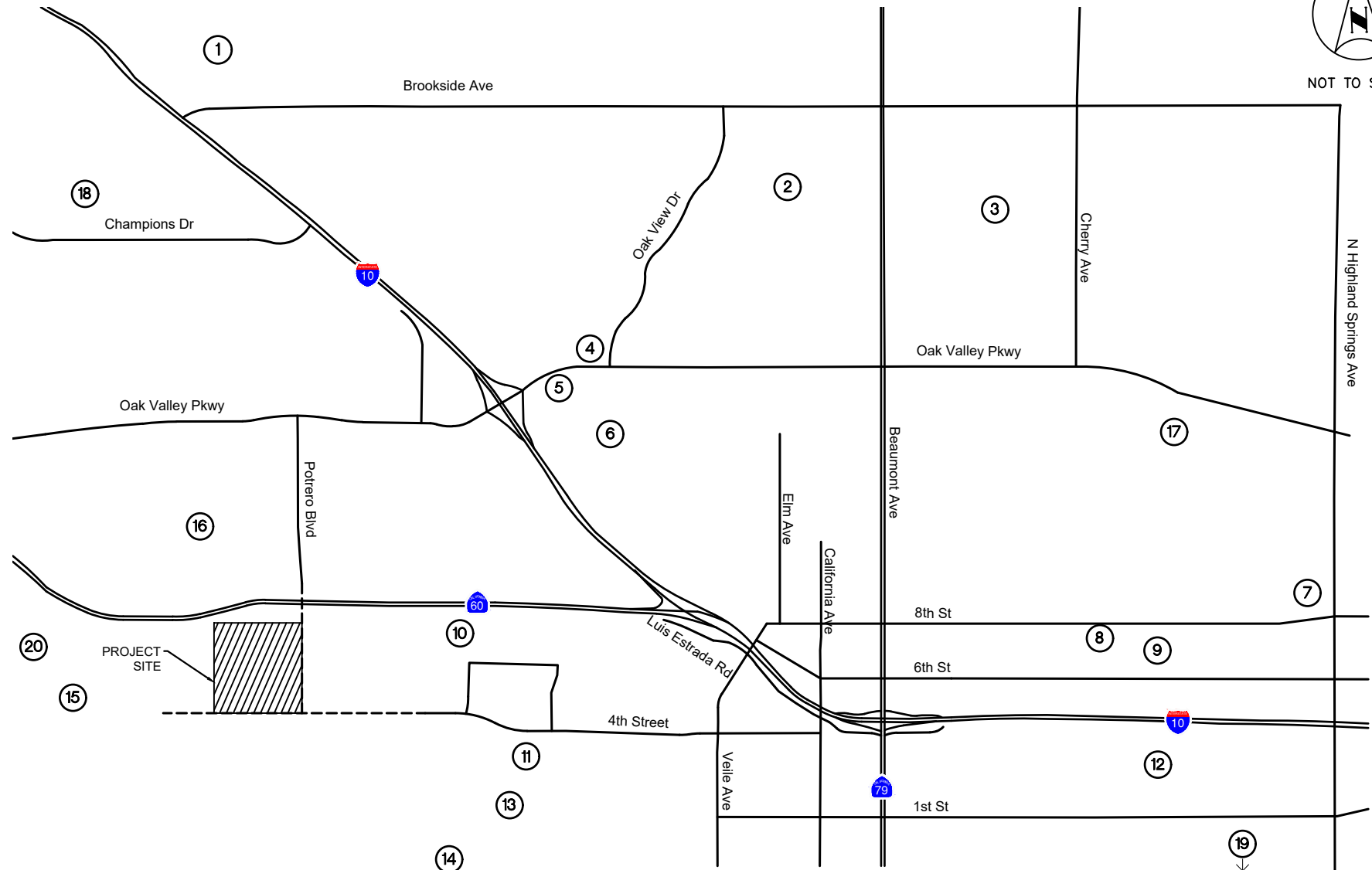
- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- S = Signalized; U = Unsignalized

TABLE 6  
SUMMARY OF CUMULATIVE PROJECTS

TRIP GENERATION RATES <sup>1</sup>										
Land Use	ITE Code	Trips per	Trip Generation Rates							
			Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
General Light Industrial	110	KSF	4.96	0.62	0.08	0.70	0.08	0.55	0.63	
Industrial Park	130	KSF	3.37	0.32	0.08	0.40	0.08	0.32	0.40	
High-Cube Parcel Hub Warehouse	156	KSF	7.75	0.35	0.35	0.70	0.44	0.21	0.64	
Single-Family Detached Housing	210	DU	9.44	0.19	0.56	0.74	0.62	0.37	0.99	
Multifamily Housing (Low-Rise)	220	DU	7.32	0.11	0.35	0.46	0.35	0.21	0.56	
Senior Adult Housing-Detached	251	DU	4.27	0.08	0.16	0.24	0.18	0.12	0.30	
Hotel	310	Room	8.36	0.28	0.19	0.47	0.31	0.29	0.60	
Miniature Golf Course	431	Hole	*	*	*	*	0.11	0.22	0.33	
Rock Climbing Gym	434	KSF	*	0.46	0.94	1.40	0.94	0.71	1.64	
Multipurpose Recreational Facility	435	KSF	*	*	*	*	1.97	1.61	3.58	
Trampoline Park	436	KSF	*	*	*	*	0.72	0.78	1.50	
Bowling Alley	437	KSF	*	0.77	0.04	0.81	0.75	0.41	1.16	
General Office Building	710	KSF	9.74	1.00	0.16	1.16	0.18	0.97	1.15	
Medical-Dental Office Building	720	KSF	34.80	2.17	0.61	2.78	0.97	2.49	3.46	
Shopping Center	820	KSF	37.75	0.58	0.36	0.94	1.83	1.98	3.81	
TRIP GENERATION ESTIMATES										
Project #	Land Use	Quantity	Units	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
1	Sunny-Cal	497	DU	4,692	92	276	368	310	182	492
2	Noble Creek Vistas	648	DU	6,117	120	360	480	404	237	641
3	Cougar Ranch	148	DU	1,397	27	82	109	92	54	146
4	Oak Valley Greens Senior Center	372	DU	1,588	29	60	89	68	44	112
5	Oak Valley Village	490,000	KSF	18,498	286	175	461	896	971	1,867
6	Kirkwood Ranch	403	DU	3,804	75	224	299	251	147	398
7	Sundance Corporate Center	300,000	KSF	2,922	299	49	348	55	290	345
8	Beaumont Commons	120	DU	878	13	42	55	42	25	67
9	Tuscany Townhomes	188	DU	1,376	20	67	87	66	39	105
10	Prologis	2,200,000	KSF	10,912	1,355	185	1,540	180	1,206	1,386
11	Beaumont Industrial Park	2,890,000	KSF	9,739	936	220	1,156	243	913	1,156
12	San Gorgonio Village	130,000	KSF	4,908	76	46	122	238	258	496
13	Jerome Taurek	244	DU	2,303	45	135	180	152	89	241
14	Legacy Highlands (Phase 1)	1,159	DU	6,963	128	346	474	394	231	625
15	Hidden Canyon Industrial Park	2,890	KSF	5,438	221	119	340	125	253	378
16	Hearthland Specific Plan	981	DU	9,261	181	544	725	612	359	971
17	Sundance	1,500	DU	14,160	278	833	1,111	936	549	1,485
18	Fairway Canyon	1,650	DU	15,576	305	916	1,221	1,030	604	1,634
19	Potrero Creek Estates	700	DU	6,608	130	389	519	437	256	693
20	Jack Rabbit Trail									
	High-Cube Fulfillment Center	4,500,000	KSF	34,875	1,575	1,575	3,150	1,958	923	2,881
	General Light Industrial	500,000	KSF	2,480	308	42	350	41	274	315
	Hotel	125	Room	1,045	35	24	59	38	37	75
	Multipurpose Recreational Facility (Go-Cart)	77,000	KSF	-	-	-	-	152	124	276
	Rock Climbing	26,000	KSF	-	12	24	36	24	18	42
	Miniature Golf	36	Hole	-	-	-	-	4	8	12
Trampoline Park	24,000	KSF	-	-	-	-	17	19	36	
Bowling Alley	40,000	KSF	-	31	2	33	30	16	46	
21	Beyond Beaumont Commercial	6,580	KSF	229	14	4	18	6	16	22
Total Cumulative Project Trips				165,769	6,591	6,739	13,330	8,801	8,142	16,943
<sup>1</sup> Source: Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u> , 10th Edition DU = Dwelling Units, KSF = 1,000 square feet										



NOT TO SCALE

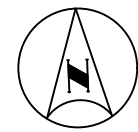


**FIGURE 10**  
**LOCATION OF CUMULATIVE PROJECTS**

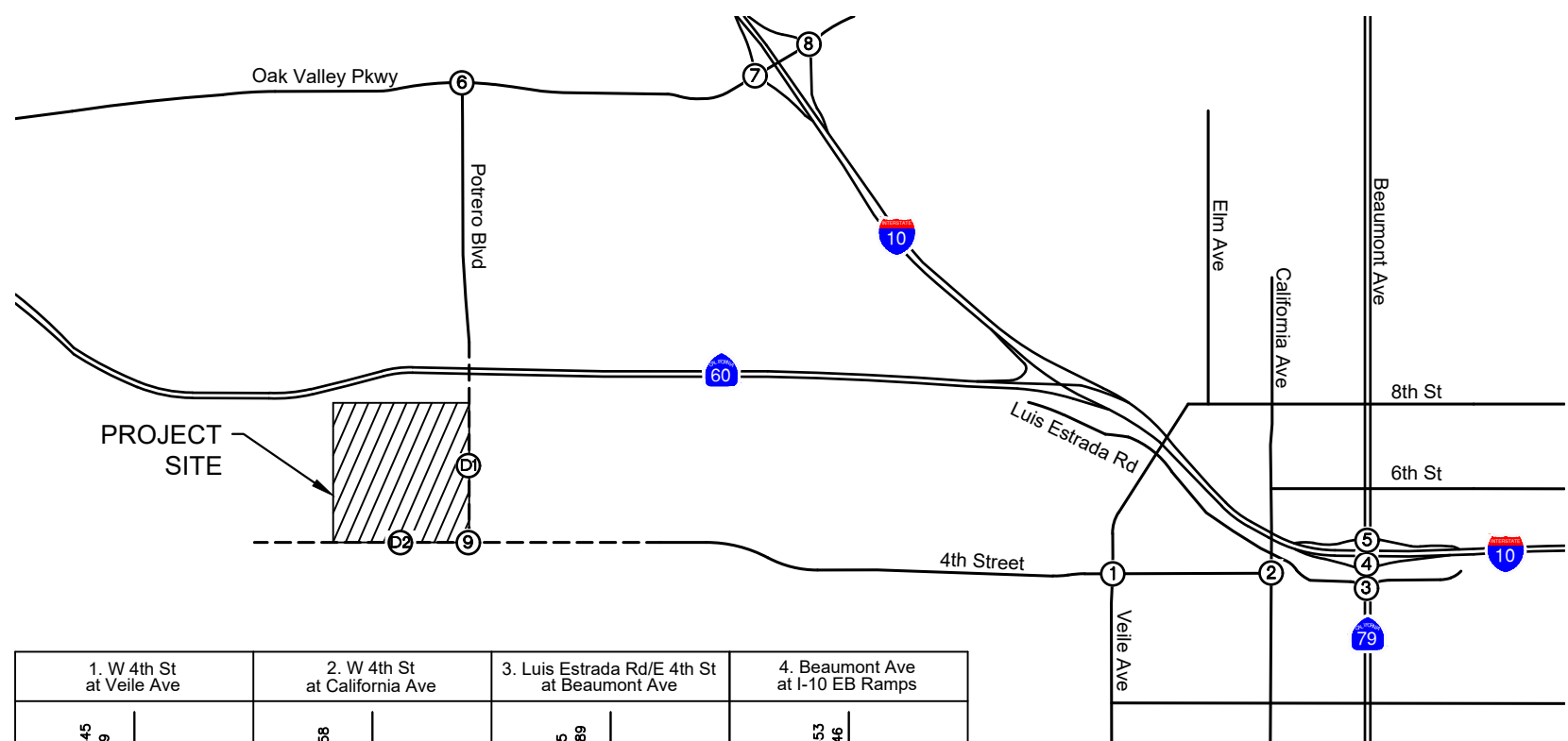
**LEGEND:**

- (X) = Cumulative Projects
- = Future Roadway





NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
									FUTURE INTERSECTION	FUTURE INTERSECTION

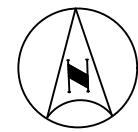
**LEGEND:**

(X) = Study Intersection

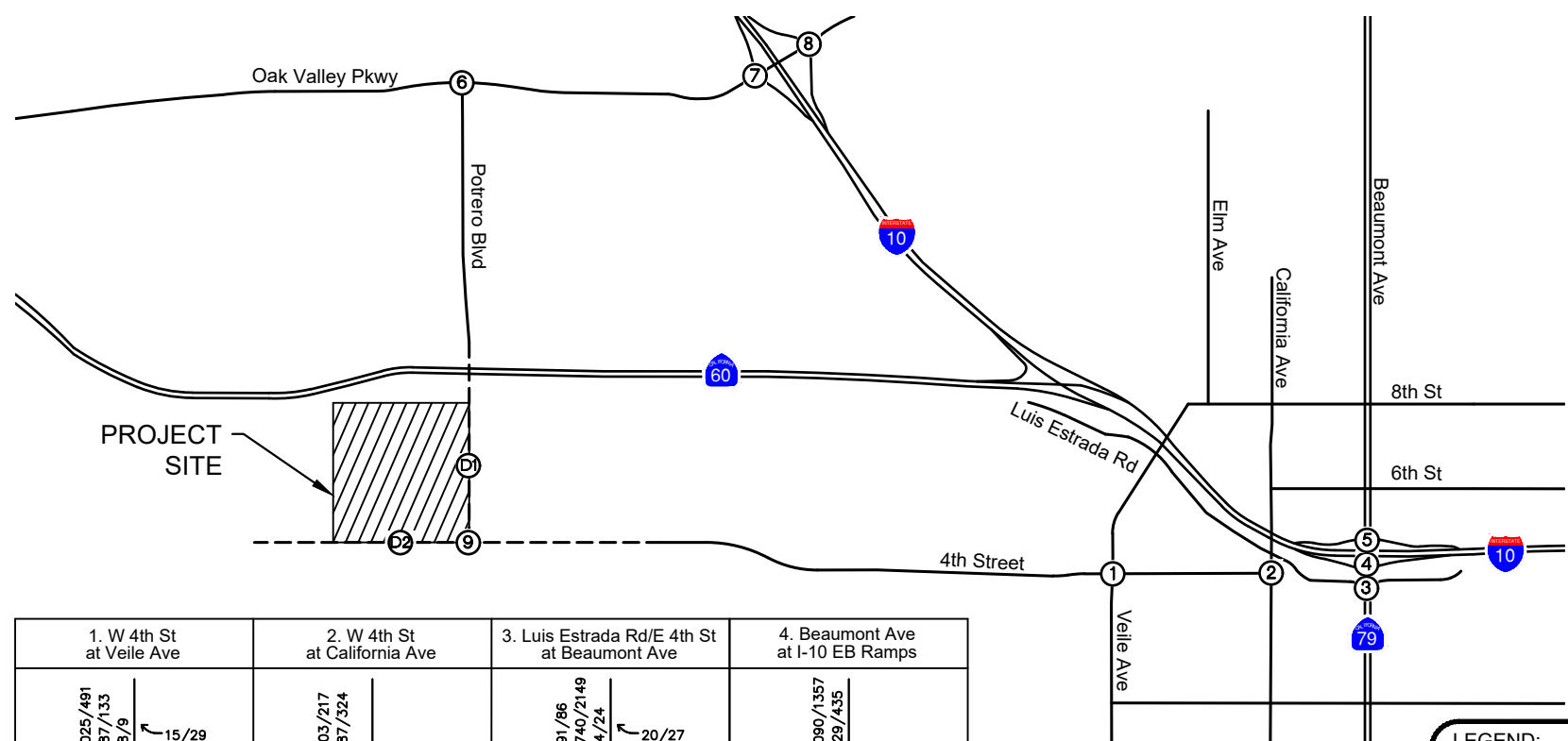
XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 11  
CUMULATIVE PROJECT TRAFFIC VOLUMES**





NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 12**  
**OPENING YEAR 2021 WITH PROJECT PLUS CUMULATIVE PROJECTS**  
**TRAFFIC VOLUMES**



## Cumulative Projects Intersection Improvements

Planned improvements and intersection improvements that will be completed as part of the Cumulative Project developments are assumed to be in place for the Opening Year 2021 Cumulative Conditions analysis. These changes in lane configuration at the study intersections are summarized on Figure 13.

The Southern California Association of Governments (SCAG) Federal Transportation Improvement Program (FTIP) lists improvements at the I-10/Oak Valley Parkway interchange, which are consistent with assumed improvements. The I-10/Beaumont Avenue (SR-79) interchange is identified in the 2019 Western Riverside Council of Governments (WRCOG) TUMF network. The assumed improvements at the I-10/Beaumont Avenue (SR-79) interchange are based on the future lane geometry assumptions from Cumulative Project traffic studies. The project will pay a fair share towards these improvements through TUMF fees. The Project contributes fewer than 50 peak hour trips to the I-10/Oak Valley Parkway intersections and fewer than 15 peak hour trips to the I-10/Beaumont Avenue intersections. However, since these intersections are outside the City's jurisdiction and the City cannot guarantee timing or completeness of improvements, the cumulative impacts at intersections #4, 5, 7, and 8 may be considered significant and unavoidable.

## Opening Year 2021 Cumulative Operating Conditions

Intersection Level of Service analysis was conducted for Opening Year 2021 Cumulative Conditions, and the results are shown on Table 7.

Review of this table indicates that, with the addition of Cumulative Projects traffic and the associated improvements, one intersection would operate at an unacceptable Level of Service:

- #4 – Beaumont Avenue at I-10 Eastbound Ramps – PM LOS E
- #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E

Intersection analysis worksheets are provided in *Appendix D*.

## Opening Year 2021 Cumulative with Potrero Interchange Operating Conditions

A separate analysis was conducted to evaluate Opening Year 2021 operating conditions assuming completion of the Potrero Boulevard interchange. Changes in intersection configurations and traffic patterns that would occur as a result of the interchange were based on traffic forecasts developed for the State Route 60/Potrero Boulevard New Interchange Project Initial Study / Environmental Assessment (*SR-60/Potrero Interchange Traffic Impact Analysis* (March 2010)). Traffic forecasts for the Opening Year 2021 with the Potrero Interchange are shown on Figure 14.

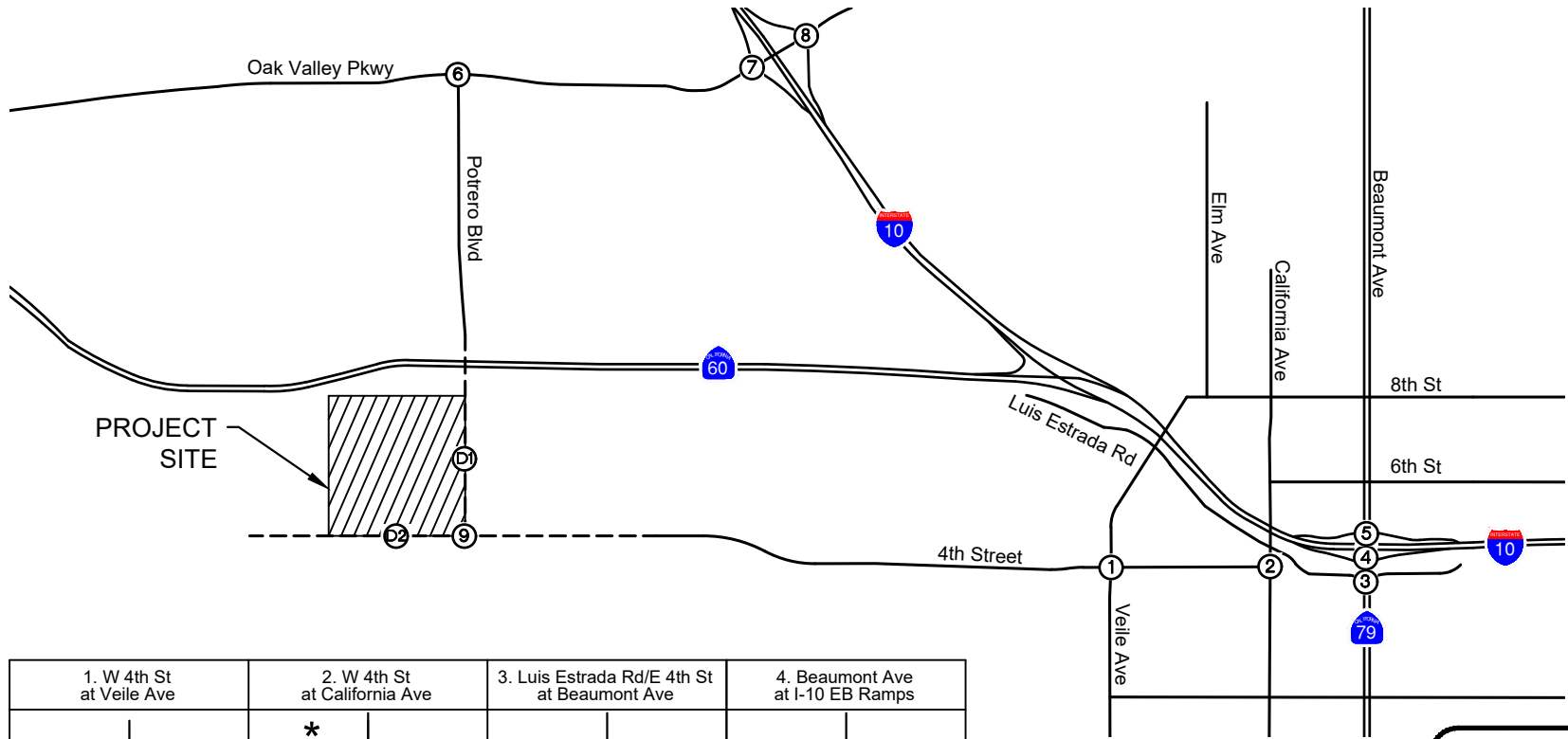
Intersection Level of Service analysis was conducted for Opening Year 2021 Cumulative Conditions with Potrero Interchange, and the results are shown on Table 8.

Review of this table indicates that, with the changes in traffic patterns and the improvements associated with the Potrero Interchange, the study intersections would operate at an acceptable Level of Service in both peak hours.





NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
									FUTURE INTERSECTION	FUTURE INTERSECTION

**LEGEND:**

- = Study Intersection
- = Signal
- = Stop Sign
- = Change in Geometry From Existing

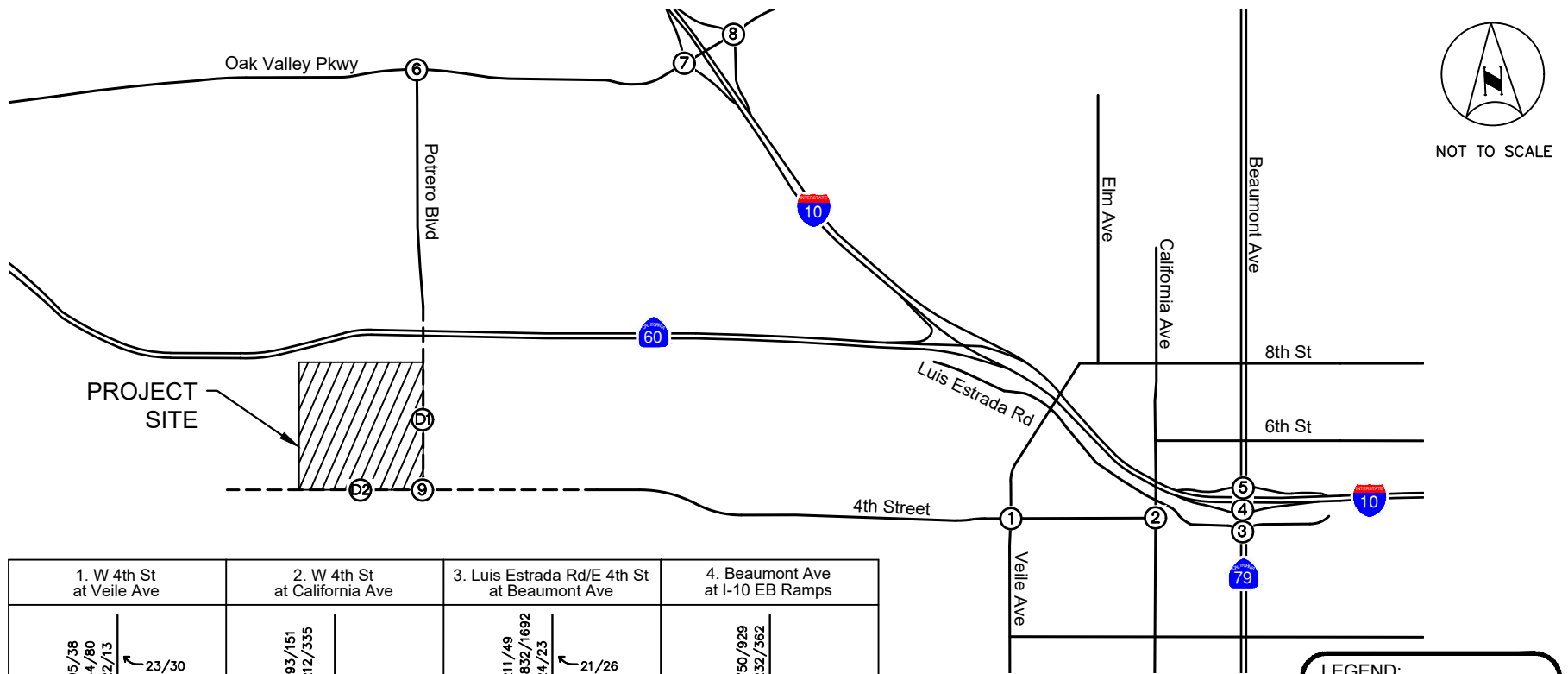
**FIGURE 13**  
**OPENING YEAR CUMULATIVE LANE CONFIGURATION**  
**AND TRAFFIC CONTROL**

TABLE 7  
SUMMARY OF INTERSECTION OPERATION  
OPENING YEAR 2021 CUMULATIVE CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	W. 4th Street at Veile Avenue	S	41.0	D	28.5	C
2	W. 4th Street at California Avenue	S	29.3	C	29.6	C
3	Luis Estrada Road at Beaumont Avenue	S	13.7	B	26.0	C
4	Beaumont Avenue at I-10 EB Ramps	S	25.1	C	64.4	E
5	Beaumont Avenue at I-10 WB Ramps	S	30.6	C	69.5	E
6	Oak Valley Parkway at Potrero Boulevard	S	28.4	C	41.7	D
7	Oak Valley Parkway at I-10 EB Ramps	S	25.9	C	25.4	C
8	Oak Valley Parkway at I-10 WB Ramps	S	22.4	C	33.6	C
9	W. 4th Street at Potrero Boulevard	S	32.2	C	29.5	C
D1	Potrero Boulevard at Driveway 1	U	10.9	B	9.9	A
D2	4th Street at Driveway 2	U	19.7	C	20.0	C

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- Delay values and LOS indicated include implementation of intersection improvements.
- S = Signalized; U = Unsignalized



1. W 4th St at Veile Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps			
5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 14**  
**OPENING YEAR 2021 WITH PROJECT PLUS CUMULATIVE PROJECTS**  
**TRAFFIC VOLUMES WITH POTRERO INTERCHANGE**



TABLE 8  
SUMMARY OF INTERSECTION OPERATION  
OPENING YEAR 2021 CUMULATIVE WITH POTRERO INTERCHANGE

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	W. 4th Street at Veile Avenue	S	39.7	D	27.2	C
2	W. 4th Street at California Avenue	S	10.0	A	12.1	B
3	Luis Estrada Road at Beaumont Avenue	S	21.6	C	10.0	A
4	Beaumont Avenue at I-10 EB Ramps	S	22.7	C	31.1	C
5	Beaumont Avenue at I-10 WB Ramps	S	26.8	C	30.3	C
6	Oak Valley Parkway at Potrero Boulevard	S	18.8	B	18.6	B
7	Oak Valley Parkway at I-10 EB Ramps	S	24.3	C	35.9	D
8	Oak Valley Parkway at I-10 WB Ramps	S	14.3	B	26.4	C
9	W. 4th Street at Potrero Boulevard	S	23.0	C	21.7	C
D1	Potrero Boulevard at Driveway 1	U	10.6	B	10.6	B
D2	4th Street at Driveway 2	U	14.0	B	17.6	C

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- Delay values and LOS indicated include implementation of intersection improvements.
- S = Signalized; U = Unsignalized

## FUTURE BUILD-OUT CONDITIONS

### Build-Out 2040 Forecasts

To derive intersection forecasts for the Build-Out 2040 condition, a combination of the Riverside Transportation Analysis Model (RivTAM) traffic projections and Build-out forecasts for the Potrero Interchange were used. The resulting traffic forecasts for Build-Out conditions are shown on Figure 15. Build-out lane configurations for the study intersections are shown on Figure 16.

The SCAG FTIP lists improvements at the I-10/Oak Valley interchange, which area consistent with assumed improvements. The I-10/Beaumont (SR-79) interchange is part of the 2019 WRCOG TUMF network. The assumed improvements at the I-10/Beaumont (SR-79) interchange are based on the future lane geometry assumptions from the SR-60/Potrero Interchange Traffic Impact Study (2010). The project will pay a fair share towards these improvements through TUMF fees. The Project contributes fewer than 50 peak hour trips to the I-10/Oak Valley Parkway intersections and fewer than 15 peak hour trips to the I-10/Beaumont Avenue intersections. However, since these intersections are outside the City's jurisdiction and the City cannot guarantee timing or completeness of improvements, the cumulative impacts at intersections #4, 5, 7, and 8 may be considered significant and unavoidable.

### Build-Out 2040 Operating Conditions

Intersection Level of Service analysis was conducted for the Build-Out 2040 condition. The results of the intersection analysis are shown on Table 9.

Review of this table indicates that, under Build-Out 2040 conditions, the following intersection would operate at an unacceptable Level of Service:

- #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E

Copies of intersection analysis worksheets for this scenario are provided in *Appendix D*.

### Build-Out 2040 with Project Conditions

Project-related traffic volumes for the Project were added to the Build-Out 2040 forecasts to develop Build-Out 2040 with Project traffic forecast volumes. The resulting traffic volumes are shown on Figure 17.

The results of the Build-out 2040 with Project intersection analysis are shown on Table 10. Review of this table indicates that the same intersection that would operate at a deficient Level of Service without the project would continue to do so with the addition of project traffic:

- #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E

The Project would not cause any additional intersections to worsen to an unacceptable Level of Service. Intersection analysis worksheets are provided in *Appendix D*.



NOT TO SCALE



1. W 4th St at Veile Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
		NOT ANALYZED FOR BUILD-OUT							NOT ANALYZED FOR BUILD-OUT	NOT ANALYZED FOR BUILD-OUT

**LEGEND:**

(X) = Study Intersection

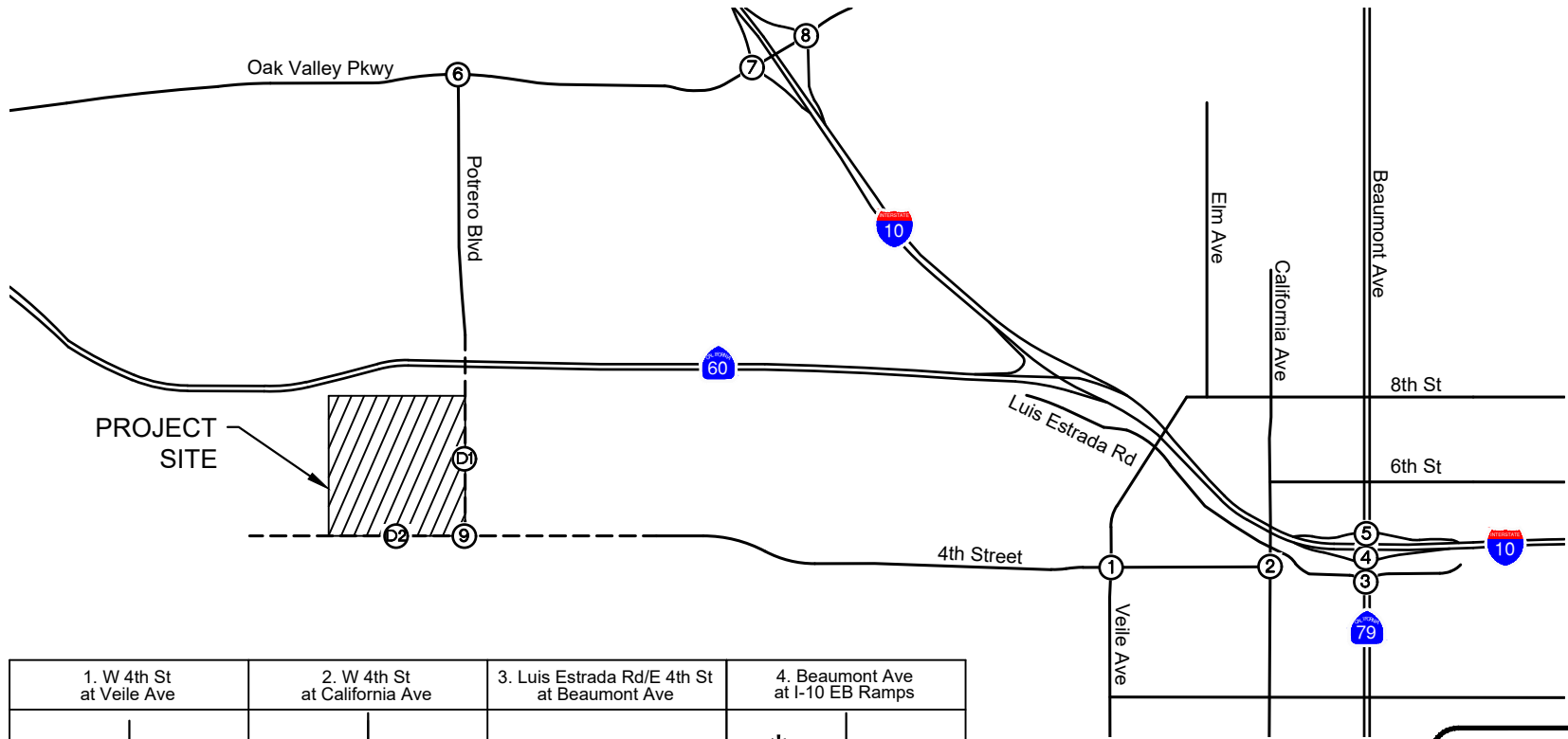
XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 15**  
**BUILD-OUT 2040 TRAFFIC VOLUMES**





NOT TO SCALE



1. W 4th St at Veille Ave	2. W 4th St at California Ave	3. Luis Estrada Rd/E 4th St at Beaumont Ave	4. Beaumont Ave at I-10 EB Ramps	5. Beaumont Ave at I-10 WB Ramps	6. Oak Valley Pkwy at Potrero Blvd	7. Oak Valley Pkwy at I-10 EB Ramps	8. Oak Valley Pkwy at I-10 WB Ramps	9. W 4th St at Potrero Blvd	D1. Potrero Blvd at Driveway 1	D2. 4th St at Driveway 2
		NOT ANALYZED FOR BUILD-OUT							NOT ANALYZED FOR BUILD-OUT	NOT ANALYZED FOR BUILD-OUT

**LEGEND:**

- (X) = Study Intersection
- [Signal Icon] = Signal
- [Stop Sign Icon] = Stop Sign
- [Change in Geometry Icon] = Change in Geometry From Opening Year

**FIGURE 16**  
**BUILD-OUT 2040 LANE CONFIGURATION AND TRAFFIC CONTROL**



TABLE 9  
SUMMARY OF INTERSECTION OPERATION  
BUILD-OUT 2040 CONDITIONS

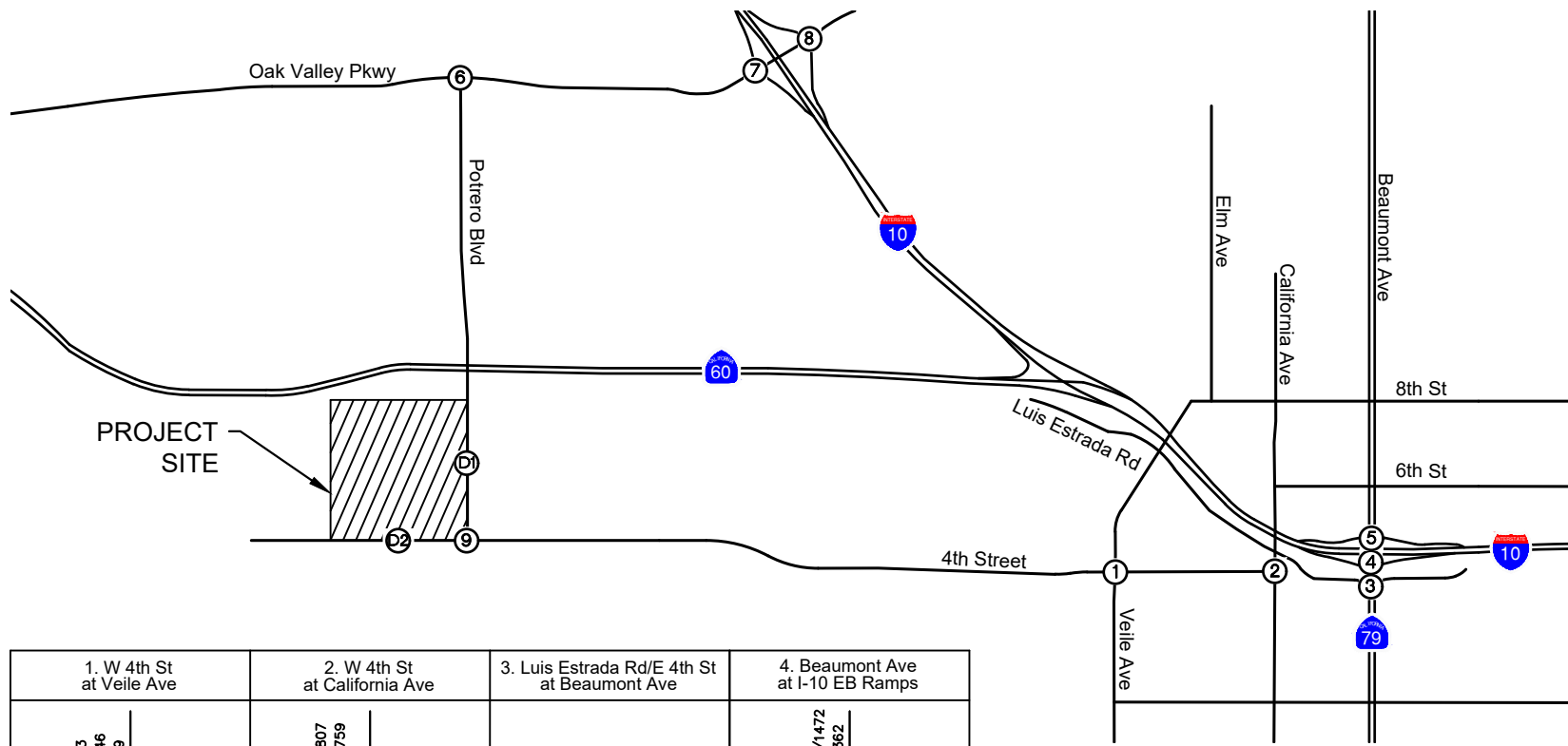
Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	W. 4th Street at Veile Avenue	S	14.6	B	18.1	B
2	W. 4th Street at California Avenue	S	14.4	B	23.1	C
3	Luis Estrada Road at Beaumont Avenue	S	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
4	Beaumont Avenue at I-10 EB Ramps	S	12.3	B	16.4	B
5	Beaumont Avenue at I-10 WB Ramps	S	38.5	D	56.8	E
6	Oak Valley Parkway at Potrero Boulevard	S	20.9	C	18.4	B
7	Oak Valley Parkway at I-10 EB Ramps	S	23.2	C	52.7	D
8	Oak Valley Parkway at I-10 WB Ramps	S	16.2	B	21.0	C
9	W. 4th Street at Potrero Boulevard	S	32.9	C	32.3	C

Notes:

<sup>1</sup> Build-out forecasts are not available for this intersection

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- Delay values and LOS indicated include implementation of intersection improvements.
- S = Signalized; U = Unsignalized





NOT TO SCALE

<p>1. W 4th St at Veile Ave</p> <p>77/93 88/146 60/39 87/47 872/841 72/109</p> <p>134/170 449/768 428/709</p> <p>527/718 83/80 68/150</p>	<p>2. W 4th St at California Ave</p> <p>960/807 530/759</p> <p>460/799</p> <p>151/157</p> <p>134/248 906/803</p>	<p>3. Luis Estrada Rd/E 4th St at Beaumont Ave</p> <p>NOT ANALYZED FOR BUILD-OUT</p>	<p>4. Beaumont Ave at I-10 EB Ramps</p> <p>1254/1472 291/362</p> <p>198/351</p> <p>808/1591</p> <p>1755/1740 699/1142</p>	<p>5. Beaumont Ave at I-10 WB Ramps</p> <p>282/597 839/810</p> <p>317/406</p> <p>706/1024</p> <p>1429/1055 524/1036</p>	<p>6. Oak Valley Pkwy at Potrero Blvd</p> <p>105/170 1503/1971</p> <p>339/179 501/617</p> <p>916/1042 1515/1927</p>	<p>7. Oak Valley Pkwy at I-10 EB Ramps</p> <p>528/1041 169/162 526/1056</p> <p>1558/1619 323/327</p> <p>1807/2313 80/88</p> <p>70/200 262/434</p>	<p>8. Oak Valley Pkwy at I-10 WB Ramps</p> <p>1007/604 1708/1625</p> <p>1244/2247</p> <p>664/690 285/759</p>	<p>9. W 4th St at Potrero Blvd</p> <p>295/663 584/223 746/738</p> <p>548/1028 130/203 94/208</p> <p>523/619 171/222 91/99</p> <p>62/121 702/534 140/154</p>	<p>D1. Potrero Blvd at Driveway 1</p> <p>NOT ANALYZED FOR BUILD-OUT</p>	<p>D2. 4th St at Driveway 2</p> <p>NOT ANALYZED FOR BUILD-OUT</p>
---	--	--	---	---	---	---	--	---	---	---

**LEGEND:**

(X) = Study Intersection

XX/YY = AM/PM Peak Hour Turning Movement Volumes

**FIGURE 17**  
**BUILD-OUT 2040 WITH PROJECT TRAFFIC VOLUMES**



TABLE 10  
SUMMARY OF INTERSECTION OPERATION  
BUILD-OUT 2040 PLUS PROJECT

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project Impact	Impact Sig?	Without Project		With Project		Project Impact	Impact Sig?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	W. 4th Street at Veile Avenue	S	14.6	B	14.7	B	0.1	No	18.1	B	18.2	B	0.1	No
2	W. 4th Street at California Avenue	S	14.4	B	14.6	B	0.2	No	23.1	C	23.4	C	0.3	No
3	Luis Estrada Road at Beaumont Avenue	S	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>	n/a <sup>1</sup>
4	Beaumont Avenue at I-10 EB Ramps	S	12.3	B	12.4	B	0.1	No	16.4	B	16.5	B	0.1	No
5	Beaumont Avenue at I-10 WB Ramps	S	38.5	D	38.9	D	0.4	No	56.8	<b>E</b>	56.9	<b>E</b>	0.1	<b>Yes</b>
6	Oak Valley Parkway at Potrero Boulevard	S	20.9	C	20.9	C	0.0	No	18.4	B	18.4	B	0.0	No
7	Oak Valley Parkway at I-10 EB Ramps	S	23.2	C	23.3	C	0.1	No	52.7	D	54.4	D	1.7	No
8	Oak Valley Parkway at I-10 WB Ramps	S	16.2	B	16.2	B	0.0	No	21.0	C	21.0	C	0.0	No
9	W. 4th Street at Potrero Boulevard	S	32.9	C	35.1	D	2.2	No	32.3	C	34.5	C	2.2	No

Notes:

<sup>1</sup> Build-out forecasts are not available for this intersection

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- Delay values and LOS indicated include implementation of intersection improvements.
- S = Signalized; U = Unsignalized

## NEEDED IMPROVEMENTS

Based on the impact criteria presented earlier in the report (page 7), the cumulative impact would be considered significant at the following intersections:

- #4 – Beaumont Avenue at I-10 Eastbound Ramps
- #5 – Beaumont Avenue at I-10 Westbound Ramps

Implementation of the following improvement would mitigate the cumulative impact:

### #4 – Beaumont Avenue at I-10 Eastbound Ramps:

*Opening Year 2021 Cumulative Conditions:* Add a second southbound left-turn lane. With this improvement, the intersection would operate at an acceptable Level of Service in both peak hours. The project will contribute on a fair-share basis to this improvement through payment of TUMF fees.

- *Note:* With the change in traffic patterns that would occur with the Potrero Boulevard Interchange project, the intersection of Beaumont Avenue at I-10 Eastbound Ramps is expected to operate at an acceptable Level of Service (see Table 8; previously mentioned).

### #5 – Beaumont Avenue at I-10 Westbound Ramps:

*Opening Year 2021 Cumulative Conditions:* Add a second northbound left-turn lane. With this improvement, the intersection would operate at an acceptable Level of Service in both peak hours. The project will contribute on a fair-share basis to this improvement through payment of TUMF fees.

- *Note:* With the change in traffic patterns that would occur with the Potrero Boulevard Interchange project, the intersection of Beaumont Avenue at I-10 Westbound Ramps is expected to operate at an acceptable Level of Service (see Table 8; previously mentioned).

*Build-Out 2040 With Project Conditions:* Add a second southbound right-turn lane. With this improvement, the intersection would operate at an acceptable Level of Service in both peak hours. The project will contribute on a fair-share basis to this improvement through payment of TUMF fees..

A summary of the intersection operation before and after implementation of these mitigation measures is provided on Table 11. The project fair share proportion of the improvements are shown on Table 12.

TABLE 11  
SUMMARY OF INTERSECTION OPERATION WITH PROPOSED MITIGATION MEASURES

Int. #	Intersection and Mitigation	AM Peak Hour				PM Peak Hour			
		Without Mitigation		With Mitigation		Without Mitigation		With Mitigation	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Opening Year 2021 Cumulative Conditions									
4	Beaumont Avenue at I-10 EB Ramps								
	Add a 2nd SB Left-Turn Lane	25.1	C	24.0	C	64.4	<b>E</b>	44.5	D
5	Beaumont Avenue at I-10 WB Ramps								
	Add a 2nd NB Left-Turn Lane	30.6	C	26.4	C	69.5	<b>E</b>	40.3	D
Build-Out 2040 With Project Conditions									
5	Beaumont Avenue at I-10 WB Ramps								
	Add a 2nd SB Right-Turn Lane	38.9	D	38.1	D	56.9	<b>E</b>	43.0	D

Notes:

- Bold and shaded values indicate intersections operating at an unacceptable Level of Service, or a significant impact to the intersection, per City standards.
- At a signalized intersection, delay refers to the average control delay for the entire intersection, measured in seconds per vehicle.
- At an unsignalized intersection, delay refers to the average delay per vehicle on the intersection approach with the highest delay.
- Delay values are based on the methodology outlined in the Highway Capacity Manual (6th Edition).
- S = Signalized; U = Unsignalized

TABLE 12  
SUMMARY OF PROJECT FAIR SHARE FOR MITIGATION MEASURES

Intersection	AM Peak Hour					PM Peak Hour				
	Total Volume		Total	Project	%age	Total Volume		Total	Project	%age
	2019	2021	Growth	Trips		2019	2021	Growth	Trips	
Opening Year 2021 Cumulative Conditions										
Beaumont Avenue at I-10 EB Ramps	2,314	3,988	1,674	6	0.4%	2,836	5,184	2,348	9	0.4%
Beaumont Avenue at I-10 WB Ramps	1,537	2,958	1,421	10	0.7%	1,879	4,289	2,410	10	0.4%
Build-Out 2040 With Project Conditions										
Beaumont Avenue at I-10 WB Ramps	1,537	4,097	2,560	10	0.4%	1,879	4,928	3,049	10	0.3%

## SUMMARY OF FINDINGS AND CONCLUSIONS

- This study has been prepared to evaluate the traffic-related impacts of the proposed Beaumont Potrero Interchange Industrial Warehouse project (Project), a 577,920-square-foot high-cube warehouse located south of the SR-60 Freeway on the northwest corner of the future intersection of Potrero Boulevard and W. 4<sup>th</sup> Street.
- Weekday morning peak hour and weekday evening peak hour operating conditions were evaluated at 9 study intersections for the following study scenarios:
  - Existing Conditions,
  - Existing Plus Project Conditions,
  - Opening Year 2021 without Project,
  - Opening Year 2021 with Project,
  - Opening Year 2021 with Project Plus Cumulative Projects,
  - Opening Year 2021 with Project Plus Cumulative Projects with Potrero Interchange,
  - Build-out 2040,
  - Build-out 2040 with Project.
- Under Existing Conditions, all of the study intersections are currently operating at an acceptable Level of Service D or better.
- The project is forecasted to generate 1,685 daily trips, with 111 trips during the morning peak hour and 120 trips during the evening peak hour.
- Under Existing Plus Project Conditions, all study intersections would continue to operate at an acceptable Level of Service with the addition of project traffic, with the exception of the following study intersection:
  - #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E
- Ambient traffic growth at a rate of 2.0 percent per year was added to Existing Conditions to develop Opening Year 2021 without Project forecasts.
- Under Opening Year 2021 without Project Conditions, the following intersection would operate at an unacceptable Level of Service with the addition of ambient growth:
  - #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E
- Under Opening Year 2021 with Project Conditions, the following intersection would continue to operate at an unacceptable Level of Service with the of project traffic:
  - #2 – W. 4<sup>th</sup> Street at California Avenue – AM LOS E

- Cumulative Project traffic was added to the Opening Year 2021 with Project volumes. Planned improvements and intersection improvements that will be completed as part of the Cumulative Project developments are assumed to be in place.
- However, since these intersections #4, 5, 7, and 8 are outside the City's jurisdiction and cannot guarantee timing or completeness of improvements, the cumulative impacts at these intersections may be considered significant and unavoidable.
- Under Opening Year 2021 Cumulative Conditions, the following study intersection would operate at an unacceptable Level of Service:
  - #4 – Beaumont Avenue at I-10 Eastbound Ramps – PM LOS E
  - #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E
- A separate analysis was conducted to evaluate Opening Year 2021 operating conditions assuming completion of the Potrero Boulevard interchange. Under Opening Year 2021 Cumulative with Potrero Interchange Conditions, all study intersections would operate at an acceptable Level of Service.
- To derive forecasts for Build-Out 2040 Conditions, a combination of the RivTAM traffic projections and Build-out forecasts for the Potrero Interchange Traffic Impact Study were used.
- Under Build-Out 2040 Conditions, the following intersection would operate at an unacceptable Level of Service:
  - #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E
- Under Build-Out 2040 with Project Conditions, the following intersection would continue to operate at an unacceptable Level of Service:
  - #5 – Beaumont Avenue at I-10 Westbound Ramps – PM LOS E
- Based on the impact criteria presented in the report, the cumulative impact would be considered significant at the following intersections:
  - #4 – Beaumont Avenue at I-10 Eastbound Ramps
  - #5 – Beaumont Avenue at I-10 Westbound Ramps
- The project would pay a fair-share percentage toward the following recommended mitigation measures:
  - #4 – Beaumont Avenue at I-10 Eastbound Ramps
    - Opening Year 2021 Cumulative Conditions: Add a second southbound left-turn lane.
  - #5 – Beaumont Avenue at I-10 Westbound Ramps
    - Opening Year 2021 Cumulative Conditions: Add a second northbound left-turn lane.
    - Build-Out 2040 With Project Conditions: Add a second southbound right-turn lane.

APPENDIX A

SCOPING AGREEMENT



## Exhibit B

### SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated April 2008.

Case No. (i.e. TR, PM, CUP, PP) \_\_\_\_\_

**Related Cases -**

SP No. Provide SP No. and list of other approved or active projects within the SP. \_\_\_\_\_

EIR No. \_\_\_\_\_

GPA No. \_\_\_\_\_

CZ No. \_\_\_\_\_

Project Name: CapRock Hi-Cube Warehouse Building

Project Address: 4<sup>th</sup> Street at Potrero Blvd (future intersection)

Project Description: 577,920-square-foot High Cube Industrial Warehouse building

	<u>Consultant</u>	<u>Developer</u>
Name:	<u>Kimley-Horn and Associates</u>	<u>ASM Beaumont, LLC</u>
Address:	<u>3880 Lemon Street, Suite 420</u>	<u>3990 Westerly Place, Suite 140</u>
	<u>Riverside, CA 92501</u>	<u>Newport Beach, CA 92660</u>
Telephone:	<u>(951) 543-9869</u>	<u>(949) 757-0510</u>
Fax:	_____	_____

**A. Trip Generation Source:** ITE Trip Generation Manual, 10<sup>th</sup> Edition, and Fontana Truck Trip Study

	<u>Current GP Land Use</u>	<u>Current Zoning</u>		<u>Proposed Land Use</u>	<u>Proposed Zoning</u>	
	<u>Parcel 1 + 2 – (I) Industrial</u>	<u>P 1 – General Commercial</u>		<u>TBD</u>	<u>TBD</u>	
<b>Current Trip Generation</b>	<u>P 2 – W-2 Controlled Development Area</u>			<b>Proposed Trip Generation</b>		
	<u>In</u>	<u>Out</u>	<u>Total</u>	<u>In</u>	<u>Out</u>	<u>Total</u>
AM Trips	<u>0</u>	<u>0</u>	<u>0</u>	<u>76 PCE</u>	<u>35 PCE</u>	<u>111 PCE</u>
PM Trips	<u>0</u>	<u>0</u>	<u>0</u>	<u>37 PCE</u>	<u>83 PCE</u>	<u>120 PCE</u>
Internal Trip Allowance	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No	( <u>0 %</u> % Trip Discount)		
Pass-By Trip Allowance	<input type="checkbox"/> Yes		<input checked="" type="checkbox"/> No	( <u>0 %</u> % Trip Discount)		

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

**B. Trip Geographic Distribution:** N 40/30%\* % S 0/25% % E 10/25% % W 50/20% %  
 (attach exhibit for detailed assignment)

Trucks / Passenger Cars

**C. Background Traffic**

\* Trucks and passenger cars to use future Potrero Blvd. It is assumed that future Potrero Blvd will be built when the project is built.

Project Build-out Year: Provide realistic opening year, considering time needed for approvals and construction. 2020 Annual Ambient Growth Rate: 2 %

Phase Year(s) N/A

Other area projects to be analyzed: We will request Cumulative Projects information from Planning and from the County of Riverside

Model/Forecast methodology For existing intersections: Ex + Growth + Cum Proj + Proj / For future intersection: Forecasts from the SR-60/Potrero Interchange Project Study

Exhibit B – Scoping Agreement – Page 2

D. Study intersections: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- |  |  |
|--|--|
| 1. <u>W 4<sup>th</sup> Street at Veile Ave</u>                 | 6. <u>Oak Valley Pkwy at Potrero Blvd</u>                          |
| 2. <u>W 4<sup>th</sup> Street at California Ave</u>            | 7. <u>Oak Valley Pkwy at I-10 EB Ramps</u>                         |
| 3. <u>Luis Estrada Rd/E. 4<sup>th</sup> St at Beaumont Ave</u> | 8. <u>Oak Valley Pkwy at I-10 WB Ramps</u>                         |
| 4. <u>Beaumont Ave at I-10 EB Ramps</u>                        | 9. <u>W 4<sup>th</sup> Street at Potrero (Future intersection)</u> |
| 5. <u>Beaumont Ave at I-10 WB Ramps</u>                        | 10. _____  |

E. Study Roadway Segments: (NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)

- |          |           |
|----------|-----------|
| 1. _____ | 6. _____  |
| 2. _____ | 7. _____  |
| 3. _____ | 8. _____  |
| 4. _____ | 9. _____  |
| 5. _____ | 10. _____ |

E. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries?  Yes  No

If so, name of City Jurisdiction: County of Riverside

F. Site Plan (please attach reduced copy)

G. Specific issues to be addressed in the Study (in addition to the standard analysis described in the Guideline) (To be filled out by Transportation Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

Signal warrants will be conducted for unsignalized intersections. An alternative With Project analysis in the Opening Year scenario will be conducted to compare with and without the Potrero Blvd interchange project

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.  
Date of counts \_\_\_\_\_ If counts are not available from recent studies, new counts will be collected

**\*NOTE\* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.**

Recommended by:

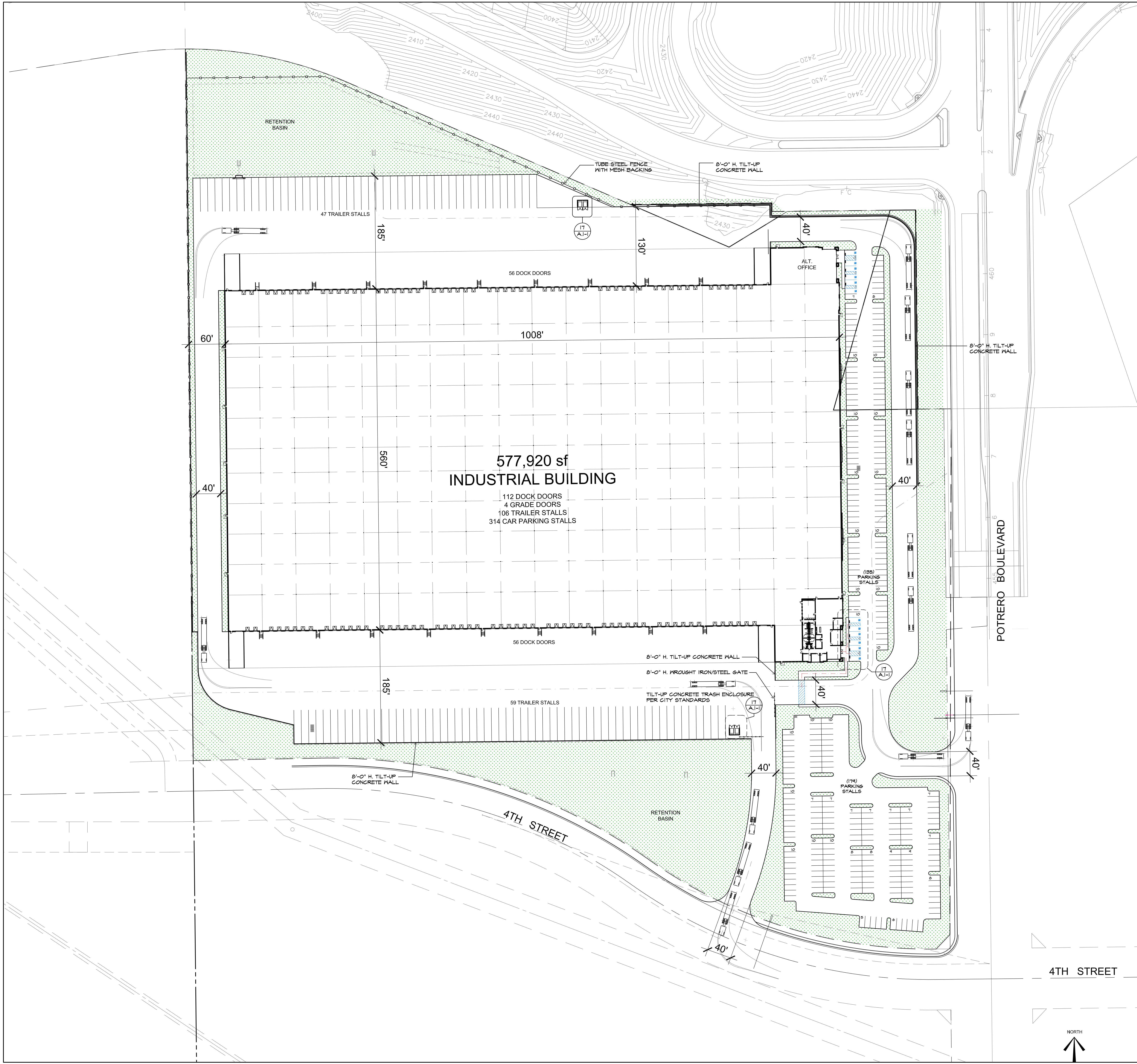
Serine Ciandella / Trevor Briggs  
Consultant's Representative \_\_\_\_\_ Date \_\_\_\_\_

Approved Scoping Agreement:

\_\_\_\_\_  
Riverside County Transportation Department \_\_\_\_\_ Date \_\_\_\_\_

Scoping Agreement Submitted on \_\_\_\_\_

Revised on \_\_\_\_\_



**PARCEL 1:** APN: 424-010-003-2  
 THE EAST 1/2 OF THE WEST 1/2 OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, LYING SOUTHERLY OF THAT CERTAIN HIGHWAY DESCRIBED IN DEED TO THE COUNTY OF RIVERSIDE, RECORDED IN BOOK 433, PAGE 7 OF DEEDS, RIVERSIDE COUNTY RECORDS, EXCEPTING THEREFROM THAT CERTAIN PARCEL OF LAND CONVEYED TO THE STATE OF CALIFORNIA FOR HIGHWAY PURPOSES BY DEED FROM C. W. NICKLIN, ET. AL, RECORDED NOVEMBER 15, 1934 IN BOOK 200, PAGE 445, OFFICIAL RECORDS, RIVERSIDE COUNTY RECORDS. ALSO EXCEPTING THEREFROM THAT PORTION THEREOF AS CONVEYED TO THE STATE OF CALIFORNIA FOR HIGHWAY PURPOSES BY DEED RECORDED SEPTEMBER 05, 1959 IN BOOK 2328, PAGE 313, OFFICIAL RECORDS, RIVERSIDE COUNTY RECORDS. ALSO EXCEPTING THAT PORTION AS CONVEYED TO THE CITY OF BEAUMONT, A MUNICIPAL CORPORATION, BY GRANT DEED RECORDED SEPTEMBER 7, 2006 AS INSTRUMENT NO. 06-0691909, OFFICIAL RECORDS, RIVERSIDE COUNTY RECORDER. ALSO EXCEPTING THEREFROM THAT PORTION AS CONVEYED TO THE CITY OF BEAUMONT, A MUNICIPAL CORPORATION, BY GRANT DEED RECORDED JUNE 7, 2017 AS INSTRUMENT NO. 2017-0227754 OF OFFICIAL RECORDS, RIVERSIDE COUNTY RECORDS. ALSO EXCEPTING THEREFROM ANY MOBILE HOME OR MANUFACTURED HOUSING UNIT AND APPURTENANCES, IF ANY, LOCATED ON SAID LAND.

**PARCEL 1:** APN: 421-010-007-6 AND 421-010-008  
 THAT PORTION OF LAND SITUATED IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BEING THAT PORTION OF THE EAST ONE HALF OF THE WEST ONE HALF OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO MERIDIAN, MORE PARTICULARLY DESCRIBED AS FOLLOWS:  
 COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 7, SAID POINT BEING NORTH 84° 59' 13" EAST, 2650.57 FEET FROM THE NORTHWEST CORNER OF SAID SECTION 7 AND SOUTH 84° 59' 13" WEST, 2650.57 FEET FROM THE NORTHEAST QUARTER OF SAID SECTION 7; THENCE ALONG THE NORTH LINE OF SAID SECTION 7, NORTH 84° 59' 13" EAST, 962.84 FEET TO THE WEST LINE OF SAID EAST ONE HALF OF THE WEST ONE HALF OF THE NORTHEAST QUARTER OF SECTION 7, SAID POINT BEING SOUTH 84° 59' 13" WEST, 1987.65 FEET FROM THE NORTHEAST QUARTER CORNER OF SAID SECTION 7; THENCE LEAVING SAID NORTH SECTION 7 LINE AND ALONG SAID WEST LINE, SOUTH 00° 20' 23" EAST, 974.33 FEET TO THE POINT OF BEGINNING.  
 THENCE CONTINUING ALONG SAID WEST LINE OF THE EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, SOUTH 00° 20' 23" EAST, 1797.87 FEET TO THE SOUTHWEST CORNER OF SAID EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, SAID POINT BEING NORTH 85° 00' 41" EAST, 687.91 FEET FROM THE CENTER OF SAID SECTION 7; THENCE LEAVING SAID WEST LINE, AND ALONG THE SOUTH LINE OF SAID EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, NORTH 85° 00' 21" EAST 687.91 FEET TO THE SOUTHWEST CORNER OF SAID EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, SAID POINT BEING SOUTH 85° 00' 41" WEST, 1335.81 FEET FROM THE EAST QUARTER CORNER OF SAID SECTION 7; THENCE LEAVING SAID SOUTH LINE AND ALONG THE EAST LINE OF EAST HALF OF THE WEST HALF OF THE NORTHEAST QUARTER OF SECTION 7, NORTH 00° 27' 10" WEST, 1494.61 FEET TO A NON-TANGENT CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 1206.00 FEET, THE RADIAL TO SAID POINT BEARS SOUTH 17° 45' 0" WEST; THENCE LEAVING SAID EAST LINE AND NORTHWESTERLY ALONG SAID CURVE THROUGH A CENTRAL ANGLE OF 07° 16' 56", AN ARC DISTANCE OF 153.28 FEET TO A TANGENT LINE; THENCE LEAVING SAID CURVE AND ALONG SAID TANGENT LINE NORTH 85° 07' 21" WEST, 555.08 TO THE POINT OF BEGINNING.

**PARCEL 1:** APN: 424-010-005  
 THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPTING THEREFROM THAT PORTION DESCRIBED IN THE DEEDS TO THE STATE OF CALIFORNIA, RECORDED IN BOOK 433, PAGE 7 OF DEEDS; AND RECORDED NOVEMBER 15, 1934 IN BOOK 200, PAGE 445, OFFICIAL RECORDS AND RECORDED SEPTEMBER 5, 1959 IN BOOK 2328, PAGE 313, OFFICIAL RECORDS OF RIVERSIDE COUNTY. ALSO EXCEPTING THEREFROM, THOSE PORTIONS DESCRIBED IN DEEDS TO THE CITY OF BEAUMONT, RECORDED JUNE 19, 2017 AS INSTRUMENT NUMBERS 2017-0246460 AND 2017-0244442, OFFICIAL RECORDS OF RIVERSIDE COUNTY.

**PARCEL 2 (EASEMENT):**  
 A NON-EXCLUSIVE EASEMENT, 60 FEET IN WIDTH, FOR INGRESS AND EGRESS OVER THE NORTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF. EXCEPTING THEREFROM THAT PORTION AS DESCRIBED IN THE DEEDS TO THE STATE OF CALIFORNIA, RECORDED IN BOOK 433, PAGE 7 OF DEEDS; AND RECORDED NOVEMBER 5, 1934 IN BOOK 200, PAGE 445 OFFICIAL RECORDS AND RECORDED SEPTEMBER 5, 1959 IN BOOK 2328, PAGE 313, OFFICIAL RECORDS OF RIVERSIDE COUNTY.

**PARCEL 1:** APN: 424-010-009 AND 424-010-010  
 THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4 OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 1 WEST, SAN BERNARDINO BASE AND MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF.

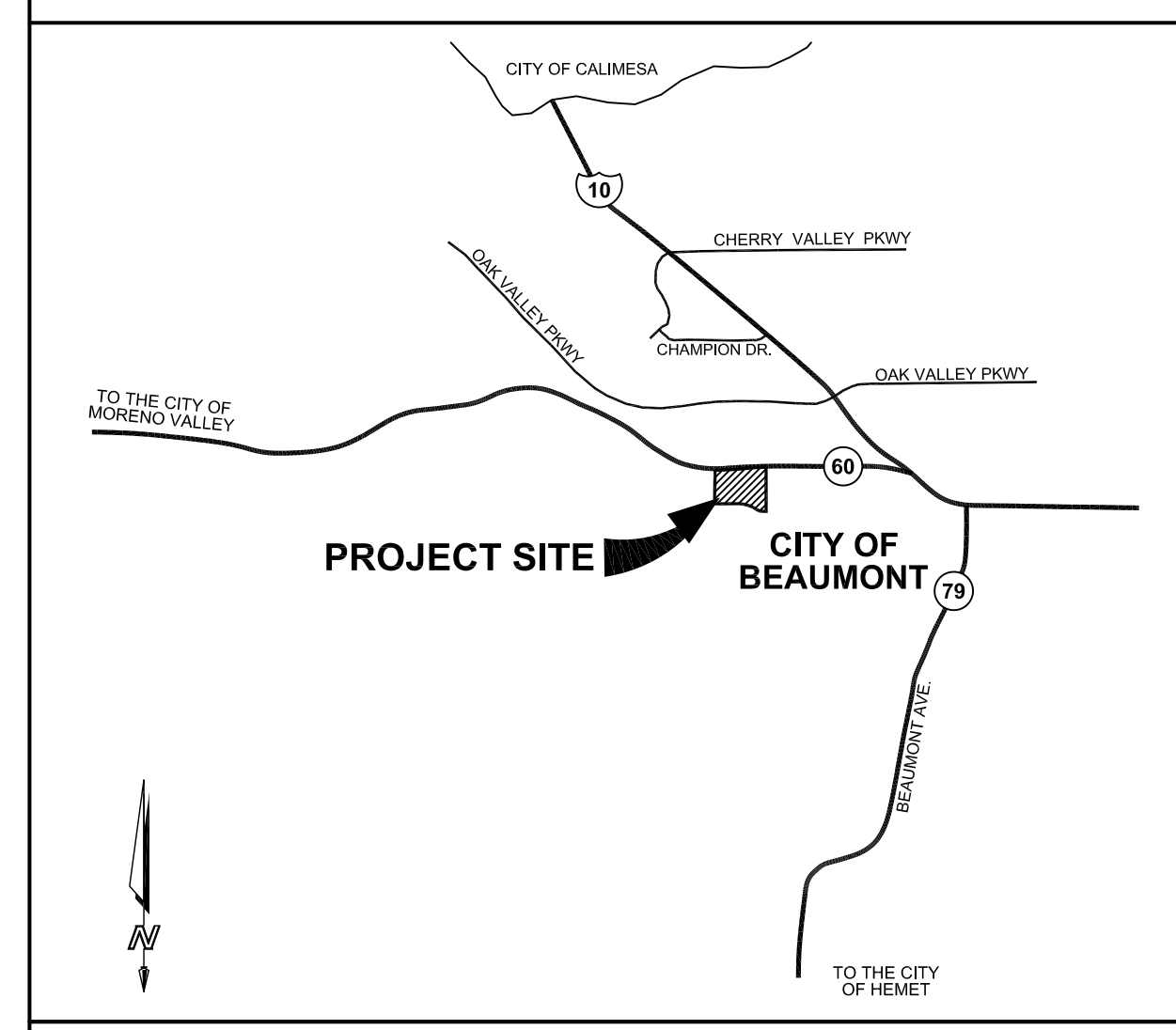
**LEGAL DESCRIPTION**

SUMMARY	
SITE AREA	1,394,807sf (32.02ac)
BUILDING AREA	577,920sf
FAR (NET)	41.4%
PARKING REQUIRED	
OFFICE (10,000SF) 1:250	40
WAREHOUSE	20
0-20,000sf 1:1000	10
20-40,000sf 1:2000	10
40-567,920sf 1:1000	132
TOTAL REQUIRED	202 stalls
PARKING PROVIDED	
VEHICULAR 8'x18'	314 stalls
TRAILER 12'x50'	106 stalls
LANDSCAPE PROVIDED	290,982sf (20.8%)

**PROJECT SUMMARY**

PROPERTY OWNER	ARCHITECT
CAPROCK PARTNERS 1300 DOVE STREET SUITE 200 NEWPORT BEACH, CA 92660 BOB O'NEIL (949) 285-8767	DOUGLAS FRANZ ARCHITECTS, INC 4001 WESTERLY PLACE SUITE 108 NEWPORT BEACH, CA 92660 DOUG FRANZ 949-553-0525

**PROJECT TEAM**



**VICINITY MAP**

License Renewal Date: 31 March 2019



**Progress set  
July-12-2019**

REVISIONS	DATE	DESCRIPTION

**Beaumont**  
**A Project for Cap Rock Partners**  
 4th St + Moreno Valley Fwy  
 Beaumont, California

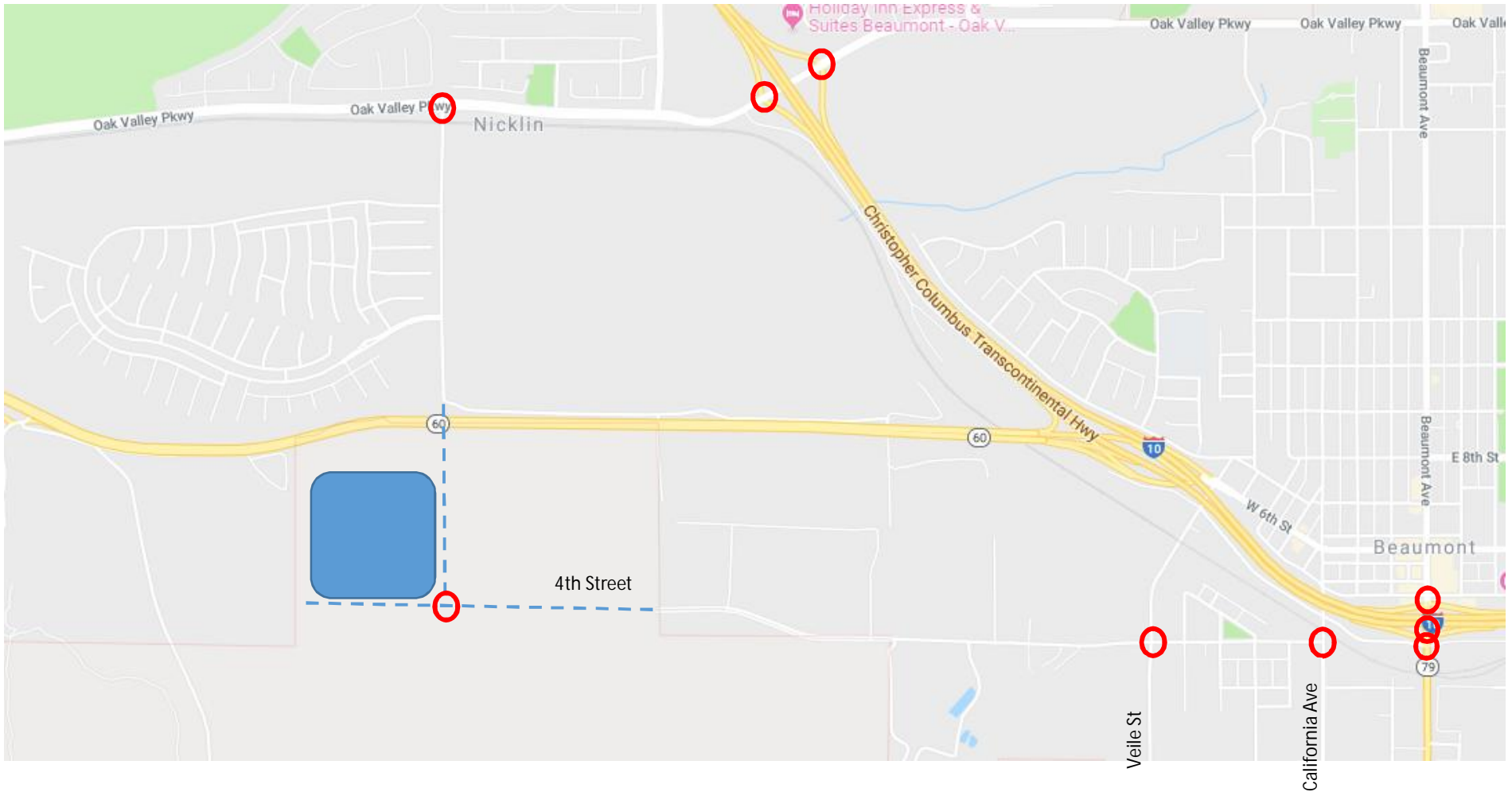
PRELIMINARY SITE PLAN	DATE:	SCALE:	DRAWN BY:	PROJECT NO.:
	07-01-2019	1" = 60'-0"	DFA	18016.00

**A.1**  
 OPTION 16

TABLE A  
SUMMARY OF PROJECT TRIP GENERATION  
CAPROCK WAREHOUSE - BEAUMONT POTRERO

TRIP GENERATION RATES										
ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	
High-Cube Warehouse	152	KSF	1,680	0.076	0.034	0.110	0.037	0.083	0.120	
PROJECT TRIP GENERATION										
Project Land Use		Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
High-Cube Warehouse		577,920	KSF	971	44	20	64	21	48	69
Passenger Vehicles	51.00%			495	22	10	32	11	24	35
Trucks	49.00%			476	22	10	32	10	24	34
PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)										
Vehicle Type	Vehicle Mix <sup>1</sup>	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	51.00%	495	1.0	495	22	10	32	11	24	35
2-Axle Trucks	0.00%	0	1.5	0	0	0	0	0	0	0
3-Axle Trucks	0.00%	0	2.0	0	0	0	0	0	0	0
4+ Axle Trucks	49.00%	476	2.5	1,190	54	25	79	26	59	85
Total Truck PCE Trips				1,190	54	25	79	26	59	85
Total Project PCE Trips				1,685	76	35	111	37	83	120
<p>Source: Institute of Transportation Engineers (ITE) <u>Trip Generation Manual</u>, 10th Edition</p> <p>PCE = Passenger Car Equivalent</p> <p>KSF = Thousand Square Feet</p> <p><sup>1</sup> Source: Truck Trip Generation Study - City of Fontana, August 2003</p>										

# CITY OF BEAUMONT - CAP ROCK HI-CUBE WAREHOUSE PROJECT



## Study Intersections

1. W 4<sup>th</sup> Street at Veile Avenue
2. W 4<sup>th</sup> Street at California Ave
3. Luis Estrada Rd/4<sup>th</sup> St at Beaumont Ave
4. Beaumont Ave at I-10 EB Ramps
5. Beaumont Ave at I-10 WB Ramps
6. Oak Valley Pkwy at Potrero Blvd
7. Oak Valley Pkwy at I-10 EB Ramps
8. Oak Valley Pkwy at I-10 WB Ramps
9. W 4<sup>th</sup> Street at Potrero (Future)

--- Future Road

## APPENDIX B

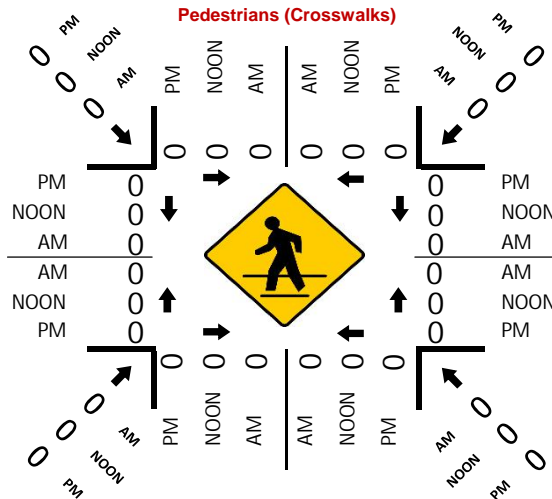
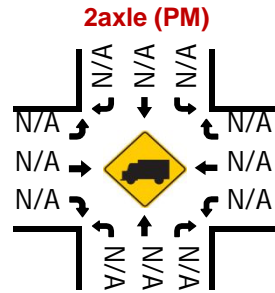
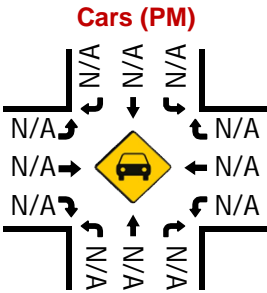
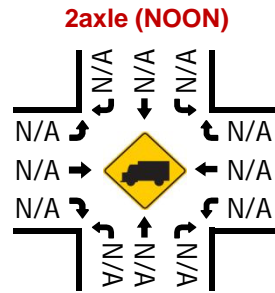
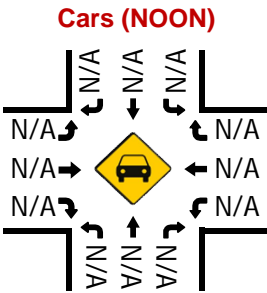
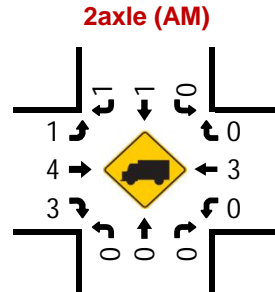
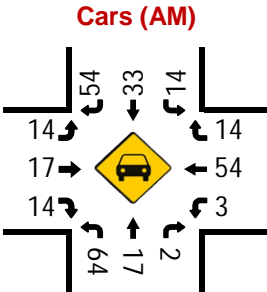
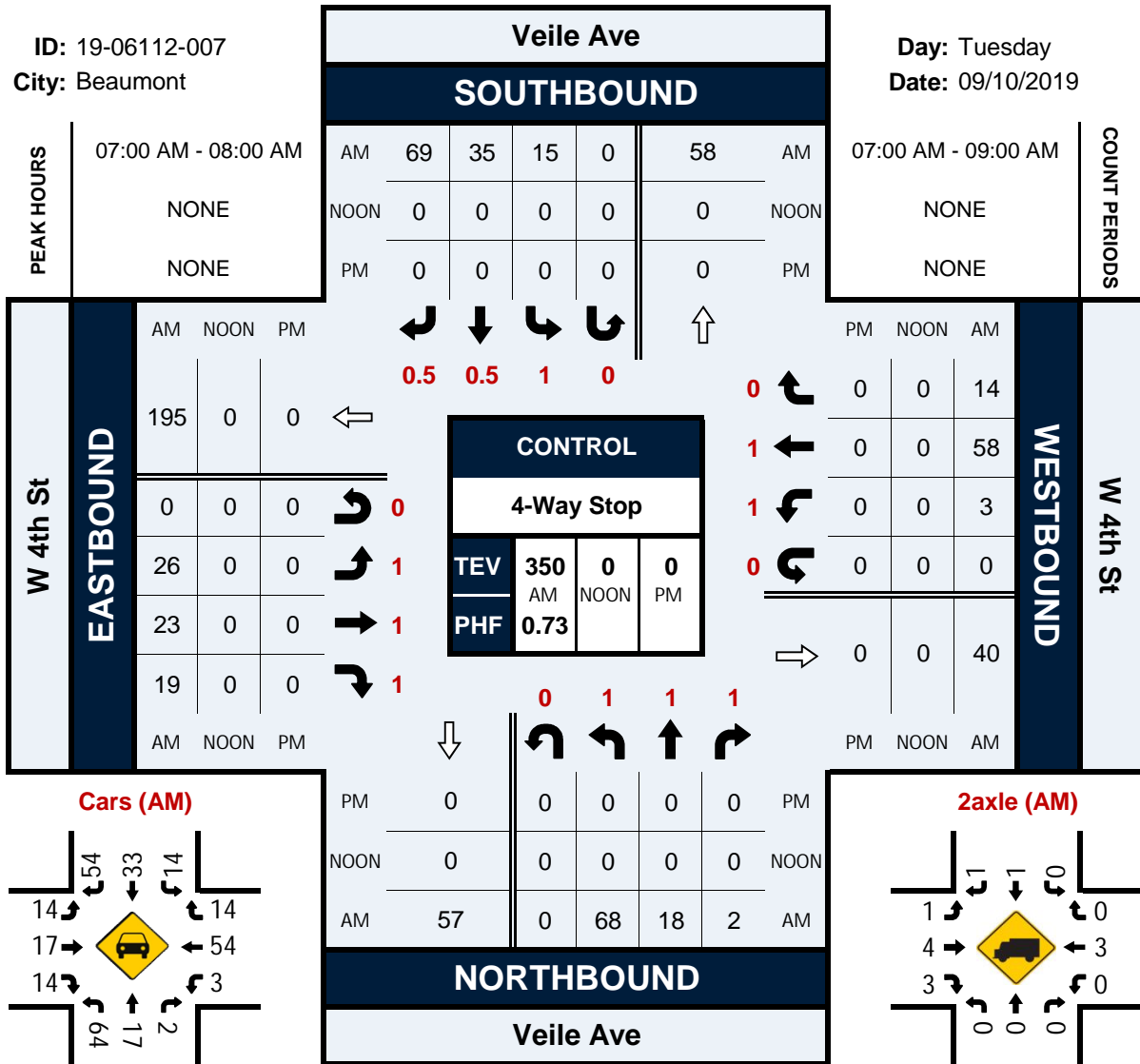
### EXISTING PEAK HOUR TRAFFIC DATA COLLECTION SHEETS

# Veile Ave & W 4th St

## Peak Hour Turning Movement Count

ID: 19-06112-007  
City: Beaumont

Day: Tuesday  
Date: 09/10/2019



Location: Veile Ave & W 4th St  
 City: Beaumont  
 Control: 4-Way Stop

Project ID: 19-06112-007  
 Date: 9/10/2019

Total

NS/EW Streets:	Veile Ave				Veile Ave				W 4th St				W 4th St				TOTAL			
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND							
AM	1	1	1	0	1	0.5	0.5	0	1	1	1	0	1	1	0	0				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU				
7:00 AM	20	9	0	0	3	7	16	0	5	6	3	0	0	7	5	0				81
7:15 AM	32	5	1	0	3	4	20	0	4	7	10	0	0	31	3	0				120
7:30 AM	11	2	0	0	6	14	8	0	8	4	4	0	1	7	3	0				68
7:45 AM	5	2	1	0	3	10	25	0	9	6	2	0	2	13	3	0				81
8:00 AM	9	3	1	0	3	3	16	0	5	1	2	0	1	11	5	0				60
8:15 AM	9	7	1	0	3	10	13	0	5	10	6	0	2	17	2	0				85
8:30 AM	6	4	2	0	1	9	12	0	5	6	8	0	1	10	2	0				66
8:45 AM	1	7	1	0	4	6	13	0	4	4	4	0	2	9	2	0				57
TOTAL VOLUMES :	93	39	7	0	26	63	123	0	45	44	39	0	9	105	25	0				618
APPROACH %'s :	66.91%	28.06%	5.04%	0.00%	12.26%	29.72%	58.02%	0.00%	35.16%	34.38%	30.47%	0.00%	6.47%	75.54%	17.99%	0.00%				
PEAK HR :	07:00 AM - 08:00 AM																TOTAL			
PEAK HR VOL :	68	18	2	0	15	35	69	0	26	23	19	0	3	58	14	0				350
PEAK HR FACTOR :	0.531	0.500	0.500	0.000	0.625	0.625	0.690	0.000	0.722	0.821	0.475	0.000	0.375	0.468	0.700	0.000				0.729
	0.579				0.783				0.810				0.551							



Location: Veile Ave & W 4th St  
 City: Beaumont  
 Control: 4-Way Stop

Project ID: 19-06112-007  
 Date: 9/10/2019

Cars

NS/EW Streets:	Veile Ave				Veile Ave				W 4th St				W 4th St				TOTAL
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
AM	1	1	1	0	1	0.5	0.5	0	1	1	1	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	19	8	0	0	3	7	14	0	2	4	2	0	0	7	5	0	71
7:15 AM	32	5	1	0	2	4	15	0	3	6	7	0	0	30	3	0	108
7:30 AM	9	2	0	0	6	13	7	0	5	3	3	0	1	7	3	0	59
7:45 AM	4	2	1	0	3	9	18	0	4	4	2	0	2	10	3	0	62
8:00 AM	9	3	1	0	2	3	12	0	3	0	1	0	0	11	5	0	50
8:15 AM	9	7	0	0	2	9	10	0	4	5	4	0	2	15	2	0	69
8:30 AM	5	4	1	0	1	9	9	0	3	4	5	0	1	10	2	0	54
8:45 AM	0	5	1	0	3	6	8	0	2	3	1	0	1	9	1	0	40
TOTAL VOLUMES :	87	36	5	0	22	60	93	0	26	29	25	0	7	99	24	0	513
APPROACH %'s :	67.97%	28.13%	3.91%	0.00%	12.57%	34.29%	53.14%	0.00%	32.50%	36.25%	31.25%	0.00%	5.38%	76.15%	18.46%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	64	17	2	0	14	33	54	0	14	17	14	0	3	54	14	0	300
PEAK HR FACTOR :	0.50	0.531	0.500	0.000	0.583	0.635	0.750	0.000	0.700	0.708	0.500	0.000	0.375	0.450	0.700	0.000	0.694
	0.546				0.842				0.703				0.538				

Location: Veile Ave & W 4th St  
 City: Beaumont  
 Control: 4-Way Stop

Project ID: 19-06112-007  
 Date: 9/10/2019

2axle

NS/EW Streets:	Veile Ave				Veile Ave				W 4th St				W 4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	1	1	1	0	1	0.5	0.5	0	1	1	1	0	1	1	0	0	
7:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	
7:30 AM	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	
7:45 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	2	0	0	
8:00 AM	0	0	0	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	4	0	0	0	1	0	0	
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	
8:45 AM	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	0	1	4	0	1	9	3	0	0	4	0	0	22
PEAK HR :	07:00 AM - 08:00 AM				0.00%	20.00%	80.00%	0.00%	7.69%	69.23%	23.08%	0.00%	0.00%	100.00%	0.00%	0.00%	TOTAL
PEAK HR VOL :	0	0	0	0	0	1	1	0	1	4	3	0	0	3	0	0	13
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.250	0.500	0.750	0.000	0.000	0.375	0.000	0.000	0.542
						0.250				1.000				0.375			

Location: Veile Ave & W 4th St  
 City: Beaumont  
 Control: 4-Way Stop

Project ID: 19-06112-007  
 Date: 9/10/2019

3axle

NS/EW Streets:	Veile Ave				Veile Ave				W 4th St				W 4th St						
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU			
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	2	0	1	1	1	0	0	0	0	0	0	0	5
8:15 AM	0	0	0	0	0	0	1	0	1	1	2	0	0	1	0	0	0	0	6
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	1	0	0	0	1	0	4	0	3	2	6	0	0	1	0	0	0	0	18
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	20.00%	0.00%	80.00%	0.00%	27.27%	18.18%	54.55%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL		
PEAK HR VOL :	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.375
					0.250				0.500										

Location: Veile Ave & W 4th St  
 City: Beaumont  
 Control: 4-Way Stop

Project ID: 19-06112-007  
 Date: 9/10/2019

4axle

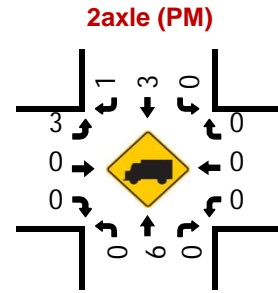
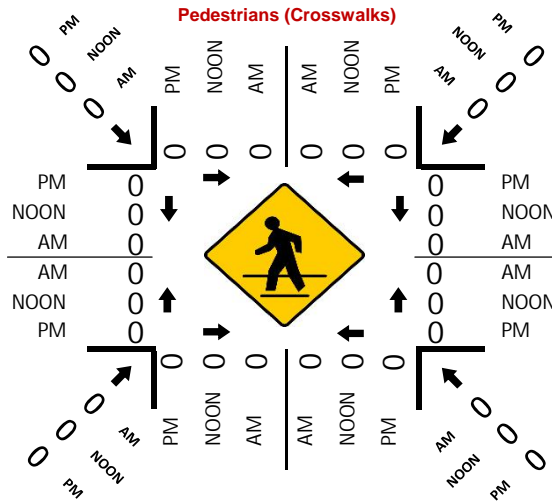
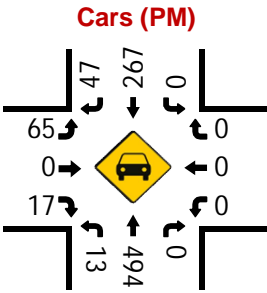
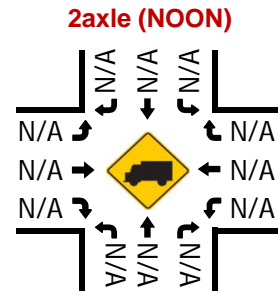
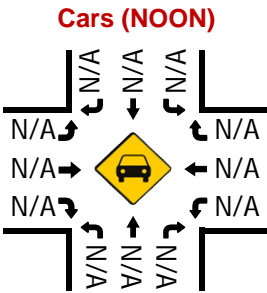
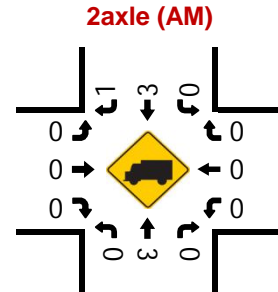
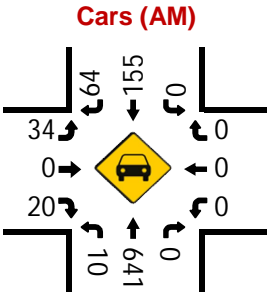
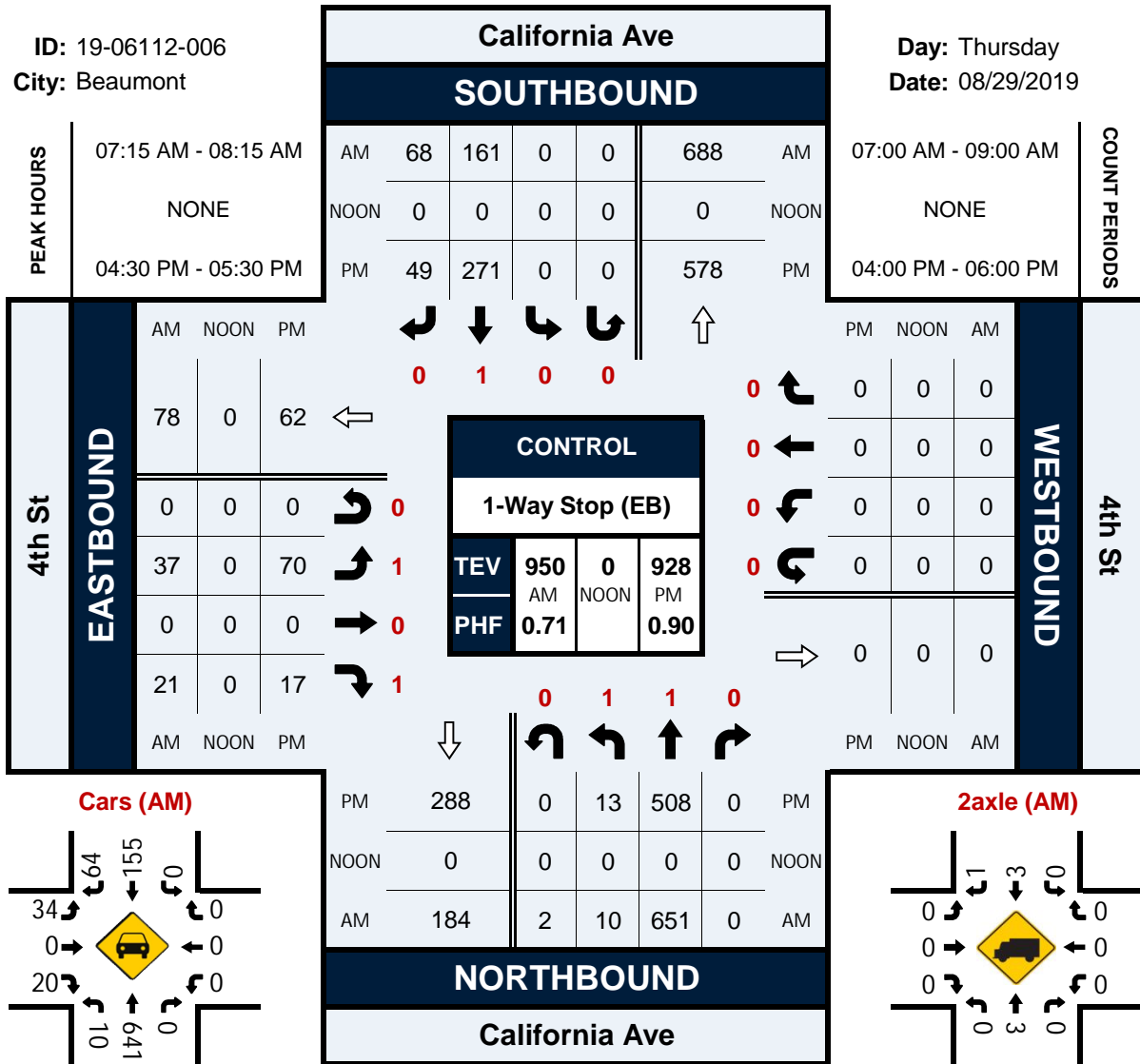
NS/EW Streets:	Veile Ave				Veile Ave				W 4th St				W 4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	1	1	0	0	0	0	2	0	3	1	0	0	0	0	0	0	8
7:15 AM	0	0	0	0	1	0	4	0	1	0	1	0	0	0	0	0	7
7:30 AM	2	0	0	0	0	1	1	0	2	1	0	0	0	0	0	0	7
7:45 AM	1	0	0	0	0	0	6	0	4	0	0	0	0	1	0	0	12
8:00 AM	0	0	0	0	1	0	2	0	1	0	0	0	1	0	0	0	5
8:15 AM	0	0	1	0	1	1	2	0	0	0	0	0	0	0	0	0	5
8:30 AM	0	0	1	0	0	0	2	0	2	2	3	0	0	0	0	0	10
8:45 AM	1	2	0	0	0	0	3	0	2	0	1	0	1	0	1	0	11
TOTAL VOLUMES :	5	3	2	0	3	2	22	0	15	4	5	0	2	1	1	0	65
APPROACH %'s :	50.00%	30.00%	20.00%	0.00%	11.11%	7.41%	81.48%	0.00%	62.50%	16.67%	20.83%	0.00%	50.00%	25.00%	25.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	1	0	0	1	1	13	0	10	2	1	0	0	1	0	0	34
PEAK HR FACTOR :	0.500	0.250	0.000	0.000	0.250	0.250	0.542	0.000	0.625	0.500	0.250	0.000	0.000	0.250	0.000	0.000	0.708
	0.625				0.625				0.813				0.250				

# California Ave & 4th St

## Peak Hour Turning Movement Count

ID: 19-06112-006  
City: Beaumont

Day: Thursday  
Date: 08/29/2019



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: California Ave & 4th St  
 City: Beaumont  
 Control: 1-Way Stop (EB)

Project ID: 19-06112-006  
 Date: 8/29/2019

### Total

NS/EW Streets:	California Ave				California Ave				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	2	117	0	0	0	21	34	0	4	0	12	0	0	0	0	0	190
7:15 AM	4	252	0	0	0	41	25	0	10	0	3	0	0	0	0	0	335
7:30 AM	2	91	0	2	0	30	6	0	5	0	9	0	0	0	0	0	145
7:45 AM	4	180	0	0	0	54	20	0	8	0	5	0	0	0	0	0	271
8:00 AM	0	128	0	0	0	36	17	0	14	0	4	0	0	0	0	0	199
8:15 AM	8	129	0	0	0	27	24	0	11	0	1	0	0	0	0	0	200
8:30 AM	4	109	0	0	0	27	11	0	15	0	7	0	0	0	0	0	173
8:45 AM	2	123	0	0	0	35	18	0	13	0	3	0	0	0	0	0	194
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	26	1129	0	2	0	271	155	0	80	0	44	0	0	0	0	0	1707
	2.25%	97.58%	0.00%	0.17%	0.00%	63.62%	36.38%	0.00%	64.52%	0.00%	35.48%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	10	651	0	2	0	161	68	0	37	0	21	0	0	0	0	0	950
PEAK HR FACTOR :	0.625	0.646	0.000	0.250	0.000	0.745	0.680	0.000	0.661	0.000	0.583	0.000	0.000	0.000	0.000	0.000	0.709
	0.647				0.774				0.806								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	4	126	0	0	0	49	18	0	20	0	6	0	0	0	0	0	223
4:15 PM	2	106	0	0	0	50	25	0	25	0	6	0	0	0	0	0	214
4:30 PM	6	123	0	0	0	69	23	0	28	0	10	0	0	0	0	0	259
4:45 PM	1	127	0	0	0	63	12	0	15	0	2	0	0	0	0	0	220
5:00 PM	2	133	0	0	0	65	6	0	15	0	3	0	0	0	0	0	224
5:15 PM	4	125	0	0	0	74	8	0	12	0	2	0	0	0	0	0	225
5:30 PM	3	115	0	0	0	41	4	0	10	0	6	0	0	0	0	0	179
5:45 PM	0	88	0	0	0	72	8	0	9	0	2	0	0	0	0	0	179
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	22	943	0	0	0	483	104	0	134	0	37	0	0	0	0	0	1723
	2.28%	97.72%	0.00%	0.00%	0.00%	82.28%	17.72%	0.00%	78.36%	0.00%	21.64%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	13	508	0	0	0	271	49	0	70	0	17	0	0	0	0	0	928
PEAK HR FACTOR :	0.542	0.955	0.000	0.000	0.000	0.916	0.533	0.000	0.625	0.000	0.425	0.000	0.000	0.000	0.000	0.000	0.896
	0.965				0.870				0.572								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: California Ave & 4th St  
 City: Beaumont  
 Control: 1-Way Stop (EB)

Project ID: 19-06112-006  
 Date: 8/29/2019

### Cars

NS/EW Streets:	California Ave				California Ave				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	108	0	0	0	19	33	0	4	0	10	0	0	0	0	0	176
7:15 AM	4	248	0	0	0	38	23	0	9	0	3	0	0	0	0	0	325
7:30 AM	2	90	0	2	0	30	4	0	4	0	9	0	0	0	0	0	141
7:45 AM	4	176	0	0	0	53	20	0	8	0	5	0	0	0	0	0	266
8:00 AM	0	127	0	0	0	34	17	0	13	0	3	0	0	0	0	0	194
8:15 AM	6	123	0	0	0	27	24	0	9	0	1	0	0	0	0	0	190
8:30 AM	2	105	0	0	0	26	10	0	12	0	5	0	0	0	0	0	160
8:45 AM	2	116	0	0	0	35	16	0	11	0	3	0	0	0	0	0	183
TOTAL VOLUMES :	22	1093	0	2	0	262	147	0	70	0	39	0	0	0	0	0	1635
APPROACH %'s :	1.97%	97.85%	0.00%	0.18%	0.00%	64.06%	35.94%	0.00%	64.22%	0.00%	35.78%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	10	641	0	2	0	155	64	0	34	0	20	0	0	0	0	0	926
PEAK HR FACTOR :	0.63	0.646	0.000	0.250	0.000	0.731	0.696	0.000	0.654	0.000	0.556	0.000	0.000	0.000	0.000	0.000	0.712
	0.648				0.750				0.844								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	125	0	0	0	48	18	0	20	0	6	0	0	0	0	0	220
4:15 PM	1	105	0	0	0	50	23	0	24	0	6	0	0	0	0	0	209
4:30 PM	6	119	0	0	0	69	21	0	24	0	10	0	0	0	0	0	249
4:45 PM	1	125	0	0	0	60	12	0	14	0	2	0	0	0	0	0	214
5:00 PM	2	129	0	0	0	65	6	0	15	0	3	0	0	0	0	0	220
5:15 PM	4	121	0	0	0	73	8	0	12	0	2	0	0	0	0	0	220
5:30 PM	3	112	0	0	0	41	4	0	8	0	6	0	0	0	0	0	174
5:45 PM	0	87	0	0	0	71	8	0	7	0	1	0	0	0	0	0	174
TOTAL VOLUMES :	20	923	0	0	0	477	100	0	124	0	36	0	0	0	0	0	1680
APPROACH %'s :	2.12%	97.88%	0.00%	0.00%	0.00%	82.67%	17.33%	0.00%	77.50%	0.00%	22.50%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	13	494	0	0	0	267	47	0	65	0	17	0	0	0	0	0	903
PEAK HR FACTOR :	0.54	0.957	0.000	0.000	0.000	0.914	0.560	0.000	0.677	0.000	0.425	0.000	0.000	0.000	0.000	0.000	0.907
	0.968				0.872				0.603								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: California Ave & 4th St  
 City: Beaumont  
 Control: 1-Way Stop (EB)

Project ID: 19-06112-006  
 Date: 8/29/2019

2axle

NS/EW Streets:	California Ave				California Ave				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	5	0	0	0	1	0	0	0	0	0	2	0	0	0	0	8
7:15 AM	0	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:30 AM	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	5	0	0	0	0	2	0	1	0	0	0	0	0	0	0	8
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	1	16	0	0	0	5	4	0	1	0	2	0	0	0	0	0	29
APPROACH %'s :	5.88%	94.12%	0.00%	0.00%	0.00%	55.56%	44.44%	0.00%	33.33%	0.00%	66.67%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	3	0	0	0	3	1	0	0	0	0	0	0	0	0	0	7
PEAK HR FACTOR :	0.000	0.750	0.000	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.438
	0.750				0.333												
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	4
4:30 PM	0	3	0	0	0	0	1	0	3	0	0	0	0	0	0	0	7
4:45 PM	0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	2	11	0	0	0	3	3	0	3	0	1	0	0	0	0	0	23
APPROACH %'s :	15.38%	84.62%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	75.00%	0.00%	25.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	9	0	0	0	3	1	0	3	0	0	0	0	0	0	0	16
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.375	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.571
	0.750				0.500				0.250								



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: California Ave & 4th St  
 City: Beaumont  
 Control: 1-Way Stop (EB)

Project ID: 19-06112-006  
 Date: 8/29/2019

3axle

NS/EW Streets:	California Ave				California Ave				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
7:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
7:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
8:30 AM	0	2	0	0	0	0	0	0	1	0	2	0	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	1	7	0	0	0	2	1	0	2	0	2	0	0	0	0	0	15
APPROACH %'s :	12.50%	87.50%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	50.00%	0.00%	50.00%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.000	0.500	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625
	0.500				0.750												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	1 EL	0 ET	1 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	1	0	0	0	0	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	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	0	5	0	0	0	1	0	0	1	0	0	0	0	0	0	0	7
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.375	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.375				0.250												

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: California Ave & 4th St  
 City: Beaumont  
 Control: 1-Way Stop (EB)

Project ID: 19-06112-006  
 Date: 8/29/2019

4axle

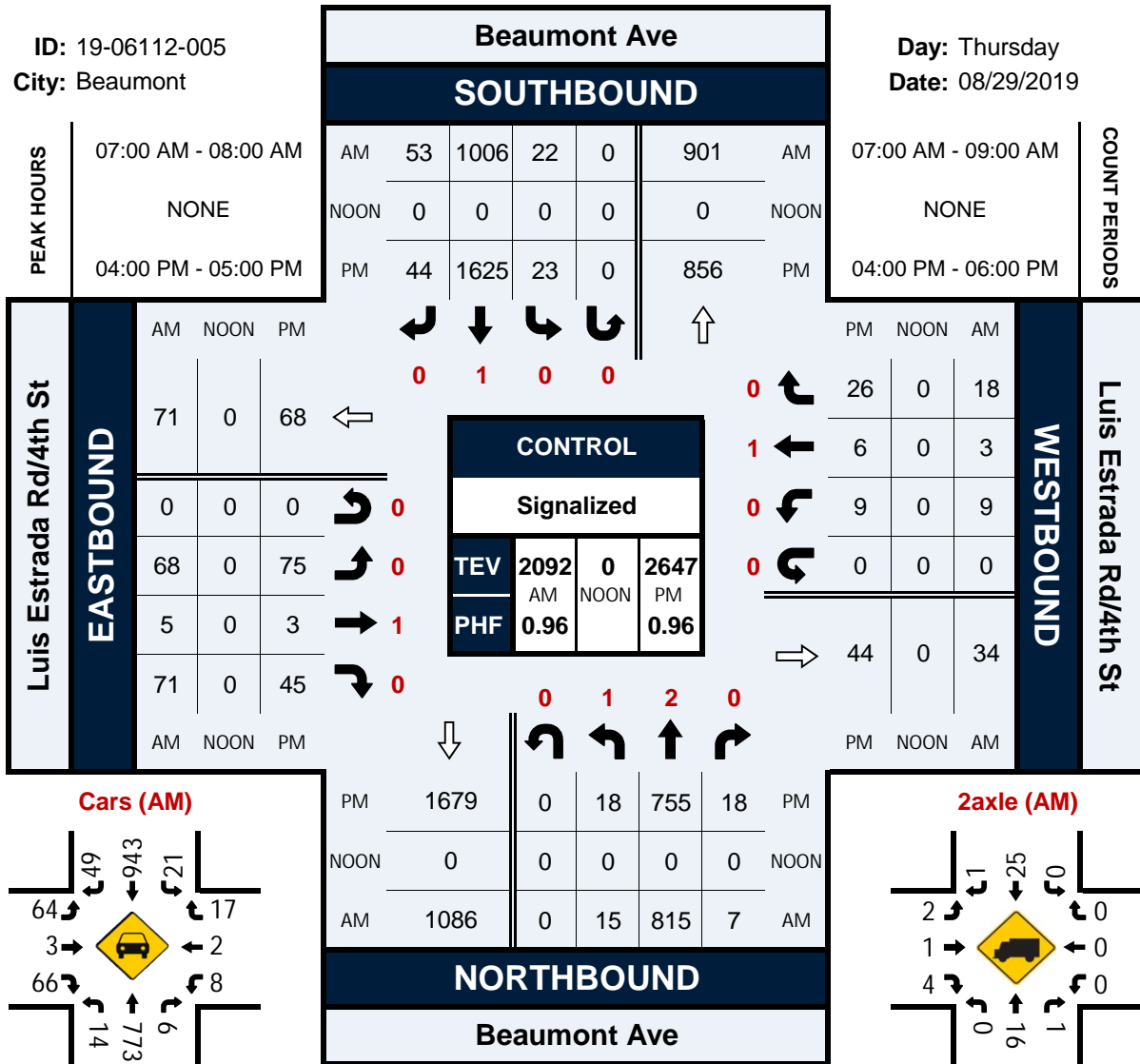
NS/EW Streets:	California Ave				California Ave				4th St				4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	4
7:15 AM	0	2	0	0	0	0	1	0	1	0	0	0	0	0	0	0	4
7:30 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
7:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	3
8:15 AM	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4
8:30 AM	2	1	0	0	0	0	0	0	2	0	0	0	0	0	0	0	5
8:45 AM	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	2	13	0	0	0	2	3	0	7	0	1	0	0	0	0	0	28
APPROACH %'s :	13.33%	86.67%	0.00%	0.00%	0.00%	40.00%	60.00%	0.00%	87.50%	0.00%	12.50%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	5	0	0	0	1	2	0	3	0	1	0	0	0	0	0	12
PEAK HR FACTOR :	0.000	0.417	0.000	0.000	0.000	0.250	0.500	0.000	0.750	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.750
	0.417				0.750				0.500								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	4	0	0	0	2	1	0	6	0	0	0	0	0	0	0	13
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	2	0	0	0	0	1	0	2	0	0	0	0	0	0	0	5
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417
	0.500				0.250				0.500								

# Beaumont Ave & Luis Estrada Rd/4th St

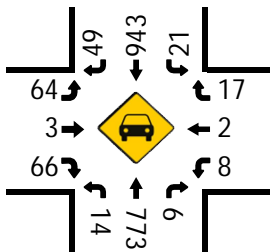
## Peak Hour Turning Movement Count

ID: 19-06112-005  
City: Beaumont

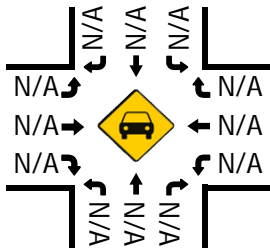
Day: Thursday  
Date: 08/29/2019



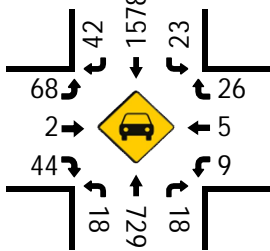
Cars (AM)



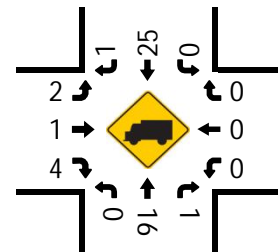
Cars (NOON)



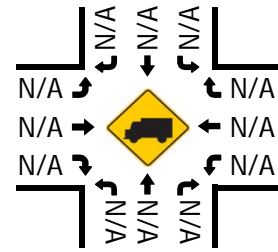
Cars (PM)



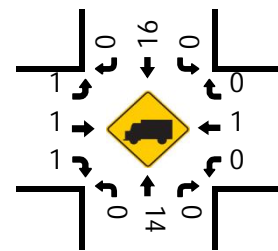
2axle (AM)



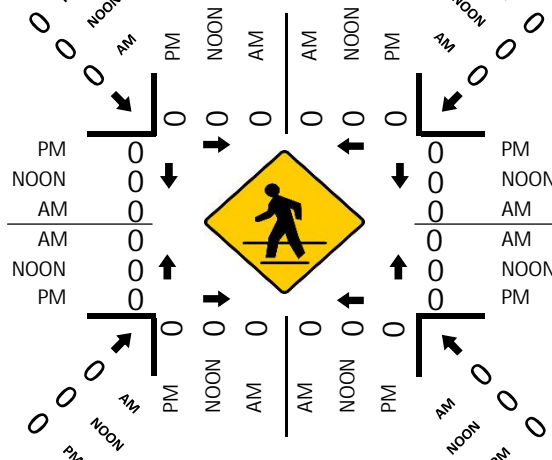
2axle (NOON)



2axle (PM)



Pedestrians (Crosswalks)



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & Luis Estrada Rd/4th St  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-005  
 Date: 8/29/2019

### Total

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	4	209	3	0	7	241	18	0	14	0	21	0	3	1	3	0	524
7:15 AM	4	213	1	0	5	261	13	0	19	1	19	0	2	0	7	0	545
7:30 AM	5	176	1	0	4	276	11	0	13	3	19	0	1	0	3	0	512
7:45 AM	2	217	2	0	6	228	11	0	22	1	12	0	3	2	5	0	511
8:00 AM	2	195	4	1	6	237	6	0	17	0	3	0	3	1	5	0	480
8:15 AM	5	211	3	0	5	232	9	0	14	0	12	0	2	1	5	0	499
8:30 AM	1	215	4	0	6	215	6	0	17	0	1	0	1	1	9	0	476
8:45 AM	0	199	12	0	11	207	13	0	8	1	3	0	0	0	8	0	462
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	23	1635	30	1	50	1897	87	0	124	6	90	0	15	6	45	0	4009
APPROACH %'s :	1.36%	96.80%	1.78%	0.06%	2.46%	93.26%	4.28%	0.00%	56.36%	2.73%	40.91%	0.00%	22.73%	9.09%	68.18%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	15	815	7	0	22	1006	53	0	68	5	71	0	9	3	18	0	2092
PEAK HR FACTOR :	0.750	0.939	0.583	0.000	0.786	0.911	0.736	0.000	0.773	0.417	0.845	0.000	0.750	0.375	0.643	0.000	0.960
	0.947				0.929				0.923				0.750				

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	6	175	6	0	4	372	11	0	23	0	14	0	2	2	10	0	625
4:15 PM	3	203	2	0	5	407	9	0	17	2	13	0	5	0	7	0	673
4:30 PM	6	178	6	0	6	422	12	0	20	0	9	0	0	0	2	0	661
4:45 PM	3	199	4	0	8	424	12	0	15	1	9	0	2	4	7	0	688
5:00 PM	1	161	7	0	3	374	14	0	31	1	5	0	2	0	11	0	610
5:15 PM	0	191	5	1	3	418	10	0	19	0	4	0	2	0	10	0	663
5:30 PM	1	206	0	0	6	368	9	0	19	2	25	0	2	1	7	0	646
5:45 PM	1	182	6	0	6	399	15	0	15	2	3	0	2	1	9	0	641
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	21	1495	36	1	41	3184	92	0	159	8	82	0	17	8	63	0	5207
APPROACH %'s :	1.35%	96.27%	2.32%	0.06%	1.24%	95.99%	2.77%	0.00%	63.86%	3.21%	32.93%	0.00%	19.32%	9.09%	71.59%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	18	755	18	0	23	1625	44	0	75	3	45	0	9	6	26	0	2647
PEAK HR FACTOR :	0.750	0.930	0.750	0.000	0.719	0.958	0.917	0.000	0.815	0.375	0.804	0.000	0.450	0.375	0.650	0.000	0.962
	0.951				0.953				0.831				0.732				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & Luis Estrada Rd/4th St  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-005  
 Date: 8/29/2019

### Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	3	199	3	0	7	225	17	0	12	0	21	0	3	1	3	0	494
7:15 AM	4	203	1	0	4	239	12	0	19	0	18	0	2	0	6	0	508
7:30 AM	5	163	1	0	4	266	11	0	12	3	18	0	1	0	3	0	487
7:45 AM	2	208	1	0	6	213	9	0	21	0	9	0	2	1	5	0	477
8:00 AM	2	187	3	1	6	220	5	0	17	0	3	0	3	1	5	0	453
8:15 AM	5	206	1	0	5	208	9	0	12	0	12	0	2	1	5	0	466
8:30 AM	1	205	4	0	5	200	6	0	15	0	1	0	1	0	7	0	445
8:45 AM	0	181	9	0	11	186	10	0	7	0	2	0	0	0	8	0	414
TOTAL VOLUMES :	22	1552	23	1	48	1757	79	0	115	3	84	0	14	4	42	0	3744
APPROACH %'s :	1.38%	97.12%	1.44%	0.06%	2.55%	93.26%	4.19%	0.00%	56.93%	1.49%	41.58%	0.00%	23.33%	6.67%	70.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	14	773	6	0	21	943	49	0	64	3	66	0	8	2	17	0	1966
PEAK HR FACTOR :	0.70	0.929	0.500	0.000	0.750	0.886	0.721	0.000	0.762	0.250	0.786	0.000	0.667	0.500	0.708	0.000	0.968
	0.940				0.901				0.899				0.844				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	6	168	6	0	4	357	11	0	22	0	13	0	2	2	10	0	601
4:15 PM	3	198	2	0	5	400	8	0	17	1	13	0	5	0	7	0	659
4:30 PM	6	174	6	0	6	408	11	0	16	0	9	0	0	0	2	0	638
4:45 PM	3	189	4	0	8	413	12	0	13	1	9	0	2	3	7	0	664
5:00 PM	1	157	7	0	3	369	13	0	28	1	5	0	2	0	11	0	597
5:15 PM	0	190	5	1	3	401	9	0	18	0	4	0	2	0	10	0	643
5:30 PM	1	202	0	0	6	361	9	0	17	2	24	0	2	1	7	0	632
5:45 PM	1	178	6	0	6	390	14	0	12	2	3	0	2	1	9	0	624
TOTAL VOLUMES :	21	1456	36	1	41	3099	87	0	143	7	80	0	17	7	63	0	5058
APPROACH %'s :	1.39%	96.17%	2.38%	0.07%	1.27%	96.03%	2.70%	0.00%	62.17%	3.04%	34.78%	0.00%	19.54%	8.05%	72.41%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	18	729	18	0	23	1578	42	0	68	2	44	0	9	5	26	0	2562
PEAK HR FACTOR :	0.75	0.920	0.750	0.000	0.719	0.955	0.875	0.000	0.773	0.500	0.846	0.000	0.450	0.417	0.650	0.000	0.965
	0.942				0.949				0.814				0.714				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & Luis Estrada Rd/4th St  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-005  
 Date: 8/29/2019

2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	4	0	0	0	5	1	0	1	0	0	0	0	0	0	0	11
7:15 AM	0	3	0	0	0	11	0	0	0	0	1	0	0	0	0	0	15
7:30 AM	0	8	0	0	0	2	0	0	1	0	0	0	0	0	0	0	11
7:45 AM	0	1	1	0	0	7	0	0	0	1	3	0	0	0	0	0	13
8:00 AM	0	0	1	0	0	5	0	0	0	0	0	0	0	0	0	0	6
8:15 AM	0	1	1	0	0	4	0	0	0	0	0	0	0	0	0	0	6
8:30 AM	0	5	0	0	0	4	0	0	0	0	0	0	0	0	1	0	10
8:45 AM	0	6	3	0	0	8	0	0	0	1	1	0	0	0	0	0	19
TOTAL VOLUMES :	0	28	6	0	0	46	1	0	2	2	5	0	0	0	1	0	91
APPROACH %'s :	0.00%	82.35%	17.65%	0.00%	0.00%	97.87%	2.13%	0.00%	22.22%	22.22%	55.56%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	16	1	0	0	25	1	0	2	1	4	0	0	0	0	0	50
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.000	0.568	0.250	0.000	0.500	0.250	0.333	0.000	0.000	0.000	0.000	0.000	0.833
	0.531				0.591				0.438								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	4	0	0	0	8	0	0	0	0	1	0	0	0	0	0	13
4:15 PM	0	4	0	0	0	1	0	0	0	1	0	0	0	0	0	0	6
4:30 PM	0	1	0	0	0	4	0	0	1	0	0	0	0	0	0	0	6
4:45 PM	0	5	0	0	0	3	0	0	0	0	0	0	0	1	0	0	9
5:00 PM	0	3	0	0	0	4	0	0	0	0	0	0	0	0	0	0	7
5:15 PM	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	2	0	0	0	3	0	0	0	0	1	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	3
TOTAL VOLUMES :	0	19	0	0	0	30	1	0	2	1	2	0	0	1	0	0	56
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	96.77%	3.23%	0.00%	40.00%	20.00%	40.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	14	0	0	0	16	0	0	1	1	1	0	0	1	0	0	34
PEAK HR FACTOR :	0.00	0.700	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.654
	0.700				0.500				0.750				0.250				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & Luis Estrada Rd/4th St  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-005  
 Date: 8/29/2019

3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	1	1	0	0	0	2	0	0	1	0	0	0	0	0	0	0	5
7:15 AM	0	3	0	0	1	5	1	0	0	1	0	0	0	0	1	0	12
7:30 AM	0	1	0	0	0	2	0	0	0	0	1	0	0	0	0	0	4
7:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	3
8:00 AM	0	2	0	0	0	2	1	0	0	0	0	0	0	0	0	0	5
8:15 AM	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	5
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	7	0	0	0	3	0	0	1	0	0	0	0	0	0	0	11
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	1	17	0	0	1	19	2	0	2	1	1	0	0	1	1	0	46
	5.56%	94.44%	0.00%	0.00%	4.55%	86.36%	9.09%	0.00%	50.00%	25.00%	25.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	6	0	0	1	10	1	0	1	1	1	0	0	1	1	0	24
PEAK HR FACTOR :	0.250	0.500	0.000	0.000	0.250	0.500	0.250	0.000	0.250	0.250	0.250	0.000	0.000	0.250	0.250	0.000	0.500
	0.583				0.429				0.750				0.500				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3
4:45 PM	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
5:15 PM	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	7	0	0	0	7	1	0	1	0	0	0	0	0	0	0	16
	0.00%	100.00%	0.00%	0.00%	0.00%	87.50%	12.50%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	0	9
PEAK HR FACTOR :	0.00	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.563
	0.500				0.750												

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & Luis Estrada Rd/4th St  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-005  
 Date: 8/29/2019

4axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Luis Estrada Rd/4th St				Luis Estrada Rd/4th St				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
7:00 AM	0	5	0	0	0	9	0	0	0	0	0	0	0	0	0	0	14
7:15 AM	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	10
7:30 AM	0	4	0	0	0	6	0	0	0	0	0	0	0	0	0	0	10
7:45 AM	0	7	0	0	0	7	2	0	1	0	0	0	1	0	0	0	18
8:00 AM	0	6	0	0	0	10	0	0	0	0	0	0	0	0	0	0	16
8:15 AM	0	2	1	0	0	17	0	0	2	0	0	0	0	0	0	0	22
8:30 AM	0	5	0	0	1	10	0	0	2	0	0	0	0	1	1	0	20
8:45 AM	0	5	0	0	0	10	3	0	0	0	0	0	0	0	0	0	18
TOTAL VOLUMES :	0	38	1	0	1	75	5	0	5	0	0	0	1	1	1	0	128
APPROACH %'s :	0.00%	97.44%	2.56%	0.00%	1.23%	92.59%	6.17%	0.00%	100.00%	0.00%	0.00%	0.00%	33.33%	33.33%	33.33%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	20	0	0	0	28	2	0	1	0	0	0	1	0	0	0	52
PEAK HR FACTOR :	0.000	0.714	0.000	0.000	0.000	0.778	0.250	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.722
	0.714				0.833				0.250				0.250				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	
4:00 PM	0	2	0	0	0	6	0	0	1	0	0	0	0	0	0	0	9
4:15 PM	0	1	0	0	0	6	1	0	0	0	0	0	0	0	0	0	8
4:30 PM	0	1	0	0	0	9	1	0	3	0	0	0	0	0	0	0	14
4:45 PM	0	2	0	0	0	7	0	0	2	0	0	0	0	0	0	0	11
5:00 PM	0	1	0	0	0	1	0	0	2	0	0	0	0	0	0	0	4
5:15 PM	0	0	0	0	0	9	1	0	1	0	0	0	0	0	0	0	11
5:30 PM	0	2	0	0	0	4	0	0	2	0	0	0	0	0	0	0	8
5:45 PM	0	4	0	0	0	6	0	0	2	0	0	0	0	0	0	0	12
TOTAL VOLUMES :	0	13	0	0	0	48	3	0	13	0	0	0	0	0	0	0	77
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	94.12%	5.88%	0.00%	100.00%	0.00%	0.00%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	6	0	0	0	28	2	0	6	0	0	0	0	0	0	0	42
PEAK HR FACTOR :	0.00	0.750	0.000	0.000	0.000	0.778	0.500	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750
	0.750				0.750				0.500								

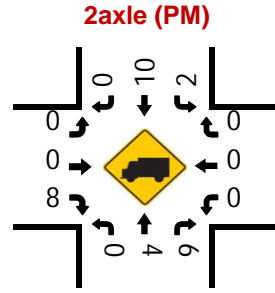
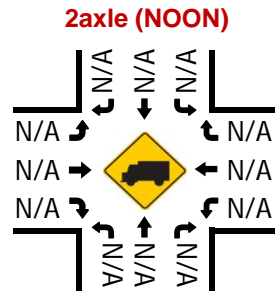
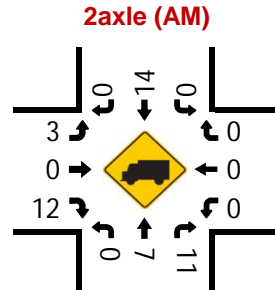
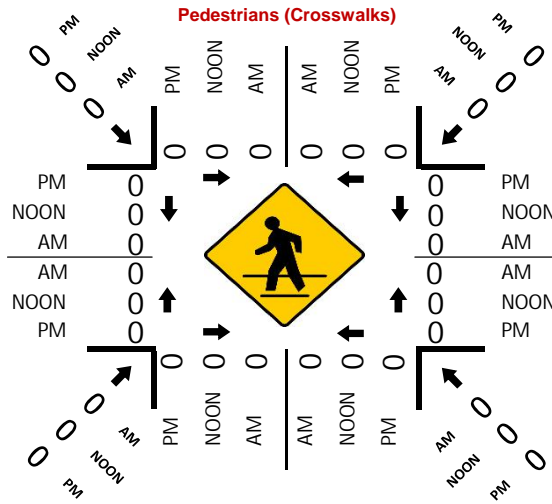
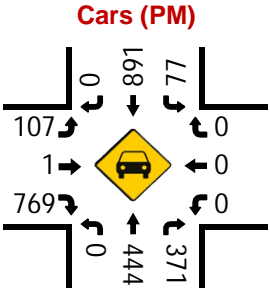
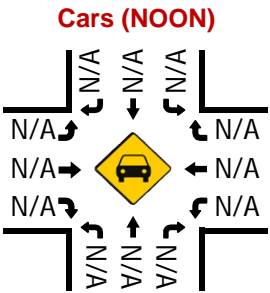
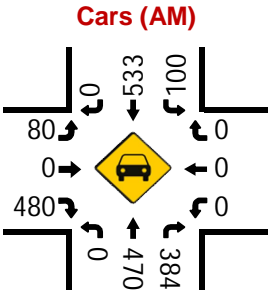
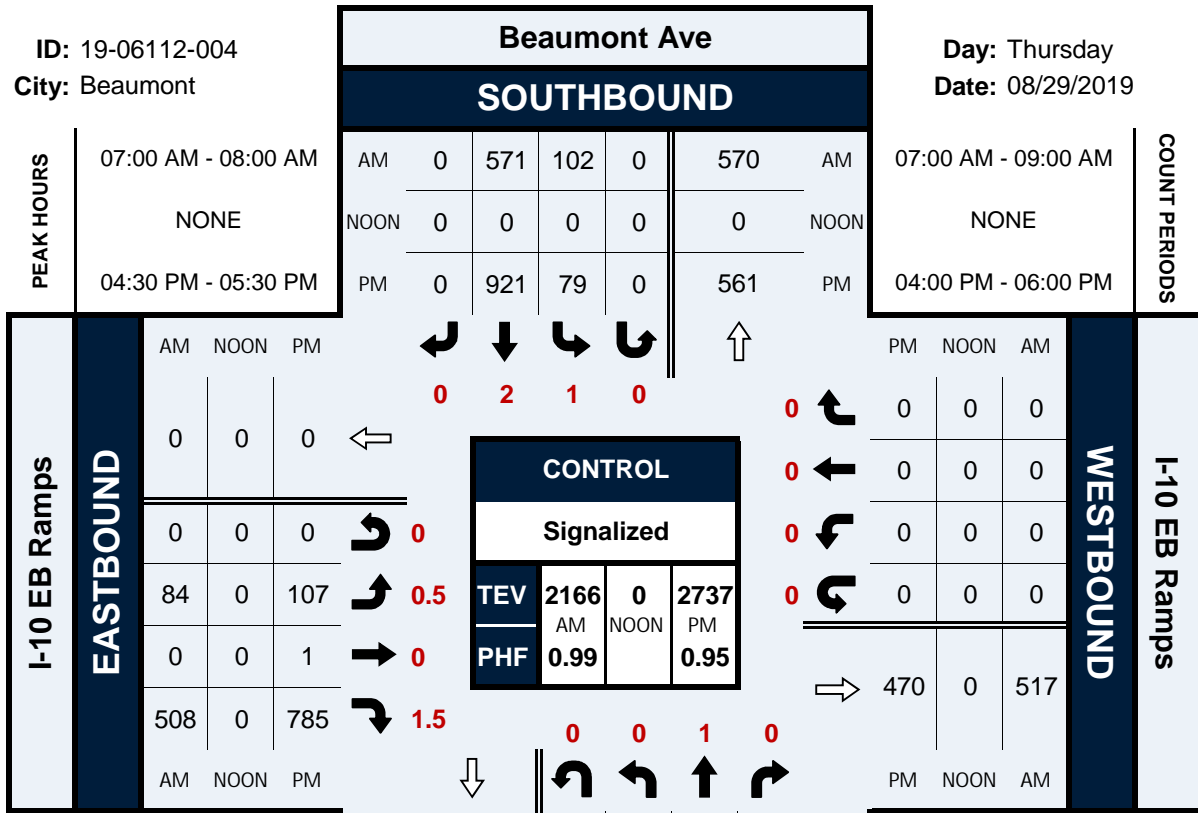


# Beaumont Ave & I-10 EB Ramps

## Peak Hour Turning Movement Count

ID: 19-06112-004  
City: Beaumont

Day: Thursday  
Date: 08/29/2019



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 EB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-004  
 Date: 8/29/2019

### Total

NS/EW Streets:		Beaumont Ave				Beaumont Ave				I-10 EB Ramps				I-10 EB Ramps				
AM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	7:00 AM	0	130	102	0	13	150	0	0	19	0	124	0	0	0	0	0	538
	7:15 AM	0	144	88	0	30	149	0	0	16	0	117	0	0	0	0	0	544
	7:30 AM	0	103	95	0	31	151	0	0	24	0	145	0	0	0	0	0	549
	7:45 AM	0	109	130	0	28	121	0	0	25	0	122	0	0	0	0	0	535
	8:00 AM	0	108	101	0	28	137	0	0	19	0	109	0	0	0	0	0	502
	8:15 AM	0	120	118	0	21	152	0	0	22	0	98	0	0	0	0	0	531
	8:30 AM	0	123	120	0	26	130	0	0	18	0	112	0	0	0	0	0	529
	8:45 AM	0	116	98	0	17	120	0	0	20	0	99	0	0	0	0	0	470
	TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	APPROACH %'s :	0.00%	52.80%	47.20%	0.00%	14.88%	85.12%	0.00%	0.00%	14.97%	0.00%	85.03%	0.00%	0	0	0	0	4198
	PEAK HR :	07:00 AM - 08:00 AM																TOTAL
	PEAK HR VOL :	0	486	415	0	102	571	0	0	84	0	508	0	0	0	0	0	2166
	PEAK HR FACTOR :	0.000	0.844	0.798	0.000	0.823	0.945	0.000	0.000	0.840	0.000	0.876	0.000	0.000	0.000	0.000	0.000	0.986
		0.942				0.924				0.876								
PM		NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
		NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
	4:00 PM	0	108	99	0	23	214	0	0	15	1	186	0	0	0	0	0	646
	4:15 PM	0	120	113	0	12	224	0	0	21	0	183	0	0	0	0	0	673
	4:30 PM	0	100	84	0	26	239	0	0	25	0	202	0	0	0	0	0	676
	4:45 PM	0	131	105	0	17	241	0	0	28	0	201	0	0	0	0	0	723
	5:00 PM	0	103	94	0	18	211	0	0	27	0	183	0	0	0	0	0	636
	5:15 PM	0	120	107	0	18	230	0	0	27	1	199	0	0	0	0	0	702
	5:30 PM	0	121	107	0	24	208	0	0	27	0	176	0	0	0	0	0	663
	5:45 PM	0	114	91	0	22	226	0	0	32	0	194	0	0	0	0	0	679
	TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	APPROACH %'s :	0.00%	53.41%	46.59%	0.00%	8.19%	91.81%	0.00%	0.00%	11.69%	0.12%	88.19%	0.00%	0	0	0	0	5398
	PEAK HR :	04:30 PM - 05:30 PM																TOTAL
	PEAK HR VOL :	0	454	390	0	79	921	0	0	107	1	785	0	0	0	0	0	2737
	PEAK HR FACTOR :	0.000	0.866	0.911	0.000	0.760	0.955	0.000	0.000	0.955	0.250	0.972	0.000	0.000	0.000	0.000	0.000	0.946
		0.894				0.943				0.975								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 EB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-004  
 Date: 8/29/2019

### Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 EB Ramps				I-10 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	1	2	0	0	0.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	123	97	0	13	142	0	0	18	0	114	0	0	0	0	0	507
7:15 AM	0	142	79	0	29	133	0	0	15	0	111	0	0	0	0	0	509
7:30 AM	0	99	86	0	30	144	0	0	22	0	141	0	0	0	0	0	522
7:45 AM	0	106	122	0	28	114	0	0	25	0	114	0	0	0	0	0	509
8:00 AM	0	104	97	0	27	125	0	0	16	0	100	0	0	0	0	0	469
8:15 AM	0	114	117	0	20	136	0	0	22	0	92	0	0	0	0	0	501
8:30 AM	0	117	112	0	26	122	0	0	17	0	102	0	0	0	0	0	496
8:45 AM	0	107	88	0	17	107	0	0	20	0	89	0	0	0	0	0	428
TOTAL VOLUMES :	0	912	798	0	190	1023	0	0	155	0	863	0	0	0	0	0	3941
APPROACH %'s :	0.00%	53.33%	46.67%	0.00%	15.66%	84.34%	0.00%	0.00%	15.23%	0.00%	84.77%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	470	384	0	100	533	0	0	80	0	480	0	0	0	0	0	2047
PEAK HR FACTOR :	0.00	0.827	0.787	0.000	0.833	0.925	0.000	0.000	0.800	0.000	0.851	0.000	0.000	0.000	0.000	0.000	0.980
	0.936				0.909				0.859								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
0	1	0	0	1	2	0	0	0.5	0	1.5	0	0	0	0	0		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	105	93	0	23	205	0	0	15	1	181	0	0	0	0	0	623
4:15 PM	0	119	110	0	12	215	0	0	20	0	182	0	0	0	0	0	658
4:30 PM	0	97	79	0	26	230	0	0	25	0	197	0	0	0	0	0	654
4:45 PM	0	126	98	0	17	233	0	0	28	0	198	0	0	0	0	0	700
5:00 PM	0	101	89	0	16	207	0	0	27	0	180	0	0	0	0	0	620
5:15 PM	0	120	105	0	18	221	0	0	27	1	194	0	0	0	0	0	686
5:30 PM	0	119	102	0	24	200	0	0	27	0	174	0	0	0	0	0	646
5:45 PM	0	114	85	0	20	221	0	0	32	0	189	0	0	0	0	0	661
TOTAL VOLUMES :	0	901	761	0	156	1732	0	0	201	2	1495	0	0	0	0	0	5248
APPROACH %'s :	0.00%	54.21%	45.79%	0.00%	8.26%	91.74%	0.00%	0.00%	11.84%	0.12%	88.04%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	444	371	0	77	891	0	0	107	1	769	0	0	0	0	0	2660
PEAK HR FACTOR :	0.00	0.881	0.883	0.000	0.740	0.956	0.000	0.000	0.955	0.250	0.971	0.000	0.000	0.000	0.000	0.000	0.950
	0.906				0.945				0.970								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 EB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-004  
 Date: 8/29/2019

2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 EB Ramps				I-10 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	1	2	0	0	0.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	4	0	0	0	3	0	0	0	0	3	0	0	0	0	0	10
7:15 AM	0	0	4	0	0	7	0	0	1	0	4	0	0	0	0	0	16
7:30 AM	0	2	6	0	0	2	0	0	2	0	0	0	0	0	0	0	12
7:45 AM	0	1	1	0	0	2	0	0	0	0	5	0	0	0	0	0	9
8:00 AM	0	0	0	0	0	2	0	0	3	0	3	0	0	0	0	0	8
8:15 AM	0	1	0	0	1	3	0	0	0	0	1	0	0	0	0	0	6
8:30 AM	0	3	3	0	0	1	0	0	1	0	3	0	0	0	0	0	11
8:45 AM	0	1	5	0	0	5	0	0	0	0	3	0	0	0	0	0	14
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	12	19	0	1	25	0	0	7	0	22	0	0	0	0	0	86
APPROACH %'s :	0.00%	38.71%	61.29%	0.00%	3.85%	96.15%	0.00%	0.00%	24.14%	0.00%	75.86%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	7	11	0	0	14	0	0	3	0	12	0	0	0	0	0	47
PEAK HR FACTOR :	0.000	0.438	0.458	0.000	0.000	0.500	0.000	0.000	0.375	0.000	0.600	0.000	0.000	0.000	0.000	0.000	0.734
	0.563				0.500				0.750								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	1	2	0	0	0.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	4	0	0	4	0	0	0	0	4	0	0	0	0	0	13
4:15 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	1	1	0	0	4	0	0	0	0	1	0	0	0	0	0	7
4:45 PM	0	2	3	0	0	2	0	0	0	0	1	0	0	0	0	0	8
5:00 PM	0	1	2	0	2	2	0	0	0	0	3	0	0	0	0	0	10
5:15 PM	0	0	0	0	0	2	0	0	0	0	3	0	0	0	0	0	5
5:30 PM	0	1	1	0	0	2	0	0	0	0	1	0	0	0	0	0	5
5:45 PM	0	0	1	0	2	1	0	0	0	0	1	0	0	0	0	0	5
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	0	7	14	0	4	17	0	0	0	0	14	0	0	0	0	0	56
APPROACH %'s :	0.00%	33.33%	66.67%	0.00%	19.05%	80.95%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	4	6	0	2	10	0	0	0	0	8	0	0	0	0	0	30
PEAK HR FACTOR :	0.00	0.500	0.500	0.000	0.250	0.625	0.000	0.000	0.000	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.750
	0.500				0.750				0.667								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 EB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-004  
 Date: 8/29/2019

3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 EB Ramps				I-10 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	2	0	0	0	2	0	0	1	0	0	0	0	0	0	0	5
7:15 AM	0	2	2	0	0	6	0	0	0	0	1	0	0	0	0	0	11
7:30 AM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
7:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	1	1	0	0	2	0	0	0	0	2	0	0	0	0	0	6
8:15 AM	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
8:45 AM	0	6	2	0	0	2	0	0	0	0	1	0	0	0	0	0	11
TOTAL VOLUMES :	0	14	6	0	0	14	0	0	1	0	8	0	0	0	0	0	43
APPROACH %'s :	0.00%	70.00%	30.00%	0.00%	0.00%	100.00%	0.00%	0.00%	11.11%	0.00%	88.89%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																
PEAK HR VOL :	0	5	3	0	0	10	0	0	1	0	2	0	0	0	0	0	21
PEAK HR FACTOR :	0.000	0.625	0.375	0.000	0.000	0.417	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.477
	0.500				0.417				0.750								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
TOTAL VOLUMES :	0	3	5	0	0	4	0	0	0	0	4	0	0	0	0	0	16
APPROACH %'s :	0.00%	37.50%	62.50%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																
PEAK HR VOL :	0	2	5	0	0	2	0	0	0	0	0	0	0	0	0	0	9
PEAK HR FACTOR :	0.00	0.500	0.625	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.450
	0.583				0.250												

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 EB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-004  
 Date: 8/29/2019

4axle

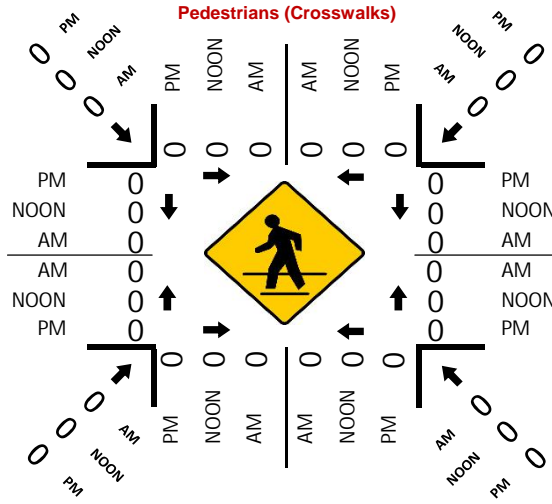
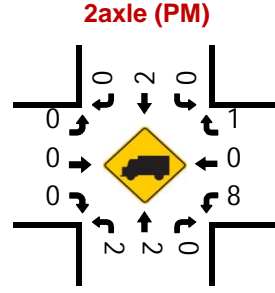
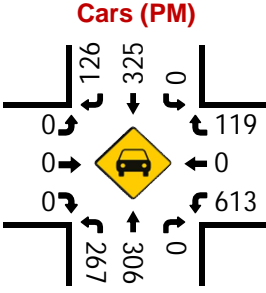
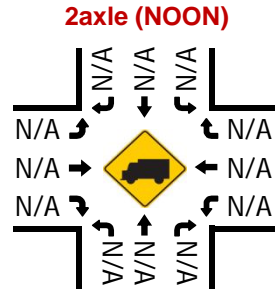
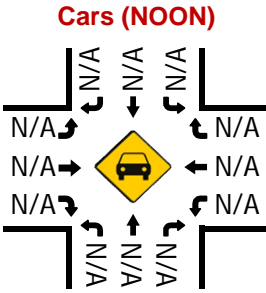
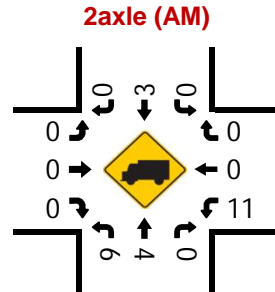
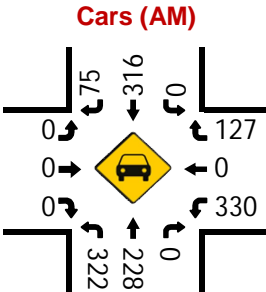
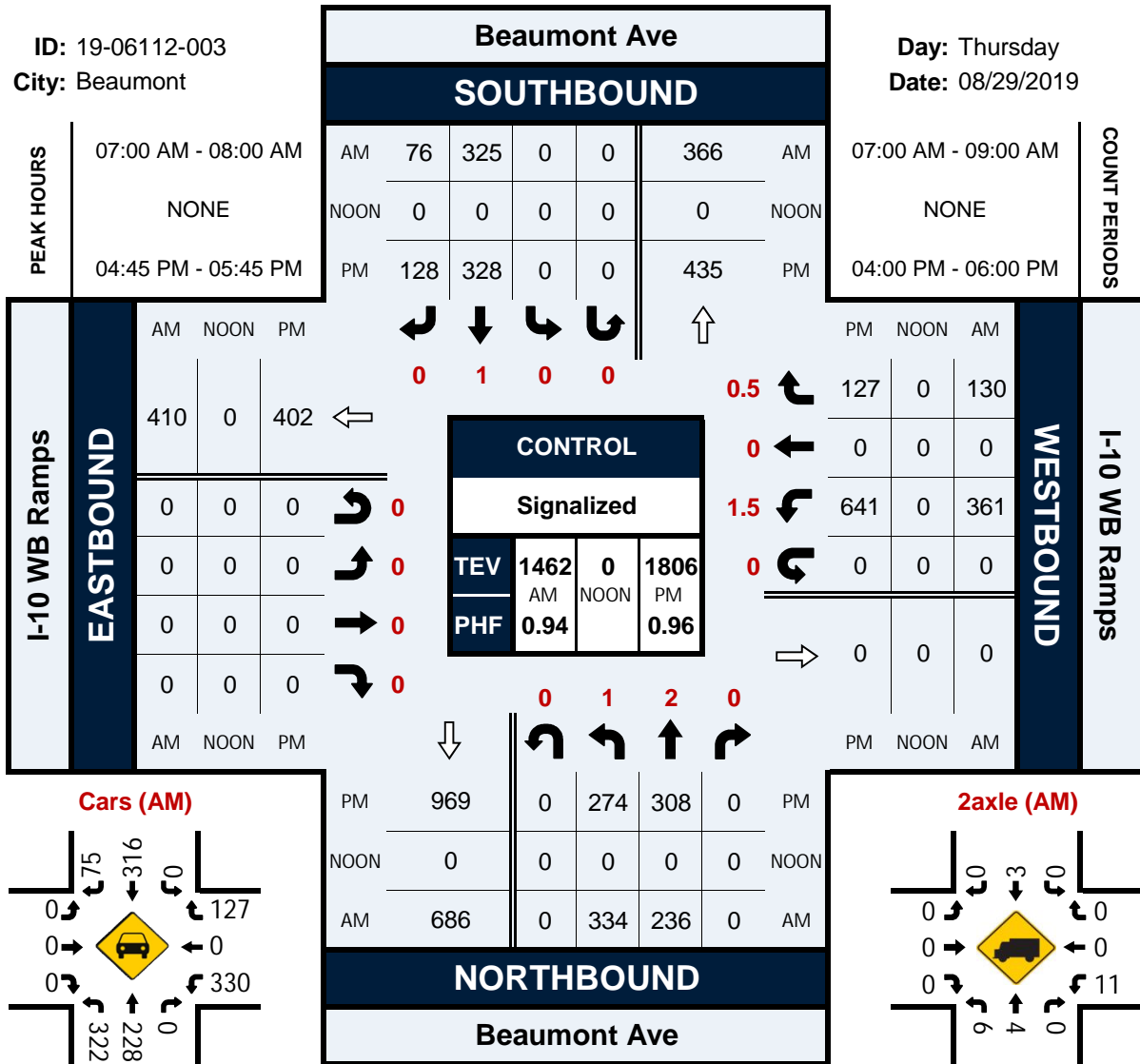
NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 EB Ramps				I-10 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	1	2	0	0	0.5	0	1.5	0	0	0	0	0	16
7:15 AM	0	0	3	0	1	3	0	0	0	0	1	0	0	0	0	0	8
7:30 AM	0	1	3	0	1	4	0	0	0	0	3	0	0	0	0	0	12
7:45 AM	0	2	6	0	0	4	0	0	0	0	3	0	0	0	0	0	15
8:00 AM	0	3	3	0	1	8	0	0	0	0	4	0	0	0	0	0	19
8:15 AM	0	3	1	0	0	13	0	0	0	0	4	0	0	0	0	0	21
8:30 AM	0	3	5	0	0	7	0	0	0	0	5	0	0	0	0	0	20
8:45 AM	0	2	3	0	0	6	0	0	0	0	6	0	0	0	0	0	17
TOTAL VOLUMES :	0	15	29	0	3	48	0	0	0	0	33	0	0	0	0	0	128
APPROACH %'s :	0.00%	34.09%	65.91%	0.00%	5.88%	94.12%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	4	17	0	2	14	0	0	0	0	14	0	0	0	0	0	51
PEAK HR FACTOR :	0.000	0.500	0.708	0.000	0.500	0.875	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.797
	0.656				0.800				0.500								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	2	0	0	5	0	0	0	0	0	0	0	0	0	0	8
4:15 PM	0	0	1	0	0	9	0	0	1	0	0	0	0	0	0	0	11
4:30 PM	0	1	3	0	0	5	0	0	0	0	4	0	0	0	0	0	13
4:45 PM	0	2	2	0	0	4	0	0	0	0	2	0	0	0	0	0	10
5:00 PM	0	1	2	0	0	2	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	1	0	0	7	0	0	0	0	2	0	0	0	0	0	10
5:30 PM	0	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	10
5:45 PM	0	0	5	0	0	3	0	0	0	0	3	0	0	0	0	0	11
TOTAL VOLUMES :	0	6	20	0	0	40	0	0	1	0	11	0	0	0	0	0	78
APPROACH %'s :	0.00%	23.08%	76.92%	0.00%	0.00%	100.00%	0.00%	0.00%	8.33%	0.00%	91.67%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	4	8	0	0	18	0	0	0	0	8	0	0	0	0	0	38
PEAK HR FACTOR :	0.00	0.500	0.667	0.000	0.000	0.643	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.731
	0.750				0.643				0.500								

# Beaumont Ave & I-10 WB Ramps

## Peak Hour Turning Movement Count

ID: 19-06112-003  
City: Beaumont

Day: Thursday  
Date: 08/29/2019



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 WB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-003  
 Date: 8/29/2019

### Total

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 WB Ramps				I-10 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
7:00 AM	97	52	0	0	0	78	25	0	0	0	0	0	87	0	31	0	370
7:15 AM	91	69	0	0	0	74	15	0	0	0	0	0	102	0	37	0	388
7:30 AM	67	60	0	0	0	94	16	0	0	0	0	0	90	0	34	0	361
7:45 AM	79	55	0	0	0	79	20	0	0	0	0	0	82	0	28	0	343
8:00 AM	84	43	0	0	0	78	17	0	0	0	0	0	79	0	20	0	321
8:15 AM	84	53	0	0	0	77	25	0	0	0	0	0	88	0	20	0	347
8:30 AM	96	51	0	0	0	63	19	0	0	0	0	0	98	0	22	0	349
8:45 AM	84	51	0	0	0	53	14	0	0	0	0	0	81	0	30	0	313
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	682	434	0	0	0	596	151	0	0	0	0	0	707	0	222	0	2792
APPROACH %'s :	61.11%	38.89%	0.00%	0.00%	0.00%	79.79%	20.21%	0.00%	0.00%	0.00%	0.00%	0.00%	76.10%	0.00%	23.90%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	334	236	0	0	0	325	76	0	0	0	0	0	361	0	130	0	1462
PEAK HR FACTOR :	0.861	0.855	0.000	0.000	0.000	0.864	0.760	0.000	0.000	0.000	0.000	0.000	0.885	0.000	0.878	0.000	0.942
	0.891				0.911								0.883				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
4:00 PM	68	57	0	0	0	81	33	0	0	0	0	0	156	0	23	0	418
4:15 PM	68	71	0	0	0	83	21	0	0	0	0	0	153	1	24	0	421
4:30 PM	75	50	0	0	0	72	32	0	0	0	0	0	196	0	32	0	457
4:45 PM	74	87	0	0	0	77	21	0	0	0	0	0	175	0	35	0	469
5:00 PM	56	70	0	0	0	80	40	0	0	0	0	0	153	0	26	0	425
5:15 PM	81	70	0	0	0	82	21	0	0	0	0	0	164	0	28	0	446
5:30 PM	63	81	0	0	0	89	46	0	0	0	0	0	149	0	38	0	466
5:45 PM	82	71	0	0	0	84	18	0	0	0	0	0	157	0	27	0	439
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
	567	557	0	0	0	648	232	0	0	0	0	0	1303	1	233	0	3541
APPROACH %'s :	50.44%	49.56%	0.00%	0.00%	0.00%	73.64%	26.36%	0.00%	0.00%	0.00%	0.00%	0.00%	84.78%	0.07%	15.16%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	274	308	0	0	0	328	128	0	0	0	0	0	641	0	127	0	1806
PEAK HR FACTOR :	0.846	0.885	0.000	0.000	0.000	0.921	0.696	0.000	0.000	0.000	0.000	0.000	0.916	0.000	0.836	0.000	0.963
	0.904				0.844								0.914				



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 WB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-003  
 Date: 8/29/2019

### Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 WB Ramps				I-10 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
7:00 AM	92	49	0	0	0	76	24	0	0	0	0	0	80	0	28	0	349
7:15 AM	91	66	0	0	0	70	15	0	0	0	0	0	90	0	37	0	369
7:30 AM	63	58	0	0	0	92	16	0	0	0	0	0	84	0	34	0	347
7:45 AM	76	55	0	0	0	78	20	0	0	0	0	0	76	0	28	0	333
8:00 AM	80	40	0	0	0	72	17	0	0	0	0	0	69	0	19	0	297
8:15 AM	78	53	0	0	0	74	25	0	0	0	0	0	77	0	20	0	327
8:30 AM	89	51	0	0	0	61	16	0	0	0	0	0	92	0	22	0	331
8:45 AM	79	47	0	0	0	51	13	0	0	0	0	0	70	0	28	0	288
TOTAL VOLUMES :	648	419	0	0	0	574	146	0	0	0	0	0	638	0	216	0	2641
APPROACH %'s :	60.73%	39.27%	0.00%	0.00%	0.00%	79.72%	20.28%	0.00%					74.71%	0.00%	25.29%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	322	228	0	0	0	316	75	0	0	0	0	0	330	0	127	0	1398
PEAK HR FACTOR :	0.88	0.864	0.000	0.000	0.000	0.859	0.781	0.000	0.000	0.000	0.000	0.000	0.917	0.000	0.858	0.000	0.947
	0.876				0.905								0.900				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
4:00 PM	66	56	0	0	0	80	33	0	0	0	0	0	148	0	22	0	405
4:15 PM	68	69	0	0	0	83	20	0	0	0	0	0	144	1	22	0	407
4:30 PM	74	48	0	0	0	72	32	0	0	0	0	0	187	0	31	0	444
4:45 PM	71	86	0	0	0	76	21	0	0	0	0	0	168	0	32	0	454
5:00 PM	53	70	0	0	0	78	39	0	0	0	0	0	148	0	26	0	414
5:15 PM	81	70	0	0	0	82	21	0	0	0	0	0	156	0	27	0	437
5:30 PM	62	80	0	0	0	89	45	0	0	0	0	0	141	0	34	0	451
5:45 PM	82	71	0	0	0	82	18	0	0	0	0	0	152	0	27	0	432
TOTAL VOLUMES :	557	550	0	0	0	642	229	0	0	0	0	0	1244	1	221	0	3444
APPROACH %'s :	50.32%	49.68%	0.00%	0.00%	0.00%	73.71%	26.29%	0.00%					84.86%	0.07%	15.08%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	267	306	0	0	0	325	126	0	0	0	0	0	613	0	119	0	1756
PEAK HR FACTOR :	0.82	0.890	0.000	0.000	0.000	0.913	0.700	0.000	0.000	0.000	0.000	0.000	0.912	0.000	0.875	0.000	0.967
	0.912				0.841								0.915				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 WB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-003  
 Date: 8/29/2019

2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 WB Ramps				I-10 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
7:00 AM	3	1	0	0	0	1	0	0	0	0	0	0	2	0	0	0	7
7:15 AM	0	1	0	0	0	1	0	0	0	0	0	0	6	0	0	0	8
7:30 AM	2	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5
7:45 AM	1	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	4
8:00 AM	0	3	0	0	0	1	0	0	0	0	0	0	1	0	0	0	5
8:15 AM	1	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	5
8:30 AM	4	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	6
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	5	0	2	0	8
TOTAL VOLUMES :	NL 11	NT 8	NR 0	NU 0	SL 0	ST 5	SR 1	SU 0	EL 0	ET 0	ER 0	EU 0	WL 21	WT 0	WR 2	WU 0	TOTAL 48
APPROACH %'s :	57.89%	42.11%	0.00%	0.00%	0.00%	83.33%	16.67%	0.00%	0.00%	0.00%	0.00%	0.00%	91.30%	0.00%	8.70%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	4	0	0	0	3	0	0	0	0	0	0	11	0	0	0	24
PEAK HR FACTOR :	0.500	0.500	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.458	0.000	0.000	0.000	0.750
	0.625				0.750								0.458				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
4:00 PM	0	1	0	0	0	1	0	0	0	0	0	0	3	0	1	0	6
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5
4:45 PM	1	1	0	0	0	0	0	0	0	0	0	0	2	0	1	0	5
5:00 PM	1	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3
5:45 PM	0	0	0	0	0	2	0	0	0	0	0	0	1	0	0	0	3
TOTAL VOLUMES :	NL 2	NT 5	NR 0	NU 0	SL 0	ST 5	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 16	WT 0	WR 2	WU 0	TOTAL 30
APPROACH %'s :	28.57%	71.43%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	88.89%	0.00%	11.11%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	2	2	0	0	0	2	0	0	0	0	0	0	8	0	1	0	15
PEAK HR FACTOR :	0.50	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.250	0.000	0.750
	0.500				0.250								0.750				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 WB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-003  
 Date: 8/29/2019

3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 WB Ramps				I-10 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
7:00 AM	1	2	0	0	0	1	0	0	0	0	0	0	2	0	2	0	8
7:15 AM	0	2	0	0	0	2	0	0	0	0	0	0	3	0	0	0	7
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:00 AM	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	3
8:15 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	3	3	0	0	0	1	0	0	0	0	0	0	1	0	0	0	8
TOTAL VOLUMES :	NL 8	NT 7	NR 0	NU 0	SL 0	ST 5	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 9	WT 0	WR 2	WU 0	TOTAL 31
APPROACH %'s :	53.33%	46.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	81.82%	0.00%	18.18%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																
PEAK HR VOL :	2	4	0	0	0	3	0	0	0	0	0	0	7	0	2	0	TOTAL 18
PEAK HR FACTOR :	0.500	0.500	0.000	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.250	0.000	0.563

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
4:00 PM	1	0	0	0	0	0	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	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	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	1	0	2	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
TOTAL VOLUMES :	NL 2	NT 1	NR 0	NU 0	SL 0	ST 1	SR 0	SU 0	EL 0	ET 0	ER 0	EU 0	WL 3	WT 0	WR 3	WU 0	TOTAL 10
APPROACH %'s :	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%	0.00%	50.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																
PEAK HR VOL :	1	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0	TOTAL 5
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.417

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Beaumont Ave & I-10 WB Ramps  
 City: Beaumont  
 Control: Signalized

Project ID: 19-06112-003  
 Date: 8/29/2019

4axle

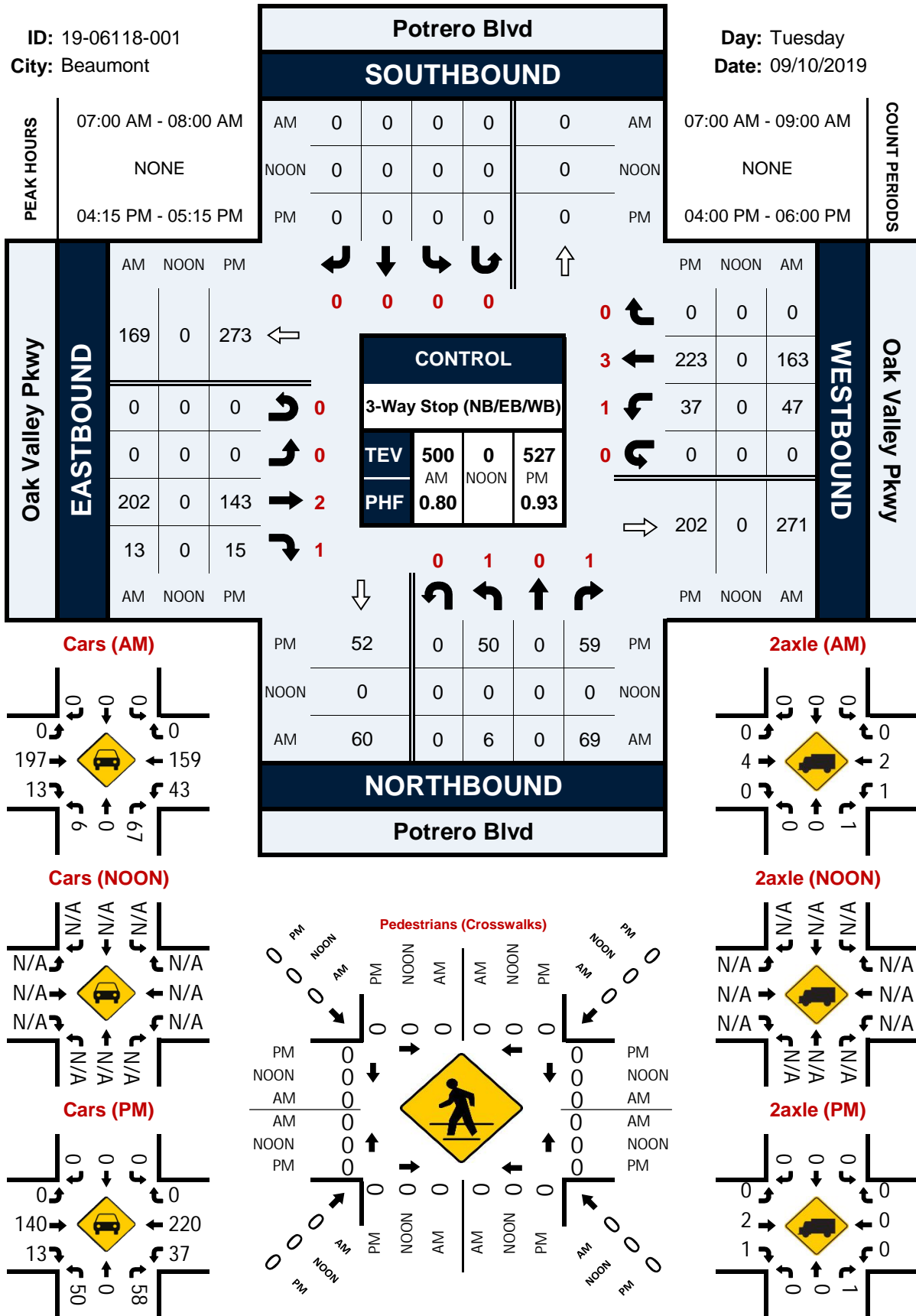
NS/EW Streets:	Beaumont Ave				Beaumont Ave				I-10 WB Ramps				I-10 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
7:00 AM	1	0	0	0	0	0	1	0	0	0	0	0	3	0	1	0	6
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	0	4
7:30 AM	1	0	0	0	0	2	0	0	0	0	0	0	4	0	0	0	7
7:45 AM	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5
8:00 AM	3	0	0	0	0	4	0	0	0	0	0	0	8	0	1	0	16
8:15 AM	3	0	0	0	0	2	0	0	0	0	0	0	8	0	0	0	13
8:30 AM	3	0	0	0	0	2	2	0	0	0	0	0	5	0	0	0	12
8:45 AM	2	0	0	0	0	1	1	0	0	0	0	0	5	0	0	0	9
TOTAL VOLUMES :	NL 15	NT 0	NR 0	NU 0	SL 0	ST 12	SR 4	SU 0	EL 0	ET 0	ER 0	EU 0	WL 39	WT 0	WR 2	WU 0	TOTAL 72
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%					95.12%	0.00%	4.88%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																
PEAK HR VOL :	4	0	0	0	0	3	1	0	0	0	0	0	13	0	1	0	TOTAL 22
PEAK HR FACTOR :	0.500	0.000	0.000	0.000	0.000	0.375	0.250	0.000	0.000	0.000	0.000	0.000	0.813	0.000	0.250	0.000	0.786
	0.500				0.500								0.875				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	2 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	0 ET	0 ER	0 EU	1.5 WL	0 WT	0.5 WR	0 WU	
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	6
4:15 PM	0	1	0	0	0	0	1	0	0	0	0	0	9	0	2	0	13
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5
4:45 PM	2	0	0	0	0	0	0	0	0	0	0	0	5	0	2	0	9
5:00 PM	1	0	0	0	0	0	1	0	0	0	0	0	3	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	6	0	1	0	7
5:30 PM	1	0	0	0	0	0	1	0	0	0	0	0	5	0	2	0	9
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3
TOTAL VOLUMES :	NL 6	NT 1	NR 0	NU 0	SL 0	ST 0	SR 3	SU 0	EL 0	ET 0	ER 0	EU 0	WL 40	WT 0	WR 7	WU 0	TOTAL 57
APPROACH %'s :	85.71%	14.29%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					85.11%	0.00%	14.89%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																
PEAK HR VOL :	4	0	0	0	0	0	2	0	0	0	0	0	19	0	5	0	TOTAL 30
PEAK HR FACTOR :	0.50	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.792	0.000	0.625	0.000	0.833
	0.500				0.500								0.857				

# Potrero Blvd & Oak Valley Pkwy

## Peak Hour Turning Movement Count

ID: 19-06118-001  
City: Beaumont

Day: Tuesday  
Date: 09/10/2019



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Potrero Blvd & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06118-001  
 Date: 9/10/2019

### Total

NS/EW Streets:	Potrero Blvd				Potrero Blvd				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	1	0	20	0	0	0	0	0	0	60	9	0	16	50	0	0	156
7:15 AM	2	0	23	0	0	0	0	0	0	44	1	0	8	33	0	0	111
7:30 AM	2	0	18	0	0	0	0	0	0	52	3	0	15	37	0	0	127
7:45 AM	1	0	8	0	0	0	0	0	0	46	0	0	8	43	0	0	106
8:00 AM	3	0	10	0	0	0	0	0	0	38	3	0	10	28	0	1	93
8:15 AM	5	0	10	0	0	0	0	0	0	21	1	0	6	27	0	0	70
8:30 AM	0	0	12	0	0	0	0	0	0	27	2	0	13	26	0	0	80
8:45 AM	1	0	7	0	0	0	0	0	0	24	3	0	7	27	0	0	69
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	15	0	108	0	0	0	0	0	0	312	22	0	83	271	0	1	812
	12.20%	0.00%	87.80%	0.00%	0.00%	93.41%	6.59%	0.00%	0.00%	23.38%	76.34%	0.00%	0.28%				
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	69	0	0	0	0	0	0	202	13	0	47	163	0	0	500
PEAK HR FACTOR :	0.750	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.842	0.361	0.000	0.734	0.815	0.000	0.000	0.801
	0.750				0.779				0.795								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	7	0	10	0	0	0	0	0	0	26	3	0	7	53	0	1	107
4:15 PM	10	0	19	0	0	0	0	0	0	39	3	0	9	61	0	0	141
4:30 PM	10	0	11	0	0	0	0	0	0	32	5	0	10	57	0	0	125
4:45 PM	15	0	19	0	0	0	0	0	0	36	4	0	7	55	0	0	136
5:00 PM	15	0	10	0	0	0	0	0	0	36	3	0	11	50	0	0	125
5:15 PM	10	0	8	0	0	0	0	0	0	32	4	0	9	49	0	0	112
5:30 PM	9	0	13	0	0	0	0	0	0	27	2	0	6	47	0	0	104
5:45 PM	13	0	9	0	0	0	0	0	0	45	0	0	6	49	0	0	122
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	89	0	99	0	0	0	0	0	0	273	24	0	65	421	0	1	972
	47.34%	0.00%	52.66%	0.00%	0.00%	91.92%	8.08%	0.00%	0.00%	13.35%	86.45%	0.00%	0.21%				
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	50	0	59	0	0	0	0	0	0	143	15	0	37	223	0	0	527
PEAK HR FACTOR :	0.833	0.000	0.776	0.000	0.000	0.000	0.000	0.000	0.000	0.917	0.750	0.000	0.841	0.914	0.000	0.000	0.934
	0.801				0.940				0.929								

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Potrero Blvd & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06118-001  
 Date: 9/10/2019

### Cars

NS/EW Streets:	Potrero Blvd				Potrero Blvd				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	1	0	20	0	0	0	0	0	0	58	9	0	14	48	0	0	150
7:15 AM	2	0	23	0	0	0	0	0	0	44	1	0	7	32	0	0	109
7:30 AM	2	0	17	0	0	0	0	0	0	51	3	0	14	36	0	0	123
7:45 AM	1	0	7	0	0	0	0	0	0	44	0	0	8	43	0	0	103
8:00 AM	3	0	9	0	0	0	0	0	0	37	3	0	9	26	0	1	88
8:15 AM	5	0	10	0	0	0	0	0	0	21	1	0	4	25	0	0	66
8:30 AM	0	0	11	0	0	0	0	0	0	25	2	0	13	25	0	0	76
8:45 AM	1	0	7	0	0	0	0	0	0	24	1	0	6	24	0	0	63
TOTAL VOLUMES :	15	0	104	0	0	0	0	0	0	304	20	0	75	259	0	1	778
APPROACH %'s :	12.61%	0.00%	87.39%	0.00%					0.00%	93.83%	6.17%	0.00%	22.39%	77.31%	0.00%	0.30%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	6	0	67	0	0	0	0	0	0	197	13	0	43	159	0	0	485
PEAK HR FACTOR :	0.75	0.000	0.728	0.000	0.000	0.000	0.000	0.000	0.000	0.849	0.361	0.000	0.768	0.828	0.000	0.000	0.808
	0.730								0.784				0.815				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	2	1	0	1	3	0	0	TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	7	0	10	0	0	0	0	0	0	24	2	0	7	53	0	1	104
4:15 PM	10	0	19	0	0	0	0	0	0	38	2	0	9	58	0	0	136
4:30 PM	10	0	11	0	0	0	0	0	0	30	4	0	10	57	0	0	122
4:45 PM	15	0	19	0	0	0	0	0	0	36	4	0	7	55	0	0	136
5:00 PM	15	0	9	0	0	0	0	0	0	36	3	0	11	50	0	0	124
5:15 PM	10	0	8	0	0	0	0	0	0	32	4	0	9	48	0	0	111
5:30 PM	9	0	12	0	0	0	0	0	0	27	2	0	6	47	0	0	103
5:45 PM	13	0	9	0	0	0	0	0	0	45	0	0	6	49	0	0	122
TOTAL VOLUMES :	89	0	97	0	0	0	0	0	0	268	21	0	65	417	0	1	958
APPROACH %'s :	47.85%	0.00%	52.15%	0.00%					0.00%	92.73%	7.27%	0.00%	13.46%	86.34%	0.00%	0.21%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	50	0	58	0	0	0	0	0	0	140	13	0	37	220	0	0	518
PEAK HR FACTOR :	0.83	0.000	0.763	0.000	0.000	0.000	0.000	0.000	0.000	0.921	0.813	0.000	0.841	0.948	0.000	0.000	0.952
	0.794								0.956				0.959				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Potrero Blvd & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06118-001  
 Date: 9/10/2019

2axle

NS/EW Streets:	Potrero Blvd				Potrero Blvd				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
7:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
8:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	5	2	0	4	3	0	0	16
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	71.43%	28.57%	0.00%	57.14%	42.86%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	4	0	0	1	2	0	0	8
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.500	0.000	0.000	0.667
	0.250								0.500				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	2	0	0	0	0	0	0	4	1	0	0	0	0	0	7
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	80.00%	20.00%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.000	0.000	0.500
	0.250								0.375								



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Potrero Blvd & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06118-001  
 Date: 9/10/2019

3axle

NS/EW Streets:	Potrero Blvd				Potrero Blvd				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	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	1	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	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	1	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	3	0	0	1	2	0	0	7
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					0.00%	100.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.500
	0.250								0.250				0.500				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
4:45 PM	0	0	0	0	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	0	0	0	0
5:15 PM	0	0	0	0	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	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	2	0	0	2	0	0	5
APPROACH %'s :									0.00%	33.33%	66.67%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250	0.000	0.000	0.500
									0.250				0.250				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: Potrero Blvd & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06118-001  
 Date: 9/10/2019

4axle

NS/EW Streets:	Potrero Blvd				Potrero Blvd				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
7:15 AM	0	0	0	0	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	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	0	0	3	7	0	0	11
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%									30.00%	70.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.250
													0.250				

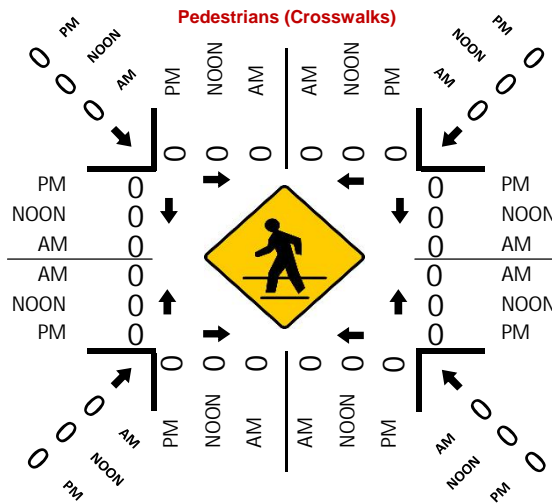
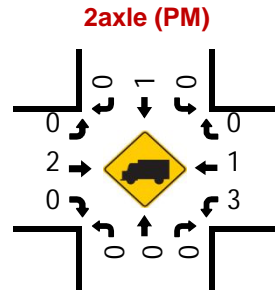
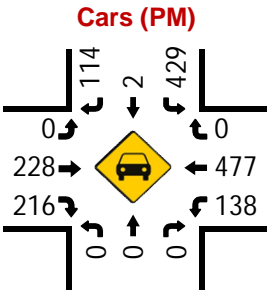
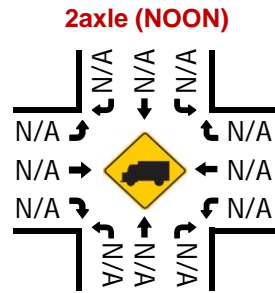
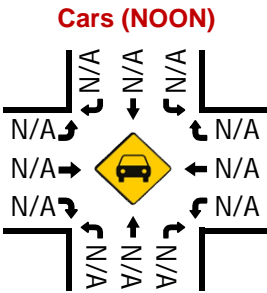
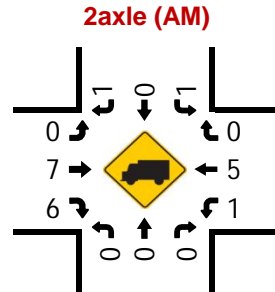
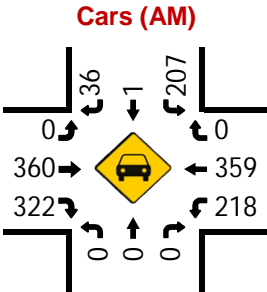
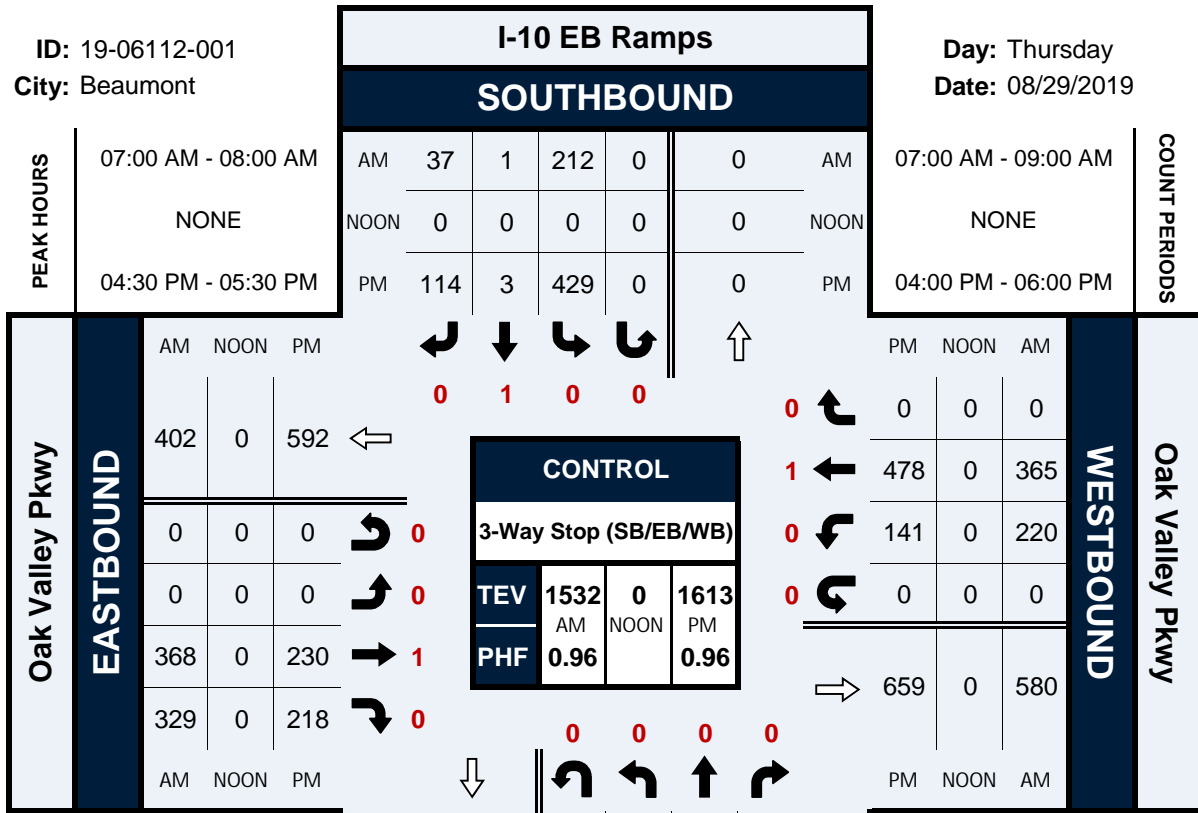
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	1 NL	0 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	1 ER	0 EU	1 WL	3 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	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	1	0	0	1
5:30 PM	0	0	0	0	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	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
APPROACH %'s :													0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
													0.250				

# I-10 EB Ramps & Oak Valley Pkwy

## Peak Hour Turning Movement Count

ID: 19-06112-001  
City: Beaumont

Day: Thursday  
Date: 08/29/2019



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 EB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-06112-001  
 Date: 8/29/2019

### Total

NS/EW Streets:	I-10 EB Ramps				I-10 EB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	55	0	3	0	0	103	104	0	38	90	0	0	393
7:15 AM	0	0	0	0	38	0	12	0	0	103	66	0	59	78	0	0	356
7:30 AM	0	0	0	0	58	0	9	0	0	94	86	0	59	91	0	0	397
7:45 AM	0	0	0	0	61	1	13	0	0	68	73	0	64	106	0	0	386
8:00 AM	0	0	0	0	59	0	11	0	0	53	61	0	37	103	0	0	324
8:15 AM	0	0	0	0	40	0	11	0	0	48	40	0	28	76	0	0	243
8:30 AM	0	0	0	0	49	0	15	0	0	45	47	0	44	54	0	0	254
8:45 AM	0	0	0	0	46	0	10	0	0	50	53	0	44	67	0	0	270
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	406	1	84	0	0	564	530	0	373	665	0	0	2623
					82.69%	0.20%	17.11%	0.00%	0.00%	51.55%	48.45%	0.00%	35.93%	64.07%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	212	1	37	0	0	368	329	0	220	365	0	0	1532
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.869	0.250	0.712	0.000	0.000	0.893	0.791	0.000	0.859	0.861	0.000	0.000	0.965
					0.833				0.842				0.860				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	89	2	26	0	0	41	51	0	35	118	0	0	362
4:15 PM	0	0	0	0	115	1	25	0	0	31	47	0	36	108	0	0	363
4:30 PM	0	0	0	0	117	2	24	0	0	54	51	0	41	126	0	0	415
4:45 PM	0	0	0	0	102	0	30	0	0	47	52	0	42	123	0	0	396
5:00 PM	0	0	0	0	89	0	34	0	0	61	59	0	23	116	0	0	382
5:15 PM	0	0	0	0	121	1	26	0	0	68	56	0	35	113	0	0	420
5:30 PM	0	0	0	0	115	0	20	0	0	49	44	0	22	107	0	0	357
5:45 PM	0	0	0	0	126	2	13	0	0	61	41	0	44	119	0	0	406
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	874	8	198	0	0	412	401	0	278	930	0	0	3101
					80.93%	0.74%	18.33%	0.00%	0.00%	50.68%	49.32%	0.00%	23.01%	76.99%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	429	3	114	0	0	230	218	0	141	478	0	0	1613
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.886	0.375	0.838	0.000	0.000	0.846	0.924	0.000	0.839	0.948	0.000	0.000	0.960
					0.922				0.903				0.927				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 EB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-06112-001  
 Date: 8/29/2019

### Cars

NS/EW Streets:	I-10 EB Ramps				I-10 EB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	55	0	3	0	0	102	101	0	37	89	0	0	387
7:15 AM	0	0	0	0	38	0	11	0	0	103	65	0	58	77	0	0	352
7:30 AM	0	0	0	0	53	0	9	0	0	92	85	0	59	88	0	0	386
7:45 AM	0	0	0	0	61	1	13	0	0	63	71	0	64	105	0	0	378
8:00 AM	0	0	0	0	58	0	11	0	0	50	59	0	37	100	0	0	315
8:15 AM	0	0	0	0	40	0	11	0	0	46	39	0	26	74	0	0	236
8:30 AM	0	0	0	0	48	0	13	0	0	44	46	0	44	54	0	0	249
8:45 AM	0	0	0	0	46	0	10	0	0	46	53	0	42	65	0	0	262
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	399	1	81	0	0	546	519	0	367	652	0	0	2565
					82.95%	0.21%	16.84%	0.00%	0.00%	51.27%	48.73%	0.00%	36.02%	63.98%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	207	1	36	0	0	360	322	0	218	359	0	0	1503
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.848	0.250	0.692	0.000	0.000	0.874	0.797	0.000	0.852	0.855	0.000	0.000	0.971
					0.813				0.840				0.854				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	85	2	25	0	0	40	50	0	35	117	0	0	354
4:15 PM	0	0	0	0	114	1	25	0	0	29	47	0	34	108	0	0	358
4:30 PM	0	0	0	0	117	1	24	0	0	54	50	0	40	126	0	0	412
4:45 PM	0	0	0	0	102	0	30	0	0	46	52	0	41	123	0	0	394
5:00 PM	0	0	0	0	89	0	34	0	0	61	59	0	22	115	0	0	380
5:15 PM	0	0	0	0	121	1	26	0	0	67	55	0	35	113	0	0	418
5:30 PM	0	0	0	0	115	0	20	0	0	48	44	0	22	107	0	0	356
5:45 PM	0	0	0	0	125	2	13	0	0	61	39	0	43	118	0	0	401
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	868	7	197	0	0	406	396	0	272	927	0	0	3073
					80.97%	0.65%	18.38%	0.00%	0.00%	50.62%	49.38%	0.00%	22.69%	77.31%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	429	2	114	0	0	228	216	0	138	477	0	0	1604
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.886	0.500	0.838	0.000	0.000	0.851	0.915	0.000	0.841	0.946	0.000	0.000	0.959
					0.921				0.910				0.926				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 EB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-06112-001  
 Date: 8/29/2019

2axle

NS/EW Streets:	I-10 EB Ramps				I-10 EB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	0	0	0	0	0	1	3	0	1	1	0	0	6
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	1	0	0	0	0	2	1	0	0	2	0	0	6
7:45 AM	0	0	0	0	0	0	0	0	0	4	2	0	0	1	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	0	6
8:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	4
8:30 AM	0	0	0	0	1	0	2	0	0	1	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	2	0	3	0	0	14	7	0	2	11	0	0	39
					40.00%	0.00%	60.00%	0.00%	0.00%	66.67%	33.33%	0.00%	15.38%	84.62%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	7	6	0	1	5	0	0	21
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.438	0.500	0.000	0.250	0.625	0.000	0.000	0.750
					0.500				0.542				0.750				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	0	0	4	1	0	0	0	6	2	0	4	1	0	0	18
					80.00%	20.00%	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%	80.00%	20.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	2	0	0	3	1	0	0	7
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.750	0.250	0.000	0.000	0.875
					0.250				0.500				0.500				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 EB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-06112-001  
 Date: 8/29/2019

3axle

NS/EW Streets:	I-10 EB Ramps				I-10 EB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	0	0	0	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	0	0	0	0
7:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
TOTAL VOLUMES :	0	0	0	0	3	0	0	0	0	2	2	0	2	0	0	0	9
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	3	0	0	0	0	1	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.333
						0.250				0.250							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	0	0	0	0	0	1	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	2	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	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	0	0	0	0
5:15 PM	0	0	0	0	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	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	0	4
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250
											0.250						

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 EB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (SB/EB/WB)

Project ID: 19-06112-001  
 Date: 8/29/2019

4axle

NS/EW Streets:	I-10 EB Ramps				I-10 EB Ramps				Oak Valley Pkwy				Oak Valley Pkwy						
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL		
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU			
7:00 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	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	1	1	0	0	0	0
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL		
APPROACH %'s :	0	0	0	0	2	0	0	0	0	2	2	0	2	2	0	0	0	10	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL		
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	1	0	1	1	0	0	4		
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.500		
					0.250				0.250				0.500				0.500		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	3
4:15 PM	0	0	0	0	0	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	0	0	0	0	0
4:45 PM	0	0	0	0	0	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	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL	
APPROACH %'s :	0	0	0	0	2	0	0	0	0	0	2	0	0	2	0	0	6	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL	
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	
					0.000				0.250								0.250	

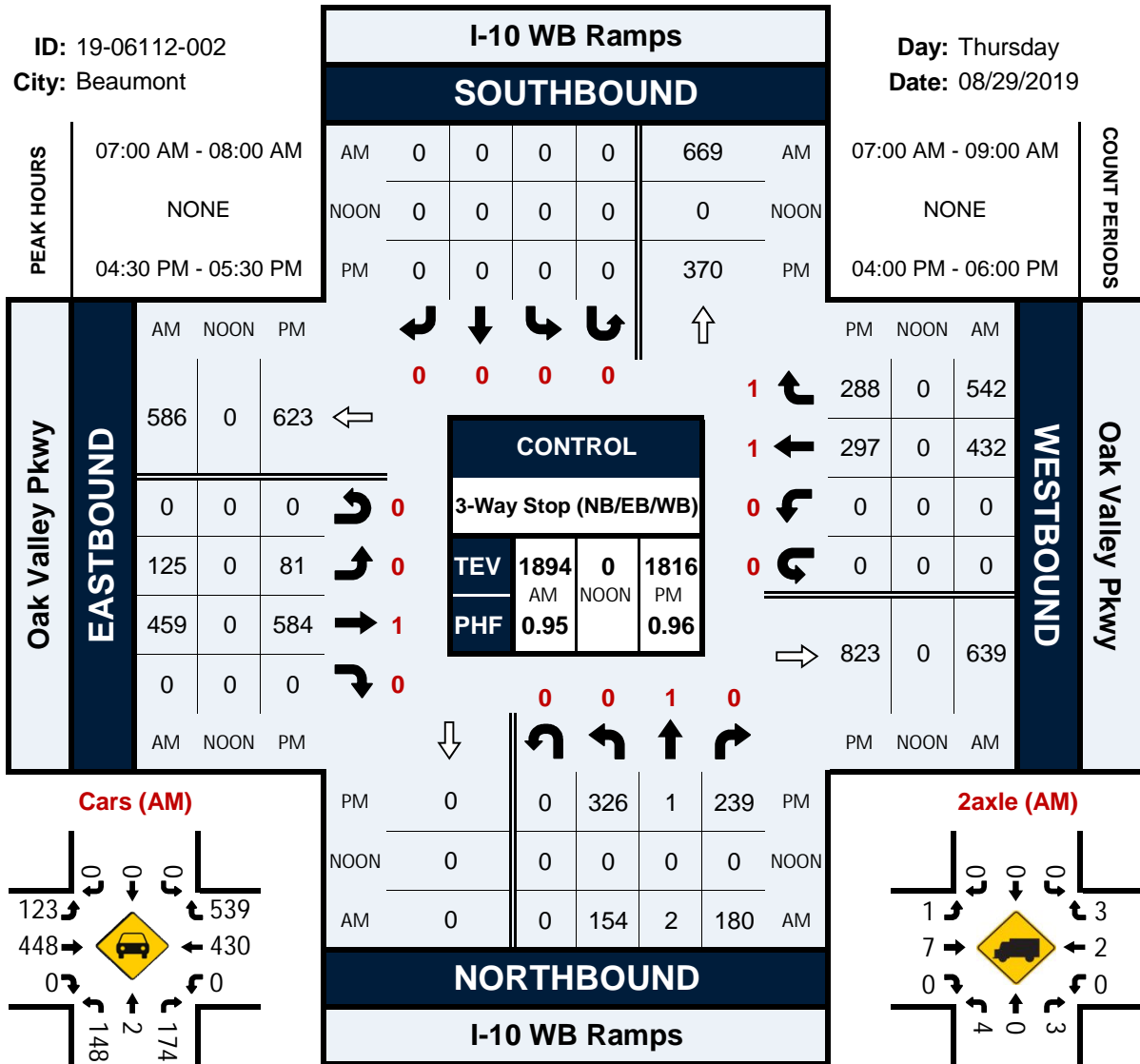


# I-10 WB Ramps & Oak Valley Pkwy

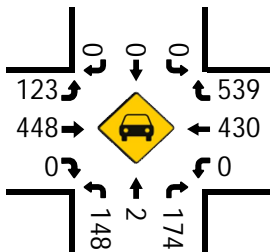
## Peak Hour Turning Movement Count

ID: 19-06112-002  
City: Beaumont

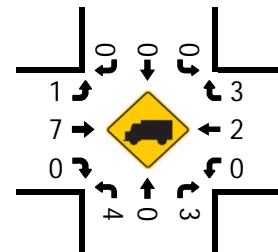
Day: Thursday  
Date: 08/29/2019



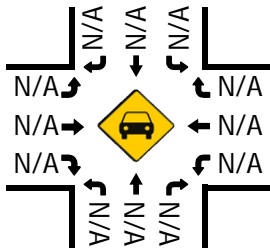
Cars (AM)



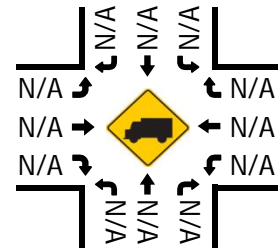
2axle (AM)



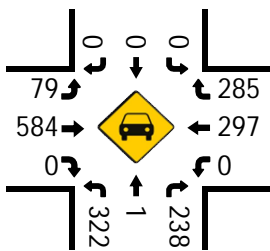
Cars (NOON)



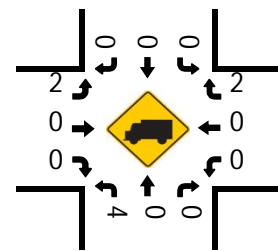
2axle (NOON)



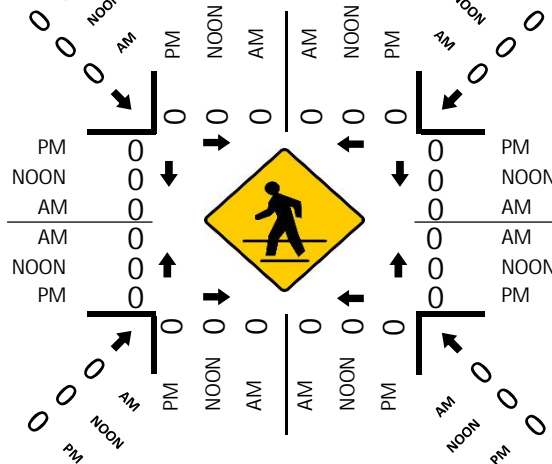
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 WB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06112-002  
 Date: 8/29/2019

### Total

NS/EW Streets:	I-10 WB Ramps				I-10 WB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	491
7:15 AM	31	0	74	0	0	0	0	0	32	103	0	0	0	112	149	0	501
7:30 AM	36	0	42	0	0	0	0	0	22	131	0	0	0	112	119	0	462
7:45 AM	47	0	28	0	0	0	0	0	16	117	0	0	0	124	108	0	440
8:00 AM	45	0	25	0	0	0	0	0	17	88	0	0	0	94	118	0	387
8:15 AM	44	0	30	0	0	0	0	0	22	69	0	0	0	59	109	0	333
8:30 AM	36	0	34	0	0	0	0	0	20	74	0	0	0	72	95	0	331
8:45 AM	37	0	30	0	0	0	0	0	24	72	0	0	0	66	80	0	309
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	316	2	299	0	0	0	0	0	208	762	0	0	0	723	944	0	3254
	51.22%	0.32%	48.46%	0.00%					21.44%	78.56%	0.00%	0.00%	0.00%	43.37%	56.63%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	154	2	180	0	0	0	0	0	125	459	0	0	0	432	542	0	1894
PEAK HR FACTOR :	0.819	0.250	0.608	0.000	0.000	0.000	0.000	0.000	0.568	0.876	0.000	0.000	0.000	0.871	0.816	0.000	0.945
	0.800								0.896				0.933				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
4:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	423
4:15 PM	81	1	59	0	0	0	0	0	15	112	0	0	0	77	78	0	405
4:30 PM	72	1	51	0	0	0	0	0	7	142	0	0	0	67	65	0	467
4:45 PM	92	0	64	0	0	0	0	0	22	148	0	0	0	73	68	0	453
5:00 PM	72	1	52	0	0	0	0	0	10	140	0	0	0	100	78	0	425
5:15 PM	94	0	57	0	0	0	0	0	21	128	0	0	0	62	63	0	471
5:30 PM	68	0	66	0	0	0	0	0	28	168	0	0	0	62	79	0	429
5:45 PM	77	0	59	0	0	0	0	0	13	142	0	0	0	66	72	0	450
	83	0	46	0	0	0	0	0	19	169	0	0	0	71	62	0	
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	639	3	454	0	0	0	0	0	135	1149	0	0	0	578	565	0	3523
	58.30%	0.27%	41.42%	0.00%					10.51%	89.49%	0.00%	0.00%	0.00%	50.57%	49.43%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	326	1	239	0	0	0	0	0	81	584	0	0	0	297	288	0	1816
PEAK HR FACTOR :	0.867	0.250	0.905	0.000	0.000	0.000	0.000	0.000	0.723	0.869	0.000	0.000	0.000	0.743	0.911	0.000	0.964
	0.907								0.848				0.822				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 WB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06112-002  
 Date: 8/29/2019

### Cars

NS/EW Streets:	I-10 WB Ramps				I-10 WB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	
7:00 AM	38	2	33	0	0	0	0	0	54	108	0	0	0	84	165	0	484
7:15 AM	30	0	72	0	0	0	0	0	32	103	0	0	0	111	149	0	497
7:30 AM	34	0	41	0	0	0	0	0	22	124	0	0	0	111	119	0	451
7:45 AM	46	0	28	0	0	0	0	0	15	113	0	0	0	124	106	0	432
8:00 AM	44	0	25	0	0	0	0	0	16	85	0	0	0	92	117	0	379
8:15 AM	43	0	30	0	0	0	0	0	21	68	0	0	0	56	107	0	325
8:30 AM	35	0	34	0	0	0	0	0	19	73	0	0	0	72	94	0	327
8:45 AM	34	0	30	0	0	0	0	0	21	71	0	0	0	66	80	0	302
TOTAL VOLUMES :	304	2	293	0	0	0	0	0	200	745	0	0	0	716	937	0	3197
APPROACH %'s :	50.75%	0.33%	48.91%	0.00%					21.16%	78.84%	0.00%	0.00%	0.00%	43.32%	56.68%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	148	2	174	0	0	0	0	0	123	448	0	0	0	430	539	0	1864
PEAK HR FACTOR :	0.80	0.250	0.604	0.000	0.000	0.000	0.000	0.000	0.569	0.903	0.000	0.000	0.000	0.867	0.817	0.000	0.938
	0.794								0.881				0.932				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0		
NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU		
4:00 PM	80	0	59	0	0	0	0	0	14	108	0	0	0	77	77	0	415
4:15 PM	72	1	51	0	0	0	0	0	7	139	0	0	0	65	65	0	400
4:30 PM	91	0	64	0	0	0	0	0	22	148	0	0	0	73	68	0	466
4:45 PM	71	1	52	0	0	0	0	0	9	140	0	0	0	100	77	0	450
5:00 PM	92	0	56	0	0	0	0	0	21	128	0	0	0	62	63	0	422
5:15 PM	68	0	66	0	0	0	0	0	27	168	0	0	0	62	77	0	468
5:30 PM	77	0	58	0	0	0	0	0	13	141	0	0	0	66	69	0	424
5:45 PM	82	0	46	0	0	0	0	0	19	168	0	0	0	70	61	0	446
TOTAL VOLUMES :	633	2	452	0	0	0	0	0	132	1140	0	0	0	575	557	0	3491
APPROACH %'s :	58.23%	0.18%	41.58%	0.00%					10.38%	89.62%	0.00%	0.00%	0.00%	50.80%	49.20%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	322	1	238	0	0	0	0	0	79	584	0	0	0	297	285	0	1806
PEAK HR FACTOR :	0.88	0.250	0.902	0.000	0.000	0.000	0.000	0.000	0.731	0.869	0.000	0.000	0.000	0.743	0.925	0.000	0.965
	0.905								0.850				0.822				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 WB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06112-002  
 Date: 8/29/2019

2axle

NS/EW Streets:	I-10 WB Ramps				I-10 WB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
<b>AM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	2	0	2	0	0	0	0	0	1	0	0	0	0	0	1	0	6
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:30 AM	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	5
7:45 AM	1	0	0	0	0	0	0	0	0	4	0	0	0	0	2	0	7
8:00 AM	1	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	6
8:15 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	2	1	0	5
8:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	3
8:45 AM	1	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	4
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	70.00%	0.00%	30.00%	0.00%	0	0	0	0	5	11	0	0	0	6	6	0	38
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	4	0	3	0	0	0	0	0	1	7	0	0	0	2	3	0	20
PEAK HR FACTOR :	0.500	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.250	0.438	0.000	0.000	0.000	0.500	0.375	0.000	0.714
	0.438								0.500				0.625				
<b>PM</b>	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
5:00 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	80.00%	0.00%	20.00%	0.00%	0	0	0	0	3	7	0	0	0	1	3	0	19
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	4	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0	8
PEAK HR FACTOR :	0.50	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.667
	0.500								0.500				0.500				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 WB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06112-002  
 Date: 8/29/2019

3axle

NS/EW Streets:	I-10 WB Ramps				I-10 WB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	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	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2
TOTAL VOLUMES :	1	0	3	0	0	0	0	0	1	4	0	0	0	1	1	0	11
APPROACH %'s :	25.00%	0.00%	75.00%	0.00%					20.00%	80.00%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.750	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.375
	0.750								0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
4:00 PM	0	0	0	0	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	2	0	0	2
4:30 PM	0	0	0	0	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	0	0	0	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES :	0	0	1	0	0	0	0	0	0	0	0	0	0	2	2	0	5
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%									0.00%	50.00%	50.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
PEAK HR FACTOR :	0.00	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.500
	0.250												0.250				

# National Data & Surveying Services

## Intersection Turning Movement Count

Location: I-10 WB Ramps & Oak Valley Pkwy  
 City: Beaumont  
 Control: 3-Way Stop (NB/EB/WB)

Project ID: 19-06112-002  
 Date: 8/29/2019

4axle

NS/EW Streets:	I-10 WB Ramps				I-10 WB Ramps				Oak Valley Pkwy				Oak Valley Pkwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
TOTAL VOLUMES :	NL 4	NT 0	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 2	ET 2	ER 0	EU 0	WL 0	WT 0	WR 0	WU 0	TOTAL 8
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					50.00%	50.00%	0.00%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.500								0.500								
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	0 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	1 WR	0 WU	
4:00 PM	1	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	4
4:15 PM	0	0	0	0	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	0	0	0	0
4:45 PM	0	0	0	0	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	0	0	0	0
5:15 PM	0	0	0	0	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	0	1	0	1
5:45 PM	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
TOTAL VOLUMES :	NL 2	NT 1	NR 0	NU 0	SL 0	ST 0	SR 0	SU 0	EL 0	ET 2	ER 0	EU 0	WL 0	WT 0	WR 3	WU 0	TOTAL 8
APPROACH %'s :	66.67%	33.33%	0.00%	0.00%					0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.00	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0

APPENDIX C

PCE WORKSHEETS

Existing Peak Hour Volumes - Classification Counts

1 Veile Avenue at 4th Street

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	64	0	0	4	4	5.9%	12	3.0	76	15	0	0	3	3	16.7%	9	3.0	24
NT	17	0	0	1	1	5.6%	3	3.0	20	23	0	0	0	0	0.0%	0	0.0	23
NR	2	0	0	0	0	0.0%	0	0.0	2	5	1	0	0	1	16.7%	2	2.0	7
SL	14	0	0	1	1	6.7%	3	3.0	17	7	1	0	0	1	12.5%	2	2.0	9
ST	33	1	0	1	2	5.7%	5	2.5	38	69	1	0	0	1	1.4%	2	2.0	71
SR	54	1	1	13	15	21.7%	43	2.9	97	12	0	1	5	6	33.3%	17	2.8	29
EL	14	1	1	10	12	46.2%	34	2.8	48	108	1	1	5	7	6.1%	19	2.7	127
ET	17	4	0	2	6	26.1%	12	2.0	29	41	4	0	3	7	14.6%	15	2.1	56
ER	14	3	1	1	5	26.3%	10	2.0	24	50	1	1	3	5	9.1%	13	2.6	63
WL	3	0	0	0	0	0.0%	0	0.0	3	9	0	0	0	0	0.0%	0	0.0	9
WT	54	3	0	1	4	6.9%	8	2.0	62	28	4	1	0	5	15.2%	8	1.6	36
WR	14	0	0	0	0	0.0%	0	0.0	14	26	1	0	0	1	3.7%	2	2.0	28
									430									482
North Leg Volumes																		
Approach	101	2	1	15	18		51		152	88	2	1	5	8		21		109
Depart	45	1	1	11	13		37		82	157	2	1	5	8		21		178
Total	146	3	2	26	31	17.5%	88	2.8	234	245	4	2	10	16	6.1%	42	2.6	287
South Leg Volumes																		
Approach	83	0	0	5	5		15		98	43	1	0	3	4		11		54
Depart	50	4	1	2	7		15		65	128	2	1	3	6		15		143
Total	133	4	1	7	12	8.3%	30	2.5	163	171	3	1	6	10	5.5%	26	2.6	197
East Leg Volumes																		
Approach	71	3	0	1	4		8		79	63	5	1	0	6		10		73
Depart	33	4	0	3	7		15		48	53	6	0	3	9		19		72
Total	104	7	0	4	11	9.6%	23	2.1	127	116	11	1	3	15	11.5%	29	1.9	145
West Leg Volumes																		
Approach	45	8	2	13	23		56		101	199	6	2	11	19		47		246
Depart	172	4	1	18	23		63		235	55	4	2	8	14		34		89
Total	217	12	3	31	46	17.5%	119	2.6	336	254	10	4	19	33	11.5%	81	2.5	335
All Legs																		
Approach	300	13	3	34	50		130		430	393	14	4	19	37		89		482
Depart	300	13	3	34	50		130		430	393	14	4	19	37		89		482
Total	600	26	6	68	100	14.3%	260	2.6	860	786	28	8	38	74	8.6%	178	2.4	964



Existing Peak Hour Volumes - Classification Counts

2 California Avenue at 4th Street

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	12	0	0	0	0	0.0%	0	0.0	12	13	0	0	0	0	0.0%	0	0.0	13
NT	641	3	2	5	10	1.5%	24	2.4	665	494	9	3	2	14	2.8%	26	1.9	520
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	155	3	2	1	6	3.7%	12	2.0	167	267	3	1	0	4	1.5%	7	1.8	274
SR	64	1	1	2	4	5.9%	10	2.5	74	47	1	0	1	2	4.1%	5	2.5	52
EL	34	0	0	3	3	8.1%	9	3.0	43	65	3	0	2	5	7.1%	11	2.2	76
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	20	0	0	1	1	4.8%	3	3.0	23	17	0	0	0	0	0.0%	0	0.0	17
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									984									952
North Leg Volumes																		
Approach	219	4	3	3	10		22		241	314	4	1	1	6		12		326
Depart	675	3	2	8	13		33		708	559	12	3	4	19		37		596
Total	894	7	5	11	23	2.5%	55	2.4	949	873	16	4	5	25	2.8%	49	2.0	922
South Leg Volumes																		
Approach	653	3	2	5	10		24		677	507	9	3	2	14		26		533
Depart	175	3	2	2	7		15		190	284	3	1	0	4		7		291
Total	828	6	4	7	17	2.0%	39	2.3	867	791	12	4	2	18	2.2%	33	1.8	824
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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	0.0%	0	0.0	0
West Leg Volumes																		
Approach	54	0	0	4	4		12		66	82	3	0	2	5		11		93
Depart	76	1	1	2	4		10		86	60	1	0	1	2		5		65
Total	130	1	1	6	8	5.8%	22	2.8	152	142	4	0	3	7	4.7%	16	2.3	158
All Legs																		
Approach	926	7	5	12	24		58		984	903	16	4	5	25		49		952
Depart	926	7	5	12	24		58		984	903	16	4	5	25		49		952
Total	1,852	14	10	24	48	2.5%	116	2.4	1,968	1,806	32	8	10	50	2.7%	98	2.0	1,904

Existing Peak Hour Volumes - Classification Counts

3 Beaumont Avenue at Luis Estrada Rd / 4th Street

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	14	0	1	0	1	6.7%	2	2.0	16	18	0	0	0	0	0.0%	0	0.0	18
NT	773	16	6	20	42	5.2%	96	2.3	869	729	14	6	6	26	3.4%	51	2.0	780
NR	6	1	0	0	1	14.3%	2	2.0	8	18	0	0	0	0	0.0%	0	0.0	18
SL	21	0	1	0	1	4.5%	2	2.0	23	23	0	0	0	0	0.0%	0	0.0	23
ST	943	25	10	28	63	6.3%	142	2.3	1,085	1,578	16	3	28	47	2.9%	114	2.4	1,692
SR	49	1	1	2	4	7.5%	10	2.5	59	42	0	0	2	2	4.5%	6	3.0	48
EL	64	2	1	1	4	5.9%	8	2.0	72	68	1	0	6	7	9.3%	20	2.9	88
ET	3	1	1	0	2	40.0%	4	2.0	7	2	1	0	0	1	33.3%	2	2.0	4
ER	66	4	1	0	5	7.0%	8	1.6	74	44	1	0	0	1	2.2%	2	2.0	46
WL	8	0	0	1	1	11.1%	3	3.0	11	9	0	0	0	0	0.0%	0	0.0	9
WT	2	0	1	0	1	33.3%	2	2.0	4	5	1	0	0	1	16.7%	2	2.0	7
WR	17	0	1	0	1	5.6%	2	2.0	19	26	0	0	0	0	0.0%	0	0.0	26
									2,247									2,759
North Leg Volumes																		
Approach	1,013	26	12	30	68		154		1,167	1,643	16	3	30	49		120		1,763
Depart	854	18	8	21	47		106		960	823	15	6	12	33		71		894
Total	1,867	44	20	51	115	5.8%	260	2.3	2,127	2,466	31	9	42	82	3.2%	191	2.3	2,657
South Leg Volumes																		
Approach	793	17	7	20	44		100		893	765	14	6	6	26		51		816
Depart	1,017	29	11	29	69		153		1,170	1,631	17	3	28	48		116		1,747
Total	1,810	46	18	49	113	5.9%	253	2.2	2,063	2,396	31	9	34	74	3.0%	167	2.3	2,563
East Leg Volumes																		
Approach	27	0	2	1	3		7		34	40	1	0	0	1		2		42
Depart	30	2	2	0	4		8		38	43	1	0	0	1		2		45
Total	57	2	4	1	7	10.9%	15	2.1	72	83	2	0	0	2	2.4%	4	2.0	87
West Leg Volumes																		
Approach	133	7	3	1	11		20		153	114	3	0	6	9		24		138
Depart	65	1	3	2	6		14		79	65	1	0	2	3		8		73
Total	198	8	6	3	17	7.9%	34	2.0	232	179	4	0	8	12	6.3%	32	2.7	211
All Legs																		
Approach	1,966	50	24	52	126		281		2,247	2,562	34	9	42	85		197		2,759
Depart	1,966	50	24	52	126		281		2,247	2,562	34	9	42	85		197		2,759
Total	3,932	100	48	104	252	6.0%	562	2.2	4,494	5,124	68	18	84	170	3.2%	394	2.3	5,518

Existing Peak Hour Volumes - Classification Counts

4 Beaumont Avenue at I-10 EB Ramps

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	470	7	5	4	16	3.3%	33	2.1	503	444	4	2	4	10	2.2%	22	2.2	466
NR	384	11	3	17	31	7.5%	74	2.4	458	371	6	5	8	19	4.9%	43	2.3	414
SL	100	0	0	2	2	2.0%	6	3.0	106	77	2	0	0	2	2.5%	3	1.5	80
ST	533	14	10	14	38	6.7%	83	2.2	616	891	10	2	18	30	3.3%	73	2.4	964
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	80	3	1	0	4	4.8%	7	1.8	87	107	0	0	0	0	0.0%	0	0.0	107
ET	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
ER	480	12	2	14	28	5.5%	64	2.3	544	769	8	0	8	16	2.0%	36	2.3	805
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									2,314									2,837
North Leg Volumes																		
Approach	633	14	10	16	40		89		722	968	12	2	18	32		76		1,044
Depart	550	10	6	4	20		40		590	551	4	2	4	10		22		573
Total	1,183	24	16	20	60	4.8%	129	2.2	1,312	1,519	16	4	22	42	2.7%	98	2.3	1,617
South Leg Volumes																		
Approach	854	18	8	21	47		107		961	815	10	7	12	29		65		880
Depart	1,013	26	12	28	66		147		1,160	1,660	18	2	26	46		109		1,769
Total	1,867	44	20	49	113	5.7%	254	2.2	2,121	2,475	28	9	38	75	2.9%	174	2.3	2,649
East Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	484	11	3	19	33		80		564	449	8	5	8	21		46		495
Total	484	11	3	19	33	6.4%	80	2.4	564	449	8	5	8	21	4.5%	46	2.2	495
West Leg Volumes																		
Approach	560	15	3	14	32		71		631	877	8	0	8	16		36		913
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	560	15	3	14	32	5.4%	71	2.2	631	877	8	0	8	16	1.8%	36	2.3	913
All Legs																		
Approach	2,047	47	21	51	119		267		2,314	2,660	30	9	38	77		177		2,837
Depart	2,047	47	21	51	119		267		2,314	2,660	30	9	38	77		177		2,837
Total	4,094	94	42	102	238	5.5%	534	2.2	4,628	5,320	60	18	76	154	2.8%	354	2.3	5,674

Existing Peak Hour Volumes - Classification Counts

5 Beaumont Avenue at I-10 WB Ramps

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	322	6	2	4	12	3.6%	25	2.1	347	267	2	1	4	7	2.6%	17	2.4	284
NT	228	4	4	0	8	3.4%	14	1.8	242	306	2	0	0	2	0.6%	3	1.5	309
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	316	3	3	3	9	2.8%	20	2.2	336	325	2	1	0	3	0.9%	5	1.7	330
SR	75	0	0	1	1	1.3%	3	3.0	78	126	0	0	2	2	1.6%	6	3.0	132
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	330	11	7	13	31	8.6%	70	2.3	400	613	8	1	19	28	4.4%	71	2.5	684
WT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WR	127	0	2	1	3	2.3%	7	2.3	134	119	1	2	5	8	6.3%	21	2.6	140
									1,537									1,879
North Leg Volumes																		
Approach	391	3	3	4	10		23		414	451	2	1	2	5		11		462
Depart	355	4	6	1	11		21		376	425	3	2	5	10		24		449
Total	746	7	9	5	21	2.7%	44	2.1	790	876	5	3	7	15	1.7%	35	2.3	911
South Leg Volumes																		
Approach	550	10	6	4	20		39		589	573	4	1	4	9		20		593
Depart	646	14	10	16	40		90		736	938	10	2	19	31		76		1,014
Total	1,196	24	16	20	60	4.8%	129	2.2	1,325	1,511	14	3	23	40	2.6%	96	2.4	1,607
East Leg Volumes																		
Approach	457	11	9	14	34		77		534	732	9	3	24	36		92		824
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	457	11	9	14	34	6.9%	77	2.3	534	732	9	3	24	36	4.7%	92	2.6	824
West Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	397	6	2	5	13		28		425	393	2	1	6	9		23		416
Total	397	6	2	5	13	3.2%	28	2.2	425	393	2	1	6	9	2.2%	23	2.6	416
All Legs																		
Approach	1,398	24	18	22	64		139		1,537	1,756	15	5	30	50		123		1,879
Depart	1,398	24	18	22	64		139		1,537	1,756	15	5	30	50		123		1,879
Total	2,796	48	36	44	128	4.4%	278	2.2	3,074	3,512	30	10	60	100	2.8%	246	2.5	3,758

Existing Peak Hour Volumes - Classification Counts

6 Potrero Boulevard at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	6	0	0	0	0	0.0%	0	0.0	6	50	0	0	0	0	0.0%	0	0.0	50
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	67	1	1	0	2	2.9%	4	2.0	71	58	1	0	0	1	1.7%	2	2.0	60
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	197	4	1	0	5	2.5%	8	1.6	205	140	2	1	0	3	2.1%	5	1.7	145
ER	13	0	0	0	0	0.0%	0	0.0	13	13	1	1	0	2	13.3%	4	2.0	17
WL	43	1	1	2	4	8.5%	10	2.5	53	37	0	0	0	0	0.0%	0	0.0	37
WT	159	2	1	1	4	2.5%	8	2.0	167	220	0	2	1	3	1.3%	7	2.3	227
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									515									536
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	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%	0	0.0		0
South Leg Volumes																		
Approach	73	1	1	0	2		4		77	108	1	0	0	1		2		110
Depart	56	1	1	2	4		10		66	50	1	1	0	2		4		54
Total	129	2	2	2	6	4.4%	14	2.3	143	158	2	1	0	3	1.9%	6	2.0	164
East Leg Volumes																		
Approach	202	3	2	3	8		18		220	257	0	2	1	3		7		264
Depart	264	5	2	0	7		12		276	198	3	1	0	4		7		205
Total	466	8	4	3	15	3.1%	30	2.0	496	455	3	3	1	7	1.5%	14	2.0	469
West Leg Volumes																		
Approach	210	4	1	0	5		8		218	153	3	2	0	5		9		162
Depart	165	2	1	1	4		8		173	270	0	2	1	3		7		277
Total	375	6	2	1	9	2.3%	16	1.8	391	423	3	4	1	8	1.9%	16	2.0	439
All Legs																		
Approach	485	8	4	3	15		30		515	518	4	4	1	9		18		536
Depart	485	8	4	3	15		30		515	518	4	4	1	9		18		536
Total	970	16	8	6	30	3.0%	60	2.0	1,030	1,036	8	8	2	18	1.7%	36	2.0	1,072

Existing Peak Hour Volumes - Classification Counts

7 I-10 EB Ramps at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE		
NL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
SL	207	1	3	1	5	2.4%	11	2.2	218	429	0	0	0	0.0%	0	0.0	429	
ST	1	0	0	0	0	0.0%	0	0.0	1	2	1	0	1	33.3%	2	2.0	4	
SR	36	1	0	0	1	2.7%	2	2.0	38	114	0	0	0	0.0%	0	0.0	114	
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
ET	360	7	1	0	8	2.2%	13	1.6	373	228	2	0	2	0.9%	3	1.5	231	
ER	322	6	0	1	7	2.1%	12	1.7	334	216	0	1	2	0.9%	5	2.5	221	
WL	218	1	0	1	2	0.9%	5	2.5	223	138	3	0	3	2.1%	5	1.7	143	
WT	359	5	0	1	6	1.6%	11	1.8	370	477	1	0	1	0.2%	2	2.0	479	
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0.0%	0	0.0	0	
									1,557								1,621	
North Leg Volumes																		
Approach	244	2	3	1	6		13		257	545	1	0	0	1		2		547
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	244	2	3	1	6	2.4%	13	2.2	257	545	1	0	0	1	0.2%	2	2.0	547
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	541	7	0	2	9		17		558	356	4	1	1	6		12		368
Total	541	7	0	2	9	1.6%	17	1.9	558	356	4	1	1	6	1.7%	12	2.0	368
East Leg Volumes																		
Approach	577	6	0	2	8		16		593	615	4	0	0	4		7		622
Depart	567	8	4	1	13		24		591	657	2	0	0	2		3		660
Total	1,144	14	4	3	21	1.8%	40	1.9	1,184	1,272	6	0	0	6	0.5%	10	1.7	1,282
West Leg Volumes																		
Approach	682	13	1	1	15		25		707	444	2	1	1	4		8		452
Depart	395	6	0	1	7		13		408	591	1	0	0	1		2		593
Total	1,077	19	1	2	22	2.0%	38	1.7	1,115	1,035	3	1	1	5	0.5%	10	2.0	1,045
All Legs																		
Approach	1,503	21	4	4	29		54		1,557	1,604	7	1	1	9		17		1,621
Depart	1,503	21	4	4	29		54		1,557	1,604	7	1	1	9		17		1,621
Total	3,006	42	8	8	58	1.9%	108	1.9	3,114	3,208	14	2	2	18	0.6%	34	1.9	3,242

Existing Peak Hour Volumes - Classification Counts

8 I-10 EWB Ramps at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume	Passenger Vehicles	Truck Volumes						Average PCE	Total PCE Volume
		2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE				2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %age	PCE		
NL	148	4	0	2	6	3.9%	12	2.0	160	322	4	0	0	4	1.2%	6	1.5	328
NT	2	0	0	0	0	0.0%	0	0.0	2	1	0	0	0	0	0.0%	0	0.0	1
NR	174	3	3	0	6	3.3%	11	1.8	185	238	0	1	0	1	0.4%	2	2.0	240
SL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
EL	123	1	0	1	2	1.6%	5	2.5	128	79	2	0	0	2	2.5%	3	1.5	82
ET	448	7	3	1	11	2.4%	20	1.8	468	584	0	0	0	0	0.0%	0	0.0	584
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	430	2	0	0	2	0.5%	3	1.5	433	297	0	0	0	0	0.0%	0	0.0	297
WR	539	3	0	0	3	0.6%	5	1.7	544	285	2	1	0	3	1.0%	5	1.7	290
									1,920									1,822
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	664	4	0	1	5		10		674	365	4	1	0	5		8		373
Total	664	4	0	1	5	0.7%	10	2.0	674	365	4	1	0	5	1.4%	8	1.6	373
South Leg Volumes																		
Approach	324	7	3	2	12		23		347	561	4	1	0	5		8		569
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	324	7	3	2	12	3.6%	23	1.9	347	561	4	1	0	5	0.9%	8	1.6	569
East Leg Volumes																		
Approach	969	5	0	0	5		8		977	582	2	1	0	3		5		587
Depart	622	10	6	1	17		31		653	822	0	1	0	1		2		824
Total	1,591	15	6	1	22	1.4%	39	1.8	1,630	1,404	2	2	0	4	0.3%	7	1.8	1,411
West Leg Volumes																		
Approach	571	8	3	2	13		25		596	663	2	0	0	2		3		666
Depart	578	6	0	2	8		15		593	619	4	0	0	4		6		625
Total	1,149	14	3	4	21	1.8%	40	1.9	1,189	1,282	6	0	0	6	0.5%	9	1.5	1,291
All Legs																		
Approach	1,864	20	6	4	30		56		1,920	1,806	8	2	0	10		16		1,822
Depart	1,864	20	6	4	30		56		1,920	1,806	8	2	0	10		16		1,822
Total	3,728	40	12	8	60	1.6%	112	1.9	3,840	3,612	16	4	0	20	0.6%	32	1.6	3,644







APPENDIX D

INTERSECTION ANALYSIS  
WORKSHEETS

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock AM\_LCS.vistro

Scenario 1 EX AM

Report File: K:\...\1 EX AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	NB Left	0.179	9.1	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.326	33.2	D
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.424	9.4	A
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.555	20.1	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	WB Right	0.488	28.2	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	0.189	8.9	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.567	18.0	B
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.553	17.2	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.179

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	76	20	2	17	38	97	48	29	24	3	62	14
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]	76	20	2	17	38	97	48	29	24	3	62	14
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	26	7	1	6	13	33	16	10	8	1	21	5
Total Analysis Volume [veh/h]	104	27	3	23	52	133	66	40	33	4	85	19
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	589	641	731	595	649	743	586	637	726	581	646
Degree of Utilization, x	0.18	0.04	0.00	0.04	0.08	0.18	0.11	0.06	0.05	0.01	0.16

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.64	0.13	0.01	0.12	0.26	0.65	0.38	0.20	0.14	0.02	0.57
95th-Percentile Queue Length [ft]	15.94	3.30	0.31	3.01	6.51	16.23	9.47	5.01	3.57	0.52	14.27
Approach Delay [s/veh]	9.76			8.68			8.96			9.32	
Approach LOS	A			A			A			A	
Intersection Delay [s/veh]	9.11										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	33.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.326

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	12	665	167	74	43	23
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	665	167	74	43	23
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	234	59	26	15	8
Total Analysis Volume [veh/h]	17	938	236	104	61	32
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.33	0.04
d_M, Delay for Movement [s/veh]	7.97	0.00	0.00	0.00	33.24	9.97
Movement LOS	A	A	A	A	D	A
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	1.34	0.13
95th-Percentile Queue Length [ft/ln]	1.05	0.00	0.00	0.00	33.40	3.31
d_A, Approach Delay [s/veh]	0.14		0.00		25.23	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	1.79					
Intersection LOS	D					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.424

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	226	2	6	283	15	19	2	19	3	1	5
Total Analysis Volume [veh/h]	17	905	8	24	1130	61	75	7	77	11	4	20
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	56	0	10	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	65	65	3	65	65	11	11
g / C, Green / Cycle	0.02	0.72	0.72	0.03	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.24	0.24	0.01	0.32	0.32	0.10	0.02
s, saturation flow rate [veh/h]	1810	1900	1894	1810	1900	1866	1616	1681
c, Capacity [veh/h]	42	1364	1360	55	1377	1352	250	252
d1, Uniform Delay [s]	43.32	4.72	4.72	42.88	4.98	4.99	38.54	35.69
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.01	0.66	0.67	5.38	1.01	1.03	2.66	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.40	0.34	0.34	0.44	0.44	0.44	0.64	0.14
d, Delay for Lane Group [s/veh]	49.33	5.38	5.38	48.25	5.99	6.01	41.20	35.94
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.44	2.75	2.74	0.60	3.87	3.82	3.56	0.70
50th-Percentile Queue Length [ft/ln]	11.01	68.71	68.52	15.04	96.84	95.43	88.91	17.56
95th-Percentile Queue Length [veh/ln]	0.79	4.95	4.93	1.08	6.97	6.87	6.40	1.26
95th-Percentile Queue Length [ft/ln]	19.81	123.68	123.33	27.07	174.31	171.78	160.04	31.61

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.33	5.38	5.38	48.25	6.00	6.01	41.20	41.20	41.20	35.94	35.94	35.94
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.19			6.84			41.20			35.94		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	9.35											
Intersection LOS	A											
Intersection V/C	0.424											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.736			2.840			1.834			1.752		
Crosswalk LOS	B			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]	1156			1156			444			444		
d_b, Bicycle Delay [s]	8.02			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.327			2.562			1.822			1.617		
Bicycle LOS	B			B			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	20.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.555

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	503	458	106	616	0	87	0	544	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	128	116	27	156	0	22	0	138	0	0	0
Total Analysis Volume [veh/h]	0	510	465	108	625	0	88	0	552	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	11	46	0	44	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	51	51	7	61	21	21	
g / C, Green / Cycle	0.56	0.56	0.08	0.68	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.30	0.06	0.17	0.19	0.20	
s, saturation flow rate [veh/h]	1900	1626	1810	3618	1664	1615	
c, Capacity [veh/h]	1065	911	137	2461	384	373	
d1, Uniform Delay [s]	11.70	12.42	40.90	5.56	33.08	33.10	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.42	2.25	9.72	0.25	5.14	5.36	
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	0.46	0.53	0.79	0.25	0.84	0.85	
d, Delay for Lane Group [s/veh]	13.12	14.67	50.62	5.81	38.22	38.46	
Lane Group LOS	B	B	D	A	D	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.72	6.19	2.69	2.00	7.14	6.98	
50th-Percentile Queue Length [ft/ln]	142.94	154.83	67.31	50.10	178.61	174.49	
95th-Percentile Queue Length [veh/ln]	9.64	10.27	4.85	3.61	11.53	11.31	
95th-Percentile Queue Length [ft/ln]	240.97	256.87	121.16	90.19	288.20	282.81	

**Movement, Approach, & Intersection Results**

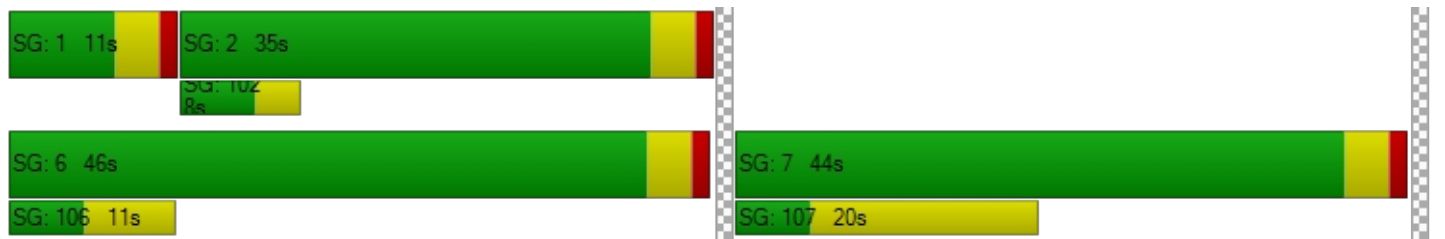
d_M, Delay for Movement [s/veh]	0.00	13.19	14.67	50.62	5.81	0.00	38.22	0.00	38.36	0.00	0.00	0.00
Movement LOS		B	B	D	A		D		D			
d_A, Approach Delay [s/veh]		13.89		12.41			38.34			0.00		
Approach LOS		B		B			D			A		
d_I, Intersection Delay [s/veh]	20.09											
Intersection LOS	C											
Intersection V/C	0.555											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.657	2.561	2.028	1.984
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	933	0	0
d_b, Bicycle Delay [s]	19.34	12.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.364	2.164	5.188	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	28.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	92	64	0	0	89	21	0	0	0	106	0	36
Total Analysis Volume [veh/h]	368	257	0	0	357	83	0	0	0	425	0	142
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	39	51	0	0	12	0	0	0	0	0	39	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	65	40	40		17	17
g / C, Green / Cycle	0.23	0.72	0.45	0.45		0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.20	0.07	0.12	0.12		0.16	0.16
s, saturation flow rate [veh/h]	1810	3618	1900	1781		1810	1704
c, Capacity [veh/h]	414	2595	844	792		350	330
d1, Uniform Delay [s]	33.62	3.87	15.71	15.85		34.88	34.89
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.70	0.08	0.75	0.87		5.17	5.51
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	0.89	0.10	0.26	0.28		0.83	0.83
d, Delay for Lane Group [s/veh]	40.32	3.94	16.46	16.72		40.05	40.41
Lane Group LOS	D	A	B	B		D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	8.35	0.60	2.91	2.95		6.52	6.18
50th-Percentile Queue Length [ft/ln]	208.74	15.10	72.72	73.72		162.95	154.46
95th-Percentile Queue Length [veh/ln]	13.09	1.09	5.24	5.31		10.70	10.25
95th-Percentile Queue Length [ft/ln]	327.21	27.18	130.90	132.70		267.62	256.37

**Movement, Approach, & Intersection Results**

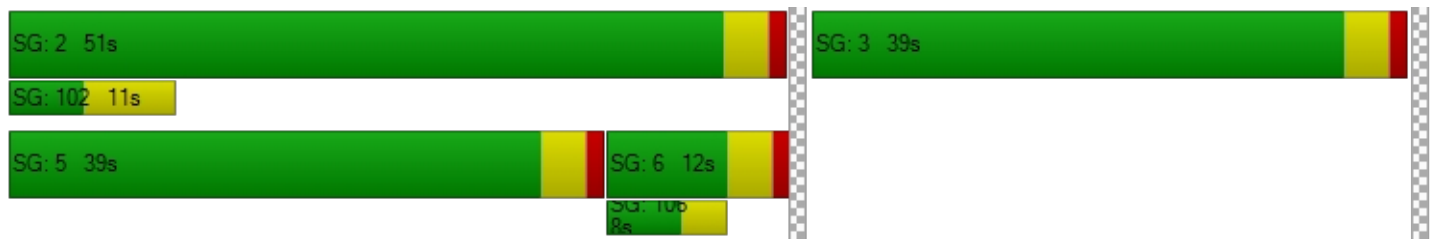
d_M, Delay for Movement [s/veh]	40.32	3.94	0.00	0.00	16.56	16.72	0.00	0.00	0.00	40.16	0.00	40.41
Movement LOS	D	A			B	B				D		D
d_A, Approach Delay [s/veh]	25.36				16.59		0.00		40.22			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	28.16											
Intersection LOS	C											
Intersection V/C	0.488											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	35.0	35.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	16.81	16.81	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.545	2.306	1.865	1.993
Crosswalk LOS	B	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1044	178	0	0
d_b, Bicycle Delay [s]	10.27	37.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.075	1.923	4.132	5.068
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.189

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	6	71	205	13	53	167
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	71	205	13	53	167
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	22	64	4	17	52
Total Analysis Volume [veh/h]	7	89	256	16	66	208
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	587	723	679	679	781	618	675	675	675
Degree of Utilization, x	0.01	0.12	0.19	0.19	0.02	0.11	0.10	0.10	0.10

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.04	0.42	0.69	0.69	0.06	0.36	0.34	0.34	0.34
95th-Percentile Queue Length [ft]	0.91	10.47	17.27	17.27	1.57	8.93	8.54	8.54	8.54
Approach Delay [s/veh]	8.42		9.13			8.78			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.87								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.567

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	218	1	38	0	373	334	223	370	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	0	0	218	1	38	0	373	334	223	370	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	56	0	10	0	97	87	58	96	0
Total Analysis Volume [veh/h]	0	0	0	226	1	39	0	387	346	231	383	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	23	0	0	67	0	0	67	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		26	56	56	56
g / C, Green / Cycle		0.29	0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate		0.15	0.42	0.31	0.20
s, saturation flow rate [veh/h]		1778	1754	735	1900
c, Capacity [veh/h]		521	1084	332	1174
d1, Uniform Delay [s]		26.44	11.28	28.40	8.22
k, delay calibration		0.50	0.50	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		3.54	3.39	2.64	0.16
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.51	0.68	0.70	0.33
d, Delay for Lane Group [s/veh]		29.98	14.67	31.04	8.38
Lane Group LOS		C	B	C	A
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		5.14	9.40	4.81	3.25
50th-Percentile Queue Length [ft/ln]		128.52	235.09	120.22	81.14
95th-Percentile Queue Length [veh/ln]		8.86	14.43	8.41	5.84
95th-Percentile Queue Length [ft/ln]		221.49	360.82	210.13	146.05



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	29.98	29.98	29.98	0.00	14.67	14.67	31.04	8.38	0.00
Movement LOS				C	C	C		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			29.98			14.67			16.91		
Approach LOS	A			C			B			B		
d_I, Intersection Delay [s/veh]	18.05											
Intersection LOS	B											
Intersection V/C	0.567											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.317	1.684	2.414	2.340
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	422	1400	1400
d_b, Bicycle Delay [s]	45.00	28.01	4.05	4.05
I_b,int, Bicycle LOS Score for Intersection	4.132	1.999	2.769	2.573
Bicycle LOS	D	A	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	17.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.553

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔						↔↑			↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	42	0	49	0	0	0	34	124	0	0	115	144
Total Analysis Volume [veh/h]	169	0	196	0	0	0	135	495	0	0	458	576
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	27	0	0	0	0	0	14	63	0	0	49	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	13		8	69	56	56
g / C, Green / Cycle	0.15	0.15		0.09	0.76	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.09	0.12		0.07	0.26	0.24	0.36
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	270	241		171	1447	1184	1006
d1, Uniform Delay [s]	35.91	37.06		39.89	3.46	8.43	9.94
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.37	6.48		7.97	0.65	0.96	2.37
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	0.63	0.81		0.79	0.34	0.39	0.57
d, Delay for Lane Group [s/veh]	38.28	43.54		47.87	4.10	9.38	12.31
Lane Group LOS	D	D		D	A	A	B
Critical Lane Group	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.61	4.54		3.26	2.30	4.25	6.49
50th-Percentile Queue Length [ft/ln]	90.21	113.50		81.52	57.52	106.13	162.33
95th-Percentile Queue Length [veh/ln]	6.50	8.03		5.87	4.14	7.62	10.67
95th-Percentile Queue Length [ft/ln]	162.38	200.86		146.74	103.53	190.61	266.81

**Movement, Approach, & Intersection Results**

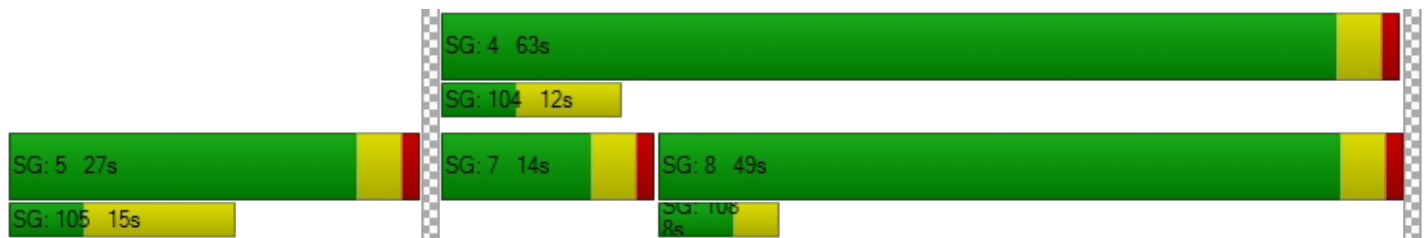
d_M, Delay for Movement [s/veh]	38.28	0.00	43.54	0.00	0.00	0.00	47.87	4.10	0.00	0.00	9.38	12.31
Movement LOS	D		D				D	A			A	B
d_A, Approach Delay [s/veh]	41.10			0.00			13.48			11.01		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	17.19											
Intersection LOS	B											
Intersection V/C	0.553											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.894	2.118	2.350	2.502
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1311	1000
d_b, Bicycle Delay [s]	45.00	45.00	5.34	11.25
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.599	3.266
Bicycle LOS	D	D	B	C

**Sequence**

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



## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock PM\_LCS.vistro

Scenario 1 EX PM

Report File: K:\...\1 EX PM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	EB Left	0.251	9.1	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.294	22.5	C
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.579	9.9	A
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.631	22.5	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.546	28.0	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	NB Left	0.118	8.6	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.592	23.5	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.507	19.6	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.251

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	24	23	7	9	71	29	127	56	63	9	36	28
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]	24	23	7	9	71	29	127	56	63	9	36	28
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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]	7	7	2	3	22	9	39	17	19	3	11	9
Total Analysis Volume [veh/h]	30	28	9	11	88	36	157	69	78	11	45	35
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	571	619	704	581	632	720	625	684	789	588	676
Degree of Utilization, x	0.05	0.05	0.01	0.02	0.14	0.05	0.25	0.10	0.10	0.02	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.17	0.14	0.04	0.06	0.48	0.16	0.99	0.34	0.33	0.06	0.40
95th-Percentile Queue Length [ft]	4.15	3.55	0.97	1.45	12.05	3.94	24.74	8.38	8.21	1.43	10.02
Approach Delay [s/veh]	8.92			8.93			9.30			8.77	
Approach LOS	A			A			A			A	
Intersection Delay [s/veh]	9.09										
Intersection LOS	A										



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	22.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.294

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	13	520	274	52	76	17
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	520	274	52	76	17
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	145	76	15	21	5
Total Analysis Volume [veh/h]	15	580	306	58	85	19
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.29	0.03
d_M, Delay for Movement [s/veh]	8.02	0.00	0.00	0.00	22.53	10.20
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	1.19	0.08
95th-Percentile Queue Length [ft/ln]	0.94	0.00	0.00	0.00	29.80	2.06
d_A, Approach Delay [s/veh]	0.20		0.00		20.28	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	C					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	203	5	6	440	12	23	1	12	2	2	7
Total Analysis Volume [veh/h]	19	811	19	24	1759	50	91	4	48	9	7	27
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	28	0	38	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	66	66	2	67	67	10	10
g / C, Green / Cycle	0.02	0.74	0.74	0.03	0.74	0.74	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.22	0.22	0.01	0.48	0.48	0.09	0.02
s, saturation flow rate [veh/h]	1810	1900	1885	1810	1900	1882	1624	1774
c, Capacity [veh/h]	38	1396	1385	47	1405	1392	238	237
d1, Uniform Delay [s]	43.58	4.05	4.05	43.29	5.83	5.87	39.14	36.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.68	0.55	0.55	8.53	2.29	2.36	2.44	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.30	0.30	0.51	0.64	0.65	0.60	0.18
d, Delay for Lane Group [s/veh]	53.26	4.60	4.60	51.81	8.12	8.23	41.58	37.25
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	2.20	2.18	0.63	7.15	7.20	3.20	0.88
50th-Percentile Queue Length [ft/ln]	12.93	55.01	54.62	15.82	178.72	179.95	80.06	22.07
95th-Percentile Queue Length [veh/ln]	0.93	3.96	3.93	1.14	11.53	11.60	5.76	1.59
95th-Percentile Queue Length [ft/ln]	23.27	99.02	98.32	28.48	288.35	289.95	144.10	39.73

**Movement, Approach, & Intersection Results**

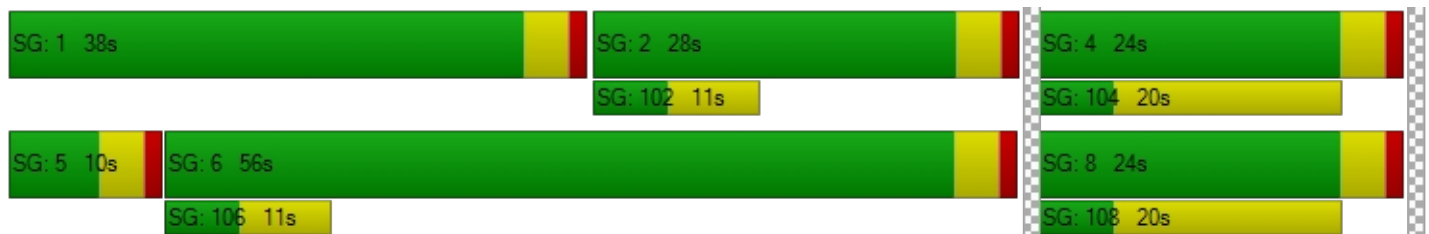
d_M, Delay for Movement [s/veh]	53.26	4.60	4.60	51.81	8.18	8.23	41.58	41.58	41.58	37.25	37.25	37.25
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	5.69			8.75			41.58			37.25		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	9.91											
Intersection LOS	A											
Intersection V/C	0.579											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.834			2.969			1.823			1.760		
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]	533			1156			444			444		
d_b, Bicycle Delay [s]	24.20			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.260			3.072			1.796			1.631		
Bicycle LOS	B			C			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	22.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.631

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↑			↵ ↑			↑↑					
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	466	414	80	964	0	107	0	805	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	123	109	21	255	0	28	0	213	0	0	0
Total Analysis Volume [veh/h]	0	493	438	85	1019	0	113	0	851	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	26	0	9	35	0	55	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	43	43	5	52	30	30	
g / C, Green / Cycle	0.47	0.47	0.06	0.57	0.34	0.34	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.29	0.05	0.28	0.29	0.30	
s, saturation flow rate [veh/h]	1900	1629	1810	3618	1657	1615	
c, Capacity [veh/h]	900	772	101	2076	559	545	
d1, Uniform Delay [s]	16.51	17.45	42.12	11.38	27.87	28.16	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.12	3.47	17.01	0.83	4.11	5.19	
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	0.52	0.60	0.85	0.49	0.86	0.88	
d, Delay for Lane Group [s/veh]	18.63	20.92	59.13	12.21	31.98	33.35	
Lane Group LOS	B	C	E	B	C	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.86	7.43	2.32	5.75	9.95	10.18	
50th-Percentile Queue Length [ft/ln]	171.46	185.83	58.09	143.67	248.77	254.62	
95th-Percentile Queue Length [veh/ln]	11.15	11.90	4.18	9.68	15.12	15.42	
95th-Percentile Queue Length [ft/ln]	278.83	297.61	104.57	241.95	378.11	385.46	

**Movement, Approach, & Intersection Results**

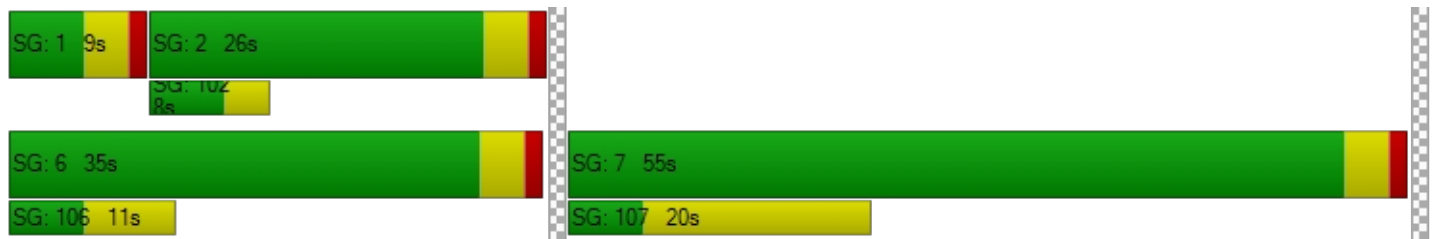
d_M, Delay for Movement [s/veh]	0.00	18.75	20.92	59.13	12.21	0.00	31.98	0.00	32.76	0.00	0.00	0.00
Movement LOS		B	C	E	B		C		C			
d_A, Approach Delay [s/veh]	19.77			15.83			32.67			0.00		
Approach LOS	B			B			C			A		
d_I, Intersection Delay [s/veh]	22.46											
Intersection LOS	C											
Intersection V/C	0.631											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.815	2.635	2.186	1.935
Crosswalk LOS	C	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	689	0	0
d_b, Bicycle Delay [s]	25.69	19.34	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.328	2.470	5.723	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.546

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵						↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	74	80	0	0	86	34	0	0	0	178	0	36
Total Analysis Volume [veh/h]	295	321	0	0	343	137	0	0	0	710	0	145
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	29	44	0	0	15	0	0	0	0	0	46	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	57	36	36		25	25
g / C, Green / Cycle	0.19	0.63	0.40	0.40		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.09	0.13	0.14		0.24	0.24
s, saturation flow rate [veh/h]	1810	3618	1900	1726		1810	1738
c, Capacity [veh/h]	337	2286	762	692		505	485
d1, Uniform Delay [s]	35.60	6.69	18.47	18.75		30.69	30.91
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.16	0.13	1.08	1.37		4.22	5.06
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	0.87	0.14	0.31	0.35		0.85	0.87
d, Delay for Lane Group [s/veh]	42.75	6.82	19.56	20.12		34.91	35.98
Lane Group LOS	D	A	B	C		C	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	6.83	1.15	3.55	3.63		9.17	9.16
50th-Percentile Queue Length [ft/ln]	170.64	28.82	88.67	90.77		229.15	229.11
95th-Percentile Queue Length [veh/ln]	11.11	2.08	6.38	6.54		14.13	14.13
95th-Percentile Queue Length [ft/ln]	277.75	51.88	159.60	163.39		353.28	353.23

**Movement, Approach, & Intersection Results**

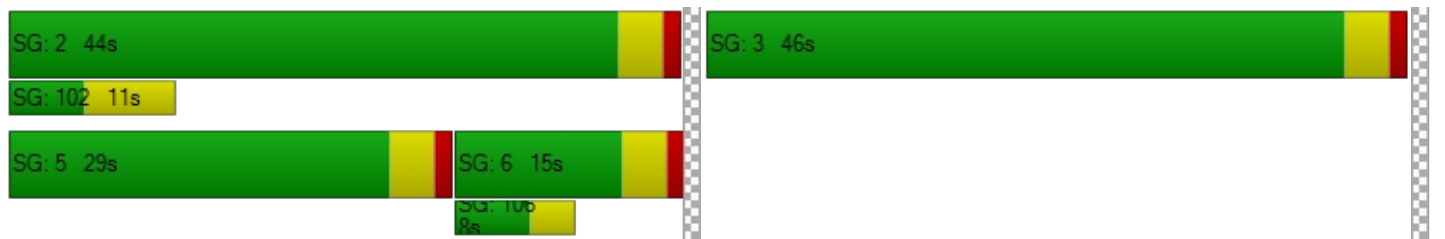
d_M, Delay for Movement [s/veh]	42.75	6.82	0.00	0.00	19.73	20.12	0.00	0.00	0.00	35.33	0.00	35.98
Movement LOS	D	A			B	C				D		D
d_A, Approach Delay [s/veh]	24.03				19.84		0.00		35.44			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	28.00											
Intersection LOS	C											
Intersection V/C	0.546											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	42.0	42.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	12.80	12.80	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.585	2.321	1.846	2.133
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	889	244	0	0
d_b, Bicycle Delay [s]	13.89	34.67	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.068	1.956	4.132	5.543
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.118

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	50	60	145	17	37	227
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	60	145	17	37	227
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	16	39	5	10	61
Total Analysis Volume [veh/h]	54	64	155	18	40	243
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	605	752	668	668	767	629	690	690	690
Degree of Utilization, x	0.09	0.09	0.12	0.12	0.02	0.06	0.12	0.12	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.29	0.28	0.39	0.39	0.07	0.20	0.40	0.40	0.40
95th-Percentile Queue Length [ft]	7.32	6.96	9.80	9.80	1.80	5.08	9.93	9.93	9.93
Approach Delay [s/veh]	8.53		8.66			8.64			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.63								
Intersection LOS	A								



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	23.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.592

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	429	4	114	0	231	221	143	479	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	0	0	429	4	114	0	231	221	143	479	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	112	1	30	0	60	58	37	125	0
Total Analysis Volume [veh/h]	0	0	0	447	4	119	0	241	230	149	499	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	48	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		44	38	38	38
g / C, Green / Cycle		0.49	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate		0.32	0.27	0.16	0.26
s, saturation flow rate [veh/h]		1766	1749	937	1900
c, Capacity [veh/h]		868	734	245	797
d1, Uniform Delay [s]		17.18	20.74	36.33	20.56
k, delay calibration		0.50	0.31	0.11	0.18
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		3.87	2.68	2.43	1.34
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.66	0.64	0.61	0.63
d, Delay for Lane Group [s/veh]		21.05	23.42	38.77	21.90
Lane Group LOS		C	C	D	C
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		9.23	8.02	3.30	8.15
50th-Percentile Queue Length [ft/ln]		230.73	200.53	82.49	203.66
95th-Percentile Queue Length [veh/ln]		14.21	12.67	5.94	12.83
95th-Percentile Queue Length [ft/ln]		355.29	316.65	148.48	320.68

**Movement, Approach, & Intersection Results**

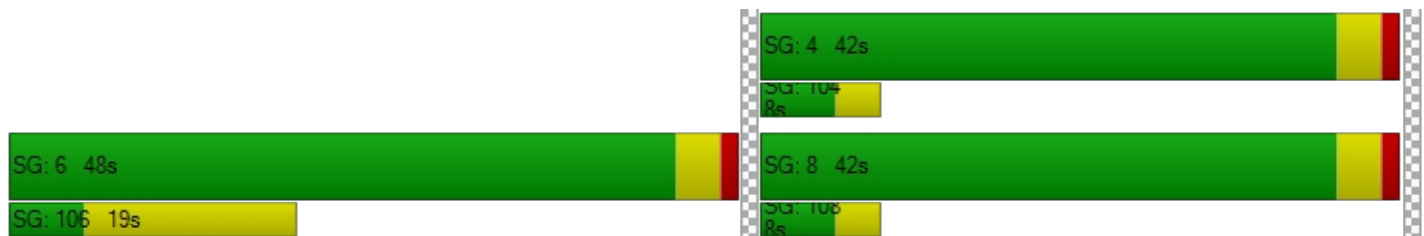
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	21.05	21.05	21.05	0.00	23.42	23.42	38.77	21.90	0.00
Movement LOS				C	C	C		C	C	D	C	
d_A, Approach Delay [s/veh]	0.00			21.05			23.42			25.78		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	23.53											
Intersection LOS	C											
Intersection V/C	0.592											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.010	1.981	2.398	2.376
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	978	844	844
d_b, Bicycle Delay [s]	45.00	11.76	15.02	15.02
I_b,int, Bicycle LOS Score for Intersection	4.132	2.500	2.337	2.629
Bicycle LOS	D	B	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	19.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔						↔↑			↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
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]	85	0	62	0	0	0	21	151	0	0	77	75
Total Analysis Volume [veh/h]	340	0	249	0	0	0	85	606	0	0	308	301
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	0	0	0	0	0	14	53	0	0	39	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20		6	62	53	53
g / C, Green / Cycle	0.22	0.22		0.06	0.69	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.19	0.15		0.05	0.32	0.16	0.19
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	396	354		112	1315	1113	946
d1, Uniform Delay [s]	33.80	32.46		41.53	6.26	9.22	9.50
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.47	2.57		9.85	1.16	0.62	0.89
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	0.86	0.70		0.76	0.46	0.28	0.32
d, Delay for Lane Group [s/veh]	39.28	35.03		51.38	7.43	9.84	10.38
Lane Group LOS	D	D		D	A	A	B
Critical Lane Group	Yes	No		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.57	5.15		2.14	4.70	2.93	2.99
50th-Percentile Queue Length [ft/ln]	189.32	128.85		53.55	117.50	73.34	74.82
95th-Percentile Queue Length [veh/ln]	12.09	8.88		3.86	8.26	5.28	5.39
95th-Percentile Queue Length [ft/ln]	302.15	221.92		96.40	206.38	132.01	134.68

**Movement, Approach, & Intersection Results**

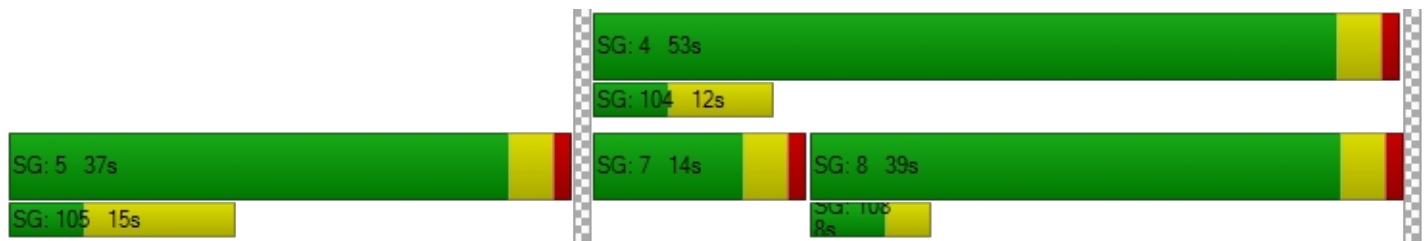
d_M, Delay for Movement [s/veh]	39.28	0.00	35.03	0.00	0.00	0.00	51.38	7.43	0.00	0.00	9.84	10.38
Movement LOS	D		D				D	A			A	B
d_A, Approach Delay [s/veh]	37.48			0.00			12.83			10.11		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	19.64											
Intersection LOS	B											
Intersection V/C	0.507											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.004	1.801	2.377	2.418
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1089	778
d_b, Bicycle Delay [s]	45.00	45.00	9.34	16.81
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.700	2.564
Bicycle LOS	D	D	B	B

**Sequence**

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





## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock AM\_LCS.vistro

Scenario 2 EX WP AM

Report File: K:\...\2 EX WP AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	NB Left	0.248	9.6	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.374	36.2	E
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.426	9.4	A
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.557	20.2	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	WB Right	0.492	29.8	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	WB Left	0.193	9.1	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	0.591	18.4	B
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.560	17.6	B
9	Potrero Boulevard at W 4th Street	All-way stop	HCM 6th Edition	SB Left	0.029	7.6	A
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.019	9.1	A
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.017	8.7	A

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	76	20	2	17	38	97	48	29	24	3	62	14
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	32	15	6	0	0	13	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]	76	20	2	17	38	129	63	35	24	3	75	14
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	26	7	1	6	13	44	22	12	8	1	26	5
Total Analysis Volume [veh/h]	104	27	3	23	52	177	86	48	33	4	103	19
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	564	612	694	577	628	715	567	615	698	562	621
Degree of Utilization, x	0.18	0.04	0.00	0.04	0.08	0.25	0.15	0.08	0.05	0.01	0.20

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.67	0.14	0.01	0.12	0.27	0.97	0.53	0.25	0.15	0.02	0.73
95th-Percentile Queue Length [ft]	16.77	3.46	0.33	3.11	6.75	24.35	13.29	6.33	3.72	0.54	18.14
Approach Delay [s/veh]	10.13			9.28			9.45			9.89	
Approach LOS	B			A			A			A	
Intersection Delay [s/veh]	9.60										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.374

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	12	665	167	74	43	23
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]	4	0	0	9	5	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	665	167	83	48	24
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	234	59	29	17	8
Total Analysis Volume [veh/h]	23	938	236	117	68	34
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.37	0.05
d_M, Delay for Movement [s/veh]	8.02	0.00	0.00	0.00	36.23	10.03
Movement LOS	A	A	A	A	E	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	1.61	0.14
95th-Percentile Queue Length [ft/ln]	1.44	0.00	0.00	0.00	40.32	3.56
d_A, Approach Delay [s/veh]	0.19		0.00		27.50	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	2.11					
Intersection LOS	E					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.426

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	2	1	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	869	8	23	1085	61	73	7	74	11	4	19
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	226	2	6	283	16	19	2	19	3	1	5
Total Analysis Volume [veh/h]	17	905	8	24	1130	64	76	7	77	11	4	20
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	56	0	10	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	65	65	3	65	65	11	11
g / C, Green / Cycle	0.02	0.72	0.72	0.03	0.73	0.73	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.24	0.24	0.01	0.32	0.32	0.10	0.02
s, saturation flow rate [veh/h]	1810	1900	1894	1810	1900	1864	1616	1680
c, Capacity [veh/h]	42	1363	1358	55	1376	1350	252	253
d1, Uniform Delay [s]	43.32	4.74	4.74	42.88	5.02	5.02	38.51	35.64
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.01	0.67	0.67	5.38	1.01	1.04	2.66	0.25
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.40	0.34	0.34	0.44	0.44	0.44	0.64	0.14
d, Delay for Lane Group [s/veh]	49.33	5.41	5.41	48.25	6.03	6.06	41.17	35.88
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.44	2.76	2.75	0.60	3.91	3.85	3.58	0.70
50th-Percentile Queue Length [ft/ln]	11.01	68.98	68.79	15.04	97.66	96.18	89.45	17.54
95th-Percentile Queue Length [veh/ln]	0.79	4.97	4.95	1.08	7.03	6.93	6.44	1.26
95th-Percentile Queue Length [ft/ln]	19.81	124.17	123.82	27.07	175.79	173.13	161.00	31.58



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.33	5.41	5.41	48.25	6.04	6.06	41.17	41.17	41.17	35.88	35.88	35.88
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.21			6.88			41.17			35.88		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	9.39											
Intersection LOS	A											
Intersection V/C	0.426											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.736			2.842			1.836			1.752		
Crosswalk LOS	B			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]	1156			1156			444			444		
d_b, Bicycle Delay [s]	8.02			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.327			2.564			1.824			1.617		
Bicycle LOS	B			B			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	20.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.557

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↑			↵ ↑			↑↑					
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	1	3	2	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	503	459	109	618	0	87	0	544	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	128	116	28	157	0	22	0	138	0	0	0
Total Analysis Volume [veh/h]	0	510	466	111	627	0	88	0	552	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	35	0	11	46	0	44	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	50	50	7	61	21	21	
g / C, Green / Cycle	0.56	0.56	0.08	0.68	0.23	0.23	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.30	0.06	0.17	0.19	0.20	
s, saturation flow rate [veh/h]	1900	1626	1810	3618	1664	1615	
c, Capacity [veh/h]	1061	908	140	2461	384	373	
d1, Uniform Delay [s]	11.80	12.53	40.81	5.56	33.08	33.10	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.44	2.28	9.63	0.25	5.14	5.36	
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	0.46	0.54	0.79	0.25	0.84	0.85	
d, Delay for Lane Group [s/veh]	13.24	14.81	50.44	5.81	38.22	38.46	
Lane Group LOS	B	B	D	A	D	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	5.76	6.24	2.76	2.01	7.14	6.98	
50th-Percentile Queue Length [ft/ln]	143.98	156.01	69.03	50.30	178.61	174.49	
95th-Percentile Queue Length [veh/ln]	9.69	10.34	4.97	3.62	11.53	11.31	
95th-Percentile Queue Length [ft/ln]	242.37	258.43	124.25	90.54	288.20	282.81	

**Movement, Approach, & Intersection Results**

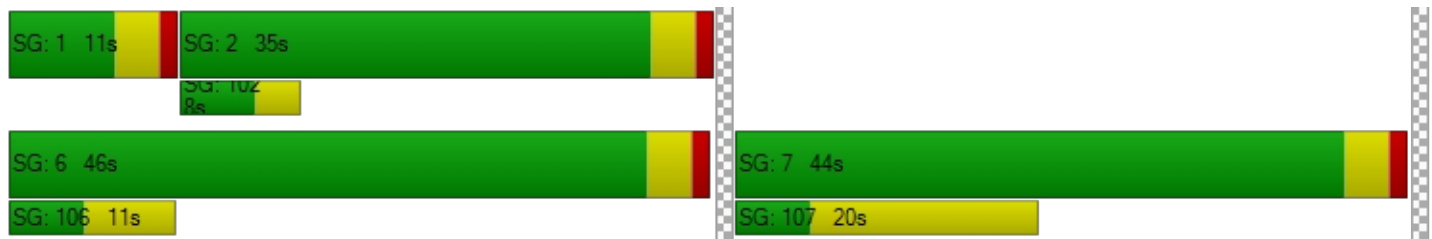
d_M, Delay for Movement [s/veh]	0.00	13.30	14.81	50.44	5.81	0.00	38.22	0.00	38.36	0.00	0.00	0.00
Movement LOS		B	B	D	A		D		D			
d_A, Approach Delay [s/veh]		14.02		12.52			38.34			0.00		
Approach LOS		B		B			D			A		
d_I, Intersection Delay [s/veh]	20.16											
Intersection LOS	C											
Intersection V/C	0.557											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.658	2.562	2.028	1.987
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	689	933	0	0
d_b, Bicycle Delay [s]	19.34	12.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.365	2.168	5.188	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	29.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.492

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	3	0	0	0	0	2	0	5
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]	347	242	0	0	339	78	0	0	0	402	0	139
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	92	64	0	0	90	21	0	0	0	107	0	37
Total Analysis Volume [veh/h]	368	257	0	0	360	83	0	0	0	427	0	148
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	51	63	0	0	12	0	0	0	0	0	27	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	65	40	40		17	17
g / C, Green / Cycle	0.23	0.72	0.45	0.45		0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.20	0.07	0.12	0.12		0.16	0.16
s, saturation flow rate [veh/h]	1810	3618	1900	1782		1810	1701
c, Capacity [veh/h]	416	2603	846	794		347	326
d1, Uniform Delay [s]	33.52	3.81	15.67	15.81		35.16	35.17
k, delay calibration	0.11	0.50	0.50	0.50		0.18	0.18
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.43	0.08	0.75	0.88		9.45	10.13
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	0.89	0.10	0.26	0.28		0.85	0.86
d, Delay for Lane Group [s/veh]	39.95	3.89	16.42	16.68		44.61	45.31
Lane Group LOS	D	A	B	B		D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	8.31	0.60	2.93	2.97		7.05	6.70
50th-Percentile Queue Length [ft/ln]	207.80	14.95	73.15	74.16		176.16	167.44
95th-Percentile Queue Length [veh/ln]	13.04	1.08	5.27	5.34		11.40	10.94
95th-Percentile Queue Length [ft/ln]	326.01	26.90	131.67	133.48		285.00	273.55



**Movement, Approach, & Intersection Results**

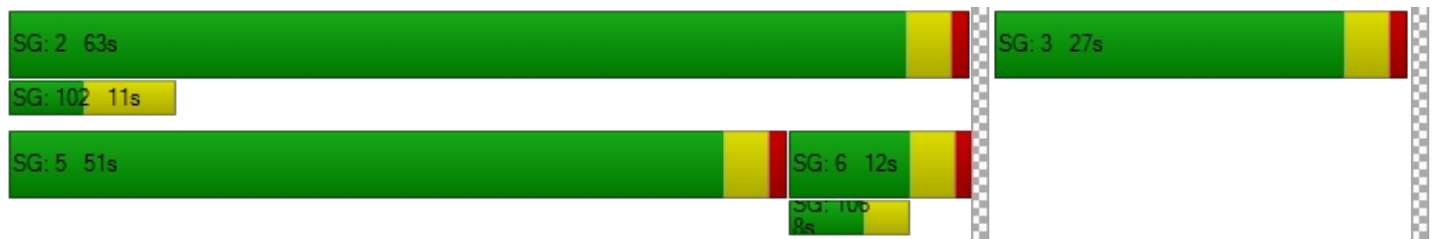
d_M, Delay for Movement [s/veh]	39.95	3.89	0.00	0.00	16.52	16.68	0.00	0.00	0.00	44.83	0.00	45.31
Movement LOS	D	A			B	B				D		D
d_A, Approach Delay [s/veh]	25.12				16.55		0.00		44.95			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	29.75											
Intersection LOS	C											
Intersection V/C	0.492											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	23.0	23.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	24.94	24.94	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.561	2.324	1.865	1.997
Crosswalk LOS	B	B	A	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1311	178	0	0
d_b, Bicycle Delay [s]	5.34	37.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.075	1.925	4.132	5.081
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.193

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	6	71	205	13	53	167
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	13	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	84	205	13	81	167
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	26	64	4	25	52
Total Analysis Volume [veh/h]	7	105	256	16	101	208
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	580	711	662	662	760	611	667	667	667
Degree of Utilization, x	0.01	0.15	0.19	0.19	0.02	0.17	0.10	0.10	0.10

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.04	0.52	0.71	0.71	0.06	0.59	0.35	0.35	0.35
95th-Percentile Queue Length [ft]	0.92	12.90	17.77	17.77	1.61	14.73	8.66	8.66	8.66
Approach Delay [s/veh]	8.66		9.32			9.06			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	9.10								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.591

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	218	1	38	0	373	334	223	370	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	26	0	13	0	0	2	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	0	0	218	1	64	0	386	334	223	372	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	56	0	17	0	100	87	58	96	0
Total Analysis Volume [veh/h]	0	0	0	226	1	66	0	400	346	231	385	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	26	0	0	64	0	0	64	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		26	56	56	56
g / C, Green / Cycle		0.29	0.63	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate		0.17	0.42	0.32	0.20
s, saturation flow rate [veh/h]		1762	1756	726	1900
c, Capacity [veh/h]		501	1101	330	1191
d1, Uniform Delay [s]		27.64	10.90	28.42	7.87
k, delay calibration		0.50	0.50	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.92	3.36	2.71	0.16
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.58	0.68	0.70	0.32
d, Delay for Lane Group [s/veh]		32.56	14.27	31.13	8.02
Lane Group LOS		C	B	C	A
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		5.95	9.43	4.84	3.18
50th-Percentile Queue Length [ft/ln]		148.74	235.64	120.94	79.45
95th-Percentile Queue Length [veh/ln]		9.95	14.46	8.44	5.72
95th-Percentile Queue Length [ft/ln]		248.75	361.51	211.11	143.01

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	32.56	32.56	32.56	0.00	14.27	14.27	31.13	8.02	0.00
Movement LOS				C	C	C		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			32.56				14.27		16.69		
Approach LOS	A			C				B		B		
d_I, Intersection Delay [s/veh]	18.41											
Intersection LOS	B											
Intersection V/C	0.591											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.317	1.711	2.424	2.345
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	489	1333	1333
d_b, Bicycle Delay [s]	45.00	25.69	5.00	5.00
I_b,int, Bicycle LOS Score for Intersection	4.132	2.043	2.791	2.576
Bicycle LOS	D	B	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.560

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy					
Approach	Northbound						Southbound			Eastbound			Westbound		
Lane Configuration															
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00			
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1			
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			
Speed [mph]	30.00			30.00			30.00			30.00					
Grade [%]	0.00			0.00			0.00			0.00					
Curb Present	No						No			No					
Crosswalk	Yes			Yes			Yes			Yes					

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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	12	1	0	0	2	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]	160	0	185	0	0	0	140	469	0	0	435	544
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	42	0	49	0	0	0	37	124	0	0	115	144
Total Analysis Volume [veh/h]	169	0	196	0	0	0	148	496	0	0	460	576
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	27	0	0	0	0	0	14	63	0	0	49	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13	13		9	69	55	55
g / C, Green / Cycle	0.15	0.15		0.10	0.76	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.09	0.12		0.08	0.26	0.24	0.36
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	270	241		185	1447	1169	994
d1, Uniform Delay [s]	35.91	37.06		39.52	3.46	8.79	10.35
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.37	6.48		7.85	0.65	1.00	2.47
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	0.63	0.81		0.80	0.34	0.39	0.58
d, Delay for Lane Group [s/veh]	38.28	43.54		47.37	4.10	9.78	12.82
Lane Group LOS	D	D		D	A	A	B
Critical Lane Group	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.61	4.54		3.56	2.31	4.40	6.69
50th-Percentile Queue Length [ft/ln]	90.21	113.50		88.90	57.68	109.88	167.19
95th-Percentile Queue Length [veh/ln]	6.50	8.03		6.40	4.15	7.83	10.93
95th-Percentile Queue Length [ft/ln]	162.38	200.86		160.03	103.82	195.84	273.22

**Movement, Approach, & Intersection Results**

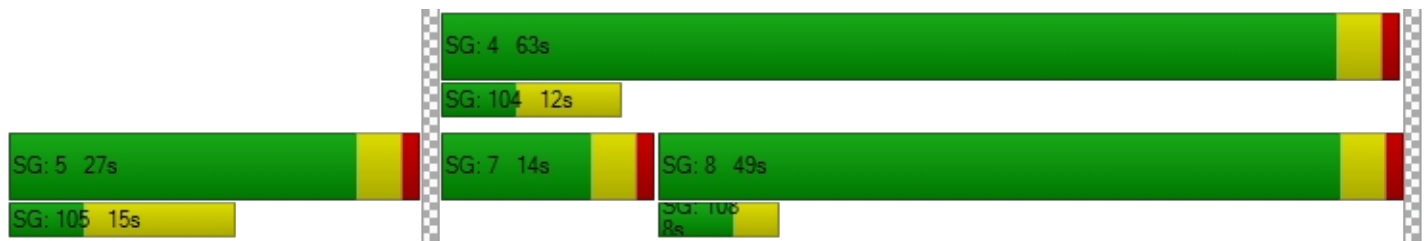
d_M, Delay for Movement [s/veh]	38.28	0.00	43.54	0.00	0.00	0.00	47.37	4.10	0.00	0.00	9.78	12.82
Movement LOS	D		D				D	A			A	B
d_A, Approach Delay [s/veh]	41.10			0.00			14.05			11.47		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	17.57											
Intersection LOS	B											
Intersection V/C	0.560											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.894	2.131	2.355	2.503
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1311	1000
d_b, Bicycle Delay [s]	45.00	45.00	5.34	11.25
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.622	3.269
Bicycle LOS	D	D	B	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T			T T T			T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
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	17	0	0	13	4	0	0	45	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	0	0	17	0	0	13	4	0	0	45	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	4	0	0	3	1	0	0	11	0
Total Analysis Volume [veh/h]	0	0	0	17	0	0	13	4	0	0	45	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	766	766	766	697	773	773	773	701	776	777	785	785	785
Degree of Utilization, x	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.03	0.03

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.06	0.02	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	1.87	0.00	0.00	0.00	1.42	0.39	0.00	0.00	2.21	2.21
Approach Delay [s/veh]	0.00			7.99				7.80			7.42		
Approach LOS	A			A				A			A		
Intersection Delay [s/veh]	7.63												
Intersection LOS	A												

**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	13	0	28	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	13	0	28	0	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	0	7	0	4
Total Analysis Volume [veh/h]	0	13	0	28	0	17
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	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	9.06
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.44
d_A, Approach Delay [s/veh]	0.00		0.00		9.06	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.65					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type: Two-way stop  
 Analysis Method: HCM 6th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 8.7  
 Level Of Service: A  
 Volume to Capacity (v/c): 0.017

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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]	17	0	0	0	0	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	0	0	0	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	0	0	11
Total Analysis Volume [veh/h]	17	0	0	0	0	45
Pedestrian Volume [ped/h]	0		0		0	



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.47	7.28	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67		3.64		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.38					
Intersection LOS	A					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock PM\_LCS.vistro

Scenario 2 EX WP PM

Report File: K:\...\2 EX WP PM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	EB Left	0.325	9.6	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.335	23.8	C
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.581	10.0	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.635	23.4	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.549	28.0	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	NB Left	0.130	8.8	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.616	24.2	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.508	20.3	C
9	Potrero Boulevard at W 4th Street	All-way stop	HCM 6th Edition	SB Left	0.059	7.9	A
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.045	9.1	A
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.041	8.7	A

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.325

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	24	23	7	9	71	29	127	56	63	9	36	28
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	16	35	16	0	0	7	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]	24	23	7	9	71	45	162	72	63	9	43	28
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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]	7	7	2	3	22	14	50	22	19	3	13	9
Total Analysis Volume [veh/h]	30	28	9	11	88	56	200	89	78	11	53	35
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	551	596	674	563	611	692	617	674	774	572	652
Degree of Utilization, x	0.05	0.05	0.01	0.02	0.14	0.08	0.32	0.13	0.10	0.02	0.14

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.17	0.15	0.04	0.06	0.50	0.26	1.40	0.45	0.34	0.06	0.47
95th-Percentile Queue Length [ft]	4.31	3.69	1.02	1.49	12.53	6.58	35.11	11.36	8.38	1.47	11.64
Approach Delay [s/veh]	9.17			9.12			10.00			9.09	
Approach LOS	A			A			A			A	
Intersection Delay [s/veh]	9.59										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	23.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.335

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	13	520	274	52	76	17
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]	2	0	0	5	10	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	520	274	57	86	23
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	145	76	16	24	6
Total Analysis Volume [veh/h]	17	580	306	64	96	26
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.34	0.04
d_M, Delay for Movement [s/veh]	8.04	0.00	0.00	0.00	23.80	10.27
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	1.43	0.11
95th-Percentile Queue Length [ft/ln]	1.08	0.00	0.00	0.00	35.72	2.85
d_A, Approach Delay [s/veh]	0.23		0.00		20.92	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.47					
Intersection LOS	C					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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	1	2	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]	18	780	18	23	1692	49	90	4	46	9	7	26
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	203	5	6	440	13	23	1	12	2	2	7
Total Analysis Volume [veh/h]	19	811	19	24	1759	51	94	4	48	9	7	27
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	28	0	37	56	0	0	25	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	66	66	2	66	66	10	10
g / C, Green / Cycle	0.02	0.73	0.73	0.03	0.74	0.74	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.22	0.22	0.01	0.48	0.48	0.09	0.02
s, saturation flow rate [veh/h]	1810	1900	1885	1810	1900	1881	1619	1773
c, Capacity [veh/h]	38	1392	1380	47	1401	1387	241	241
d1, Uniform Delay [s]	43.58	4.13	4.13	43.29	5.94	5.99	39.02	36.69
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.71	0.55	0.56	8.55	2.32	2.39	2.43	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.30	0.30	0.52	0.65	0.65	0.60	0.18
d, Delay for Lane Group [s/veh]	53.29	4.68	4.68	51.84	8.26	8.38	41.45	37.04
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	2.23	2.22	0.63	7.27	7.32	3.27	0.88
50th-Percentile Queue Length [ft/ln]	12.94	55.83	55.43	15.83	181.70	182.98	81.65	22.00
95th-Percentile Queue Length [veh/ln]	0.93	4.02	3.99	1.14	11.69	11.76	5.88	1.58
95th-Percentile Queue Length [ft/ln]	23.28	100.49	99.78	28.49	292.24	293.91	146.96	39.59

**Movement, Approach, & Intersection Results**

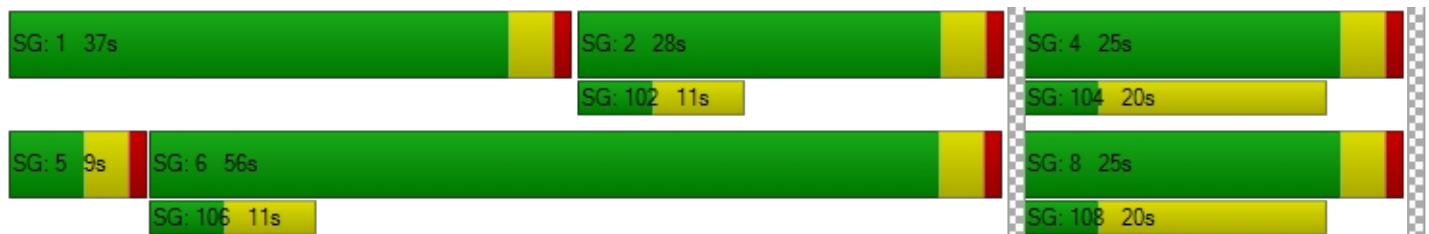
d_M, Delay for Movement [s/veh]	53.29	4.68	4.68	51.84	8.32	8.38	41.45	41.45	41.45	37.04	37.04	37.04
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	5.77			8.89			41.45			37.04		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.04											
Intersection LOS	B											
Intersection V/C	0.581											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.834			2.974			1.825			1.760		
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]	533			1156			467			467		
d_b, Bicycle Delay [s]	24.20			8.02			26.45			26.45		
I_b,int, Bicycle LOS Score for Intersection	2.260			3.073			1.801			1.631		
Bicycle LOS	B			C			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↑			↵ ↑			↑↑					
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	2	6	1	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	466	416	86	965	0	107	0	805	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	123	110	23	255	0	28	0	213	0	0	0
Total Analysis Volume [veh/h]	0	493	440	91	1020	0	113	0	851	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	33	0	10	43	0	47	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	42	42	6	52	30	30	
g / C, Green / Cycle	0.47	0.47	0.06	0.58	0.34	0.34	
(v / s)_i Volume / Saturation Flow Rate	0.25	0.29	0.05	0.28	0.29	0.30	
s, saturation flow rate [veh/h]	1900	1629	1810	3618	1657	1615	
c, Capacity [veh/h]	885	759	117	2080	557	543	
d1, Uniform Delay [s]	17.01	17.99	41.47	11.33	27.97	28.25	
k, delay calibration	0.50	0.50	0.11	0.50	0.17	0.18	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.24	3.70	10.64	0.83	6.49	8.24	
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	0.53	0.61	0.78	0.49	0.87	0.89	
d, Delay for Lane Group [s/veh]	19.25	21.69	52.11	12.16	34.45	36.49	
Lane Group LOS	B	C	D	B	C	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	7.01	7.61	2.31	5.73	10.34	10.67	
50th-Percentile Queue Length [ft/ln]	175.27	190.26	57.75	143.16	258.59	266.70	
95th-Percentile Queue Length [veh/ln]	11.35	12.13	4.16	9.65	15.62	16.02	
95th-Percentile Queue Length [ft/ln]	283.83	303.37	103.94	241.27	390.45	400.61	

**Movement, Approach, & Intersection Results**

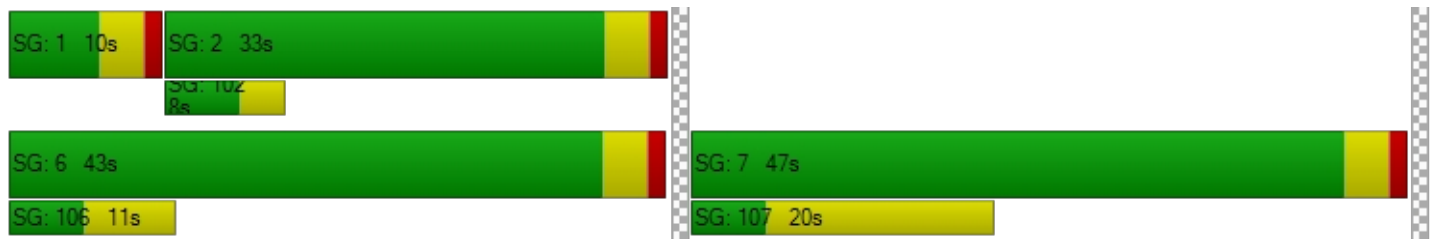
d_M, Delay for Movement [s/veh]	0.00	19.39	21.69	52.11	12.16	0.00	34.45	0.00	35.61	0.00	0.00	0.00
Movement LOS		B	C	D	B		C		D			
d_A, Approach Delay [s/veh]	20.47			15.43			35.47			0.00		
Approach LOS	C			B			D			A		
d_I, Intersection Delay [s/veh]	23.42											
Intersection LOS	C											
Intersection V/C	0.635											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.816	2.636	2.186	1.943
Crosswalk LOS	C	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	867	0	0
d_b, Bicycle Delay [s]	20.67	14.45	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.329	2.476	5.723	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.549

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	6	0	0	0	0	1	0	3
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]	284	309	0	0	336	132	0	0	0	685	0	143
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	74	80	0	0	87	34	0	0	0	178	0	37
Total Analysis Volume [veh/h]	295	321	0	0	349	137	0	0	0	711	0	148
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	29	44	0	0	15	0	0	0	0	0	46	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	57	36	36		25	25
g / C, Green / Cycle	0.19	0.63	0.40	0.40		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.16	0.09	0.13	0.14		0.24	0.25
s, saturation flow rate [veh/h]	1810	3618	1900	1728		1810	1737
c, Capacity [veh/h]	337	2281	760	691		508	487
d1, Uniform Delay [s]	35.60	6.74	18.59	18.87		30.62	30.85
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.16	0.13	1.11	1.41		4.19	5.11
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	0.87	0.14	0.32	0.35		0.85	0.87
d, Delay for Lane Group [s/veh]	42.75	6.87	19.70	20.27		34.81	35.96
Lane Group LOS	D	A	B	C		C	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	6.83	1.16	3.61	3.69		9.20	9.21
50th-Percentile Queue Length [ft/ln]	170.64	28.97	90.23	92.37		229.93	230.26
95th-Percentile Queue Length [veh/ln]	11.11	2.09	6.50	6.65		14.17	14.19
95th-Percentile Queue Length [ft/ln]	277.75	52.15	162.41	166.26		354.27	354.69

**Movement, Approach, & Intersection Results**

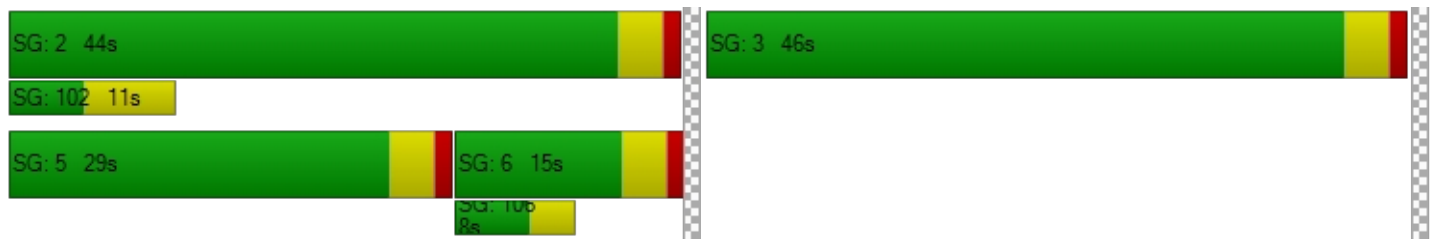
d_M, Delay for Movement [s/veh]	42.75	6.87	0.00	0.00	19.88	20.27	0.00	0.00	0.00	35.26	0.00	35.96
Movement LOS	D	A			B	C				D		D
d_A, Approach Delay [s/veh]	24.05				19.99		0.00		35.38			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	28.01											
Intersection LOS	C											
Intersection V/C	0.549											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	42.0	42.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	12.80	12.80	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.586	2.323	1.846	2.135
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	889	244	0	0
d_b, Bicycle Delay [s]	13.89	34.67	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.068	1.961	4.132	5.550
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.130

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	50	60	145	17	37	227
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	31	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	91	145	17	50	227
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	24	39	5	13	61
Total Analysis Volume [veh/h]	54	97	155	18	54	243
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	601	745	652	652	747	618	676	676	676
Degree of Utilization, x	0.09	0.13	0.12	0.12	0.02	0.09	0.12	0.12	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.29	0.45	0.40	0.40	0.07	0.29	0.41	0.41	0.41
95th-Percentile Queue Length [ft]	7.37	11.16	10.07	10.07	1.85	7.15	10.15	10.15	10.15
Approach Delay [s/veh]	8.62		8.83			8.81			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.77								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	24.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⊕			⊥			⊥		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	429	4	114	0	231	221	143	479	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	12	0	31	0	0	1	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	0	0	429	4	126	0	262	221	143	480	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	112	1	33	0	68	58	37	125	0
Total Analysis Volume [veh/h]	0	0	0	447	4	131	0	273	230	149	500	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	48	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		44	38	38	38
g / C, Green / Cycle		0.49	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate		0.33	0.29	0.16	0.26
s, saturation flow rate [veh/h]		1762	1758	910	1900
c, Capacity [veh/h]		865	739	227	799
d1, Uniform Delay [s]		17.43	21.17	37.83	20.51
k, delay calibration		0.50	0.35	0.11	0.18
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.17	3.51	3.21	1.35
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.67	0.68	0.66	0.63
d, Delay for Lane Group [s/veh]		21.60	24.69	41.03	21.86
Lane Group LOS		C	C	D	C
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		9.58	8.88	3.42	8.16
50th-Percentile Queue Length [ft/ln]		239.47	222.05	85.47	203.97
95th-Percentile Queue Length [veh/ln]		14.65	13.77	6.15	12.84
95th-Percentile Queue Length [ft/ln]		366.36	344.24	153.85	321.08

**Movement, Approach, & Intersection Results**

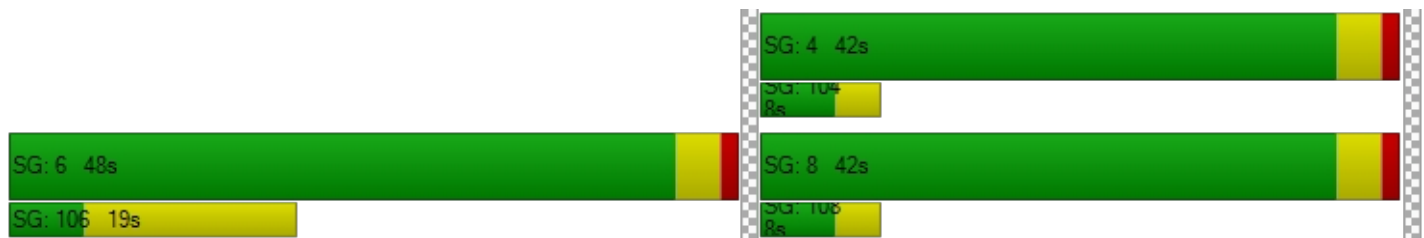
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	21.60	21.60	21.60	0.00	24.69	24.69	41.03	21.86	0.00
Movement LOS				C	C	C		C	C	D	C	
d_A, Approach Delay [s/veh]	0.00			21.60			24.69			26.26		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	24.24											
Intersection LOS	C											
Intersection V/C	0.616											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.010	1.992	2.409	2.387
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	978	844	844
d_b, Bicycle Delay [s]	45.00	11.76	15.02	15.02
I_b,int, Bicycle LOS Score for Intersection	4.132	2.520	2.390	2.630
Bicycle LOS	D	B	B	B

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	20.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy					
Approach	Northbound						Southbound			Eastbound			Westbound		
Lane Configuration															
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00			
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1			
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			
Speed [mph]	30.00			30.00			30.00			30.00					
Grade [%]	0.00			0.00			0.00			0.00					
Curb Present	No						No			No					
Crosswalk	Yes			Yes			Yes			Yes					

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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	29	2	0	0	1	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]	328	0	240	0	0	0	111	586	0	0	298	290
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
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]	85	0	62	0	0	0	29	152	0	0	77	75
Total Analysis Volume [veh/h]	340	0	249	0	0	0	115	608	0	0	309	301
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	0	0	0	0	0	14	53	0	0	39	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20		7	62	51	51
g / C, Green / Cycle	0.22	0.22		0.08	0.69	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.19	0.15		0.06	0.32	0.16	0.19
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	398	355		149	1314	1073	912
d1, Uniform Delay [s]	33.74	32.39		40.47	6.30	10.18	10.48
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.34	2.53		8.21	1.17	0.68	0.97
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	0.86	0.70		0.77	0.46	0.29	0.33
d, Delay for Lane Group [s/veh]	39.07	34.92		48.68	7.48	10.86	11.45
Lane Group LOS	D	C		D	A	B	B
Critical Lane Group	Yes	No		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.56	5.15		2.80	4.73	3.14	3.19
50th-Percentile Queue Length [ft/ln]	188.92	128.72		70.09	118.27	78.59	79.87
95th-Percentile Queue Length [veh/ln]	12.07	8.87		5.05	8.30	5.66	5.75
95th-Percentile Queue Length [ft/ln]	301.63	221.75		126.17	207.45	141.46	143.77

**Movement, Approach, & Intersection Results**

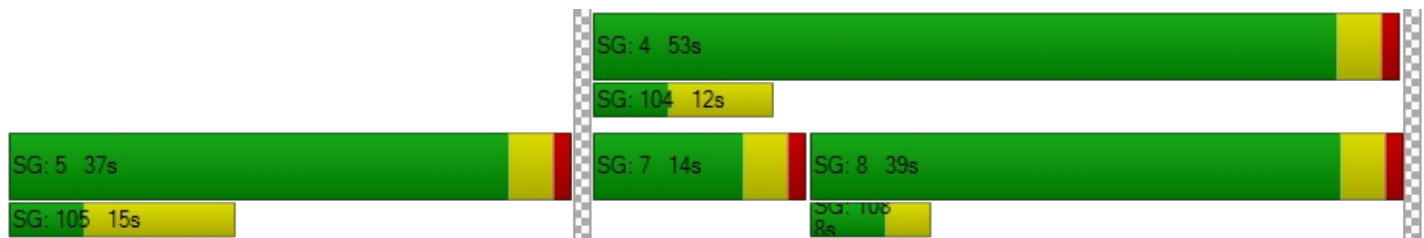
d_M, Delay for Movement [s/veh]	39.07	0.00	34.92	0.00	0.00	0.00	48.68	7.48	0.00	0.00	10.86	11.45
Movement LOS	D		C				D	A			B	B
d_A, Approach Delay [s/veh]	37.32			0.00			14.03			11.15		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	20.25											
Intersection LOS	C											
Intersection V/C	0.508											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.004	1.830	2.388	2.418
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1089	778
d_b, Bicycle Delay [s]	45.00	45.00	9.34	16.81
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.753	2.566
Bicycle LOS	D	D	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			↵↵↵			↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
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	41	0	0	31	11	0	0	23	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	0	0	41	0	0	31	11	0	0	23	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	10	0	0	8	3	0	0	6	0
Total Analysis Volume [veh/h]	0	0	0	41	0	0	31	11	0	0	23	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	756	756	756	696	770	770	770	696	771	771	764	764	764
Degree of Utilization, x	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.02	0.02

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.14	0.04	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	4.69	0.00	0.00	0.00	3.49	1.09	0.00	0.00	1.15	1.15
Approach Delay [s/veh]	0.00			8.20				7.94			7.49		
Approach LOS	A			A				A			A		
Intersection Delay [s/veh]	7.94												
Intersection LOS	A												

**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.045

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	31	0	13	0	41
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	31	0	13	0	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	0	3	0	10
Total Analysis Volume [veh/h]	0	31	0	13	0	41
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	0.00	0.00	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	9.12
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.14
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	3.52
d_A, Approach Delay [s/veh]	0.00		0.00		9.12	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.40					
Intersection LOS	A					



**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type: Two-way stop  
 Analysis Method: HCM 6th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 8.7  
 Level Of Service: A  
 Volume to Capacity (v/c): 0.041

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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]	42	0	0	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	0	0	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	0	0	0	6
Total Analysis Volume [veh/h]	42	0	0	0	0	23
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
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	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.71	8.51	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.24	3.24	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.71		3.62		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.63					
Intersection LOS	A					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock AM\_LCS.vistro

Scenario 3 OY AM

Report File: K:\...\3 OY AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	NB Left	0.189	9.2	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.360	36.8	E
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.441	9.6	A
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.577	20.5	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.508	29.5	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	0.197	9.0	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	0.590	18.2	B
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.575	17.6	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.189

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	76	20	2	17	38	97	48	29	24	3	62	14
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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]	79	21	2	18	40	101	50	30	25	3	64	15
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	27	7	1	6	14	35	17	10	9	1	22	5
Total Analysis Volume [veh/h]	108	29	3	25	55	139	69	41	34	4	88	21
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	583	634	723	590	643	734	580	630	717	576	641
Degree of Utilization, x	0.19	0.05	0.00	0.04	0.09	0.19	0.12	0.07	0.05	0.01	0.17

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.67	0.14	0.01	0.13	0.28	0.69	0.40	0.21	0.15	0.02	0.61
95th-Percentile Queue Length [ft]	16.86	3.59	0.31	3.31	6.99	17.34	10.07	5.21	3.73	0.52	15.25
Approach Delay [s/veh]	9.88			8.80			9.06			9.46	
Approach LOS	A			A			A			A	
Intersection Delay [s/veh]	9.23										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	36.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.360

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	12	665	167	74	43	23
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	12	692	174	77	45	24
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	244	61	27	16	8
Total Analysis Volume [veh/h]	17	976	245	109	63	34
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.36	0.05
d_M, Delay for Movement [s/veh]	8.00	0.00	0.00	0.00	36.77	10.06
Movement LOS	A	A	A	A	E	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	1.52	0.14
95th-Percentile Queue Length [ft/ln]	1.06	0.00	0.00	0.00	38.11	3.58
d_A, Approach Delay [s/veh]	0.14		0.00		27.41	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	1.94					
Intersection LOS	E					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.441

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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]	17	904	8	24	1128	61	75	7	77	11	4	20
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	235	2	6	294	16	20	2	20	3	1	5
Total Analysis Volume [veh/h]	18	942	8	25	1175	64	78	7	80	11	4	21
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	56	0	10	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	64	64	3	65	65	11	11
g / C, Green / Cycle	0.02	0.71	0.71	0.03	0.72	0.72	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.25	0.25	0.01	0.33	0.33	0.10	0.02
s, saturation flow rate [veh/h]	1810	1900	1894	1810	1900	1866	1614	1678
c, Capacity [veh/h]	44	1355	1351	57	1367	1343	257	258
d1, Uniform Delay [s]	43.25	4.95	4.95	42.82	5.27	5.27	38.35	35.39
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.87	0.72	0.72	5.33	1.10	1.13	2.68	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.41	0.35	0.35	0.44	0.46	0.46	0.64	0.14
d, Delay for Lane Group [s/veh]	49.13	5.67	5.67	48.15	6.37	6.40	41.04	35.63
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.46	2.98	2.97	0.62	4.23	4.18	3.69	0.72
50th-Percentile Queue Length [ft/ln]	11.58	74.50	74.30	15.62	105.86	104.39	92.16	17.97
95th-Percentile Queue Length [veh/ln]	0.83	5.36	5.35	1.12	7.61	7.52	6.64	1.29
95th-Percentile Queue Length [ft/ln]	20.85	134.10	133.73	28.11	190.23	187.91	165.89	32.35

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.13	5.67	5.67	48.15	6.38	6.40	41.04	41.04	41.04	35.63	35.63	35.63
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.47			7.21			41.04			35.63		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	9.63											
Intersection LOS	A											
Intersection V/C	0.441											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.753			2.862			1.839			1.753		
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]	1156			1156			444			444		
d_b, Bicycle Delay [s]	8.02			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.358			2.602			1.832			1.619		
Bicycle LOS	B			B			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	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	523	476	110	641	0	90	0	566	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	133	121	28	163	0	23	0	144	0	0	0
Total Analysis Volume [veh/h]	0	530	483	112	650	0	91	0	574	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	34	0	12	46	0	44	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	50	50	7	61	21	21	
g / C, Green / Cycle	0.55	0.55	0.08	0.67	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.31	0.06	0.18	0.20	0.20	
s, saturation flow rate [veh/h]	1900	1626	1810	3618	1663	1615	
c, Capacity [veh/h]	1044	894	142	2433	397	385	
d1, Uniform Delay [s]	12.44	13.25	40.75	5.88	32.71	32.74	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.61	2.60	9.39	0.27	5.11	5.36	
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	0.48	0.57	0.79	0.27	0.85	0.85	
d, Delay for Lane Group [s/veh]	14.05	15.85	50.13	6.15	37.82	38.10	
Lane Group LOS	B	B	D	A	D	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.23	6.78	2.78	2.18	7.39	7.24	
50th-Percentile Queue Length [ft/ln]	155.79	169.62	69.41	54.57	184.86	180.89	
95th-Percentile Queue Length [veh/ln]	10.33	11.06	5.00	3.93	11.85	11.65	
95th-Percentile Queue Length [ft/ln]	258.14	276.41	124.95	98.23	296.35	291.17	

**Movement, Approach, & Intersection Results**

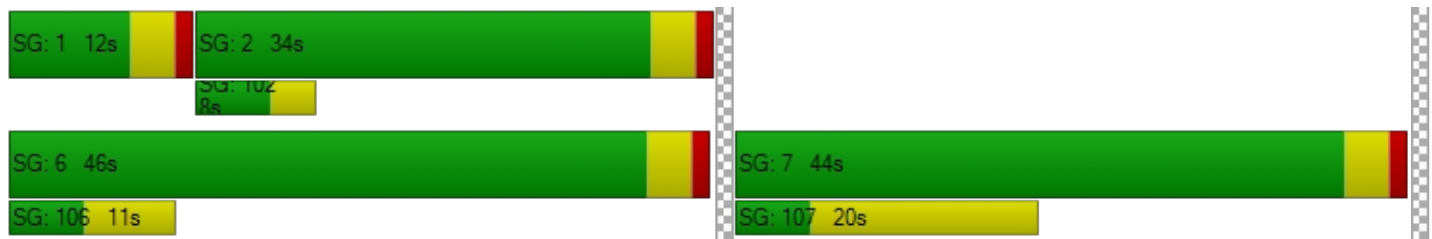
d_M, Delay for Movement [s/veh]	0.00	14.13	15.85	50.13	6.15	0.00	37.82	0.00	37.98	0.00	0.00	0.00
Movement LOS		B	B	D	A		D		D			
d_A, Approach Delay [s/veh]		14.95		12.62			37.96		0.00			
Approach LOS		B		B			D		A			
d_I, Intersection Delay [s/veh]	20.49											
Intersection LOS	C											
Intersection V/C	0.577											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.678	2.571	2.041	2.005
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	933	0	0
d_b, Bicycle Delay [s]	20.00	12.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.395	2.188	5.230	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	29.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400
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	252	0	0	349	81	0	0	0	416	0	139
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	96	67	0	0	93	21	0	0	0	110	0	37
Total Analysis Volume [veh/h]	383	268	0	0	370	86	0	0	0	442	0	148
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	36	60	0	0	24	0	0	0	0	0	30	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	64	39	39		18	18
g / C, Green / Cycle	0.24	0.71	0.43	0.43		0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.21	0.07	0.12	0.13		0.17	0.17
s, saturation flow rate [veh/h]	1810	3618	1900	1781		1810	1704
c, Capacity [veh/h]	428	2579	820	769		359	338
d1, Uniform Delay [s]	33.26	4.01	16.51	16.66		34.75	34.77
k, delay calibration	0.16	0.50	0.50	0.50		0.14	0.14
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	9.26	0.08	0.84	0.98		6.95	7.50
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	0.89	0.10	0.28	0.30		0.85	0.85
d, Delay for Lane Group [s/veh]	42.53	4.09	17.35	17.65		41.70	42.27
Lane Group LOS	D	A	B	B		D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	8.98	0.65	3.12	3.16		6.96	6.62
50th-Percentile Queue Length [ft/ln]	224.46	16.21	77.95	79.08		173.89	165.44
95th-Percentile Queue Length [veh/ln]	13.89	1.17	5.61	5.69		11.28	10.84
95th-Percentile Queue Length [ft/ln]	347.32	29.18	140.32	142.34		282.02	270.91

**Movement, Approach, & Intersection Results**

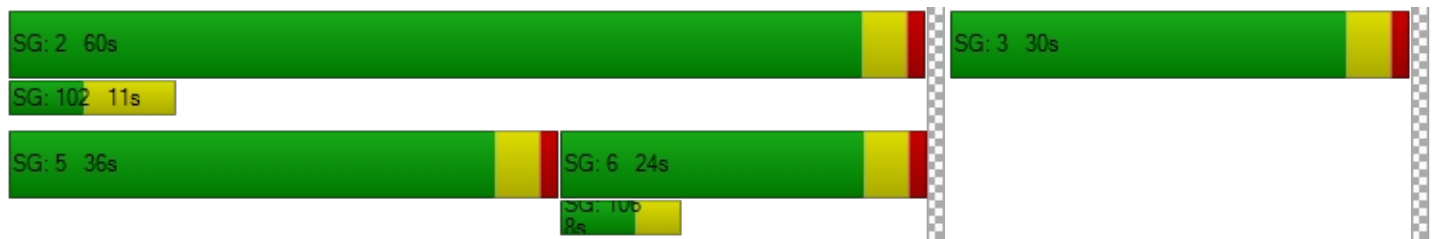
d_M, Delay for Movement [s/veh]	42.53	4.09	0.00	0.00	17.47	17.65	0.00	0.00	0.00	41.88	0.00	42.27
Movement LOS	D	A			B	B				D		D
d_A, Approach Delay [s/veh]	26.70				17.50		0.00		41.97			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	29.54											
Intersection LOS	C											
Intersection V/C	0.508											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	26.0	26.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.76	22.76	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.568	2.326	1.882	2.004
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	444	0	0
d_b, Bicycle Delay [s]	6.42	27.22	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.097	1.936	4.132	5.106
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.197

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	6	71	205	13	53	167
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	74	213	14	55	174
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	23	66	4	17	54
Total Analysis Volume [veh/h]	7	92	266	17	69	217
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	583	717	674	674	775	614	671	671	671
Degree of Utilization, x	0.01	0.13	0.20	0.20	0.02	0.11	0.11	0.11	0.11

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.04	0.44	0.73	0.73	0.07	0.38	0.36	0.36	0.36
95th-Percentile Queue Length [ft]	0.91	10.99	18.24	18.24	1.68	9.44	9.02	9.02	9.02
Approach Delay [s/veh]	8.50		9.24			8.85			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.96								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.590

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⊕			⊥			⊥		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	218	1	38	0	373	334	223	370	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	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	0	0	227	1	40	0	388	347	232	385	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	59	0	10	0	101	90	60	100	0
Total Analysis Volume [veh/h]	0	0	0	235	1	41	0	402	360	240	399	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	28	0	0	62	0	0	62	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		24	58	58	58
g / C, Green / Cycle		0.27	0.64	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate		0.16	0.43	0.34	0.21
s, saturation flow rate [veh/h]		1778	1754	715	1900
c, Capacity [veh/h]		478	1127	320	1221
d1, Uniform Delay [s]		28.52	10.17	29.89	7.28
k, delay calibration		0.50	0.50	0.11	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		5.07	3.26	3.61	0.15
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.58	0.68	0.75	0.33
d, Delay for Lane Group [s/veh]		33.58	13.43	33.50	7.43
Lane Group LOS		C	B	C	A
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		5.73	9.14	5.27	3.10
50th-Percentile Queue Length [ft/ln]		143.34	228.62	131.73	77.43
95th-Percentile Queue Length [veh/ln]		9.66	14.10	9.03	5.58
95th-Percentile Queue Length [ft/ln]		241.52	352.61	225.85	139.38



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	33.58	33.58	33.58	0.00	13.43	13.43	33.50	7.43	0.00
Movement LOS				C	C	C		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			33.58				13.43		17.22		
Approach LOS	A			C				B		B		
d_I, Intersection Delay [s/veh]	18.20											
Intersection LOS	B											
Intersection V/C	0.590											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.352	1.695	2.426	2.356
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	533	1289	1289
d_b, Bicycle Delay [s]	45.00	24.20	5.69	5.69
I_b,int, Bicycle LOS Score for Intersection	4.132	2.017	2.817	2.614
Bicycle LOS	D	B	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy					
Approach	Northbound						Southbound			Eastbound			Westbound		
Lane Configuration															
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right			
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00			
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1			
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00			
Speed [mph]	30.00			30.00			30.00			30.00					
Grade [%]	0.00			0.00			0.00			0.00					
Curb Present	No						No			No					
Crosswalk	Yes			Yes			Yes			Yes					

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
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]	166	0	192	0	0	0	133	487	0	0	450	566
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	44	0	51	0	0	0	35	129	0	0	119	150
Total Analysis Volume [veh/h]	176	0	203	0	0	0	141	515	0	0	476	599
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	27	0	0	0	0	0	14	63	0	0	49	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	14		9	68	55	55
g / C, Green / Cycle	0.15	0.15		0.10	0.76	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.10	0.13		0.08	0.27	0.25	0.37
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	278	248		177	1439	1169	994
d1, Uniform Delay [s]	35.70	36.87		39.72	3.63	8.89	10.59
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.38	6.52		7.92	0.70	1.05	2.71
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	0.63	0.82		0.80	0.36	0.41	0.60
d, Delay for Lane Group [s/veh]	38.08	43.38		47.65	4.33	9.95	13.30
Lane Group LOS	D	D		D	A	A	B
Critical Lane Group	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.75	4.70		3.40	2.51	4.61	7.14
50th-Percentile Queue Length [ft/ln]	93.76	117.43		84.95	62.73	115.13	178.48
95th-Percentile Queue Length [veh/ln]	6.75	8.25		6.12	4.52	8.12	11.52
95th-Percentile Queue Length [ft/ln]	168.77	206.30		152.90	112.92	203.12	288.03

**Movement, Approach, & Intersection Results**

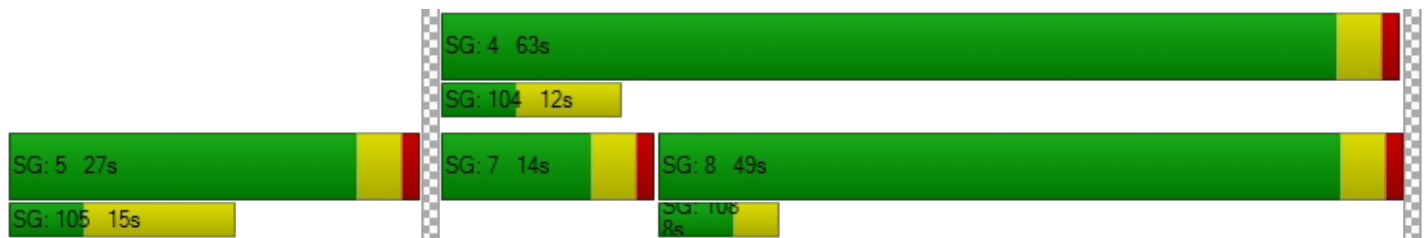
d_M, Delay for Movement [s/veh]	38.08	0.00	43.38	0.00	0.00	0.00	47.65	4.33	0.00	0.00	9.95	13.30
Movement LOS	D		D				D	A			A	B
d_A, Approach Delay [s/veh]	40.92			0.00			13.64			11.82		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	17.61											
Intersection LOS	B											
Intersection V/C	0.575											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.901	2.146	2.367	2.524
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1311	1000
d_b, Bicycle Delay [s]	45.00	45.00	5.34	11.25
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.642	3.333
Bicycle LOS	D	D	B	C

**Sequence**

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



## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock PM\_LCS.vistro

Scenario 3 OY PM

Report File: K:\...\3 OY PM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	EB Left	0.262	9.2	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.321	24.2	C
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.604	10.5	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.656	23.1	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.568	28.3	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	NB Left	0.123	8.7	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.616	24.8	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.527	19.9	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.262

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	24	23	7	9	71	29	127	56	63	9	36	28
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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]	25	24	7	9	74	30	132	58	66	9	37	29
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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]	8	7	2	3	23	9	41	18	20	3	11	9
Total Analysis Volume [veh/h]	31	30	9	11	92	37	163	72	82	11	46	36
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	565	614	697	577	627	713	622	680	783	583	670
Degree of Utilization, x	0.05	0.05	0.01	0.02	0.15	0.05	0.26	0.11	0.10	0.02	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.17	0.15	0.04	0.06	0.51	0.16	1.05	0.35	0.35	0.06	0.42
95th-Percentile Queue Length [ft]	4.34	3.85	0.98	1.46	12.80	4.09	26.18	8.84	8.74	1.44	10.40
Approach Delay [s/veh]	9.00			9.03			9.40			8.84	
Approach LOS	A			A			A			A	
Intersection Delay [s/veh]	9.19										
Intersection LOS	A										



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	24.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.321

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	13	520	274	52	76	17
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	541	285	54	79	18
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	151	80	15	22	5
Total Analysis Volume [veh/h]	16	604	318	60	88	20
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.01	0.01	0.00	0.00	0.32	0.03
d_M, Delay for Movement [s/veh]	8.06	0.00	0.00	0.00	24.22	10.30
Movement LOS	A	A	A	A	C	B
95th-Percentile Queue Length [veh/ln]	0.04	0.00	0.00	0.00	1.34	0.09
95th-Percentile Queue Length [ft/ln]	1.02	0.00	0.00	0.00	33.53	2.20
d_A, Approach Delay [s/veh]	0.21		0.00		21.64	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.23					
Intersection LOS	C					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	10.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.604

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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]	19	811	19	24	1760	50	92	4	48	9	7	27
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	211	5	6	457	13	24	1	12	2	2	7
Total Analysis Volume [veh/h]	20	843	20	25	1830	52	96	4	50	9	7	28
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	28	0	37	56	0	0	25	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	66	66	2	66	66	10	10
g / C, Green / Cycle	0.02	0.73	0.73	0.03	0.73	0.73	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.23	0.23	0.01	0.50	0.50	0.09	0.02
s, saturation flow rate [veh/h]	1810	1900	1885	1810	1900	1882	1617	1770
c, Capacity [veh/h]	40	1385	1374	48	1394	1380	245	245
d1, Uniform Delay [s]	43.53	4.28	4.28	43.25	6.33	6.39	38.88	36.49
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.56	0.59	0.60	8.51	2.64	2.74	2.45	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.31	0.31	0.52	0.68	0.68	0.61	0.18
d, Delay for Lane Group [s/veh]	53.09	4.87	4.88	51.76	8.97	9.13	41.33	36.83
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.54	2.40	2.38	0.66	8.05	8.13	3.35	0.90
50th-Percentile Queue Length [ft/ln]	13.54	60.01	59.58	16.43	201.22	203.34	83.82	22.43
95th-Percentile Queue Length [veh/ln]	0.97	4.32	4.29	1.18	12.70	12.81	6.03	1.62
95th-Percentile Queue Length [ft/ln]	24.37	108.03	107.24	29.58	317.54	320.27	150.87	40.38

**Movement, Approach, & Intersection Results**

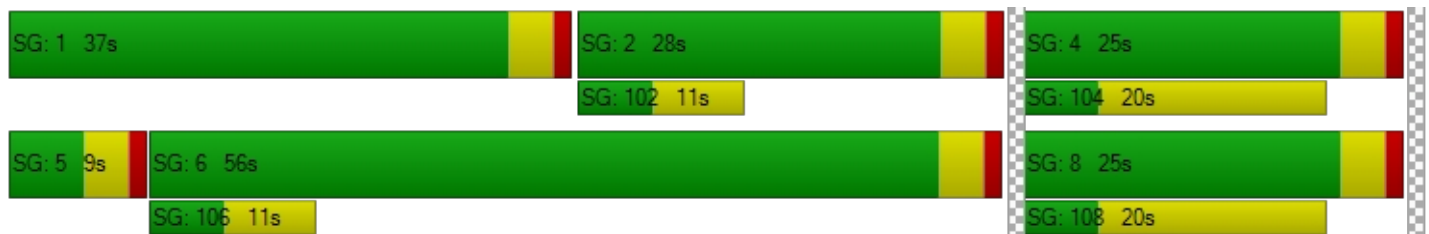
d_M, Delay for Movement [s/veh]	53.09	4.87	4.88	51.76	9.05	9.13	41.33	41.33	41.33	36.83	36.83	36.83
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	5.97			9.61			41.33			36.83		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.53											
Intersection LOS	B											
Intersection V/C	0.604											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.855			2.998			1.828			1.762		
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]	533			1156			467			467		
d_b, Bicycle Delay [s]	24.20			8.02			26.45			26.45		
I_b,int, Bicycle LOS Score for Intersection	2.288			3.133			1.807			1.632		
Bicycle LOS	B			C			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.656

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↑			↵ ↑			↑↑					
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	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	485	431	83	1003	0	111	0	837	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	128	114	22	265	0	29	0	221	0	0	0
Total Analysis Volume [veh/h]	0	513	456	88	1060	0	117	0	885	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	23	0	9	32	0	58	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	42	42	5	51	31	31	
g / C, Green / Cycle	0.46	0.46	0.06	0.56	0.35	0.35	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.30	0.05	0.29	0.30	0.31	
s, saturation flow rate [veh/h]	1900	1629	1810	3618	1657	1615	
c, Capacity [veh/h]	874	750	101	2026	581	567	
d1, Uniform Delay [s]	17.61	18.67	42.19	12.32	27.17	27.48	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.53	4.27	20.02	0.97	3.92	4.78	
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	0.55	0.65	0.88	0.52	0.86	0.88	
d, Delay for Lane Group [s/veh]	20.14	22.94	62.21	13.29	31.09	32.26	
Lane Group LOS	C	C	E	B	C	C	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	7.50	8.19	2.48	6.34	10.23	10.46	
50th-Percentile Queue Length [ft/ln]	187.47	204.74	61.91	158.38	255.83	261.54	
95th-Percentile Queue Length [veh/ln]	11.99	12.88	4.46	10.46	15.48	15.77	
95th-Percentile Queue Length [ft/ln]	299.74	322.07	111.44	261.58	386.99	394.15	

**Movement, Approach, & Intersection Results**

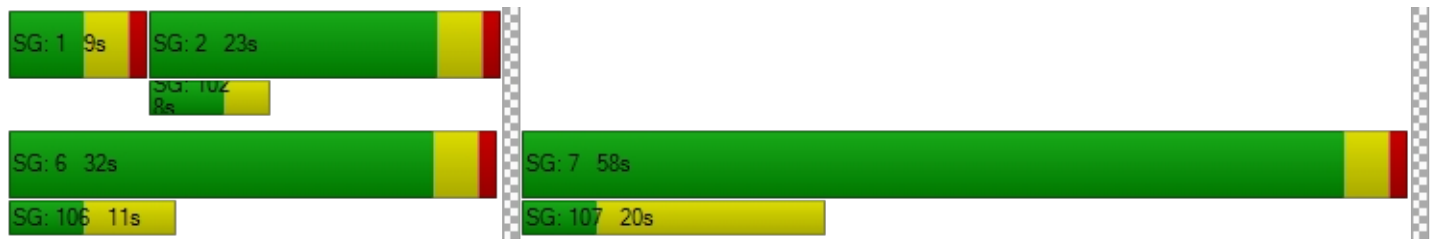
d_M, Delay for Movement [s/veh]	0.00	20.29	22.94	62.21	13.29	0.00	31.09	0.00	31.75	0.00	0.00	0.00
Movement LOS		C	C	E	B		C		C			
d_A, Approach Delay [s/veh]		21.54		17.04			31.67			0.00		
Approach LOS		C		B			C			A		
d_I, Intersection Delay [s/veh]		23.14										
Intersection LOS		C										
Intersection V/C		0.656										

**Other Modes**

g_Walk,mi, Effective Walk Time [s]		9.0		9.0		9.0		9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]		0.00		0.00		0.00		0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]		0.00		0.00		0.00		0.00
d_p, Pedestrian Delay [s]		36.45		36.45		36.45		36.45
I_p,int, Pedestrian LOS Score for Intersection		2.843		2.648		2.205		1.955
Crosswalk LOS		C		B		B		A
s_b, Saturation Flow Rate of the bicycle lane		2000		2000		2000		2000
c_b, Capacity of the bicycle lane [bicycles/h]		422		622		0		0
d_b, Bicycle Delay [s]		28.01		21.36		45.00		45.00
I_b,int, Bicycle LOS Score for Intersection		2.359		2.507		5.786		4.132
Bicycle LOS		B		B		F		D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	28.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵						↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400
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]	295	321	0	0	343	137	0	0	0	711	0	146
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	77	83	0	0	89	36	0	0	0	185	0	38
Total Analysis Volume [veh/h]	306	333	0	0	356	142	0	0	0	738	0	152
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	29	44	0	0	15	0	0	0	0	0	46	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	56	35	35		26	26
g / C, Green / Cycle	0.19	0.62	0.38	0.38		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.17	0.09	0.13	0.14		0.25	0.25
s, saturation flow rate [veh/h]	1810	3618	1900	1726		1810	1738
c, Capacity [veh/h]	349	2245	728	662		526	505
d1, Uniform Delay [s]	35.29	7.14	19.70	20.00		30.10	30.38
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.12
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.05	0.14	1.28	1.63		4.19	5.65
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	0.88	0.15	0.34	0.38		0.85	0.88
d, Delay for Lane Group [s/veh]	42.34	7.28	20.98	21.63		34.29	36.03
Lane Group LOS	D	A	C	C		C	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	7.06	1.25	3.84	3.94		9.46	9.60
50th-Percentile Queue Length [ft/ln]	176.44	31.30	96.07	98.49		236.52	240.12
95th-Percentile Queue Length [veh/ln]	11.41	2.25	6.92	7.09		14.51	14.69
95th-Percentile Queue Length [ft/ln]	285.37	56.34	172.93	177.28		362.63	367.19

**Movement, Approach, & Intersection Results**

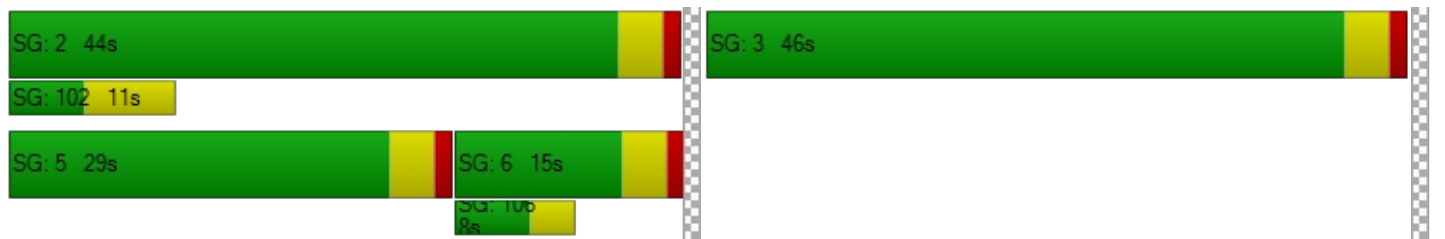
d_M, Delay for Movement [s/veh]	42.34	7.28	0.00	0.00	21.17	21.63	0.00	0.00	0.00	34.97	0.00	36.03
Movement LOS	D	A			C	C				C		D
d_A, Approach Delay [s/veh]	24.07				21.30		0.00		35.15			
Approach LOS	C				C		A		D			
d_I, Intersection Delay [s/veh]	28.26											
Intersection LOS	C											
Intersection V/C	0.568											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	42.0	42.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	12.80	12.80	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.597	2.330	1.862	2.150
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	889	244	0	0
d_b, Bicycle Delay [s]	13.89	34.67	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.087	1.970	4.132	5.601
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.123

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	50	60	145	17	37	227
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	62	151	18	38	236
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	17	40	5	10	63
Total Analysis Volume [veh/h]	56	66	162	19	41	253
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	601	745	663	663	762	626	685	685	685
Degree of Utilization, x	0.09	0.09	0.12	0.12	0.02	0.07	0.12	0.12	0.12

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.31	0.29	0.41	0.41	0.08	0.21	0.42	0.42	0.42
95th-Percentile Queue Length [ft]	7.67	7.26	10.37	10.37	1.92	5.25	10.47	10.47	10.47
Approach Delay [s/veh]	8.60		8.74			8.71			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.70								
Intersection LOS	A								



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	24.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.616

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	429	4	114	0	231	221	143	479	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	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	0	0	446	4	119	0	240	230	149	498	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	116	1	31	0	63	60	39	130	0
Total Analysis Volume [veh/h]	0	0	0	465	4	124	0	250	240	155	519	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	41	0	0	41	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		45	37	37	37
g / C, Green / Cycle		0.50	0.41	0.41	0.41
(v / s)_i Volume / Saturation Flow Rate		0.34	0.28	0.17	0.27
s, saturation flow rate [veh/h]		1766	1749	921	1900
c, Capacity [veh/h]		886	715	222	777
d1, Uniform Delay [s]		16.80	21.83	38.64	21.62
k, delay calibration		0.50	0.33	0.11	0.21
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.00	3.56	3.94	1.93
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.67	0.68	0.70	0.67
d, Delay for Lane Group [s/veh]		20.80	25.40	42.58	23.55
Lane Group LOS		C	C	D	C
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		9.55	8.78	3.64	8.89
50th-Percentile Queue Length [ft/ln]		238.67	219.60	91.04	222.21
95th-Percentile Queue Length [veh/ln]		14.61	13.64	6.55	13.78
95th-Percentile Queue Length [ft/ln]		365.35	341.12	163.87	344.45

**Movement, Approach, & Intersection Results**

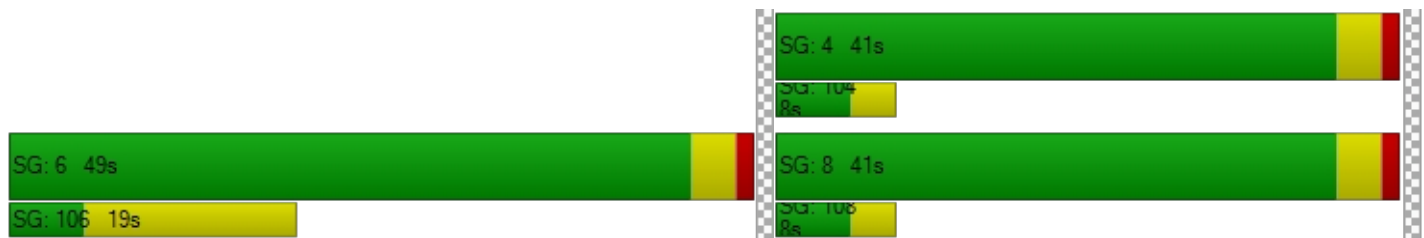
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	20.80	20.80	20.80	0.00	25.40	25.40	42.58	23.55	0.00
Movement LOS				C	C	C		C	C	D	C	
d_A, Approach Delay [s/veh]	0.00			20.80				25.40		27.93		
Approach LOS	A			C				C		C		
d_I, Intersection Delay [s/veh]	24.82											
Intersection LOS	C											
Intersection V/C	0.616											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.034	2.003	2.409	2.393
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1000	822	822
d_b, Bicycle Delay [s]	45.00	11.25	15.61	15.61
I_b,int, Bicycle LOS Score for Intersection	4.132	2.538	2.368	2.672
Bicycle LOS	D	B	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	19.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.527

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔						↔↑			↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
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]	341	0	250	0	0	0	85	607	0	0	309	302
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	0	65	0	0	0	22	157	0	0	80	78
Total Analysis Volume [veh/h]	354	0	259	0	0	0	88	630	0	0	321	313
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	0	0	0	0	0	14	53	0	0	39	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20		6	62	52	52
g / C, Green / Cycle	0.23	0.23		0.06	0.68	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.20	0.16		0.05	0.33	0.17	0.19
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	410	366		116	1300	1094	930
d1, Uniform Delay [s]	33.45	32.04		41.43	6.71	9.75	10.05
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.58	2.52		9.65	1.29	0.68	0.98
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	0.86	0.71		0.76	0.48	0.29	0.34
d, Delay for Lane Group [s/veh]	39.03	34.56		51.07	8.00	10.43	11.03
Lane Group LOS	D	C		D	A	B	B
Critical Lane Group	Yes	No		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.88	5.33		2.21	5.18	3.18	3.25
50th-Percentile Queue Length [ft/ln]	196.94	133.29		55.23	129.51	79.61	81.14
95th-Percentile Queue Length [veh/ln]	12.48	9.12		3.98	8.91	5.73	5.84
95th-Percentile Queue Length [ft/ln]	312.02	227.96		99.41	222.82	143.30	146.05

**Movement, Approach, & Intersection Results**

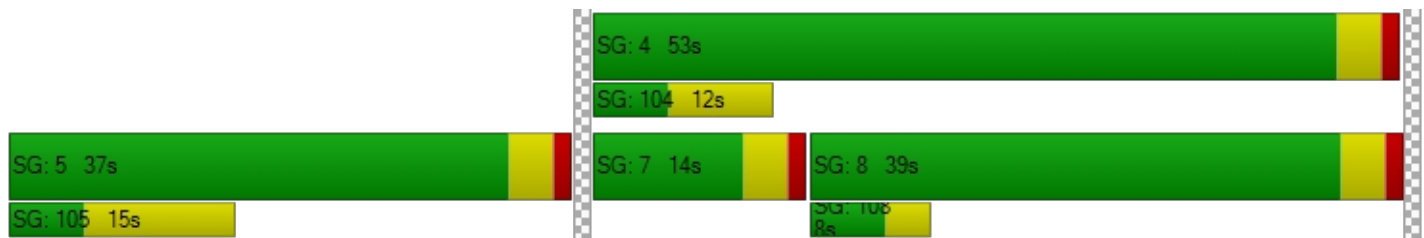
d_M, Delay for Movement [s/veh]	39.03	0.00	34.56	0.00	0.00	0.00	51.07	8.00	0.00	0.00	10.43	11.03
Movement LOS	D		C				D	A			B	B
d_A, Approach Delay [s/veh]	37.14			0.00			13.28			10.72		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	19.90											
Intersection LOS	B											
Intersection V/C	0.527											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.015	1.816	2.394	2.437
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1089	778
d_b, Bicycle Delay [s]	45.00	45.00	9.34	16.81
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.744	2.606
Bicycle LOS	D	D	B	B

**Sequence**

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





## Beaumont Potrero Interchange Indust WH

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Scenario 5 OY WP AM

Report File: K:\...\5 OY WP AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	NB Left	0.258	9.7	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.419	40.7	E
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.443	9.7	A
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.579	20.6	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.511	29.7	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	WB Left	0.202	9.2	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	0.614	19.0	B
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.581	18.0	B
9	Potrero Boulevard at W 4th Street	All-way stop	HCM 6th Edition	SB Left	0.029	7.6	A
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.019	9.1	A
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.017	8.7	A

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.258

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	76	20	2	17	38	97	48	29	24	3	62	14
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	32	15	6	0	0	13	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]	79	21	2	18	40	133	65	36	25	3	77	15
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	27	7	1	6	14	46	22	12	9	1	26	5
Total Analysis Volume [veh/h]	108	29	3	25	55	182	89	49	34	4	106	21
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	559	605	686	572	621	707	562	609	689	557	615
Degree of Utilization, x	0.19	0.05	0.00	0.04	0.09	0.26	0.16	0.08	0.05	0.01	0.21

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.71	0.15	0.01	0.14	0.29	1.02	0.56	0.26	0.16	0.02	0.77
95th-Percentile Queue Length [ft]	17.74	3.76	0.33	3.42	7.25	25.61	13.99	6.54	3.88	0.54	19.26
Approach Delay [s/veh]	10.26			9.42			9.56			10.04	
Approach LOS	B			A			A			B	
Intersection Delay [s/veh]	9.74										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	40.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.419

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	12	665	167	74	43	23
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	9	5	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	692	174	86	50	25
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	244	61	30	18	9
Total Analysis Volume [veh/h]	23	976	245	121	71	35
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.42	0.05
d_M, Delay for Movement [s/veh]	8.05	0.00	0.00	0.00	40.72	10.11
Movement LOS	A	A	A	A	E	B
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.00	0.00	1.88	0.15
95th-Percentile Queue Length [ft/ln]	1.46	0.00	0.00	0.00	46.88	3.72
d_A, Approach Delay [s/veh]	0.19		0.00		30.61	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	2.33					
Intersection LOS	E					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.443

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	2	1	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]	17	904	8	24	1128	63	76	7	77	11	4	20
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	235	2	6	294	16	20	2	20	3	1	5
Total Analysis Volume [veh/h]	18	942	8	25	1175	66	79	7	80	11	4	21
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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	56	0	10	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	64	64	3	65	65	11	11
g / C, Green / Cycle	0.02	0.71	0.71	0.03	0.72	0.72	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.01	0.25	0.25	0.01	0.33	0.33	0.10	0.02
s, saturation flow rate [veh/h]	1810	1900	1894	1810	1900	1865	1613	1677
c, Capacity [veh/h]	44	1353	1349	57	1366	1341	258	259
d1, Uniform Delay [s]	43.25	4.97	4.97	42.82	5.30	5.30	38.32	35.33
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.87	0.72	0.72	5.33	1.11	1.13	2.68	0.24
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.41	0.35	0.35	0.44	0.46	0.46	0.64	0.14
d, Delay for Lane Group [s/veh]	49.13	5.69	5.69	48.15	6.41	6.44	41.00	35.58
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.46	2.99	2.98	0.62	4.26	4.20	3.71	0.72
50th-Percentile Queue Length [ft/ln]	11.58	74.78	74.58	15.62	106.58	105.07	92.70	17.95
95th-Percentile Queue Length [veh/ln]	0.83	5.38	5.37	1.12	7.65	7.56	6.67	1.29
95th-Percentile Queue Length [ft/ln]	20.85	134.61	134.25	28.11	191.24	189.12	166.85	32.31



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.13	5.69	5.69	48.15	6.42	6.44	41.00	41.00	41.00	35.58	35.58	35.58
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.50			7.25			41.00			35.58		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	9.67											
Intersection LOS	A											
Intersection V/C	0.443											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.753			2.864			1.840			1.753		
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]	1156			1156			444			444		
d_b, Bicycle Delay [s]	8.02			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.358			2.604			1.834			1.619		
Bicycle LOS	B			B			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	20.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.579

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↑			↵ ↑			↑↑					
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	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	1	3	2	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	523	477	113	643	0	90	0	566	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	133	121	29	163	0	23	0	144	0	0	0
Total Analysis Volume [veh/h]	0	530	484	115	652	0	91	0	574	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	34	0	11	45	0	45	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	50	50	7	61	21	21	
g / C, Green / Cycle	0.55	0.55	0.08	0.67	0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.27	0.31	0.06	0.18	0.20	0.20	
s, saturation flow rate [veh/h]	1900	1626	1810	3618	1663	1615	
c, Capacity [veh/h]	1045	894	141	2432	397	386	
d1, Uniform Delay [s]	12.42	13.24	40.87	5.89	32.69	32.72	
k, delay calibration	0.50	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.61	2.60	10.90	0.27	5.08	5.33	
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	0.49	0.57	0.82	0.27	0.85	0.85	
d, Delay for Lane Group [s/veh]	14.04	15.84	51.77	6.17	37.78	38.05	
Lane Group LOS	B	B	D	A	D	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.23	6.79	2.90	2.19	7.39	7.23	
50th-Percentile Queue Length [ft/ln]	155.86	169.72	72.58	54.81	184.76	180.79	
95th-Percentile Queue Length [veh/ln]	10.33	11.06	5.23	3.95	11.85	11.64	
95th-Percentile Queue Length [ft/ln]	258.23	276.55	130.65	98.66	296.22	291.04	

**Movement, Approach, & Intersection Results**

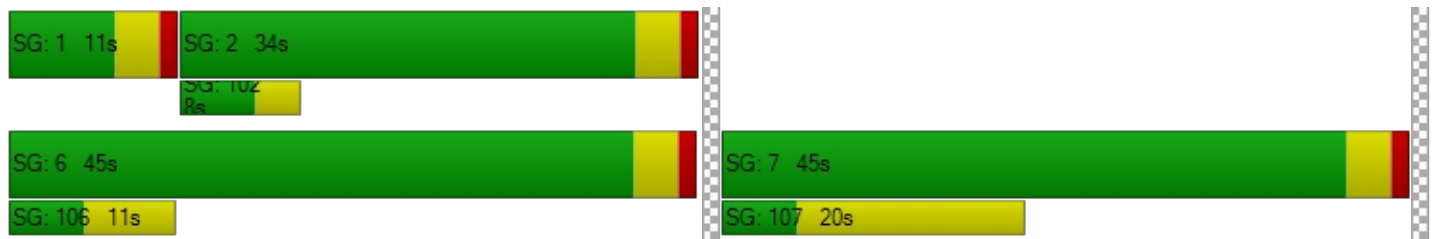
d_M, Delay for Movement [s/veh]	0.00	14.11	15.84	51.77	6.17	0.00	37.78	0.00	37.94	0.00	0.00	0.00
Movement LOS		B	B	D	A		D		D			
d_A, Approach Delay [s/veh]		14.94		13.00			37.91		0.00			
Approach LOS		B		B			D		A			
d_I, Intersection Delay [s/veh]	20.58											
Intersection LOS	C											
Intersection V/C	0.579											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.679	2.572	2.041	2.009
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	911	0	0
d_b, Bicycle Delay [s]	20.00	13.34	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.396	2.192	5.230	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	29.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.511

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵						↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400
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	3	0	0	0	0	2	0	5
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	252	0	0	352	81	0	0	0	418	0	144
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	96	67	0	0	93	21	0	0	0	111	0	38
Total Analysis Volume [veh/h]	383	268	0	0	374	86	0	0	0	444	0	153
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	36	60	0	0	24	0	0	0	0	0	30	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	C	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	64	39	39		18	18
g / C, Green / Cycle	0.24	0.71	0.43	0.43		0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.21	0.07	0.12	0.13		0.17	0.17
s, saturation flow rate [veh/h]	1810	3618	1900	1782		1810	1701
c, Capacity [veh/h]	428	2571	816	766		363	341
d1, Uniform Delay [s]	33.26	4.07	16.65	16.81		34.66	34.68
k, delay calibration	0.16	0.50	0.50	0.50		0.14	0.15
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	9.26	0.08	0.86	1.01		7.18	7.78
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	0.89	0.10	0.28	0.30		0.85	0.85
d, Delay for Lane Group [s/veh]	42.53	4.15	17.52	17.81		41.84	42.46
Lane Group LOS	D	A	B	B		D	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	8.98	0.66	3.16	3.21		7.06	6.72
50th-Percentile Queue Length [ft/ln]	224.46	16.41	79.12	80.26		176.50	167.90
95th-Percentile Queue Length [veh/ln]	13.89	1.18	5.70	5.78		11.42	10.97
95th-Percentile Queue Length [ft/ln]	347.32	29.53	142.42	144.47		285.44	274.15



**Movement, Approach, & Intersection Results**

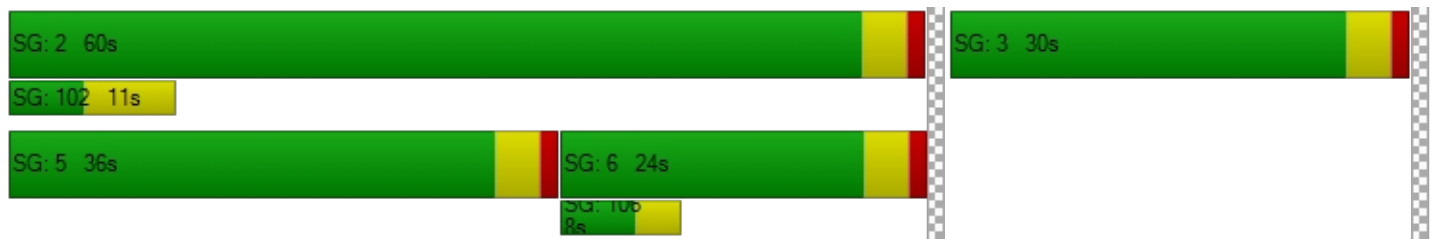
d_M, Delay for Movement [s/veh]	42.53	4.15	0.00	0.00	17.63	17.81	0.00	0.00	0.00	42.04	0.00	42.46
Movement LOS	D	A			B	B				D		D
d_A, Approach Delay [s/veh]	26.73				17.66		0.00		42.14			
Approach LOS	C				B		A		D			
d_I, Intersection Delay [s/veh]	29.67											
Intersection LOS	C											
Intersection V/C	0.511											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	26.0	26.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.76	22.76	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.569	2.328	1.882	2.007
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	444	0	0
d_b, Bicycle Delay [s]	6.42	27.22	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.097	1.939	4.132	5.117
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.202

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	6	71	205	13	53	167
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	13	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	87	213	14	83	174
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	27	66	4	26	54
Total Analysis Volume [veh/h]	7	109	266	17	104	217
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	576	706	658	658	754	606	662	662	662
Degree of Utilization, x	0.01	0.15	0.20	0.20	0.02	0.17	0.11	0.11	0.11

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.04	0.54	0.75	0.75	0.07	0.61	0.37	0.37	0.37
95th-Percentile Queue Length [ft]	0.92	13.61	18.80	18.80	1.73	15.37	9.15	9.15	9.15
Approach Delay [s/veh]	8.75		9.44			9.14			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	9.20								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.614

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	218	1	38	0	373	334	223	370	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	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	26	0	13	0	0	2	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	0	0	227	1	66	0	401	347	232	387	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	59	0	17	0	104	90	60	100	0
Total Analysis Volume [veh/h]	0	0	0	235	1	68	0	416	360	240	401	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	28	0	0	62	0	0	62	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		24	58	58	58
g / C, Green / Cycle		0.27	0.64	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate		0.17	0.44	0.34	0.21
s, saturation flow rate [veh/h]		1762	1756	706	1900
c, Capacity [veh/h]		472	1130	314	1222
d1, Uniform Delay [s]		29.15	10.26	30.42	7.26
k, delay calibration		0.50	0.50	0.12	0.11
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		6.63	3.41	4.12	0.16
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.64	0.69	0.76	0.33
d, Delay for Lane Group [s/veh]		35.78	13.67	34.54	7.41
Lane Group LOS		D	B	C	A
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		6.54	9.44	5.38	3.11
50th-Percentile Queue Length [ft/ln]		163.48	235.99	134.47	77.80
95th-Percentile Queue Length [veh/ln]		10.73	14.48	9.18	5.60
95th-Percentile Queue Length [ft/ln]		268.32	361.95	229.55	140.04

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	35.78	35.78	35.78	0.00	13.67	13.67	34.54	7.41	0.00
Movement LOS				D	D	D		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			35.78				13.67		17.57		
Approach LOS	A			D				B		B		
d_I, Intersection Delay [s/veh]	19.03											
Intersection LOS	B											
Intersection V/C	0.614											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.352	1.721	2.436	2.362
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	533	1289	1289
d_b, Bicycle Delay [s]	45.00	24.20	5.69	5.69
I_b,int, Bicycle LOS Score for Intersection	4.132	2.061	2.840	2.617
Bicycle LOS	D	B	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌						⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
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	12	1	0	0	2	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]	166	0	192	0	0	0	145	488	0	0	452	566
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	44	0	51	0	0	0	38	129	0	0	120	150
Total Analysis Volume [veh/h]	176	0	203	0	0	0	153	516	0	0	478	599
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	27	0	0	0	0	0	14	63	0	0	49	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	14		9	68	55	55
g / C, Green / Cycle	0.15	0.15		0.10	0.76	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.10	0.13		0.08	0.27	0.25	0.37
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	278	248		190	1439	1155	982
d1, Uniform Delay [s]	35.70	36.87		39.39	3.64	9.23	10.98
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.38	6.52		7.83	0.70	1.09	2.82
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	0.63	0.82		0.81	0.36	0.41	0.61
d, Delay for Lane Group [s/veh]	38.08	43.38		47.22	4.33	10.33	13.80
Lane Group LOS	D	D		D	A	B	B
Critical Lane Group	No	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.75	4.70		3.67	2.52	4.75	7.33
50th-Percentile Queue Length [ft/ln]	93.76	117.43		91.77	62.90	118.81	183.27
95th-Percentile Queue Length [veh/ln]	6.75	8.25		6.61	4.53	8.33	11.77
95th-Percentile Queue Length [ft/ln]	168.77	206.30		165.19	113.23	208.19	294.27

**Movement, Approach, & Intersection Results**

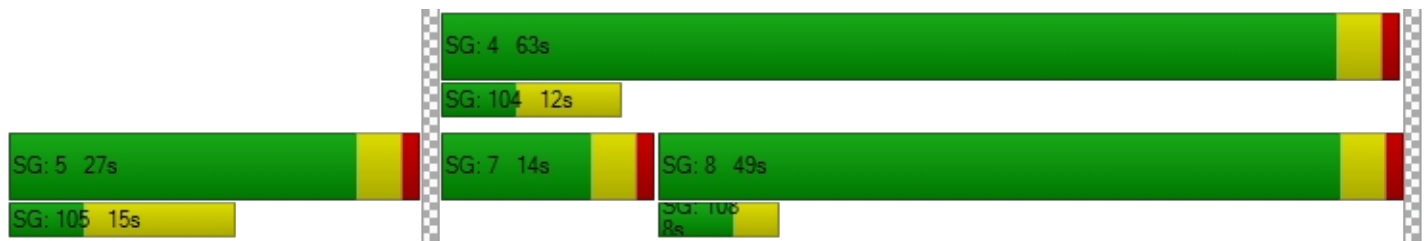
d_M, Delay for Movement [s/veh]	38.08	0.00	43.38	0.00	0.00	0.00	47.22	4.33	0.00	0.00	10.33	13.80
Movement LOS	D		D				D	A			B	B
d_A, Approach Delay [s/veh]	40.92			0.00			14.14			12.26		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	17.96											
Intersection LOS	B											
Intersection V/C	0.581											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
l_p,int, Pedestrian LOS Score for Intersection	1.901	2.158	2.372	2.525
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1311	1000
d_b, Bicycle Delay [s]	45.00	45.00	5.34	11.25
l_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.663	3.337
Bicycle LOS	D	D	B	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.029

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵ ↵			↵ ↵ ↵			↵ ↵			↵ ↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	17	0	0	13	4	0	0	45	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	0	0	17	0	0	13	4	0	0	45	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	4	0	0	3	1	0	0	11	0
Total Analysis Volume [veh/h]	0	0	0	17	0	0	13	4	0	0	45	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	766	766	766	697	773	773	773	701	776	777	785	785	785
Degree of Utilization, x	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.03	0.03

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.06	0.02	0.00	0.00	0.09	0.09
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	1.87	0.00	0.00	0.00	1.42	0.39	0.00	0.00	2.21	2.21
Approach Delay [s/veh]	0.00			7.99				7.80			7.42		
Approach LOS	A			A				A			A		
Intersection Delay [s/veh]	7.63												
Intersection LOS	A												

**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	13	0	28	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	13	0	28	0	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	3	0	7	0	4
Total Analysis Volume [veh/h]	0	13	0	28	0	17
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	0.00	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	9.06
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.44
d_A, Approach Delay [s/veh]	0.00		0.00		9.06	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.65					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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]	17	0	0	0	0	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	0	0	0	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	0	0	11
Total Analysis Volume [veh/h]	17	0	0	0	0	45
Pedestrian Volume [ped/h]	0		0		0	



**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.47	7.28	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.67		3.64		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.38					
Intersection LOS	A					

## Beaumont Potrero Interchange Indust WH

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Scenario 5 OY WP PM

Report File: K:\...\5 OY WP PM.pdf

6/2/2020

## Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	All-way stop	HCM 6th Edition	EB Left	0.338	9.7	A
2	California Ave at 4th Street	Two-way stop	HCM 6th Edition	EB Left	0.365	25.7	D
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.605	10.6	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.660	24.3	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.571	28.3	C
6	Potrero Blvd at Oak Valley Pkwy	All-way stop	HCM 6th Edition	NB Left	0.135	8.8	A
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.640	25.2	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.528	20.5	C
9	Potrero Boulevard at W 4th Street	All-way stop	HCM 6th Edition	SB Left	0.059	7.9	A
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.045	9.1	A
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.041	8.7	A

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.338

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	24	23	7	9	71	29	127	56	63	9	36	28
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	16	35	16	0	0	7	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]	25	24	7	9	74	46	167	74	66	9	44	29
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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]	8	7	2	3	23	14	52	23	20	3	14	9
Total Analysis Volume [veh/h]	31	30	9	11	92	57	207	92	82	11	54	36
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	546	591	667	559	606	686	613	669	768	568	646
Degree of Utilization, x	0.06	0.05	0.01	0.02	0.15	0.08	0.34	0.14	0.11	0.02	0.14

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.18	0.16	0.04	0.06	0.53	0.27	1.49	0.48	0.36	0.06	0.48
95th-Percentile Queue Length [ft]	4.50	4.00	1.03	1.50	13.33	6.77	37.18	11.88	8.92	1.48	12.06
Approach Delay [s/veh]	9.25			9.22			10.14			9.18	
Approach LOS	A			A			B			A	
Intersection Delay [s/veh]	9.71										
Intersection LOS	A										

**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Two-way stop	Delay (sec / veh):	25.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.365

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	13	520	274	52	76	17
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	5	10	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	541	285	59	89	24
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	151	80	16	25	7
Total Analysis Volume [veh/h]	18	604	318	66	99	27
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.37	0.04
d_M, Delay for Movement [s/veh]	8.08	0.00	0.00	0.00	25.73	10.37
Movement LOS	A	A	A	A	D	B
95th-Percentile Queue Length [veh/ln]	0.05	0.00	0.00	0.00	1.61	0.12
95th-Percentile Queue Length [ft/ln]	1.16	0.00	0.00	0.00	40.16	3.02
d_A, Approach Delay [s/veh]	0.23		0.00		22.44	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	2.63					
Intersection LOS	D					

**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.605

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	1	2	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]	19	811	19	24	1760	51	94	4	48	9	7	27
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	211	5	6	457	13	24	1	12	2	2	7
Total Analysis Volume [veh/h]	20	843	20	25	1830	53	98	4	50	9	7	28
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	9	28	0	37	56	0	0	25	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	66	66	2	66	66	10	10
g / C, Green / Cycle	0.02	0.73	0.73	0.03	0.73	0.73	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.23	0.23	0.01	0.50	0.50	0.09	0.02
s, saturation flow rate [veh/h]	1810	1900	1885	1810	1900	1881	1615	1769
c, Capacity [veh/h]	40	1382	1371	48	1391	1377	248	248
d1, Uniform Delay [s]	43.53	4.33	4.33	43.25	6.41	6.46	38.80	36.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.56	0.59	0.60	8.51	2.67	2.77	2.46	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.31	0.31	0.52	0.68	0.68	0.61	0.18
d, Delay for Lane Group [s/veh]	53.09	4.92	4.93	51.76	9.07	9.23	41.26	36.71
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.54	2.42	2.40	0.66	8.13	8.22	3.40	0.90
50th-Percentile Queue Length [ft/ln]	13.54	60.55	60.11	16.43	203.32	205.52	84.89	22.39
95th-Percentile Queue Length [veh/ln]	0.97	4.36	4.33	1.18	12.81	12.92	6.11	1.61
95th-Percentile Queue Length [ft/ln]	24.37	108.99	108.19	29.58	320.25	323.07	152.80	40.29

**Movement, Approach, & Intersection Results**

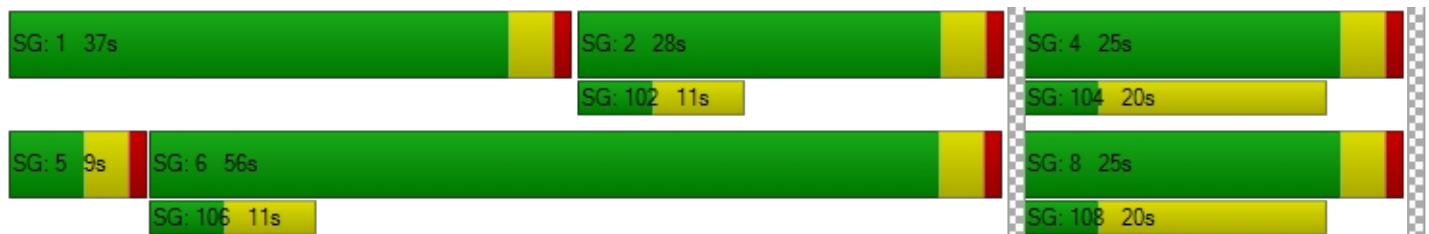
d_M, Delay for Movement [s/veh]	53.09	4.92	4.93	51.76	9.15	9.23	41.26	41.26	41.26	36.71	36.71	36.71
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	6.02			9.71			41.26			36.71		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.62											
Intersection LOS	B											
Intersection V/C	0.605											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.855			3.002			1.829			1.762		
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]	533			1156			467			467		
d_b, Bicycle Delay [s]	24.20			8.02			26.45			26.45		
I_b,int, Bicycle LOS Score for Intersection	2.288			3.134			1.810			1.632		
Bicycle LOS	B			C			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	24.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.660

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	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	2	6	1	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	485	433	89	1004	0	111	0	837	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	128	114	24	265	0	29	0	221	0	0	0
Total Analysis Volume [veh/h]	0	513	458	94	1061	0	117	0	885	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	33	0	10	43	0	47	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	C	L	C	C	R	
C, Cycle Length [s]	90	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	41	41	6	51	31	31	
g / C, Green / Cycle	0.45	0.45	0.07	0.56	0.35	0.35	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.30	0.05	0.29	0.30	0.31	
s, saturation flow rate [veh/h]	1900	1629	1810	3618	1657	1615	
c, Capacity [veh/h]	859	737	120	2037	576	562	
d1, Uniform Delay [s]	18.13	19.23	41.37	12.15	27.43	27.74	
k, delay calibration	0.50	0.50	0.11	0.50	0.19	0.20	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	2.68	4.58	10.51	0.96	7.05	9.00	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.56	0.66	0.78	0.52	0.87	0.89	
d, Delay for Lane Group [s/veh]	20.81	23.82	51.88	13.11	34.47	36.73	
Lane Group LOS	C	C	D	B	C	D	
Critical Lane Group	No	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	7.68	8.40	2.38	6.29	10.78	11.16	
50th-Percentile Queue Length [ft/ln]	191.96	210.07	59.48	157.30	269.39	279.02	
95th-Percentile Queue Length [veh/ln]	12.22	13.16	4.28	10.41	16.16	16.64	
95th-Percentile Queue Length [ft/ln]	305.58	328.92	107.06	260.14	403.98	415.99	

**Movement, Approach, & Intersection Results**

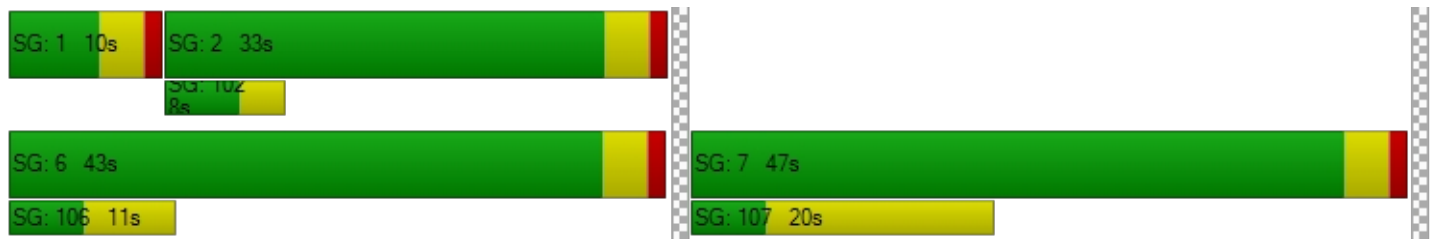
d_M, Delay for Movement [s/veh]	0.00	20.98	23.82	51.88	13.11	0.00	34.47	0.00	35.75	0.00	0.00	0.00
Movement LOS		C	C	D	B		C		D			
d_A, Approach Delay [s/veh]		22.32		16.26			35.60			0.00		
Approach LOS		C		B			D			A		
d_I, Intersection Delay [s/veh]	24.34											
Intersection LOS	C											
Intersection V/C	0.660											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.844	2.649	2.205	1.963
Crosswalk LOS	C	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	867	0	0
d_b, Bicycle Delay [s]	20.67	14.45	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.361	2.512	5.786	4.132
Bicycle LOS	B	B	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	28.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.571

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	0	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400
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	6	0	0	0	0	1	0	3
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]	295	321	0	0	349	137	0	0	0	712	0	149
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	77	83	0	0	91	36	0	0	0	185	0	39
Total Analysis Volume [veh/h]	306	333	0	0	362	142	0	0	0	739	0	155
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	0	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	29	44	0	0	15	0	0	0	0	46	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
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	C		L	C
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	17	56	34	34		26	26
g / C, Green / Cycle	0.19	0.62	0.38	0.38		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.17	0.09	0.13	0.15		0.25	0.26
s, saturation flow rate [veh/h]	1810	3618	1900	1728		1810	1737
c, Capacity [veh/h]	349	2240	726	660		528	507
d1, Uniform Delay [s]	35.29	7.19	19.82	20.13		30.03	30.32
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.13
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	7.05	0.14	1.31	1.67		4.22	5.74
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	0.88	0.15	0.35	0.38		0.85	0.88
d, Delay for Lane Group [s/veh]	42.34	7.33	21.13	21.80		34.25	36.06
Lane Group LOS	D	A	C	C		C	D
Critical Lane Group	Yes	No	No	Yes		No	Yes
50th-Percentile Queue Length [veh/ln]	7.06	1.26	3.91	4.01		9.50	9.66
50th-Percentile Queue Length [ft/ln]	176.44	31.46	97.72	100.18		237.46	241.45
95th-Percentile Queue Length [veh/ln]	11.41	2.27	7.04	7.21		14.55	14.75
95th-Percentile Queue Length [ft/ln]	285.37	56.63	175.90	180.32		363.82	368.87

**Movement, Approach, & Intersection Results**

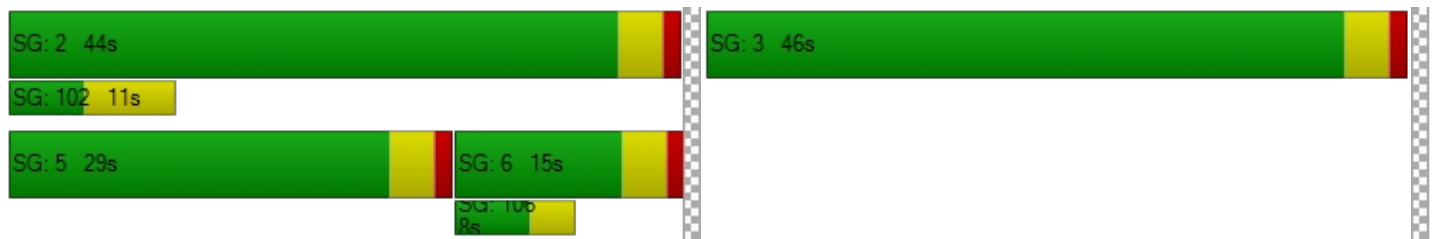
d_M, Delay for Movement [s/veh]	42.34	7.33	0.00	0.00	21.34	21.80	0.00	0.00	0.00	34.96	0.00	36.06
Movement LOS	D	A			C	C				C		D
d_A, Approach Delay [s/veh]	24.09				21.47		0.00		35.15			
Approach LOS	C				C		A		D			
d_I, Intersection Delay [s/veh]	28.29											
Intersection LOS	C											
Intersection V/C	0.571											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	42.0	42.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	12.80	12.80	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.599	2.332	1.862	2.152
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	889	244	0	0
d_b, Bicycle Delay [s]	13.89	34.67	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.087	1.975	4.132	5.608
Bicycle LOS	B	A	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	All-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.135

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	↵↵		↑↑↵		↵↑↑↑	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	50	60	145	17	37	227
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	31	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	93	151	18	51	236
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	25	40	5	14	63
Total Analysis Volume [veh/h]	56	100	162	19	55	253
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	598	740	647	647	740	614	672	672	672
Degree of Utilization, x	0.09	0.14	0.13	0.13	0.03	0.09	0.13	0.13	0.13

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.31	0.47	0.43	0.43	0.08	0.29	0.43	0.43	0.43
95th-Percentile Queue Length [ft]	7.72	11.65	10.67	10.67	1.97	7.35	10.71	10.71	10.71
Approach Delay [s/veh]	8.69		8.91			8.89			
Approach LOS	A		A			A			
Intersection Delay [s/veh]	8.85								
Intersection LOS	A								

**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.640

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				+			T			T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	429	4	114	0	231	221	143	479	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 [%]	2.00	2.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	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	12	0	31	0	0	1	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	0	0	446	4	131	0	271	230	149	499	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	116	1	34	0	71	60	39	130	0
Total Analysis Volume [veh/h]	0	0	0	465	4	136	0	282	240	155	520	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	0	0	0	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	5	0	0	5	0	0	5	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	0	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	48	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	0	14	0	0	3	0	0	3	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					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	C	L	C
C, Cycle Length [s]		90	90	90	90
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		44	38	38	38
g / C, Green / Cycle		0.49	0.42	0.42	0.42
(v / s)_i Volume / Saturation Flow Rate		0.34	0.30	0.17	0.27
s, saturation flow rate [veh/h]		1762	1757	894	1900
c, Capacity [veh/h]		864	740	217	800
d1, Uniform Delay [s]		17.81	21.47	38.94	20.78
k, delay calibration		0.50	0.37	0.11	0.20
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.70	4.20	4.37	1.65
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.70	0.71	0.72	0.65
d, Delay for Lane Group [s/veh]		22.51	25.67	43.31	22.43
Lane Group LOS		C	C	D	C
Critical Lane Group		Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]		10.23	9.46	3.69	8.65
50th-Percentile Queue Length [ft/ln]		255.70	236.47	92.26	216.36
95th-Percentile Queue Length [veh/ln]		15.47	14.50	6.64	13.48
95th-Percentile Queue Length [ft/ln]		386.82	362.57	166.07	336.97

**Movement, Approach, & Intersection Results**

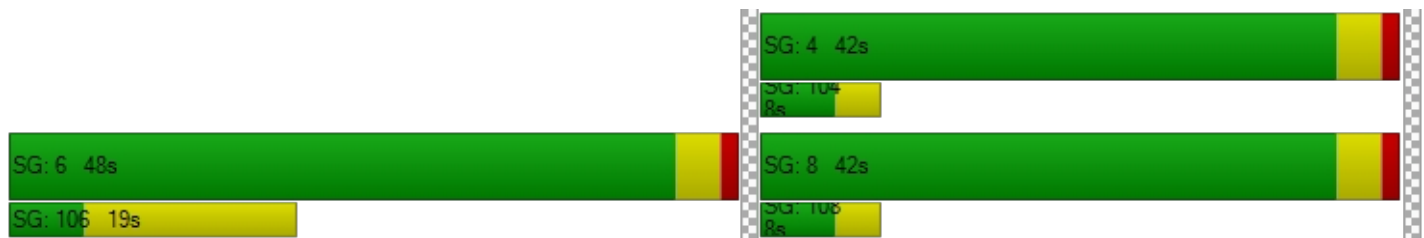
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.51	22.51	22.51	0.00	25.67	25.67	43.31	22.43	0.00
Movement LOS				C	C	C		C	C	D	C	
d_A, Approach Delay [s/veh]	0.00			22.51			25.67			27.22		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	25.19											
Intersection LOS	C											
Intersection V/C	0.640											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.034	2.015	2.420	2.404
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	978	844	844
d_b, Bicycle Delay [s]	45.00	11.76	15.02	15.02
I_b,int, Bicycle LOS Score for Intersection	4.132	2.558	2.421	2.673
Bicycle LOS	D	B	B	B

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	20.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔↔						↔↑			↑↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
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	29	2	0	0	1	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]	341	0	250	0	0	0	114	609	0	0	310	302
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	88	0	65	0	0	0	30	158	0	0	80	78
Total Analysis Volume [veh/h]	354	0	259	0	0	0	118	632	0	0	322	313
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	0	0	0	0	0	14	53	0	0	39	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	10	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C	R
C, Cycle Length [s]	90	90		90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20		8	62	50	50
g / C, Green / Cycle	0.23	0.23		0.08	0.68	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.20	0.16		0.07	0.33	0.17	0.19
s, saturation flow rate [veh/h]	1810	1615		1810	1900	1900	1615
c, Capacity [veh/h]	412	367		152	1299	1055	896
d1, Uniform Delay [s]	33.39	31.99		40.38	6.75	10.73	11.05
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.46	2.48		8.16	1.31	0.75	1.07
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	0.86	0.71		0.78	0.49	0.31	0.35
d, Delay for Lane Group [s/veh]	38.85	34.47		48.54	8.05	11.47	12.12
Lane Group LOS	D	C		D	A	B	B
Critical Lane Group	Yes	No		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.86	5.33		2.87	5.21	3.40	3.46
50th-Percentile Queue Length [ft/ln]	196.57	133.17		71.80	130.32	85.10	86.41
95th-Percentile Queue Length [veh/ln]	12.46	9.11		5.17	8.96	6.13	6.22
95th-Percentile Queue Length [ft/ln]	311.53	227.80		129.24	223.93	153.17	155.53

**Movement, Approach, & Intersection Results**

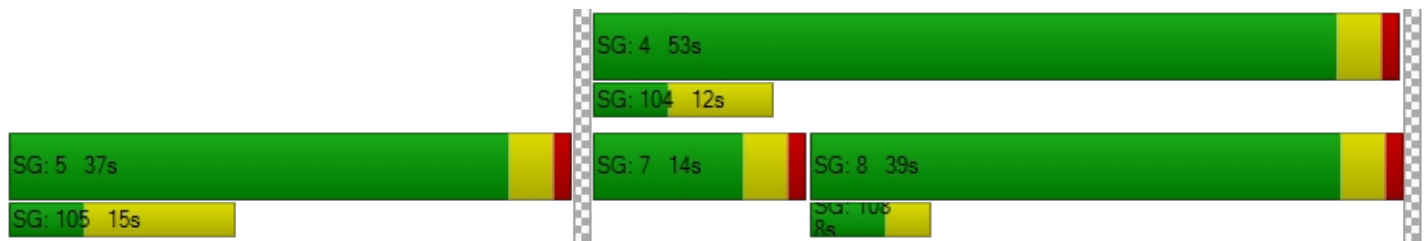
d_M, Delay for Movement [s/veh]	38.85	0.00	34.47	0.00	0.00	0.00	48.54	8.05	0.00	0.00	11.47	12.12
Movement LOS	D		C				D	A			B	B
d_A, Approach Delay [s/veh]	37.00			0.00			14.42			11.79		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	20.51											
Intersection LOS	C											
Intersection V/C	0.528											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.015	1.845	2.405	2.438
Crosswalk LOS	B	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1089	778
d_b, Bicycle Delay [s]	45.00	45.00	9.34	16.81
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.797	2.607
Bicycle LOS	D	D	C	B

**Sequence**



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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	All-way stop	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.059

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
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	41	0	0	31	11	0	0	23	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	0	0	41	0	0	31	11	0	0	23	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	10	0	0	8	3	0	0	6	0
Total Analysis Volume [veh/h]	0	0	0	41	0	0	31	11	0	0	23	0
Pedestrian Volume [ped/h]	0			0			0			0		

**Intersection Settings**

**Lanes**

Capacity per Entry Lane [veh/h]	756	756	756	696	770	770	770	696	771	771	764	764	764
Degree of Utilization, x	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.02	0.02

**Movement, Approach, & Intersection Results**

95th-Percentile Queue Length [veh]	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.14	0.04	0.00	0.00	0.05	0.05
95th-Percentile Queue Length [ft]	0.00	0.00	0.00	4.69	0.00	0.00	0.00	3.49	1.09	0.00	0.00	1.15	1.15
Approach Delay [s/veh]	0.00			8.20				7.94			7.49		
Approach LOS	A			A				A			A		
Intersection Delay [s/veh]	7.94												
Intersection LOS	A												

**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.045

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	31	0	13	0	41
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	31	0	13	0	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	8	0	3	0	10
Total Analysis Volume [veh/h]	0	31	0	13	0	41
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	0.00	0.00	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	9.12
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.14
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	3.52
d_A, Approach Delay [s/veh]	0.00		0.00		9.12	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.40					
Intersection LOS	A					



**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.041

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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]	42	0	0	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	0	0	0	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	0	0	0	6
Total Analysis Volume [veh/h]	42	0	0	0	0	23
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
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	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.71	8.51	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.24	3.24	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.71		3.62		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.63					
Intersection LOS	A					

## Beaumont Potrero Interchange Indust WH

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Geo\_AM\_TBB.vistro

Scenario 8 OY CUM WP AM

Report File: K:\...\8 OY CUM WP AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	WB Left	0.696	41.0	D
2	California Ave at 4th Street	Signalized	HCM 6th Edition	EB Left	0.842	29.3	C
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.684	13.7	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.665	25.1	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.715	30.6	C
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.937	28.4	C
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Right	0.655	25.9	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.523	22.4	C
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	WB Left	0.611	32.2	C
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.027	10.9	B
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.065	19.7	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	41.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	76	20	2	17	38	97	48	29	24	3	62	14
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	207	53	0	0	147	892	140	393	49	0	429	0
Site-Generated Trips [veh/h]	0	0	0	0	0	32	15	6	0	0	13	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]	286	74	2	18	187	1025	205	429	74	3	506	15
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	98	25	1	6	64	352	70	147	25	1	174	5
Total Analysis Volume [veh/h]	392	102	3	25	257	1406	281	588	102	4	694	21
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	0	3	8	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]	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]	25	24	0	25	24	0	20	32	0	9	21	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	15	0	0	15	0	0	9	0	0	12	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	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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]	21	39	2	20	16	32	32	0	17	17
g / C, Green / Cycle	0.23	0.43	0.03	0.22	0.17	0.36	0.36	0.01	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.22	0.06	0.01	0.14	0.16	0.19	0.19	0.00	0.19	0.19
s, saturation flow rate [veh/h]	1810	1890	1810	1900	1810	1900	1803	1810	1900	1880
c, Capacity [veh/h]	422	810	50	422	315	686	651	10	365	362
d1, Uniform Delay [s]	33.76	15.58	43.16	31.47	36.33	22.59	22.59	44.59	36.20	36.20
k, delay calibration	0.19	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.13	0.13
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]	14.71	0.33	7.68	6.39	8.61	0.60	0.64	22.30	20.55	20.84
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	0.93	0.13	0.50	0.61	0.89	0.52	0.52	0.39	0.98	0.98
d, Delay for Lane Group [s/veh]	48.47	15.91	50.84	37.85	44.94	23.20	23.23	66.89	56.75	57.04
Lane Group LOS	D	B	D	D	D	C	C	E	E	E
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	9.76	1.32	0.64	5.60	6.66	5.81	5.52	0.15	9.85	9.79
50th-Percentile Queue Length [ft/ln]	243.98	32.89	16.10	140.08	166.57	145.23	137.99	3.82	246.31	244.66
95th-Percentile Queue Length [veh/ln]	14.88	2.37	1.16	9.49	10.90	9.76	9.37	0.27	15.00	14.92
95th-Percentile Queue Length [ft/ln]	372.07	59.20	28.98	237.13	272.40	244.05	234.31	6.87	375.00	372.92

**Movement, Approach, & Intersection Results**

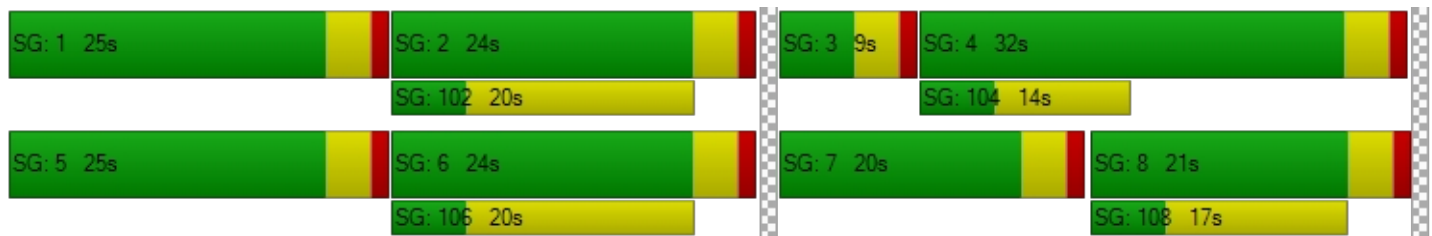
d_M, Delay for Movement [s/veh]	48.47	15.91	15.91	50.84	37.85	0.00	44.94	23.21	23.23	66.89	56.89	57.04
Movement LOS	D	B	B	D	D		D	C	C	E	E	E
d_A, Approach Delay [s/veh]	41.59			39.01			29.50			56.95		
Approach LOS	D			D			C			E		
d_I, Intersection Delay [s/veh]	41.01											
Intersection LOS	D											
Intersection V/C	0.696											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.268	2.328	2.702	2.518
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	622	378
d_b, Bicycle Delay [s]	27.22	27.22	21.36	29.61
I_b,int, Bicycle LOS Score for Intersection	2.380	2.025	2.361	2.153
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 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	29.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.842

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	12	665	167	74	43	23
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	162	35	13	317	338	74
Site-Generated Trips [veh/h]	4	0	0	9	5	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	178	727	187	403	388	99
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	256	66	142	137	35
Total Analysis Volume [veh/h]	251	1025	264	568	547	140
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	32	58	26	26	32	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	15	54	35	67	28	28
g / C, Green / Cycle	0.16	0.60	0.39	0.75	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.14	0.54	0.14	0.35	0.30	0.09
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810	1615
c, Capacity [veh/h]	295	1140	746	1208	563	502
d1, Uniform Delay [s]	36.60	15.63	19.28	4.40	30.61	23.38
k, delay calibration	0.11	0.50	0.50	0.50	0.38	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.84	11.27	1.32	1.31	26.94	0.30
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	0.85	0.90	0.35	0.47	0.97	0.28
d, Delay for Lane Group [s/veh]	43.44	26.91	20.60	5.72	57.55	23.68
Lane Group LOS	D	C	C	A	E	C
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.82	19.41	4.04	3.42	15.45	2.24
50th-Percentile Queue Length [ft/ln]	145.53	485.19	101.02	85.52	386.35	55.99
95th-Percentile Queue Length [veh/ln]	9.78	26.63	7.27	6.16	21.90	4.03
95th-Percentile Queue Length [ft/ln]	244.45	665.81	181.83	153.93	547.53	100.78

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	43.44	26.91	20.60	5.72	57.55	23.68
Movement LOS	D	C	C	A	E	C
d_A, Approach Delay [s/veh]	30.16		10.44		50.65	
Approach LOS	C		B		D	
d_I, Intersection Delay [s/veh]	29.33					
Intersection LOS	C					
Intersection V/C	0.842					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.488	2.723	2.595
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	6.238	5.505	4.132
Bicycle LOS	F	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	869	8	23	1085	59	72	7	74	11	4	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	258	0	0	612	128	33	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	2	1	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]	17	1162	8	24	1740	191	109	7	77	11	4	20
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	303	2	6	453	50	28	2	20	3	1	5
Total Analysis Volume [veh/h]	18	1210	8	25	1813	199	114	7	80	11	4	21
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	51	56	0	10	15	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	62	62	3	63	63	13	13
g / C, Green / Cycle	0.02	0.69	0.69	0.03	0.70	0.70	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.01	0.32	0.32	0.01	0.53	0.55	0.13	0.02
s, saturation flow rate [veh/h]	1810	1900	1896	1810	1900	1836	1590	1659
c, Capacity [veh/h]	45	1310	1307	56	1321	1276	295	295
d1, Uniform Delay [s]	43.20	6.39	6.40	42.84	8.88	9.24	37.24	33.50
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.49	1.19	1.19	5.43	4.19	4.98	2.76	0.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.40	0.47	0.47	0.44	0.76	0.79	0.68	0.12
d, Delay for Lane Group [s/veh]	48.69	7.59	7.59	48.27	13.07	14.23	40.00	33.68
Lane Group LOS	D	A	A	D	B	B	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.46	4.81	4.80	0.63	11.62	12.26	4.46	0.69
50th-Percentile Queue Length [ft/ln]	11.51	120.25	120.03	15.64	290.50	306.58	111.52	17.35
95th-Percentile Queue Length [veh/ln]	0.83	8.41	8.39	1.13	17.21	18.01	7.92	1.25
95th-Percentile Queue Length [ft/ln]	20.71	210.17	209.86	28.16	430.27	450.15	198.12	31.23

**Movement, Approach, & Intersection Results**

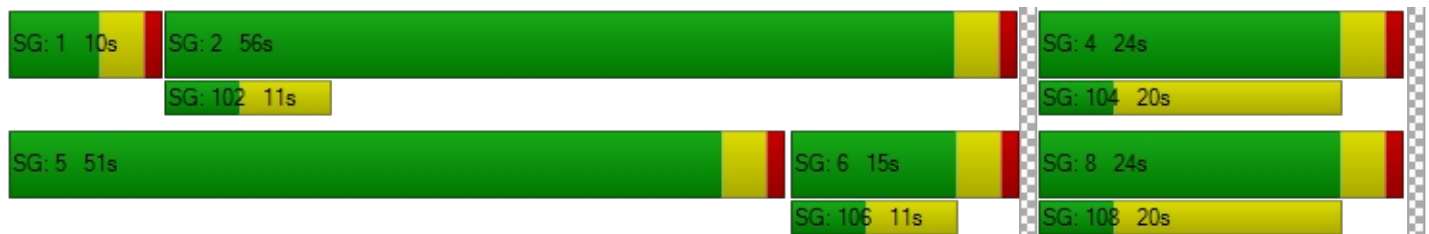
d_M, Delay for Movement [s/veh]	48.69	7.59	7.59	48.27	13.59	14.23	40.00	40.00	40.00	33.68	33.68	33.68
Movement LOS	D	A	A	D	B	B	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	8.19			14.07			40.00			33.68		
Approach LOS	A			B			D			C		
d_I, Intersection Delay [s/veh]	13.69											
Intersection LOS	B											
Intersection V/C	0.684											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.929	3.123	1.922	1.753
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]	1156	244	444	444
d_b, Bicycle Delay [s]	8.02	34.67	27.22	27.22
I_b,int, Bicycle LOS Score for Intersection	2.579	3.240	1.891	1.619
Bicycle LOS	B	C	A	A

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.665

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	204	147	116	447	0	289	0	373	0	0	0
Site-Generated Trips [veh/h]	0	0	1	3	2	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	727	624	229	1090	0	379	0	939	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	184	158	58	276	0	96	0	238	0	0	0
Total Analysis Volume [veh/h]	0	737	633	232	1105	0	384	0	952	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	15	0	39	54	0	36	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	9	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	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	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	33	14	50	32	32	
g / C, Green / Cycle	0.36	0.15	0.56	0.35	0.35	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.13	0.31	0.21	0.33	
s, saturation flow rate [veh/h]	3618	1810	3618	1810	2859	
c, Capacity [veh/h]	1308	278	2024	636	1005	
d1, Uniform Delay [s]	23.03	36.99	12.57	24.02	28.37	
k, delay calibration	0.50	0.11	0.50	0.16	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.76	6.54	1.06	1.34	5.61	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.56	0.84	0.55	0.60	0.95	
d, Delay for Lane Group [s/veh]	24.79	43.53	13.64	25.35	33.98	
Lane Group LOS	C	D	B	C	C	
Critical Lane Group	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	6.36	5.37	6.76	6.73	10.29	
50th-Percentile Queue Length [ft/ln]	159.03	134.35	169.11	168.30	257.35	
95th-Percentile Queue Length [veh/ln]	10.50	9.18	11.03	10.99	15.56	
95th-Percentile Queue Length [ft/ln]	262.44	229.40	275.75	274.68	388.90	

**Movement, Approach, & Intersection Results**

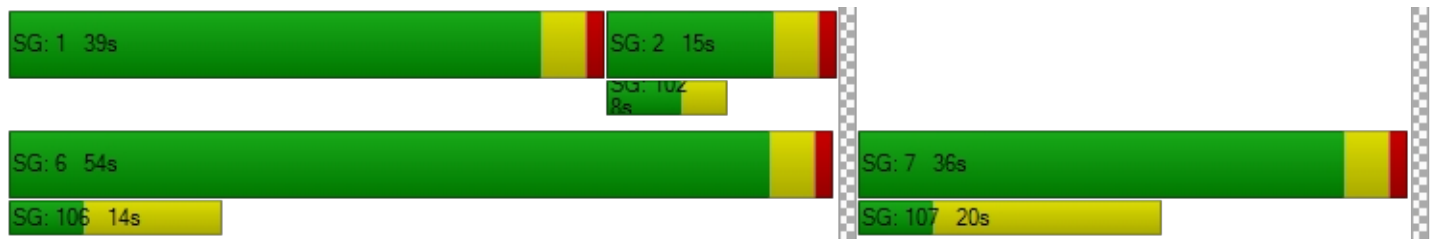
d_M, Delay for Movement [s/veh]	0.00	24.79	0.00	43.53	13.64	0.00	25.35	0.00	33.98	0.00	0.00	0.00
Movement LOS		C		D	B		C		C			
d_A, Approach Delay [s/veh]	24.79			18.82			31.50			0.00		
Approach LOS	C			B			C			A		
d_I, Intersection Delay [s/veh]	25.08											
Intersection LOS	C											
Intersection V/C	0.665											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.846	2.781	2.376	1.651
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	244	1111	0	0
d_b, Bicycle Delay [s]	34.67	8.89	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.168	2.663	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	30.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.715

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵						↵↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	114	228	0	0	300	170	0	0	0	309	0	229
Site-Generated Trips [veh/h]	0	0	0	0	3	0	0	0	0	2	0	5
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]	475	480	0	0	652	251	0	0	0	727	0	373
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	126	127	0	0	173	67	0	0	0	193	0	99
Total Analysis Volume [veh/h]	504	510	0	0	692	266	0	0	0	772	0	396
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	43	55	0	0	12	0	0	0	0	0	35	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	27	56	25	25		26	26
g / C, Green / Cycle	0.30	0.63	0.28	0.28		0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.28	0.14	0.19	0.16		0.22	0.25
s, saturation flow rate [veh/h]	1810	3618	3618	1615		3514	1615
c, Capacity [veh/h]	550	2268	1008	450		999	459
d1, Uniform Delay [s]	30.22	7.29	28.96	28.04		29.55	30.55
k, delay calibration	0.20	0.50	0.50	0.50		0.11	0.24
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	10.89	0.23	3.81	5.62		1.31	10.17
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	0.92	0.22	0.69	0.59		0.77	0.86
d, Delay for Lane Group [s/veh]	41.11	7.52	32.77	33.66		30.86	40.72
Lane Group LOS	D	A	C	C		C	D
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	11.81	1.98	7.01	5.52		7.61	9.18
50th-Percentile Queue Length [ft/ln]	295.24	49.58	175.27	138.07		190.25	229.38
95th-Percentile Queue Length [veh/ln]	17.45	3.57	11.35	9.38		12.13	14.14
95th-Percentile Queue Length [ft/ln]	436.13	89.25	283.83	234.43		303.35	353.57

**Movement, Approach, & Intersection Results**

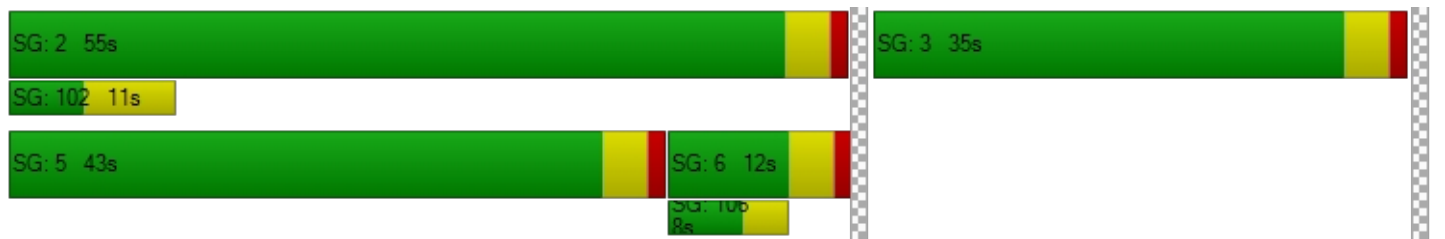
d_M, Delay for Movement [s/veh]	41.11	7.52	0.00	0.00	32.77	33.66	0.00	0.00	0.00	30.86	0.00	40.72
Movement LOS	D	A			C	C				C		D
d_A, Approach Delay [s/veh]	24.22				33.02		0.00		34.20			
Approach LOS	C				C		A		C			
d_I, Intersection Delay [s/veh]	30.62											
Intersection LOS	C											
Intersection V/C	0.715											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	31.0	31.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	19.34	19.34	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.759	2.639	2.176	2.321
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1133	178	0	0
d_b, Bicycle Delay [s]	8.45	37.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.396	2.350	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	28.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.937

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐⇐		⇐⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	6	71	205	13	53	167
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	215	871	53	207	714	69
Site-Generated Trips [veh/h]	0	13	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	221	958	266	221	797	243
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	299	83	69	249	76
Total Analysis Volume [veh/h]	276	1196	332	276	995	303
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	40	40	29	0	21	50
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	14	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	64	64	18	18	53	75
g / C, Green / Cycle	0.71	0.71	0.20	0.20	0.59	0.83
(v / s)_i Volume / Saturation Flow Rate	0.15	0.74	0.09	0.17	0.28	0.06
s, saturation flow rate [veh/h]	1810	1615	3618	1615	3514	5176
c, Capacity [veh/h]	1287	1150	721	322	2055	4288
d1, Uniform Delay [s]	4.42	12.97	31.77	34.80	10.83	1.41
k, delay calibration	0.11	0.50	0.11	0.11	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.08	37.62	0.46	6.60	0.82	0.01
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	0.21	1.04	0.46	0.86	0.48	0.07
d, Delay for Lane Group [s/veh]	4.51	50.59	32.23	41.40	11.65	1.41
Lane Group LOS	A	F	C	D	B	A
Critical Lane Group	Yes	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.44	29.25	3.18	6.29	5.43	0.15
50th-Percentile Queue Length [ft/ln]	35.95	731.19	79.45	157.36	135.63	3.79
95th-Percentile Queue Length [veh/ln]	2.59	39.49	5.72	10.41	9.25	0.27
95th-Percentile Queue Length [ft/ln]	64.71	987.14	143.00	260.22	231.13	6.82

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	4.51	50.59	32.23	41.40	11.65	1.41
Movement LOS	A	F	C	D	B	A
d_A, Approach Delay [s/veh]	41.95		36.39		9.26	
Approach LOS	D		D		A	
d_I, Intersection Delay [s/veh]	28.39					
Intersection LOS	C					
Intersection V/C	0.937					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.801	2.647	3.071
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.634	4.846
Bicycle LOS	D	E	E

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	25.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⇐⇐⇐			⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	218	1	38	0	373	334	223	370	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 [%]	2.00	2.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	127	0	435	0	688	211	159	280	0
Site-Generated Trips [veh/h]	0	0	0	0	0	26	0	13	0	0	2	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	0	0	354	1	501	0	1089	558	391	667	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	92	0	130	0	282	145	101	173	0
Total Analysis Volume [veh/h]	0	0	0	367	1	519	0	1128	578	405	691	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss
Signal Group	0	0	0	1	0	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	5	0	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	30	0	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	41	0	0	0	16	0	33	49	0
Vehicle Extension [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	27	0	0	0	7	0	0	10	0
Rest In Walk				No				No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	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		L	R	C	L	C
C, Cycle Length [s]		90	90	90	90	90
L, Total Lost Time per Cycle [s]		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
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		32	32	33	13	50
g / C, Green / Cycle		0.35	0.35	0.37	0.15	0.56
(v / s)_i Volume / Saturation Flow Rate		0.10	0.32	0.22	0.12	0.13
s, saturation flow rate [veh/h]		3514	1615	5176	3514	5176
c, Capacity [veh/h]		1231	566	1910	518	2902
d1, Uniform Delay [s]		21.21	27.98	22.91	36.98	10.02
k, delay calibration		0.11	0.30	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.13	14.96	1.35	2.63	0.19
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.30	0.92	0.59	0.78	0.24
d, Delay for Lane Group [s/veh]		21.34	42.95	24.26	39.60	10.21
Lane Group LOS		C	D	C	D	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		2.76	12.57	6.43	4.41	2.20
50th-Percentile Queue Length [ft/ln]		69.00	314.17	160.72	110.28	55.11
95th-Percentile Queue Length [veh/ln]		4.97	18.38	10.59	7.86	3.97
95th-Percentile Queue Length [ft/ln]		124.19	459.51	264.67	196.40	99.19

**Movement, Approach, & Intersection Results**

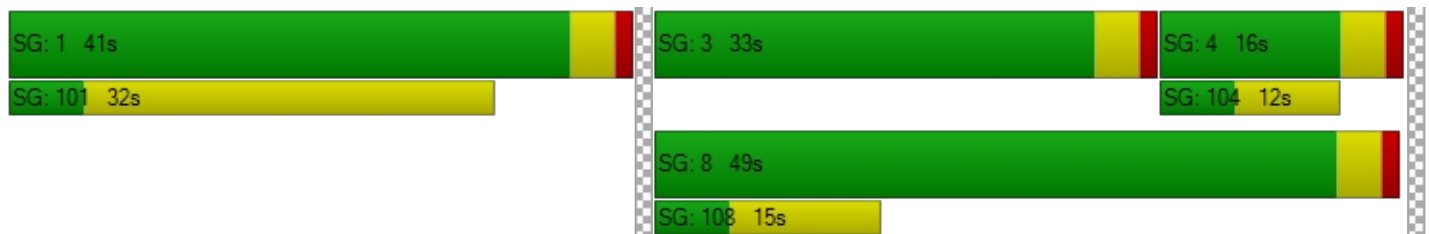
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	21.34	0.00	42.95	0.00	24.26	0.00	39.60	10.21	0.00
Movement LOS				C		D		C		D	B	
d_A, Approach Delay [s/veh]	0.00			34.00			24.26			21.07		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	25.91											
Intersection LOS	C											
Intersection V/C	0.655											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.914	2.230	3.012	3.131
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	267	1000
d_b, Bicycle Delay [s]	45.00	45.00	33.80	11.25
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.180	2.162
Bicycle LOS	D	D	B	B

**Sequence**




Ring 1	1	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	22.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	160	0	185	0	0	0	128	468	0	0	433	544
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	195	0	148	0	0	0	313	381	0	0	341	212
Site-Generated Trips [veh/h]	0	0	0	0	0	0	12	1	0	0	2	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	0	340	0	0	0	458	869	0	0	793	778
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	96	0	90	0	0	0	121	230	0	0	210	206
Total Analysis Volume [veh/h]	382	0	360	0	0	0	485	920	0	0	839	823
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	40	0	0	0	0	0	38	50	0	0	12	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C
C, Cycle Length [s]	90	90		90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	23	23		15	59	40
g / C, Green / Cycle	0.26	0.26		0.17	0.65	0.44
(v / s)_i Volume / Saturation Flow Rate	0.21	0.22		0.14	0.18	0.16
s, saturation flow rate [veh/h]	1810	1615		3514	5176	5176
c, Capacity [veh/h]	464	414		605	3389	2267
d1, Uniform Delay [s]	31.54	32.02		35.77	6.52	16.96
k, delay calibration	0.11	0.13		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.73	6.75		2.52	0.20	0.47
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.82	0.87		0.80	0.27	0.37
d, Delay for Lane Group [s/veh]	35.28	38.77		38.29	6.72	17.42
Lane Group LOS	D	D		D	A	B
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	8.09	8.06		5.23	2.20	3.82
50th-Percentile Queue Length [ft/ln]	202.23	201.38		130.68	55.09	95.42
95th-Percentile Queue Length [veh/ln]	12.75	12.71		8.98	3.97	6.87
95th-Percentile Queue Length [ft/ln]	318.84	317.75		224.41	99.16	171.76

**Movement, Approach, & Intersection Results**

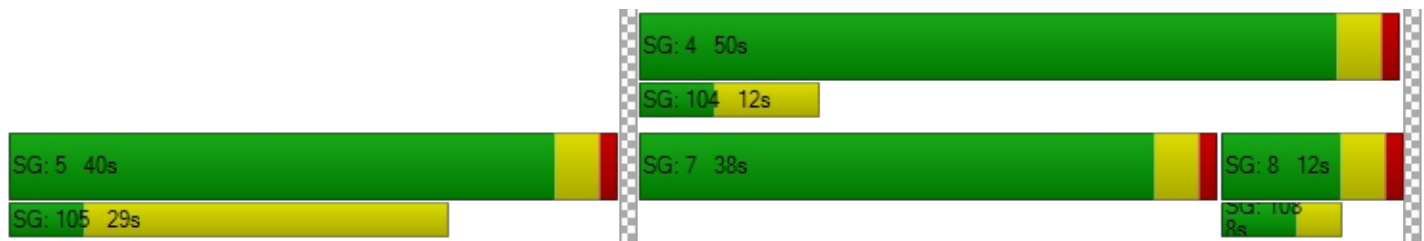
d_M, Delay for Movement [s/veh]	35.28	0.00	38.77	0.00	0.00	0.00	38.29	6.72	0.00	0.00	17.42	0.00
Movement LOS	D		D				D	A			B	
d_A, Approach Delay [s/veh]	36.97			0.00			17.62			17.42		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	22.37											
Intersection LOS	C											
Intersection 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 <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.078	1.953	3.135	2.891
Crosswalk LOS	B	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1022	178
d_b, Bicycle Delay [s]	45.00	45.00	10.76	37.36
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.332	2.021
Bicycle LOS	D	D	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵↵			↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	242	166	0	349	117	146	0	89	449	45
Site-Generated Trips [veh/h]	0	0	0	17	0	0	13	4	0	0	45	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	0	242	183	0	349	130	150	0	89	494	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	61	46	0	87	33	38	0	22	124	11
Total Analysis Volume [veh/h]	0	0	242	183	0	349	130	150	0	89	494	45
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	16	37	37	15	29	0	15	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	12	12	0	9	0	0	15	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	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	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	16	11	26	45	15	42	6	33
g / C, Green / Cycle	0.00	0.17	0.12	0.29	0.50	0.16	0.46	0.06	0.37
(v / s)_i Volume / Saturation Flow Rate	0.00	0.15	0.10	0.00	0.22	0.07	0.08	0.05	0.29
s, saturation flow rate [veh/h]	1810	1615	1810	1900	1615	1810	1900	1810	1872
c, Capacity [veh/h]	2	280	218	557	808	294	880	118	684
d1, Uniform Delay [s]	0.00	36.14	38.72	0.00	14.33	34.00	14.09	41.38	25.44
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	7.75	8.34	0.00	0.37	1.04	0.42	9.49	8.93
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.00	0.86	0.84	0.00	0.43	0.44	0.17	0.76	0.79
d, Delay for Lane Group [s/veh]	0.00	43.89	47.06	0.00	14.70	35.04	14.51	50.87	34.37
Lane Group LOS	A	D	D	A	B	D	B	D	C
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	5.67	4.39	0.00	4.35	2.61	1.82	2.23	11.52
50th-Percentile Queue Length [ft/ln]	0.00	141.64	109.86	0.00	108.85	65.30	45.40	55.72	288.04
95th-Percentile Queue Length [veh/ln]	0.00	9.57	7.83	0.00	7.78	4.70	3.27	4.01	17.09
95th-Percentile Queue Length [ft/ln]	0.00	239.23	195.81	0.00	194.40	117.54	81.72	100.30	427.21

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	43.89	43.89	47.06	0.00	14.70	35.04	14.51	14.51	50.87	34.37	34.37
Movement LOS	A	D	D	D	A	B	D	B	B	D	C	C
d_A, Approach Delay [s/veh]	43.89			25.83			24.04			36.71		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	32.19											
Intersection LOS	C											
Intersection V/C	0.611											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.049	2.569	2.406	2.536
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	578	733	556	556
d_b, Bicycle Delay [s]	22.76	18.05	23.47	23.47
I_b,int, Bicycle LOS Score for Intersection	1.959	2.437	2.022	2.596
Bicycle LOS	A	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 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	10.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.027

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	162	515	0	0	0
Site-Generated Trips [veh/h]	0	13	0	28	0	17
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	175	515	28	0	17
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	44	129	7	0	4
Total Analysis Volume [veh/h]	0	175	515	28	0	17
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	0.00	0.01	0.00	0.00	0.03
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	10.93
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.08
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	2.10
d_A, Approach Delay [s/veh]	0.00		0.00		10.93	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	19.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.065

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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	263	798	0
Site-Generated Trips [veh/h]	17	0	0	0	0	45
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	0	263	798	45
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	66	200	11
Total Analysis Volume [veh/h]	17	0	0	263	798	45
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	19.74	12.10	9.49	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.19	5.19	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.74		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.30					
Intersection LOS	C					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_\_OY Lane

Scenario 8 OY CUM WP PM

Geo\_PM\_TBB.vistro

Report File: K:\...\8 OY CUM WP PM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	NB Left	0.738	28.5	C
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.788	29.6	C
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.815	26.0	C
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	EB Right	0.968	64.4	E
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.966	69.5	E
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.045	41.7	D
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.703	25.4	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Thru	0.807	33.6	C
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.653	29.5	C
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.053	9.9	A
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.149	20.0	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	28.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.738

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵			↵↵			↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	24	23	7	9	71	29	127	56	63	9	36	28
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	51	150	0	0	59	445	563	772	196	0	227	0
Site-Generated Trips [veh/h]	0	0	0	0	0	16	35	16	0	0	7	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]	76	174	7	9	133	491	730	846	262	9	271	29
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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]	24	54	2	3	41	152	226	262	81	3	84	9
Total Analysis Volume [veh/h]	94	215	9	11	165	608	903	1047	324	11	335	36
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	0	3	8	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]	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	24	0	9	24	0	36	26	0	31	21	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	15	0	0	15	0	0	9	0	0	12	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	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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]	5	13	1	10	48	58	58	1	11	11
g / C, Green / Cycle	0.06	0.15	0.01	0.11	0.53	0.64	0.64	0.01	0.12	0.12
(v / s)_i Volume / Saturation Flow Rate	0.05	0.12	0.01	0.09	0.50	0.36	0.39	0.01	0.10	0.10
s, saturation flow rate [veh/h]	1810	1887	1810	1900	1810	1900	1754	1810	1900	1836
c, Capacity [veh/h]	101	283	24	205	966	1224	1130	26	237	229
d1, Uniform Delay [s]	42.34	36.89	44.06	39.21	19.53	8.91	9.35	43.97	38.23	38.28
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.50	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]	28.30	4.95	12.36	7.20	16.96	1.85	2.43	10.34	5.80	6.33
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	0.94	0.79	0.45	0.80	0.93	0.56	0.61	0.42	0.79	0.80
d, Delay for Lane Group [s/veh]	70.64	41.85	56.42	46.41	36.49	10.77	11.78	54.31	44.03	44.61
Lane Group LOS	E	D	E	D	D	B	B	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.82	5.00	0.32	3.88	20.35	7.06	7.51	0.32	4.38	4.32
50th-Percentile Queue Length [ft/ln]	70.57	125.00	8.06	96.95	508.84	176.46	187.66	7.97	109.53	108.04
95th-Percentile Queue Length [veh/ln]	5.08	8.67	0.58	6.98	27.75	11.42	12.00	0.57	7.81	7.73
95th-Percentile Queue Length [ft/ln]	127.03	216.68	14.52	174.52	693.82	285.39	299.99	14.34	195.34	193.27

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	70.64	41.85	41.85	56.42	46.41	0.00	36.49	11.12	11.78	54.31	44.29	44.61
Movement LOS	E	D	D	E	D		D	B	B	D	D	D
d_A, Approach Delay [s/veh]	50.36			47.04			21.28			44.61		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	28.49											
Intersection LOS	C											
Intersection V/C	0.738											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.252	2.511	2.828	2.537
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	489	378
d_b, Bicycle Delay [s]	27.22	27.22	25.69	29.61
I_b,int, Bicycle LOS Score for Intersection	2.084	1.850	3.436	1.875
Bicycle LOS	B	A	C	A

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	29.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.788

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	13	520	274	52	76	17
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	88	23	39	158	651	171
Site-Generated Trips [veh/h]	2	0	0	5	10	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	104	564	324	217	740	195
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	157	90	61	206	54
Total Analysis Volume [veh/h]	116	629	362	242	826	218
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	10	36	26	26	54	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	6	38	28	76	44	44
g / C, Green / Cycle	0.07	0.42	0.31	0.84	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.06	0.33	0.19	0.15	0.46	0.13
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810	1615
c, Capacity [veh/h]	121	804	593	1364	883	788
d1, Uniform Delay [s]	41.89	22.37	26.30	1.28	21.72	13.65
k, delay calibration	0.11	0.50	0.50	0.50	0.34	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	29.69	7.46	4.63	0.28	13.57	0.19
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	0.78	0.61	0.18	0.94	0.28
d, Delay for Lane Group [s/veh]	71.58	29.83	30.93	1.57	35.29	13.84
Lane Group LOS	E	C	C	A	D	B
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.53	12.48	7.15	0.39	18.45	2.55
50th-Percentile Queue Length [ft/ln]	88.24	312.12	178.75	9.84	461.16	63.72
95th-Percentile Queue Length [veh/ln]	6.35	18.28	11.54	0.71	25.49	4.59
95th-Percentile Queue Length [ft/ln]	158.83	456.99	288.38	17.72	637.25	114.69

**Movement, Approach, & Intersection Results**

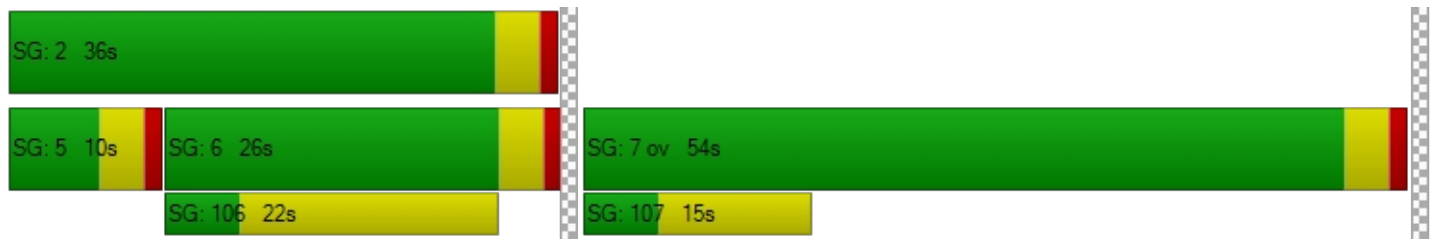
d_M, Delay for Movement [s/veh]	71.58	29.83	30.93	1.57	35.29	13.84
Movement LOS	E	C	C	A	D	B
d_A, Approach Delay [s/veh]	36.33		19.16		30.81	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	29.59					
Intersection LOS	C					
Intersection V/C	0.788					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.372	2.611	2.575
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	5.362	5.129	4.132
Bicycle LOS	F	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	26.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.815

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	717	0	0	389	35	123	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	1	2	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]	19	1528	19	24	2149	86	217	4	48	9	7	27
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	397	5	6	558	22	56	1	12	2	2	7
Total Analysis Volume [veh/h]	20	1588	20	25	2234	89	226	4	50	9	7	28
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	40	0	26	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	57	57	2	58	58	18	18
g / C, Green / Cycle	0.02	0.64	0.64	0.03	0.64	0.64	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.01	0.42	0.42	0.01	0.61	0.62	0.18	0.02
s, saturation flow rate [veh/h]	1810	1900	1892	1810	1900	1875	1515	1772
c, Capacity [veh/h]	40	1209	1204	50	1219	1203	379	407
d1, Uniform Delay [s]	43.50	10.32	10.33	43.15	14.85	15.17	34.69	29.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.12	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.21	2.91	2.94	7.61	16.64	18.86	3.22	0.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.67	0.67	0.50	0.95	0.97	0.74	0.11
d, Delay for Lane Group [s/veh]	52.72	13.22	13.27	50.76	31.49	34.03	37.91	29.48
Lane Group LOS	D	B	B	D	C	C	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.54	9.61	9.61	0.65	23.77	24.83	6.17	0.78
50th-Percentile Queue Length [ft/ln]	13.47	240.31	240.25	16.23	594.15	620.70	154.31	19.58
95th-Percentile Queue Length [veh/ln]	0.97	14.70	14.69	1.17	31.76	33.00	10.25	1.41
95th-Percentile Queue Length [ft/ln]	24.25	367.43	367.35	29.21	794.02	825.00	256.17	35.24

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	52.72	13.24	13.27	50.76	32.71	34.03	37.91	37.91	37.91	29.48	29.48	29.48
Movement LOS	D	B	B	D	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	13.73			32.95			37.91			29.48		
Approach LOS	B			C			D			C		
d_I, Intersection Delay [s/veh]	25.96											
Intersection LOS	C											
Intersection V/C	0.815											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.079	3.440	1.909	1.762
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]	800	1156	444	444
d_b, Bicycle Delay [s]	16.20	8.02	27.22	27.22
I_b,int, Bicycle LOS Score for Intersection	2.903	3.497	2.022	1.632
Bicycle LOS	C	C	B	A

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	64.4
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.968

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	685	360	346	353	0	311	0	170	0	0	0
Site-Generated Trips [veh/h]	0	0	2	6	1	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	1170	793	435	1357	0	422	0	1007	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	309	210	115	359	0	112	0	266	0	0	0
Total Analysis Volume [veh/h]	0	1237	838	460	1434	0	446	0	1064	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	32	0	25	57	0	33	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	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	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	28	21	53	29	29	
g / C, Green / Cycle	0.31	0.23	0.59	0.32	0.32	
(v / s)_i Volume / Saturation Flow Rate	0.34	0.25	0.40	0.25	0.37	
s, saturation flow rate [veh/h]	3618	1810	3618	1810	2859	
c, Capacity [veh/h]	1125	422	2130	583	921	
d1, Uniform Delay [s]	31.00	34.50	12.60	27.43	30.50	
k, delay calibration	0.50	0.28	0.50	0.26	0.13	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	58.19	59.64	1.72	4.98	73.32	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	1.10	1.09	0.67	0.76	1.16	
d, Delay for Lane Group [s/veh]	89.19	94.14	14.32	32.41	103.82	
Lane Group LOS	F	F	B	C	F	
Critical Lane Group	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	20.81	15.96	9.29	9.13	18.93	
50th-Percentile Queue Length [ft/ln]	520.19	399.06	232.29	228.21	473.35	
95th-Percentile Queue Length [veh/ln]	30.01	23.61	14.29	14.08	28.42	
95th-Percentile Queue Length [ft/ln]	750.20	590.20	357.26	352.09	710.46	

**Movement, Approach, & Intersection Results**

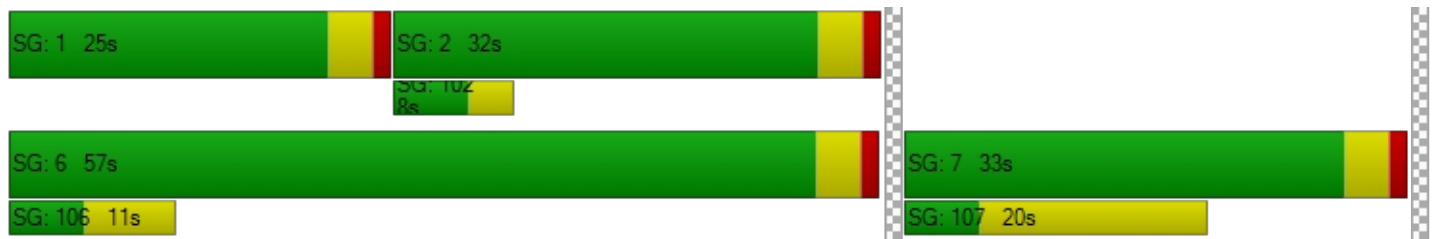
d_M, Delay for Movement [s/veh]	0.00	89.19	0.00	94.14	14.32	0.00	32.41	0.00	103.82	0.00	0.00	0.00
Movement LOS		F		F	B		C		F			
d_A, Approach Delay [s/veh]	89.19			33.71			82.73			0.00		
Approach LOS	F			C			F			A		
d_I, Intersection Delay [s/veh]	64.44											
Intersection LOS	E											
Intersection V/C	0.968											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.030	2.999	2.432	1.873
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	622	1178	0	0
d_b, Bicycle Delay [s]	21.36	7.61	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.580	3.122	4.132	4.132
Bicycle LOS	B	C	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	69.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.966

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	0.00
Growth Factor	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0000	1.0400
In-Process Volume [veh/h]	411	579	0	0	608	316	0	0	0	201	0	211
Site-Generated Trips [veh/h]	0	0	0	0	6	0	0	0	0	1	0	3
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]	706	900	0	0	957	453	0	0	0	913	0	360
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	183	234	0	0	248	118	0	0	0	237	0	93
Total Analysis Volume [veh/h]	733	935	0	0	994	470	0	0	0	948	0	374
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	36	64	0	0	28	0	0	0	0	0	26	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	32	60	24	24		22	22
g / C, Green / Cycle	0.36	0.67	0.27	0.27		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.41	0.26	0.27	0.29		0.27	0.23
s, saturation flow rate [veh/h]	1810	3618	3618	1615		3514	1615
c, Capacity [veh/h]	643	2412	965	431		859	395
d1, Uniform Delay [s]	29.00	6.74	33.00	33.00		34.00	33.43
k, delay calibration	0.50	0.50	0.50	0.50		0.11	0.40
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	80.50	0.47	37.03	70.30		51.20	29.18
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	1.14	0.39	1.03	1.09		1.10	0.95
d, Delay for Lane Group [s/veh]	109.50	7.21	70.03	103.30		85.20	62.61
Lane Group LOS	F	A	F	F		F	E
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	27.59	3.59	15.12	17.48		15.21	10.99
50th-Percentile Queue Length [ft/ln]	689.78	89.83	378.09	437.06		380.16	274.75
95th-Percentile Queue Length [veh/ln]	39.43	6.47	21.89	25.61		22.81	16.43
95th-Percentile Queue Length [ft/ln]	985.70	161.70	547.27	640.37		570.24	410.67

**Movement, Approach, & Intersection Results**

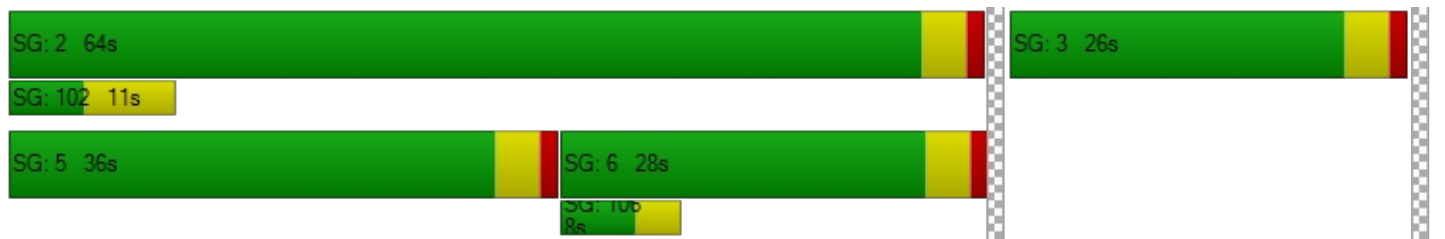
d_M, Delay for Movement [s/veh]	109.50	7.21	0.00	0.00	70.03	103.30	0.00	0.00	0.00	85.20	0.00	62.61
Movement LOS	F	A			F	F				F		E
d_A, Approach Delay [s/veh]	52.16		80.71		0.00		78.81					
Approach LOS	D		F		A		E					
d_I, Intersection Delay [s/veh]	69.46											
Intersection LOS	E											
Intersection V/C	0.966											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	22.0	22.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	25.69	25.69	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.991	2.828	2.598	2.371
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1333	533	0	0
d_b, Bicycle Delay [s]	5.00	24.20	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.936	2.767	4.132	4.132
Bicycle LOS	C	C	D	D

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	41.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.045

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration	⇐⇐		⇐⇐		⇐⇐⇐⇐	
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	50	60	145	17	37	227
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	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	308	1092	122	298	1168	113
Site-Generated Trips [veh/h]	0	31	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	360	1185	273	316	1219	349
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	96	317	73	85	326	93
Total Analysis Volume [veh/h]	385	1269	292	338	1305	374
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Overlap	Permissive	Permissive	Protected	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups		1,8				
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	0	5	5
Maximum Green [s]	30	30	30	0	30	30
Amber [s]	3.0	3.0	3.0	0.0	3.0	3.0
All red [s]	1.0	1.0	1.0	0.0	1.0	1.0
Split [s]	36	36	24	0	30	54
Vehicle Extension [s]	3.0	3.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	14	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	0.0	2.0	2.0
Minimum Recall	No	No	No		No	No
Maximum Recall	No	No	No		No	No
Pedestrian Recall	No	No	No		No	No
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	R	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	62	62	20	20	47	71
g / C, Green / Cycle	0.69	0.69	0.22	0.22	0.53	0.79
(v / s)_i Volume / Saturation Flow Rate	0.21	0.79	0.08	0.21	0.37	0.07
s, saturation flow rate [veh/h]	1810	1615	3618	1615	3514	5176
c, Capacity [veh/h]	1245	1113	804	359	1848	4102
d1, Uniform Delay [s]	5.56	14.00	29.61	34.43	16.09	2.09
k, delay calibration	0.16	0.50	0.11	0.18	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.20	74.43	0.28	17.34	2.30	0.01
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	1.14	0.36	0.94	0.71	0.09
d, Delay for Lane Group [s/veh]	5.76	88.43	29.89	51.76	18.38	2.10
Lane Group LOS	A	F	C	D	B	A
Critical Lane Group	Yes	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	40.50	2.66	8.81	9.87	0.31
50th-Percentile Queue Length [ft/ln]	61.69	1012.58	66.52	220.18	246.82	7.74
95th-Percentile Queue Length [veh/ln]	4.44	56.87	4.79	13.67	15.03	0.56
95th-Percentile Queue Length [ft/ln]	111.04	1421.82	119.74	341.85	375.65	13.93

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	5.76	88.43	29.89	51.76	18.38	2.10
Movement LOS	A	F	C	D	B	A
d_A, Approach Delay [s/veh]	69.19		41.62		14.76	
Approach LOS	E		D		B	
d_I, Intersection Delay [s/veh]	41.75					
Intersection LOS	D					
Intersection V/C	1.045					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.936	2.680	3.122
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.652	5.056
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	25.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.703

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⇐⇐⇐			⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	429	4	114	0	231	221	143	479	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 [%]	2.00	2.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0400	1.0200	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	403	0	388	0	865	265	320	660	0
Site-Generated Trips [veh/h]	0	0	0	0	0	12	0	31	0	0	1	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	0	0	849	4	519	0	1136	495	469	1159	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	221	1	135	0	296	129	122	302	0
Total Analysis Volume [veh/h]	0	0	0	884	4	541	0	1183	516	489	1207	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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss
Signal Group	0	0	0	1	0	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	5	0	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	30	0	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	55	0	0	0	16	0	19	35	0
Vehicle Extension [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	27	0	0	0	7	0	0	10	0
Rest In Walk				No				No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	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		L	R	C	L	C
C, Cycle Length [s]		90	90	90	90	90
L, Total Lost Time per Cycle [s]		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
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		35	35	28	15	47
g / C, Green / Cycle		0.39	0.39	0.31	0.17	0.53
(v / s)_i Volume / Saturation Flow Rate		0.25	0.33	0.23	0.14	0.23
s, saturation flow rate [veh/h]		3514	1615	5176	3514	5176
c, Capacity [veh/h]		1356	623	1606	599	2718
d1, Uniform Delay [s]		22.67	25.52	27.74	35.98	13.23
k, delay calibration		0.11	0.16	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.54	5.62	3.05	2.80	0.53
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.65	0.87	0.74	0.82	0.44
d, Delay for Lane Group [s/veh]		23.21	31.14	30.79	38.78	13.76
Lane Group LOS		C	C	C	D	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		7.47	11.13	7.79	5.30	4.84
50th-Percentile Queue Length [ft/ln]		186.81	278.20	194.77	132.53	121.00
95th-Percentile Queue Length [veh/ln]		11.96	16.60	12.37	9.08	8.45
95th-Percentile Queue Length [ft/ln]		298.89	414.97	309.21	226.93	211.20

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	23.21	0.00	31.14	0.00	30.79	0.00	38.78	13.76	0.00
Movement LOS				C		C		C		D	B	
d_A, Approach Delay [s/veh]	0.00			26.22			30.79			20.97		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	25.41											
Intersection LOS	C											
Intersection V/C	0.703											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.955	2.405	3.084	3.258
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	267	689
d_b, Bicycle Delay [s]	45.00	45.00	33.80	19.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.210	2.492
Bicycle LOS	D	D	B	B

**Sequence**

Ring 1	1	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-





**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	33.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.807

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	328	0	240	0	0	0	82	584	0	0	297	290
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0400	1.0000	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	258	0	383	0	0	0	517	688	0	0	757	380
Site-Generated Trips [veh/h]	0	0	0	0	0	0	29	2	0	0	1	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]	599	0	633	0	0	0	631	1297	0	0	1067	682
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
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]	155	0	164	0	0	0	164	336	0	0	277	177
Total Analysis Volume [veh/h]	621	0	657	0	0	0	655	1345	0	0	1107	707
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	6	0	0	0	0	0	6	6	0	0	6	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	45	0	0	0	0	0	21	45	0	0	24	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C
C, Cycle Length [s]	90	90		90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	39	39		19	43	21
g / C, Green / Cycle	0.43	0.43		0.21	0.48	0.23
(v / s)_i Volume / Saturation Flow Rate	0.34	0.41		0.19	0.26	0.21
s, saturation flow rate [veh/h]	1810	1615		3514	5176	5176
c, Capacity [veh/h]	781	697		720	2482	1192
d1, Uniform Delay [s]	22.14	24.52		34.97	16.46	33.91
k, delay calibration	0.28	0.38		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	4.76	18.85		4.87	0.85	13.77
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.80	0.94		0.91	0.54	0.93
d, Delay for Lane Group [s/veh]	26.90	43.37		39.83	17.32	47.68
Lane Group LOS	C	D		D	B	D
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	11.74	16.20		7.32	6.33	9.21
50th-Percentile Queue Length [ft/ln]	293.61	404.97		182.93	158.21	230.21
95th-Percentile Queue Length [veh/ln]	17.36	22.80		11.75	10.45	14.19
95th-Percentile Queue Length [ft/ln]	434.12	569.99		293.84	261.35	354.63

**Movement, Approach, & Intersection Results**

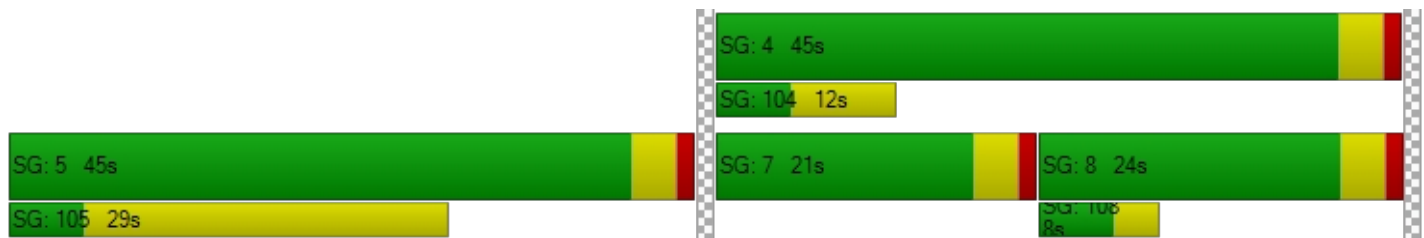
d_M, Delay for Movement [s/veh]	26.90	0.00	43.37	0.00	0.00	0.00	39.83	17.32	0.00	0.00	47.68	0.00
Movement LOS	C		D				D	B			D	
d_A, Approach Delay [s/veh]	35.37			0.00			24.69			47.68		
Approach LOS	D			A			C			D		
d_I, Intersection Delay [s/veh]	33.61											
Intersection LOS	C											
Intersection V/C	0.807											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.339	2.036	3.255	3.028
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	911	444
d_b, Bicycle Delay [s]	45.00	45.00	13.34	27.22
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.660	2.168
Bicycle LOS	D	D	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	29.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.653

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌			⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	0	0	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
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	162	49	0	191	443	455	0	276	247	160
Site-Generated Trips [veh/h]	0	0	0	41	0	0	31	11	0	0	23	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	0	162	90	0	191	474	466	0	276	270	160
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	41	23	0	48	119	117	0	69	68	40
Total Analysis Volume [veh/h]	0	0	162	90	0	191	474	466	0	276	270	160
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]	70
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	24	0	13	22	22	12	21	0	12	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	12	12	0	9	0	0	15	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	L	C
C, Cycle Length [s]	70	70	70	70	70	70	70	70	70
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	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	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	9	5	13	38	20	28	13	20
g / C, Green / Cycle	0.00	0.13	0.06	0.19	0.54	0.29	0.40	0.18	0.29
(v / s)_i Volume / Saturation Flow Rate	0.00	0.10	0.05	0.00	0.12	0.26	0.25	0.15	0.24
s, saturation flow rate [veh/h]	1810	1615	1810	1900	1615	1810	1900	1810	1783
c, Capacity [veh/h]	0	202	117	361	869	527	759	329	518
d1, Uniform Delay [s]	0.00	29.76	32.23	0.00	8.47	23.84	16.72	27.64	23.21
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.17	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	7.14	10.15	0.00	0.13	8.56	3.69	5.67	14.30
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.00	0.80	0.77	0.00	0.22	0.90	0.61	0.84	0.83
d, Delay for Lane Group [s/veh]	0.00	36.91	42.38	0.00	8.60	32.40	20.41	33.31	37.51
Lane Group LOS	A	D	D	A	A	C	C	C	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	2.94	1.78	0.00	1.35	8.25	6.21	4.76	8.25
50th-Percentile Queue Length [ft/ln]	0.00	73.62	44.47	0.00	33.74	206.18	155.16	118.99	206.15
95th-Percentile Queue Length [veh/ln]	0.00	5.30	3.20	0.00	2.43	12.96	10.29	8.34	12.96
95th-Percentile Queue Length [ft/ln]	0.00	132.51	80.05	0.00	60.73	323.92	257.30	208.44	323.88

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	36.91	36.91	42.38	0.00	8.60	32.40	20.41	20.41	33.31	37.51	37.51
Movement LOS	A	D	D	D	A	A	C	C	C	C	D	D
d_A, Approach Delay [s/veh]	36.91			19.42			26.46			35.87		
Approach LOS	D			B			C			D		
d_I, Intersection Delay [s/veh]	29.50											
Intersection LOS	C											
Intersection V/C	0.653											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	26.58	26.58	26.58	26.58
I_p,int, Pedestrian LOS Score for Intersection	2.071	2.590	2.461	2.566
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	571	514	486	486
d_b, Bicycle Delay [s]	17.86	19.31	20.06	20.06
I_b,int, Bicycle LOS Score for Intersection	1.827	2.023	3.111	2.725
Bicycle LOS	A	B	C	B

**Sequence**

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





**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.053

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	0	0	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	0.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	603	240	0	0	0
Site-Generated Trips [veh/h]	0	31	0	13	0	41
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	634	240	13	0	41
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	159	60	3	0	10
Total Analysis Volume [veh/h]	0	634	240	13	0	41
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	0.00	0.00	0.00	0.05
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	9.94
Movement LOS		A	A	A		A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.17
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	4.21
d_A, Approach Delay [s/veh]	0.00		0.00		9.94	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.44					
Intersection LOS	A					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	20.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.149

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	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	898	438	0
Site-Generated Trips [veh/h]	42	0	0	0	0	23
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	0	0	898	438	23
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	0	225	110	6
Total Analysis Volume [veh/h]	42	0	0	898	438	23
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
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	0.15	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	19.95	11.84	8.24	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.51	0.51	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.87	12.87	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.95		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.60					
Intersection LOS	C					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_\_OY Lane

Scenario 7 OY CUM WP W INT AM

Geo\_AM\_TBB.vistro

Report File: K:\...\8 OY CUM WP\_W INT\_AM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	WB Left	0.251	39.7	D
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.594	10.0	A
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.777	21.6	C
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.544	22.7	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	NB Left	0.604	26.8	C
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.566	18.8	B
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	0.659	24.3	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.467	14.3	B
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	NB Right	0.505	23.0	C
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.008	10.6	B
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.068	14.0	B

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	39.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.251

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	132	28	10	22	44	94	59	81	75	12	162	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	1	1	6	0	0	13	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]	132	28	10	22	44	95	60	87	75	12	175	23
Peak Hour Factor	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290
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]	45	10	3	8	15	33	21	30	26	4	60	8
Total Analysis Volume [veh/h]	181	38	14	30	60	130	82	119	103	16	240	32
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	0	3	8	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]	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]	33	32	0	25	24	0	12	22	0	11	21	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	15	0	0	15	0	0	9	0	0	12	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	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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]	11	57	3	49	5	13	13	2	9	9
g / C, Green / Cycle	0.12	0.63	0.03	0.54	0.06	0.14	0.14	0.02	0.10	0.10
(v / s)_i Volume / Saturation Flow Rate	0.10	0.03	0.02	0.03	0.05	0.06	0.07	0.01	0.07	0.07
s, saturation flow rate [veh/h]	1810	1814	1810	1900	1810	1900	1622	1810	1900	1823
c, Capacity [veh/h]	223	1149	56	1028	106	265	226	34	189	181
d1, Uniform Delay [s]	38.46	6.23	42.97	9.78	41.77	35.50	35.67	43.71	39.35	39.41
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.02	0.07	7.76	0.11	11.19	1.14	1.52	9.78	5.28	5.89
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	0.81	0.05	0.54	0.06	0.77	0.44	0.47	0.47	0.73	0.74
d, Delay for Lane Group [s/veh]	45.48	6.31	50.73	9.89	52.96	36.64	37.19	53.49	44.63	45.30
Lane Group LOS	D	A	D	A	D	D	D	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.22	0.35	0.77	0.55	2.10	2.38	2.21	0.45	3.22	3.18
50th-Percentile Queue Length [ft/ln]	105.50	8.66	19.13	13.70	52.60	59.54	55.33	11.14	80.48	79.57
95th-Percentile Queue Length [veh/ln]	7.59	0.62	1.38	0.99	3.79	4.29	3.98	0.80	5.79	5.73
95th-Percentile Queue Length [ft/ln]	189.73	15.59	34.44	24.65	94.68	107.17	99.59	20.05	144.87	143.22



**Movement, Approach, & Intersection Results**

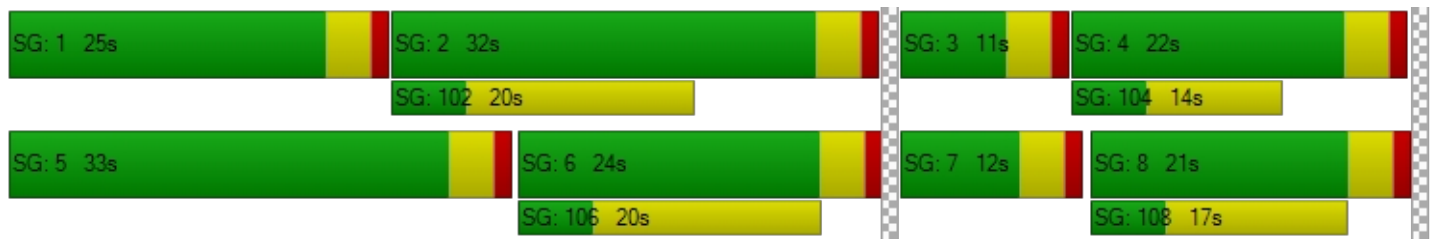
d_M, Delay for Movement [s/veh]	45.48	6.31	6.31	50.73	9.89	0.00	52.96	36.65	37.19	53.49	44.92	45.30
Movement LOS	D	A	A	D	A		D	D	D	D	D	D
d_A, Approach Delay [s/veh]	36.74			23.50			41.23			45.44		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	39.67											
Intersection LOS	D											
Intersection V/C	0.251											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.098			2.201			2.443			2.375		
Crosswalk LOS	B			B			B			B		
s_b, Saturation Flow Rate of the bicycle lane	2000			2000			2000			2000		
c_b, Capacity of the bicycle lane [bicycles/h]	622			444			400			378		
d_b, Bicycle Delay [s]	21.36			27.22			28.80			29.61		
I_b,int, Bicycle LOS Score for Intersection	1.944			1.708			1.810			1.797		
Bicycle LOS	A			A			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 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.594

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	27	695	212	184	95	39
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]	4	0	0	9	5	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	695	212	193	100	40
Peak Hour Factor	0.7090	0.7090	0.7090	0.7090	0.7090	0.7090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	245	75	68	35	14
Total Analysis Volume [veh/h]	44	980	299	272	141	56
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	12	64	52	52	26	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	3	72	65	79	10	10
g / C, Green / Cycle	0.04	0.80	0.72	0.87	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.02	0.52	0.16	0.17	0.08	0.03
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810	1615
c, Capacity [veh/h]	69	1521	1365	1410	200	179
d1, Uniform Delay [s]	42.69	3.70	4.24	0.87	38.61	36.88
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.61	2.12	0.37	0.30	4.49	0.99
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	0.64	0.64	0.22	0.19	0.70	0.31
d, Delay for Lane Group [s/veh]	52.30	5.81	4.61	1.17	43.09	37.87
Lane Group LOS	D	A	A	A	D	D
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.14	5.11	1.61	0.21	3.21	1.17
50th-Percentile Queue Length [ft/ln]	28.45	127.85	40.17	5.23	80.28	29.32
95th-Percentile Queue Length [veh/ln]	2.05	8.82	2.89	0.38	5.78	2.11
95th-Percentile Queue Length [ft/ln]	51.21	220.57	72.30	9.42	144.50	52.78

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	52.30	5.81	4.61	1.17	43.09	37.87
Movement LOS	D	A	A	A	D	D
d_A, Approach Delay [s/veh]	7.81		2.97		41.61	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	9.98					
Intersection LOS	A					
Intersection V/C	0.594					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.390	2.492	2.401
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	5.822	5.075	4.132
Bicycle LOS	F	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	21.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.777

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	16	1572	9	24	1832	209	194	7	75	11	4	21
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	2	1	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	1572	9	24	1832	211	195	7	75	11	4	21
Peak Hour Factor	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600	0.9600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	409	2	6	477	55	51	2	20	3	1	5
Total Analysis Volume [veh/h]	17	1638	9	25	1908	220	203	7	78	11	4	22
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	6	6	0	6	6	0	0	6	0	0	6	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	11	43	0	23	55	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	57	57	3	57	57	18	18
g / C, Green / Cycle	0.02	0.63	0.63	0.03	0.64	0.64	0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.01	0.43	0.43	0.01	0.56	0.58	0.19	0.02
s, saturation flow rate [veh/h]	1810	1900	1896	1810	1900	1833	1537	1700
c, Capacity [veh/h]	43	1195	1192	59	1212	1169	384	401
d1, Uniform Delay [s]	43.32	10.95	10.96	42.72	13.43	14.08	34.59	29.03
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.13	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.95	3.27	3.29	4.84	9.17	12.03	3.52	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.40	0.69	0.69	0.43	0.88	0.91	0.75	0.09
d, Delay for Lane Group [s/veh]	49.27	14.22	14.24	47.57	22.60	26.11	38.10	29.13
Lane Group LOS	D	B	B	D	C	C	D	C
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.44	10.36	10.36	0.62	18.00	19.54	6.37	0.65
50th-Percentile Queue Length [ft/ln]	11.00	258.98	259.01	15.49	449.92	488.53	159.32	16.33
95th-Percentile Queue Length [veh/ln]	0.79	15.64	15.64	1.11	24.95	26.79	10.51	1.18
95th-Percentile Queue Length [ft/ln]	19.80	390.94	390.98	27.87	623.85	669.77	262.82	29.39



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.27	14.23	14.24	47.57	24.15	26.11	38.10	38.10	38.10	29.13	29.13	29.13
Movement LOS	D	B	B	D	C	C	D	D	D	C	C	C
d_A, Approach Delay [s/veh]	14.59			24.62			38.10			29.13		
Approach LOS	B			C			D			C		
d_I, Intersection Delay [s/veh]	21.57											
Intersection LOS	C											
Intersection V/C	0.777											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.031	3.373	1.974	1.754
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]	867	1133	444	444
d_b, Bicycle Delay [s]	14.45	8.45	27.22	27.22
I_b,int, Bicycle LOS Score for Intersection	2.932	3.336	2.035	1.621
Bicycle LOS	C	C	B	A

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	22.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	570	350	229	748	0	104	0	718	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	1	3	2	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	570	351	232	750	0	104	0	718	0	0	0
Peak Hour Factor	1.0000	0.9860	0.9860	0.9860	0.9860	1.0000	0.9860	1.0000	0.9860	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	145	89	59	190	0	26	0	182	0	0	0
Total Analysis Volume [veh/h]	0	578	356	235	761	0	105	0	728	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	16	0	19	35	0	55	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	9	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	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	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	38	13	56	26	26	
g / C, Green / Cycle	0.42	0.15	0.62	0.29	0.29	
(v / s)_i Volume / Saturation Flow Rate	0.16	0.13	0.21	0.06	0.25	
s, saturation flow rate [veh/h]	3618	1810	3618	1810	2859	
c, Capacity [veh/h]	1528	271	2231	533	842	
d1, Uniform Delay [s]	17.88	37.37	8.37	23.78	30.06	
k, delay calibration	0.50	0.11	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	0.72	8.16	0.42	0.18	2.83	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.38	0.87	0.34	0.20	0.86	
d, Delay for Lane Group [s/veh]	18.59	45.52	8.79	23.96	32.88	
Lane Group LOS	B	D	A	C	C	
Critical Lane Group	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	4.12	5.58	3.35	1.67	7.55	
50th-Percentile Queue Length [ft/ln]	103.01	139.40	83.71	41.83	188.63	
95th-Percentile Queue Length [veh/ln]	7.42	9.45	6.03	3.01	12.05	
95th-Percentile Queue Length [ft/ln]	185.41	236.22	150.69	75.29	301.25	

**Movement, Approach, & Intersection Results**

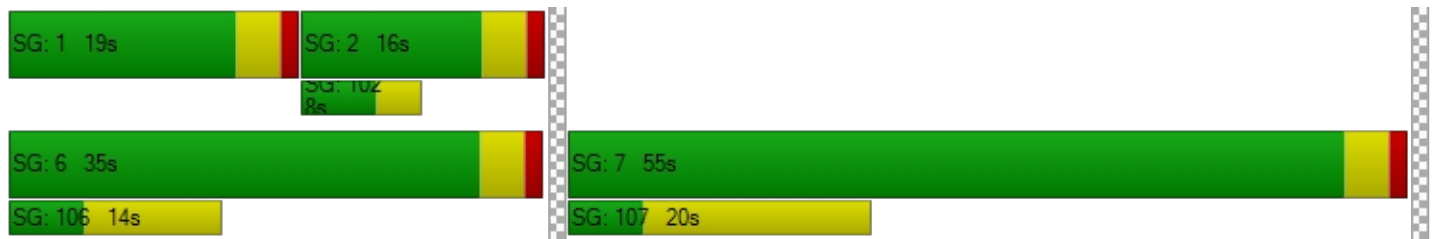
d_M, Delay for Movement [s/veh]	0.00	18.59	0.00	45.52	8.79	0.00	23.96	0.00	32.88	0.00	0.00	0.00
Movement LOS		B		D	A		C		C			
d_A, Approach Delay [s/veh]	18.59		17.46			31.76			0.00			
Approach LOS	B		B			C			A			
d_I, Intersection Delay [s/veh]	22.68											
Intersection LOS	C											
Intersection V/C	0.544											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.704	2.629	2.212	1.654
Crosswalk LOS	B	B	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	267	689	0	0
d_b, Bicycle Delay [s]	33.80	19.34	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.036	2.381	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.604

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	346	252	0	0	652	154	0	0	0	401	0	312
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	3	0	0	0	0	2	0	5
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]	346	252	0	0	655	154	0	0	0	403	0	317
Peak Hour Factor	0.9420	0.9420	1.0000	1.0000	0.9420	0.9420	1.0000	1.0000	1.0000	0.9420	0.9630	0.9420
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]	92	67	0	0	174	41	0	0	0	107	0	84
Total Analysis Volume [veh/h]	367	268	0	0	695	163	0	0	0	428	0	337
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	41	54	0	0	13	0	0	0	0	0	36	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	21	60	36	36		22	22
g / C, Green / Cycle	0.23	0.67	0.40	0.40		0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.20	0.07	0.19	0.10		0.12	0.21
s, saturation flow rate [veh/h]	1810	3618	3618	1615		3514	1615
c, Capacity [veh/h]	413	2415	1428	638		856	393
d1, Uniform Delay [s]	33.62	5.37	20.40	18.33		29.32	32.54
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.15
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	6.63	0.09	1.19	0.97		0.45	7.33
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	0.89	0.11	0.49	0.26		0.50	0.86
d, Delay for Lane Group [s/veh]	40.24	5.46	21.59	19.30		29.77	39.87
Lane Group LOS	D	A	C	B		C	D
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	8.32	0.82	5.50	2.39		3.96	7.63
50th-Percentile Queue Length [ft/ln]	207.95	20.40	137.43	59.72		99.01	190.70
95th-Percentile Queue Length [veh/ln]	13.05	1.47	9.34	4.30		7.13	12.16
95th-Percentile Queue Length [ft/ln]	326.20	36.72	233.56	107.50		178.22	303.94



**Movement, Approach, & Intersection Results**

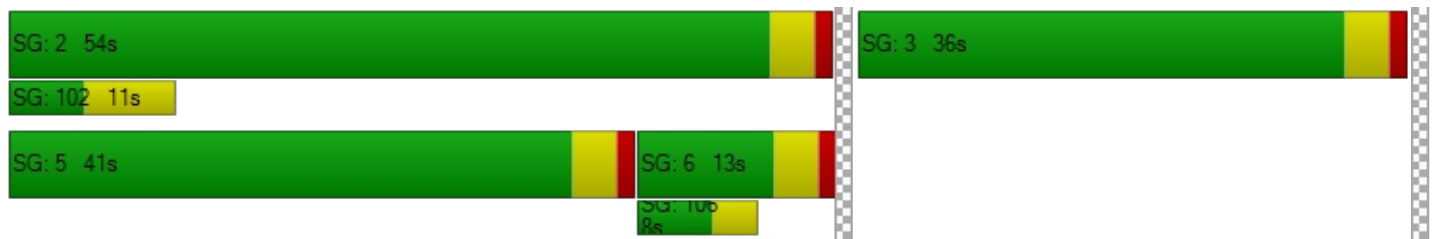
d_M, Delay for Movement [s/veh]	40.24	5.46	0.00	0.00	21.59	19.30	0.00	0.00	0.00	29.77	0.00	39.87
Movement LOS	D	A			C	B				C		D
d_A, Approach Delay [s/veh]	25.57				21.15		0.00		34.22			
Approach LOS	C				C		A		C			
d_I, Intersection Delay [s/veh]	26.82											
Intersection LOS	C											
Intersection V/C	0.604											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	32.0	32.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	18.69	18.69	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.617	2.560	1.942	2.190
Crosswalk LOS	B	B	A	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1111	200	0	0
d_b, Bicycle Delay [s]	8.89	36.45	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.083	2.267	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.566

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	833	1502	128	501	1475	33
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	13	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	833	1515	128	501	1503	33
Peak Hour Factor	0.8010	0.8010	0.8010	0.8010	0.8010	0.8010
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	260	473	40	156	469	10
Total Analysis Volume [veh/h]	1040	1891	160	625	1876	41
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	36	0	23	0	31	54
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	14	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	22	6	60	60	60
g / C, Green / Cycle	0.25	0.07	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.20	0.04	0.37	0.38	0.02
s, saturation flow rate [veh/h]	5271	3618	3367	1657	1729
c, Capacity [veh/h]	1303	243	2294	1193	1148
d1, Uniform Delay [s]	31.77	40.98	8.05	7.92	5.21
k, delay calibration	0.11	0.11	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.16	3.05	0.94	1.65	0.01
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.80	0.66	0.55	0.52	0.04
d, Delay for Lane Group [s/veh]	32.93	44.03	8.99	9.57	5.22
Lane Group LOS	C	D	A	A	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.02	1.81	5.66	5.82	0.24
50th-Percentile Queue Length [ft/ln]	175.56	45.35	141.40	145.51	5.89
95th-Percentile Queue Length [veh/ln]	11.37	3.27	9.56	9.78	0.42
95th-Percentile Queue Length [ft/ln]	284.21	81.63	238.91	244.42	10.61

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	32.93	0.00	44.03	0.00	9.18	5.22
Movement LOS	C		D		A	A
d_A, Approach Delay [s/veh]	32.93		44.03		9.10	
Approach LOS	C		D		A	
d_I, Intersection Delay [s/veh]	18.84					
Intersection LOS	B					
Intersection V/C	0.566					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.320	2.656	2.885
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.264	5.714
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	24.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.659

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⇐⇐⇐			⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	354	1	502	0	1162	80	289	549	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 [%]	2.00	2.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0200	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	26	0	13	0	0	2	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	0	0	354	1	528	0	1175	80	289	551	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9650	0.9650	0.9650	1.0000	0.9650	0.9650	0.9650	0.9650	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	92	0	137	0	304	21	75	143	0
Total Analysis Volume [veh/h]	0	0	0	367	1	547	0	1218	83	299	571	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss
Signal Group	0	0	0	1	0	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	5	0	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	30	0	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	65	0	0	0	16	0	9	25	0
Vehicle Extension [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	27	0	0	0	7	0	0	10	0
Rest In Walk				No				No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	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		L	R	C	L	C
C, Cycle Length [s]		90	90	90	90	90
L, Total Lost Time per Cycle [s]		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
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		34	34	34	10	48
g / C, Green / Cycle		0.37	0.37	0.38	0.11	0.54
(v / s)_i Volume / Saturation Flow Rate		0.10	0.34	0.24	0.09	0.11
s, saturation flow rate [veh/h]		3514	1615	5176	3514	5176
c, Capacity [veh/h]		1317	605	1964	395	2776
d1, Uniform Delay [s]		19.64	26.60	22.66	38.74	10.87
k, delay calibration		0.11	0.11	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.11	5.37	1.48	2.97	0.17
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.28	0.90	0.62	0.76	0.21
d, Delay for Lane Group [s/veh]		19.76	31.97	24.15	41.71	11.04
Lane Group LOS		B	C	C	D	B
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		2.63	11.45	6.98	3.31	1.91
50th-Percentile Queue Length [ft/ln]		65.82	286.18	174.61	82.87	47.64
95th-Percentile Queue Length [veh/ln]		4.74	17.00	11.32	5.97	3.43
95th-Percentile Queue Length [ft/ln]		118.48	424.90	282.96	149.16	85.76



**Movement, Approach, & Intersection Results**

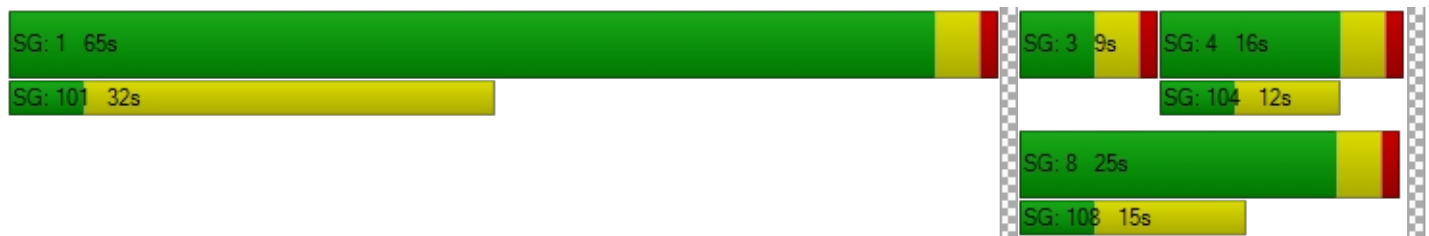
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	19.76	0.00	31.97	0.00	24.15	0.00	41.71	11.04	0.00
Movement LOS				B		C		C		D	B	
d_A, Approach Delay [s/veh]	0.00			27.07			24.15			21.58		
Approach LOS	A			C			C			C		
d_I, Intersection Delay [s/veh]	24.29											
Intersection LOS	C											
Intersection V/C	0.659											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.862	2.239	2.921	3.117
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	267	467
d_b, Bicycle Delay [s]	45.00	45.00	33.80	26.45
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.230	2.038
Bicycle LOS	D	D	B	B

**Sequence**

Ring 1	1	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.467

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	120	0	130	0	0	0	458	1243	0	0	1172	778
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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	12	1	0	0	2	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]	120	0	130	0	0	0	470	1244	0	0	1174	778
Peak Hour Factor	0.9450	1.0000	0.9450	1.0000	1.0000	1.0000	0.9450	0.9450	1.0000	1.0000	0.9450	0.9450
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]	32	0	34	0	0	0	124	329	0	0	311	206
Total Analysis Volume [veh/h]	127	0	138	0	0	0	497	1316	0	0	1242	823
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	5	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	54	0	0	0	0	0	9	36	0	0	27	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C
C, Cycle Length [s]	90	90		90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	10	10		16	72	52
g / C, Green / Cycle	0.11	0.11		0.17	0.80	0.58
(v / s)_i Volume / Saturation Flow Rate	0.07	0.09		0.14	0.25	0.24
s, saturation flow rate [veh/h]	1810	1615		3514	5176	5176
c, Capacity [veh/h]	204	182		608	4132	3007
d1, Uniform Delay [s]	38.10	38.74		35.84	2.45	10.40
k, delay calibration	0.11	0.11		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.09	6.34		2.77	0.20	0.42
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.62	0.76		0.82	0.32	0.41
d, Delay for Lane Group [s/veh]	41.20	45.08		38.61	2.66	10.82
Lane Group LOS	D	D		D	A	B
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.81	3.23		5.38	1.34	4.26
50th-Percentile Queue Length [ft/ln]	70.30	80.83		134.39	33.57	106.58
95th-Percentile Queue Length [veh/ln]	5.06	5.82		9.18	2.42	7.65
95th-Percentile Queue Length [ft/ln]	126.53	145.49		229.45	60.42	191.24

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	41.20	0.00	45.08	0.00	0.00	0.00	38.61	2.66	0.00	0.00	10.82	0.00
Movement LOS	D		D				D	A			B	
d_A, Approach Delay [s/veh]	43.22			0.00			12.51			10.82		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	14.33											
Intersection LOS	B											
Intersection V/C	0.467											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.846	1.959	3.195	2.971
Crosswalk LOS	A	A	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	711	511
d_b, Bicycle Delay [s]	45.00	45.00	18.69	24.94
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.557	2.243
Bicycle LOS	D	D	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	23.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌			⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	71	141	0	295	496	34	0	35	116	37
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	5	0	0	27	2	0	0	14	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	0	71	146	0	295	523	36	0	35	130	37
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	18	37	0	74	131	9	0	9	33	9
Total Analysis Volume [veh/h]	0	0	71	146	0	295	523	36	0	35	130	37
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	24	0	15	30	30	27	18	0	33	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	12	12	0	9	0	0	15	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	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	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	5	9	14	68	50	57	3	10
g / C, Green / Cycle	0.00	0.06	0.10	0.16	0.75	0.55	0.63	0.03	0.11
(v / s)_i Volume / Saturation Flow Rate	0.00	0.04	0.08	0.00	0.18	0.29	0.02	0.02	0.09
s, saturation flow rate [veh/h]	1810	1615	1810	1900	1615	1810	1900	1810	1829
c, Capacity [veh/h]	0	91	184	299	1218	999	1199	61	206
d1, Uniform Delay [s]	0.00	41.92	39.51	0.00	3.33	12.71	6.25	42.86	39.01
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	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
d2, Incremental Delay [s]	0.00	13.44	7.56	0.00	0.10	1.96	0.01	8.37	7.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.00	0.78	0.79	0.00	0.24	0.52	0.03	0.58	0.81
d, Delay for Lane Group [s/veh]	0.00	55.36	47.08	0.00	3.44	14.67	6.26	51.23	46.51
Lane Group LOS	A	E	D	A	A	B	A	D	D
Critical Lane Group	No	Yes	Yes	No	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	1.88	3.50	0.00	1.21	6.66	0.24	0.90	3.98
50th-Percentile Queue Length [ft/ln]	0.00	46.94	87.38	0.00	30.29	166.42	5.88	22.52	99.41
95th-Percentile Queue Length [veh/ln]	0.00	3.38	6.29	0.00	2.18	10.89	0.42	1.62	7.16
95th-Percentile Queue Length [ft/ln]	0.00	84.50	157.29	0.00	54.53	272.21	10.59	40.54	178.94



**Movement, Approach, & Intersection Results**

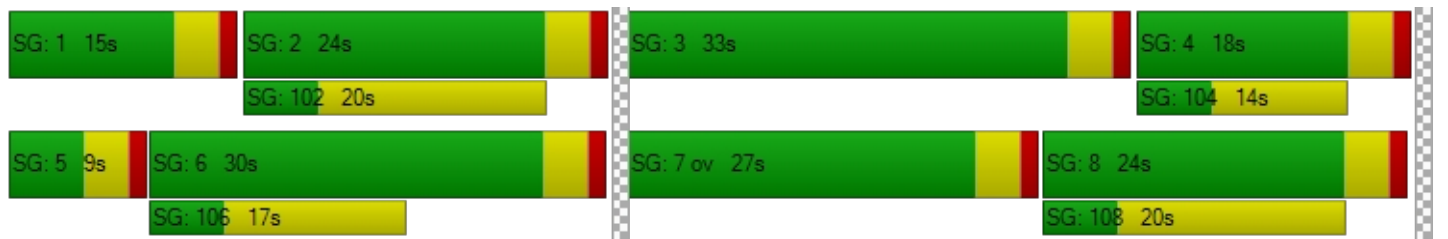
d_M, Delay for Movement [s/veh]	0.00	55.36	55.36	47.08	0.00	3.44	14.67	6.26	6.26	51.23	46.51	46.51
Movement LOS	A	E	E	D	A	A	B	A	A	D	D	D
d_A, Approach Delay [s/veh]	55.36			17.88			14.13			47.32		
Approach LOS	E			B			B			D		
d_I, Intersection Delay [s/veh]	23.00											
Intersection LOS	C											
Intersection V/C	0.505											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.976	2.617	2.372	2.390
Crosswalk LOS	A	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	578	311	444
d_b, Bicycle Delay [s]	27.22	22.76	32.09	27.22
I_b,int, Bicycle LOS Score for Intersection	1.677	2.287	2.482	1.893
Bicycle LOS	A	B	B	A

**Sequence**

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



**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	533	436	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	27	0	59	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	560	436	59	0	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	140	109	15	0	1
Total Analysis Volume [veh/h]	0	560	436	59	0	5
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	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	10.62
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.58
d_A, Approach Delay [s/veh]	0.00		0.00		10.62	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.05					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	14.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.068

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	514	351	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]	29	0	0	0	0	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	0	0	514	351	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	129	88	4
Total Analysis Volume [veh/h]	29	0	0	514	351	14
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	14.03	9.92	7.99	0.00	0.00	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.22	0.22	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.43	5.43	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.03		0.00		0.00	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.45					
Intersection LOS	B					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_\_OY Lane

Scenario 7 OY CUM WP W INT PM

Geo\_PM\_TBB.vistro

Report File: K:\...\8 OY CUM WP\_W INT\_PM.pdf

6/2/2020

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.278	27.2	C
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.434	12.1	B
3	Beaumont Avenue at Luis Estrada Road	Signalized	HCM 6th Edition	NB Left	0.581	10.0	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.766	31.1	C
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	WB Right	0.730	30.3	C
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.608	18.6	B
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Right	0.843	35.9	D
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.778	26.4	C
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.636	21.7	C
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.018	10.6	B
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.200	17.6	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.278

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↔			↔			↔			↔		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	111	30	25	13	80	37	132	143	144	22	136	30
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	1	1	16	0	0	7	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]	111	30	25	13	80	38	133	159	144	22	143	30
Peak Hour Factor	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080	0.8080
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	9	8	4	25	12	41	49	45	7	44	9
Total Analysis Volume [veh/h]	137	37	31	16	99	47	165	197	178	27	177	37
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	0	3	8	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]	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]	23	24	0	23	24	0	18	28	0	15	25	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	15	0	0	15	0	0	9	0	0	12	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	L	C	L	C	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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]	9	13	2	6	52	57	57	2	8	8
g / C, Green / Cycle	0.10	0.15	0.02	0.07	0.57	0.63	0.63	0.03	0.08	0.08
(v / s)_i Volume / Saturation Flow Rate	0.08	0.04	0.01	0.05	0.09	0.10	0.11	0.01	0.06	0.06
s, saturation flow rate [veh/h]	1810	1759	1810	1900	1810	1900	1615	1810	1900	1789
c, Capacity [veh/h]	173	256	36	133	1036	1195	1015	51	160	151
d1, Uniform Delay [s]	39.82	34.17	43.62	41.08	9.05	6.92	6.97	43.16	40.02	40.11
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	0.50	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]	7.86	0.55	8.45	8.08	0.33	0.30	0.38	8.41	4.94	5.79
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	0.79	0.27	0.45	0.75	0.16	0.16	0.18	0.53	0.68	0.70
d, Delay for Lane Group [s/veh]	47.67	34.72	52.07	49.16	9.38	7.22	7.35	51.57	44.96	45.89
Lane Group LOS	D	C	D	D	A	A	A	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.27	1.33	0.43	2.40	1.51	1.50	1.38	0.71	2.55	2.51
50th-Percentile Queue Length [ft/ln]	81.72	33.24	10.75	60.07	37.65	37.47	34.51	17.80	63.68	62.85
95th-Percentile Queue Length [veh/ln]	5.88	2.39	0.77	4.32	2.71	2.70	2.48	1.28	4.59	4.53
95th-Percentile Queue Length [ft/ln]	147.10	59.84	19.34	108.12	67.78	67.44	62.12	32.03	114.63	113.13

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	47.67	34.72	34.72	52.07	49.16	0.00	9.38	7.22	7.35	51.57	45.32	45.89
Movement LOS	D	C	C	D	D		A	A	A	D	D	D
d_A, Approach Delay [s/veh]	43.38			49.57			7.92			46.11		
Approach LOS	D			D			A			D		
d_I, Intersection Delay [s/veh]	27.23											
Intersection LOS	C											
Intersection V/C	0.278											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.135	2.233	2.468	2.380
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	533	467
d_b, Bicycle Delay [s]	27.22	27.22	24.20	26.45
I_b,int, Bicycle LOS Score for Intersection	1.898	1.749	2.005	1.758
Bicycle LOS	A	A	B	A

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.434

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	42	555	335	146	165	34
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]	2	0	0	5	10	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	555	335	151	175	40
Peak Hour Factor	0.8960	0.8960	0.8960	0.8960	0.8960	0.8960
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	155	93	42	49	11
Total Analysis Volume [veh/h]	49	619	374	169	195	45
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	9	35	26	26	55	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	4	70	62	78	12	12
g / C, Green / Cycle	0.04	0.77	0.69	0.87	0.14	0.14
(v / s)_i Volume / Saturation Flow Rate	0.03	0.33	0.20	0.10	0.11	0.03
s, saturation flow rate [veh/h]	1810	1900	1900	1615	1810	1615
c, Capacity [veh/h]	71	1467	1307	1408	252	225
d1, Uniform Delay [s]	42.68	3.47	5.45	0.83	37.37	34.30
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.15	0.89	0.55	0.17	5.04	0.43
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	0.69	0.42	0.29	0.12	0.77	0.20
d, Delay for Lane Group [s/veh]	53.83	4.37	6.00	1.00	42.41	34.73
Lane Group LOS	D	A	A	A	D	C
Critical Lane Group	No	Yes	No	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.28	2.93	2.48	0.13	4.43	0.89
50th-Percentile Queue Length [ft/ln]	32.12	73.35	61.96	3.22	110.74	22.26
95th-Percentile Queue Length [veh/ln]	2.31	5.28	4.46	0.23	7.88	1.60
95th-Percentile Queue Length [ft/ln]	57.82	132.03	111.53	5.79	197.03	40.07

**Movement, Approach, & Intersection Results**

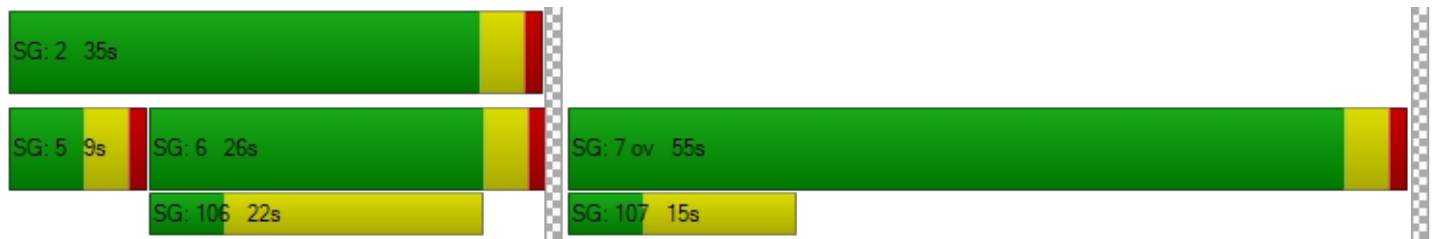
d_M, Delay for Movement [s/veh]	53.83	4.37	6.00	1.00	42.41	34.73
Movement LOS	D	A	A	A	D	C
d_A, Approach Delay [s/veh]	7.99		4.45		40.97	
Approach LOS	A		A		D	
d_I, Intersection Delay [s/veh]	12.12					
Intersection LOS	B					
Intersection V/C	0.434					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.295	2.383	2.391
Crosswalk LOS	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	5.235	5.028	4.132
Bicycle LOS	F	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 3: Beaumont Avenue at Luis Estrada Road**

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵↵			↵↵↵			⊕			⊕		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	0	0	0	0	0	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			Luis Estrada Rd			E 4th Street		
Base Volume Input [veh/h]	18	780	18	23	1692	48	88	4	46	9	7	26
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	1	2	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]	18	780	18	23	1692	49	90	4	46	9	7	26
Peak Hour Factor	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620	0.9620
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]	5	203	5	6	440	13	23	1	12	2	2	7
Total Analysis Volume [veh/h]	19	811	19	24	1759	51	94	4	48	9	7	27
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	1	6	0	0	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	5	5	0	5	5	0	0	5	0	0	5	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	10	28	0	38	56	0	0	24	0	0	24	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	6	0	0	6	0	0	15	0	0	15	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	No	No		No	No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	66	66	2	66	66	10	10
g / C, Green / Cycle	0.02	0.73	0.73	0.03	0.74	0.74	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.22	0.22	0.01	0.48	0.48	0.09	0.02
s, saturation flow rate [veh/h]	1810	1900	1885	1810	1900	1881	1620	1773
c, Capacity [veh/h]	38	1392	1381	47	1401	1387	241	240
d1, Uniform Delay [s]	43.58	4.12	4.12	43.29	5.94	5.98	39.03	36.71
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.68	0.55	0.56	8.53	2.32	2.39	2.44	0.35
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.50	0.30	0.30	0.51	0.65	0.65	0.61	0.18
d, Delay for Lane Group [s/veh]	53.26	4.67	4.68	51.81	8.25	8.37	41.47	37.06
Lane Group LOS	D	A	A	D	A	A	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	0.52	2.23	2.22	0.63	7.26	7.31	3.27	0.88
50th-Percentile Queue Length [ft/ln]	12.93	55.78	55.38	15.82	181.52	182.80	81.67	22.00
95th-Percentile Queue Length [veh/ln]	0.93	4.02	3.99	1.14	11.68	11.75	5.88	1.58
95th-Percentile Queue Length [ft/ln]	23.27	100.40	99.68	28.48	292.00	293.67	147.01	39.60

**Movement, Approach, & Intersection Results**

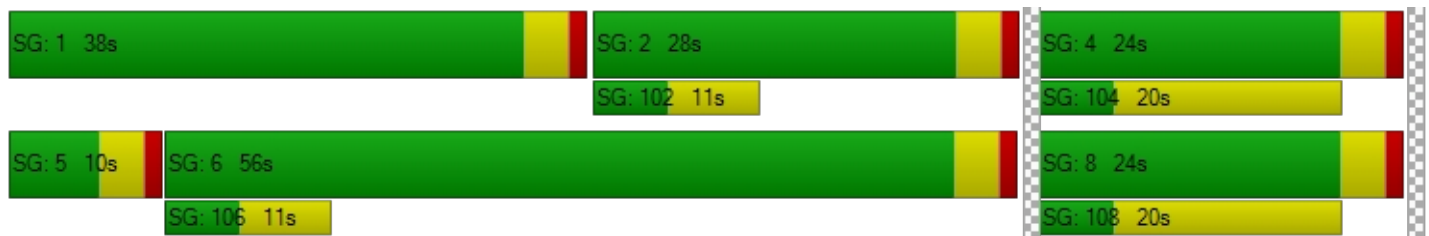
d_M, Delay for Movement [s/veh]	53.26	4.67	4.68	51.81	8.31	8.37	41.47	41.47	41.47	37.06	37.06	37.06
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	5.76			8.88			41.47			37.06		
Approach LOS	A			A			D			D		
d_I, Intersection Delay [s/veh]	10.04											
Intersection LOS	B											
Intersection V/C	0.581											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0			9.0			9.0			9.0		
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00			0.00			0.00			0.00		
d_p, Pedestrian Delay [s]	36.45			36.45			36.45			36.45		
I_p,int, Pedestrian LOS Score for Intersection	2.834			2.974			1.825			1.760		
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]	533			1156			444			444		
d_b, Bicycle Delay [s]	24.20			8.02			27.22			27.22		
I_b,int, Bicycle LOS Score for Intersection	2.260			3.073			1.801			1.631		
Bicycle LOS	B			C			A			A		

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	31.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.766

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	883	480	356	928	0	141	0	801	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	2	6	1	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	883	482	362	929	0	141	0	801	0	0	0
Peak Hour Factor	1.0000	0.9460	0.9460	0.9460	0.9460	1.0000	0.9460	1.0000	0.9460	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	233	127	96	246	0	37	0	212	0	0	0
Total Analysis Volume [veh/h]	0	933	510	383	982	0	149	0	847	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	24	0	22	46	0	44	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	R	
C, Cycle Length [s]	90	90	90	90	90	
L, Total Lost Time per Cycle [s]	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	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	30	18	52	30	30	
g / C, Green / Cycle	0.33	0.20	0.58	0.34	0.34	
(v / s)_i Volume / Saturation Flow Rate	0.26	0.21	0.27	0.08	0.30	
s, saturation flow rate [veh/h]	3618	1810	3618	1810	2859	
c, Capacity [veh/h]	1197	362	2082	607	960	
d1, Uniform Delay [s]	27.14	36.00	11.14	21.64	28.22	
k, delay calibration	0.50	0.18	0.50	0.11	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	5.05	45.33	0.77	0.21	2.89	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.78	1.06	0.47	0.25	0.88	
d, Delay for Lane Group [s/veh]	32.20	81.33	11.91	21.85	31.11	
Lane Group LOS	C	F	B	C	C	
Critical Lane Group	Yes	Yes	No	No	Yes	
50th-Percentile Queue Length [veh/ln]	9.53	12.30	5.42	2.27	8.65	
50th-Percentile Queue Length [ft/ln]	238.28	307.49	135.54	56.65	216.34	
95th-Percentile Queue Length [veh/ln]	14.59	18.59	9.24	4.08	13.48	
95th-Percentile Queue Length [ft/ln]	364.85	464.72	231.00	101.97	336.96	

**Movement, Approach, & Intersection Results**

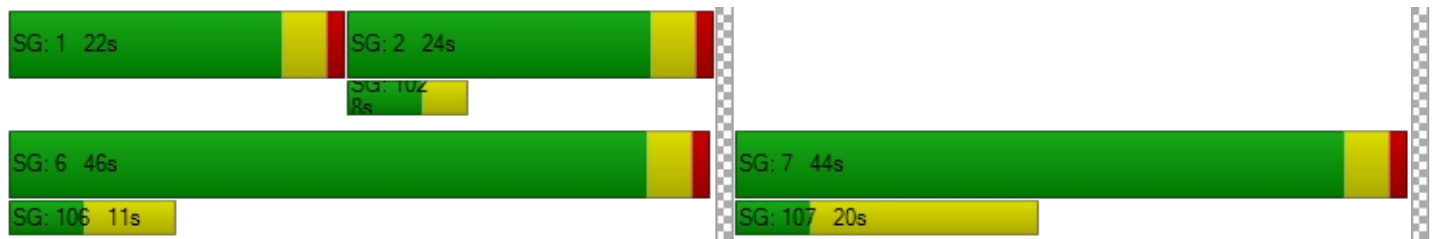
d_M, Delay for Movement [s/veh]	0.00	32.20	0.00	81.33	11.91	0.00	21.85	0.00	31.11	0.00	0.00	0.00
Movement LOS		C		F	B		C		C			
d_A, Approach Delay [s/veh]	32.20			31.38			29.72			0.00		
Approach LOS	C			C			C			A		
d_I, Intersection Delay [s/veh]	31.11											
Intersection LOS	C											
Intersection V/C	0.766											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.840	2.779	2.265	1.798
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	933	0	0
d_b, Bicycle Delay [s]	27.22	12.80	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.329	2.686	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	30.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.730

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	460	536	0	0	804	345	0	0	0	548	0	360
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	6	0	0	0	0	1	0	3
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]	460	536	0	0	810	345	0	0	0	549	0	363
Peak Hour Factor	0.9630	0.9630	1.0000	1.0000	0.9630	0.9630	1.0000	1.0000	1.0000	0.9630	0.9630	0.9630
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]	119	139	0	0	210	90	0	0	0	143	0	94
Total Analysis Volume [veh/h]	478	557	0	0	841	358	0	0	0	570	0	377
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	44	56	0	0	12	0	0	0	0	0	34	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	26	58	28	28		24	24
g / C, Green / Cycle	0.29	0.64	0.31	0.31		0.27	0.27
(v / s)_i Volume / Saturation Flow Rate	0.26	0.15	0.23	0.22		0.16	0.23
s, saturation flow rate [veh/h]	1810	3618	3618	1615		3514	1615
c, Capacity [veh/h]	525	2325	1115	498		943	433
d1, Uniform Delay [s]	30.83	6.79	28.05	27.66		28.75	31.43
k, delay calibration	0.16	0.50	0.50	0.50		0.11	0.23
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	9.12	0.24	4.74	8.66		0.63	10.82
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	0.91	0.24	0.75	0.72		0.60	0.87
d, Delay for Lane Group [s/veh]	39.95	7.03	32.79	36.32		29.38	42.25
Lane Group LOS	D	A	C	D		C	D
Critical Lane Group	Yes	No	Yes	No		No	Yes
50th-Percentile Queue Length [veh/ln]	10.99	2.07	8.62	7.82		5.33	8.88
50th-Percentile Queue Length [ft/ln]	274.80	51.67	215.49	195.42		133.15	222.10
95th-Percentile Queue Length [veh/ln]	16.43	3.72	13.43	12.40		9.11	13.77
95th-Percentile Queue Length [ft/ln]	410.74	93.00	335.86	310.05		227.77	344.30

**Movement, Approach, & Intersection Results**

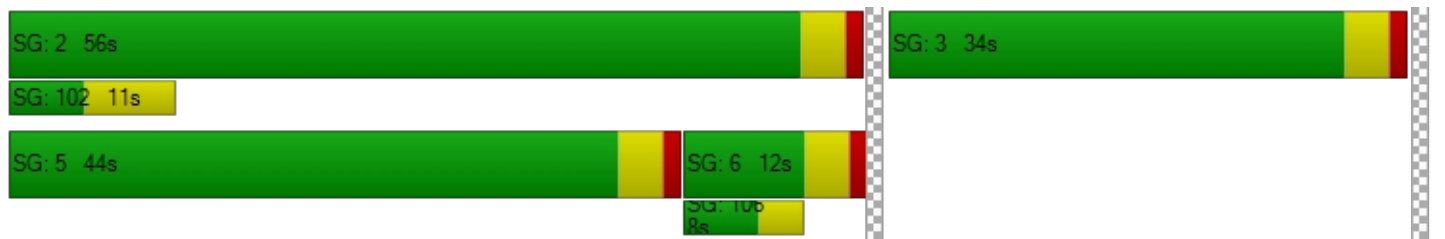
d_M, Delay for Movement [s/veh]	39.95	7.03	0.00	0.00	32.79	36.32	0.00	0.00	0.00	29.38	0.00	42.25
Movement LOS	D	A			C	D				C		D
d_A, Approach Delay [s/veh]	22.23				33.85		0.00		34.51			
Approach LOS	C				C		A		C			
d_I, Intersection Delay [s/veh]	30.26											
Intersection LOS	C											
Intersection V/C	0.730											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	30.0	30.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.00	20.00	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.754	2.693	2.240	2.249
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1156	178	0	0
d_b, Bicycle Delay [s]	8.02	37.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.413	2.549	4.132	4.132
Bicycle LOS	B	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.608

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	1042	1896	84	617	1958	64
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	31	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1042	1927	84	617	1971	64
Peak Hour Factor	0.9340	0.9340	0.9340	0.9340	0.9340	0.9340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	279	516	22	165	528	17
Total Analysis Volume [veh/h]	1116	2063	90	661	2110	69
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	8	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	36	0	23	0	31	54
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	14	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	24	5	58	58	58
g / C, Green / Cycle	0.26	0.05	0.65	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.21	0.02	0.41	0.41	0.04
s, saturation flow rate [veh/h]	5271	3618	3409	1711	1729
c, Capacity [veh/h]	1390	182	2309	1207	1119
d1, Uniform Delay [s]	30.95	41.62	9.37	9.20	5.83
k, delay calibration	0.11	0.11	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.13	2.07	1.21	2.06	0.02
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.80	0.49	0.61	0.58	0.06
d, Delay for Lane Group [s/veh]	32.08	43.69	10.58	11.25	5.85
Lane Group LOS	C	D	B	B	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.47	1.02	7.34	7.51	0.43
50th-Percentile Queue Length [ft/ln]	186.77	25.38	183.54	187.81	10.83
95th-Percentile Queue Length [veh/ln]	11.95	1.83	11.79	12.01	0.78
95th-Percentile Queue Length [ft/ln]	298.84	45.68	294.63	300.19	19.50

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	32.08	0.00	43.69	0.00	10.81	5.85
Movement LOS	C		D		B	A
d_A, Approach Delay [s/veh]	32.08		43.69		10.65	
Approach LOS	C		D		B	
d_I, Intersection Delay [s/veh]	18.59					
Intersection LOS	B					
Intersection V/C	0.608					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.337	2.662	2.911
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.207	5.930
Bicycle LOS	D	D	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	35.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration				⇐⇐⇐			⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	849	4	794	0	1121	88	308	822	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 [%]	2.00	2.00	2.00	0.00	2.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0200	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	12	0	31	0	0	1	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	0	0	849	4	806	0	1152	88	308	823	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9600	0.9600	0.9600	1.0000	0.9600	0.9600	0.9600	0.9600	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	221	1	210	0	300	23	80	214	0
Total Analysis Volume [veh/h]	0	0	0	884	4	840	0	1200	92	321	857	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss
Signal Group	0	0	0	1	0	0	0	4	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	5	0	0	0	5	0	5	5	0
Maximum Green [s]	0	0	0	30	0	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
All red [s]	0.0	0.0	0.0	1.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.0
Split [s]	0	0	0	51	0	0	0	26	0	13	39	0
Vehicle Extension [s]	0.0	0.0	0.0	3.0	0.0	0.0	0.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	0	0	5	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	0	0	27	0	0	0	7	0	0	10	0
Rest In Walk				No				No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	2.0	0.0	0.0	0.0	2.0	0.0	2.0	2.0	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		L	R	C	L	C
C, Cycle Length [s]		90	90	90	90	90
L, Total Lost Time per Cycle [s]		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
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		47	47	22	9	35
g / C, Green / Cycle		0.52	0.52	0.24	0.10	0.39
(v / s)_i Volume / Saturation Flow Rate		0.25	0.52	0.23	0.09	0.17
s, saturation flow rate [veh/h]		3514	1615	5176	3514	5176
c, Capacity [veh/h]		1835	843	1265	351	2013
d1, Uniform Delay [s]		13.72	21.41	33.44	40.11	20.14
k, delay calibration		0.11	0.46	0.50	0.11	0.50
l, Upstream Filtering Factor		1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		0.20	28.94	15.64	9.41	0.66
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity		0.48	1.00	0.95	0.91	0.43
d, Delay for Lane Group [s/veh]		13.92	50.34	49.09	49.52	20.80
Lane Group LOS		B	D	D	D	C
Critical Lane Group		No	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		5.40	22.64	10.17	3.92	4.37
50th-Percentile Queue Length [ft/ln]		135.02	565.96	254.17	98.10	109.16
95th-Percentile Queue Length [veh/ln]		9.21	30.44	15.40	7.06	7.79
95th-Percentile Queue Length [ft/ln]		230.30	761.03	384.90	176.58	194.83

**Movement, Approach, & Intersection Results**

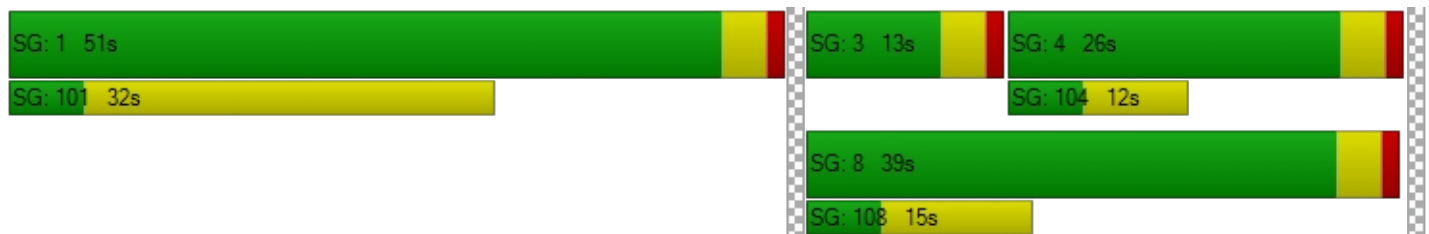
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	13.92	0.00	50.34	0.00	49.09	0.00	49.52	20.80	0.00
Movement LOS				B		D		D		D	C	
d_A, Approach Delay [s/veh]	0.00			31.67			49.09			28.63		
Approach LOS	A			C			D			C		
d_I, Intersection Delay [s/veh]	35.89											
Intersection LOS	D											
Intersection V/C	0.843											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	1.873	2.502	2.999	3.204
Crosswalk LOS	A	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	489	778
d_b, Bicycle Delay [s]	45.00	45.00	25.69	16.81
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.220	2.208
Bicycle LOS	D	D	B	B

**Sequence**

Ring 1	1	-	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	26.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.778

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	0	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	166	0	401	0	0	0	631	1773	0	0	1624	604
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	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	29	2	0	0	1	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]	166	0	401	0	0	0	660	1775	0	0	1625	604
Peak Hour Factor	0.9640	1.0000	0.9640	1.0000	1.0000	1.0000	0.9640	0.9640	1.0000	1.0000	0.9640	0.9640
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]	43	0	104	0	0	0	171	460	0	0	421	157
Total Analysis Volume [veh/h]	172	0	416	0	0	0	685	1841	0	0	1686	627
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	6	0	0	0	0	0	6	6	0	0	6	0
Maximum Green [s]	30	0	0	0	0	0	30	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	37	0	0	0	0	0	21	53	0	0	32	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	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	L	R		L	C	C
C, Cycle Length [s]	90	90		90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	26	26		20	56	32
g / C, Green / Cycle	0.28	0.28		0.22	0.63	0.36
(v / s)_i Volume / Saturation Flow Rate	0.10	0.26		0.19	0.36	0.33
s, saturation flow rate [veh/h]	1810	1615		3514	5176	5176
c, Capacity [veh/h]	514	459		780	3244	1865
d1, Uniform Delay [s]	25.47	31.05		33.83	9.73	27.31
k, delay calibration	0.11	0.24		0.11	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	13.48		3.38	0.73	7.72
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.33	0.91		0.88	0.57	0.90
d, Delay for Lane Group [s/veh]	25.85	44.52		37.21	10.45	35.02
Lane Group LOS	C	D		D	B	D
Critical Lane Group	No	Yes		Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	2.91	10.13		7.40	6.35	12.27
50th-Percentile Queue Length [ft/ln]	72.69	253.29		185.11	158.80	306.78
95th-Percentile Queue Length [veh/ln]	5.23	15.35		11.87	10.49	18.02
95th-Percentile Queue Length [ft/ln]	130.85	383.80		296.68	262.13	450.40

**Movement, Approach, & Intersection Results**

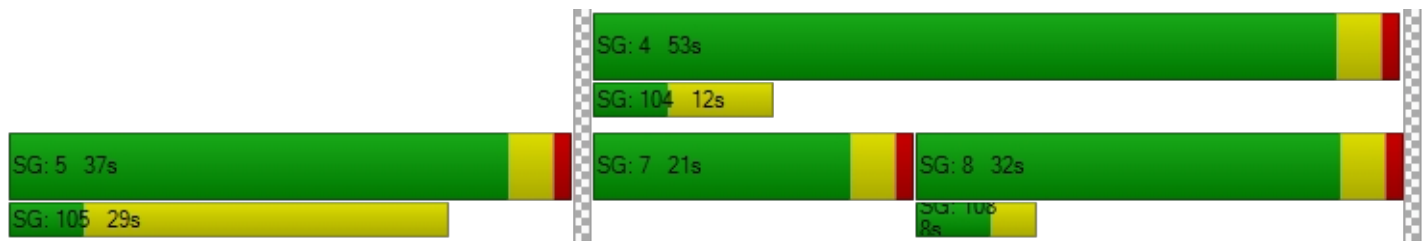
d_M, Delay for Movement [s/veh]	25.85	0.00	44.52	0.00	0.00	0.00	37.21	10.45	0.00	0.00	35.02	0.00
Movement LOS	C		D				D	B			D	
d_A, Approach Delay [s/veh]	39.06			0.00			17.71			35.02		
Approach LOS	D			A			B			D		
d_I, Intersection Delay [s/veh]	26.41											
Intersection LOS	C											
Intersection V/C	0.778											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.003	2.050	3.326	3.145
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1089	622
d_b, Bicycle Delay [s]	45.00	45.00	9.34	21.36
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.949	2.487
Bicycle LOS	D	D	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	21.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.636

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	↵↵			↵↵↵			↵↵			↵↵		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	0	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	0	0	47	65	0	663	554	121	0	185	111	119
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	12	0	0	65	6	0	0	8	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	0	47	77	0	663	619	127	0	185	119	119
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	12	19	0	166	155	32	0	46	30	30
Total Analysis Volume [veh/h]	0	0	47	77	0	663	619	127	0	185	119	119
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	24	0	9	24	24	27	37	0	20	30	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	12	12	0	9	0	0	15	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	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	0.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	0	5	5	10	64	49	53	11	14
g / C, Green / Cycle	0.00	0.06	0.06	0.11	0.71	0.55	0.58	0.12	0.16
(v / s)_i Volume / Saturation Flow Rate	0.00	0.03	0.04	0.00	0.41	0.34	0.07	0.10	0.14
s, saturation flow rate [veh/h]	1810	1615	1810	1900	1615	1810	1900	1810	1746
c, Capacity [veh/h]	0	93	101	216	1142	993	1109	226	279
d1, Uniform Delay [s]	0.00	41.16	41.88	0.00	6.56	13.91	8.36	38.39	36.81
k, delay calibration	0.11	0.11	0.11	0.11	0.50	0.50	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
d2, Incremental Delay [s]	0.00	4.19	10.96	0.00	2.16	2.94	0.05	7.17	7.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.00	0.51	0.76	0.00	0.58	0.62	0.11	0.82	0.85
d, Delay for Lane Group [s/veh]	0.00	45.35	52.83	0.00	8.72	16.85	8.40	45.56	44.18
Lane Group LOS	A	D	D	A	A	B	A	D	D
Critical Lane Group	No	No	No	No	Yes	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	1.11	1.97	0.00	5.68	8.70	1.04	4.36	5.57
50th-Percentile Queue Length [ft/ln]	0.00	27.74	49.37	0.00	141.90	217.47	25.92	109.10	139.16
95th-Percentile Queue Length [veh/ln]	0.00	2.00	3.55	0.00	9.58	13.54	1.87	7.79	9.44
95th-Percentile Queue Length [ft/ln]	0.00	49.92	88.86	0.00	239.58	338.39	46.66	194.75	235.89

**Movement, Approach, & Intersection Results**

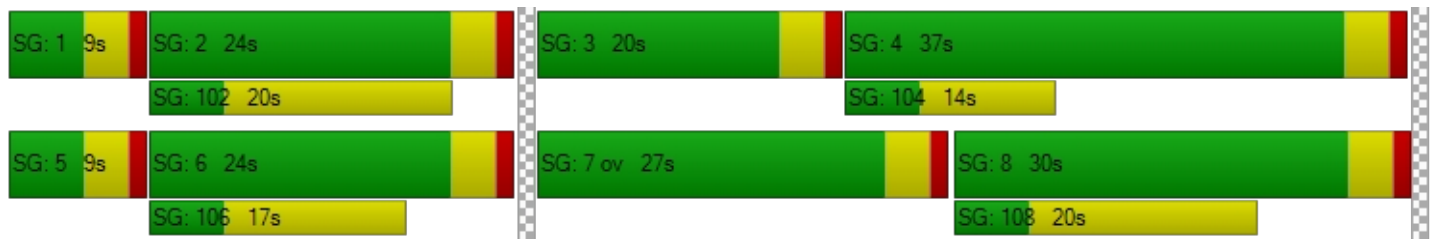
d_M, Delay for Movement [s/veh]	0.00	45.35	45.35	52.83	0.00	8.72	16.85	8.40	8.40	45.56	44.18	44.18
Movement LOS	A	D	D	D	A	A	B	A	A	D	D	D
d_A, Approach Delay [s/veh]	45.35			13.31			15.42			44.78		
Approach LOS	D			B			B			D		
d_I, Intersection Delay [s/veh]	21.69											
Intersection LOS	C											
Intersection V/C	0.636											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.017	2.695	2.505	2.433
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	733	578
d_b, Bicycle Delay [s]	27.22	27.22	18.05	22.76
I_b,int, Bicycle LOS Score for Intersection	1.637	2.781	2.791	2.258
Bicycle LOS	A	C	C	B

**Sequence**

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



**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.018

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	673	460	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	65	0	28	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	738	460	28	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	185	115	7	0	3
Total Analysis Volume [veh/h]	0	738	460	28	0	12
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	0.00	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	10.65
Movement LOS		A	A	A		B
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.41
d_A, Approach Delay [s/veh]	0.00		0.00		10.65	
Approach LOS	A		A		B	
d_I, Intersection Delay [s/veh]	0.10					
Intersection LOS	B					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type:	Two-way stop	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.200

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	600	438	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]	71	0	0	0	0	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	0	0	600	438	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	0	150	110	2
Total Analysis Volume [veh/h]	71	0	0	600	438	8
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

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

**Movement, Approach, & Intersection Results**

V/C, Movement V/C Ratio	0.20	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	17.64	12.09	8.20	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.73	0.73	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	18.34	18.34	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.64		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.12					
Intersection LOS	C					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_BO Lane

Scenario 9 BO AM

Geo\_AM\_TBB.vistro

Report File: K:\...\9 BO AM.pdf

12/12/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.523	14.6	B
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.666	14.4	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	EB Left	0.623	12.3	B
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	WB Right	0.838	38.5	D
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.508	20.9	C
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.520	23.2	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.812	16.2	B
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	NB Left	0.641	32.9	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.523

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTT			TTL			TTL			TTT		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	527	83	68	60	88	76	133	443	428	72	859	87
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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	527	83	68	60	88	76	133	443	428	72	859	87
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	21	17	15	22	19	33	111	107	18	215	22
Total Analysis Volume [veh/h]	527	83	68	60	88	76	133	443	428	72	859	87
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	9	24	0	9	24	0	36	21	21	36	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	12	12	0	12	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	2.0	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	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	44	45	4	6	8	59	68	5	55	55
g / C, Green / Cycle	0.49	0.50	0.04	0.06	0.09	0.66	0.75	0.05	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.15	0.09	0.03	0.05	0.07	0.23	0.27	0.04	0.25	0.25
s, saturation flow rate [veh/h]	3514	1760	1810	1900	1810	1900	1615	1810	1900	1839
c, Capacity [veh/h]	1706	887	78	117	170	1245	1215	96	1167	1130
d1, Uniform Delay [s]	14.02	12.13	42.61	41.56	39.87	6.97	3.76	42.04	8.96	8.96
k, delay calibration	0.50	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.47	0.09	14.48	9.37	7.62	0.80	0.80	11.20	0.23	0.24
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	0.31	0.17	0.77	0.75	0.78	0.36	0.35	0.75	0.41	0.41
d, Delay for Lane Group [s/veh]	14.49	12.22	57.09	50.93	47.50	7.77	4.56	53.24	9.19	9.20
Lane Group LOS	B	B	E	D	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.13	1.55	1.61	2.18	3.20	3.58	2.20	1.87	4.56	4.42
50th-Percentile Queue Length [ft/ln]	78.23	38.87	40.14	54.56	79.95	89.50	54.89	46.85	114.07	110.50
95th-Percentile Queue Length [veh/ln]	5.63	2.80	2.89	3.93	5.76	6.44	3.95	3.37	8.07	7.87
95th-Percentile Queue Length [ft/ln]	140.82	69.96	72.25	98.20	143.90	161.10	98.81	84.34	201.65	196.69

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	14.49	12.22	12.22	57.09	50.93	0.00	47.50	7.77	4.56	53.24	9.20	9.20
Movement LOS	B	B	B	E	D		D	A	A	D	A	A
d_A, Approach Delay [s/veh]	13.99			53.43			11.66			12.31		
Approach LOS	B			D			B			B		
d_I, Intersection Delay [s/veh]	14.62											
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 <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.493	2.261	2.767	2.560
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	444	378	378
d_b, Bicycle Delay [s]	27.22	27.22	29.61	29.61
I_b,int, Bicycle LOS Score for Intersection	2.678	1.804	3.216	2.399
Bicycle LOS	B	A	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	14.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	130	906	530	951	455	150
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	130	906	530	951	455	150
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	227	133	238	114	38
Total Analysis Volume [veh/h]	130	906	530	951	455	150
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	22	69	47	47	21	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	8	65	53	74	17	17
g / C, Green / Cycle	0.09	0.72	0.59	0.82	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.07	0.25	0.28	0.59	0.13	0.09
s, saturation flow rate [veh/h]	1810	3618	1900	1615	3514	1615
c, Capacity [veh/h]	166	2613	1113	1323	664	305
d1, Uniform Delay [s]	39.99	4.63	10.70	3.58	34.01	32.64
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.79	0.37	1.46	3.39	1.27	1.23
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	0.78	0.35	0.48	0.72	0.69	0.49
d, Delay for Lane Group [s/veh]	47.77	5.00	12.16	6.96	35.27	33.86
Lane Group LOS	D	A	B	A	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.14	2.59	5.93	4.99	4.66	2.98
50th-Percentile Queue Length [ft/ln]	78.44	64.66	148.24	124.77	116.56	74.50
95th-Percentile Queue Length [veh/ln]	5.65	4.66	9.92	8.65	8.20	5.36
95th-Percentile Queue Length [ft/ln]	141.19	116.39	248.08	216.37	205.09	134.11

**Movement, Approach, & Intersection Results**

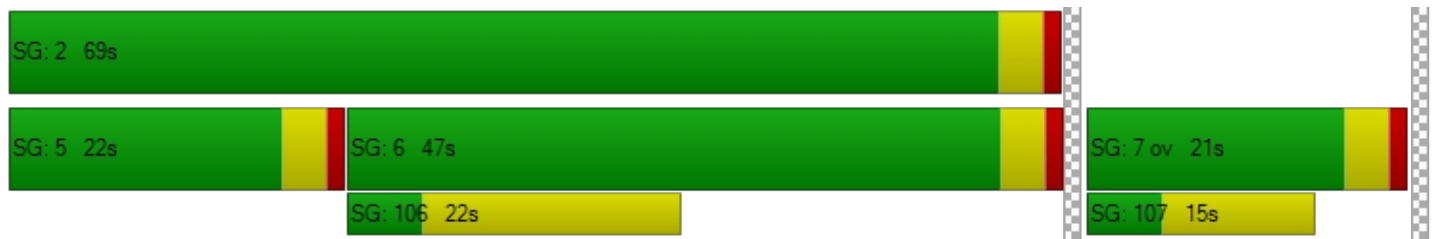
d_M, Delay for Movement [s/veh]	47.77	5.00	12.16	6.96	35.27	33.86
Movement LOS	D	A	B	A	D	C
d_A, Approach Delay [s/veh]	10.37		8.82		34.92	
Approach LOS	B		A		C	
d_I, Intersection Delay [s/veh]	14.39					
Intersection LOS	B					
Intersection V/C	0.666					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.551	2.825	2.728
Crosswalk LOS	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.987	6.576	4.132
Bicycle LOS	E	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.623

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	1755	698	288	1252	0	198	0	808	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	1755	698	288	1252	0	198	0	808	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	439	175	72	313	0	50	0	202	0	0	0
Total Analysis Volume [veh/h]	0	1755	698	288	1252	0	198	0	808	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	34	0	32	66	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	9	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	
C, Cycle Length [s]	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	61	10	75	7	
g / C, Green / Cycle	0.67	0.11	0.83	0.08	
(v / s)_i Volume / Saturation Flow Rate	0.49	0.08	0.35	0.06	
s, saturation flow rate [veh/h]	3618	3514	3618	3514	
c, Capacity [veh/h]	2439	389	3000	288	
d1, Uniform Delay [s]	9.28	38.76	2.01	40.20	
k, delay calibration	0.50	0.11	0.50	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.87	2.78	0.43	2.93	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.72	0.74	0.42	0.69	
d, Delay for Lane Group [s/veh]	11.15	41.54	2.43	43.13	
Lane Group LOS	B	D	A	D	
Critical Lane Group	Yes	Yes	No	Yes	
50th-Percentile Queue Length [veh/ln]	9.57	3.19	1.49	2.22	
50th-Percentile Queue Length [ft/ln]	239.20	79.67	37.36	55.59	
95th-Percentile Queue Length [veh/ln]	14.64	5.74	2.69	4.00	
95th-Percentile Queue Length [ft/ln]	366.03	143.40	67.25	100.06	

**Movement, Approach, & Intersection Results**

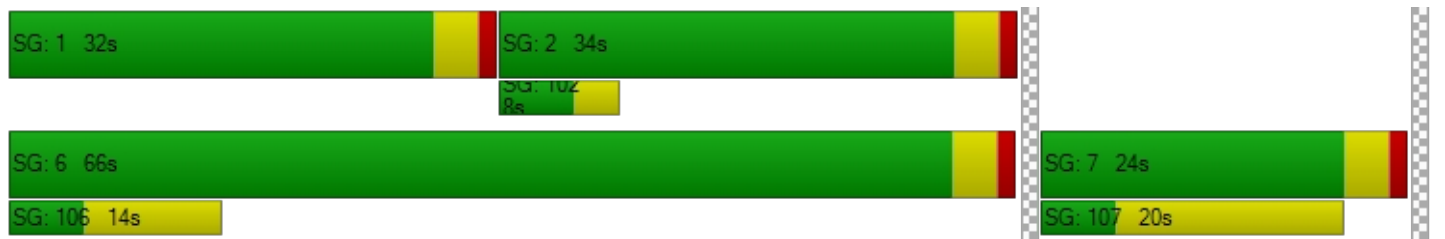
d_M, Delay for Movement [s/veh]	0.00	11.15	0.00	41.54	2.43	0.00	43.13	0.00	0.00	0.00	0.00	0.00
Movement LOS		B		D	A		D					
d_A, Approach Delay [s/veh]	11.15			9.75			43.13			0.00		
Approach LOS	B			A			D			A		
d_I, Intersection Delay [s/veh]	12.35											
Intersection LOS	B											
Intersection V/C	0.623											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.888	3.082	2.006	1.857
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	1378	0	0
d_b, Bicycle Delay [s]	20.00	4.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.007	2.830	4.132	4.132
Bicycle LOS	C	C	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	38.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.838

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	1429	524	0	0	836	282	0	0	0	704	0	312
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1429	524	0	0	836	282	0	0	0	704	0	312
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9630	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	357	131	0	0	209	71	0	0	0	176	0	78
Total Analysis Volume [veh/h]	1429	524	0	0	836	282	0	0	0	704	0	312
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	41	67	0	0	26	0	0	0	0	0	23	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	37	63	22	22		19	19
g / C, Green / Cycle	0.41	0.70	0.24	0.24		0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.41	0.14	0.23	0.17		0.20	0.19
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615
c, Capacity [veh/h]	1445	2532	884	395		742	341
d1, Uniform Delay [s]	26.30	4.74	33.41	31.12		35.02	34.71
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.37
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.77	0.19	19.60	10.54		7.38	25.09
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	0.99	0.21	0.95	0.71		0.95	0.92
d, Delay for Lane Group [s/veh]	35.07	4.92	53.01	41.66		42.40	59.80
Lane Group LOS	D	A	D	D		D	E
Critical Lane Group	Yes	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	16.02	1.48	11.11	6.62		8.17	8.89
50th-Percentile Queue Length [ft/ln]	400.38	36.98	277.70	165.59		204.30	222.18
95th-Percentile Queue Length [veh/ln]	22.58	2.66	16.57	10.84		12.86	13.78
95th-Percentile Queue Length [ft/ln]	564.46	66.57	414.34	271.11		321.50	344.41

**Movement, Approach, & Intersection Results**

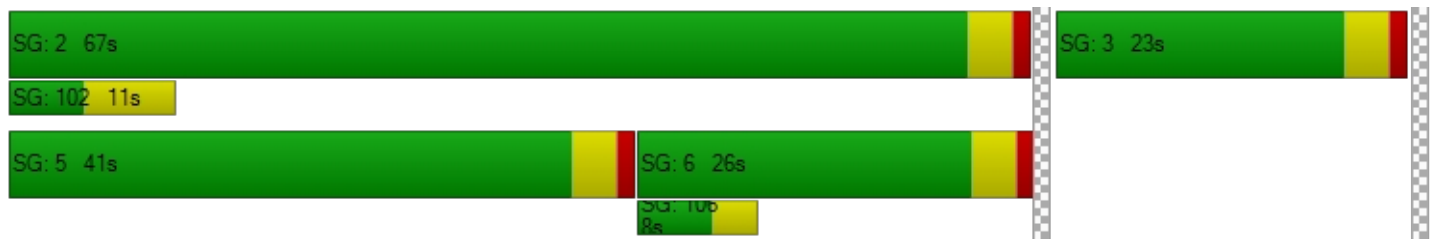
d_M, Delay for Movement [s/veh]	35.07	4.92	0.00	0.00	53.01	41.66	0.00	0.00	0.00	42.40	0.00	59.80
Movement LOS	D	A			D	D				D		E
d_A, Approach Delay [s/veh]	26.98				50.15		0.00		47.74			
Approach LOS	C				D		A		D			
d_I, Intersection Delay [s/veh]	38.48											
Intersection LOS	D											
Intersection V/C	0.838											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	28.01	28.01	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.071	2.672	2.550	2.272
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1400	489	0	0
d_b, Bicycle Delay [s]	4.05	25.69	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.171	2.482	4.132	4.132
Bicycle LOS	C	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.508

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	916	1502	339	501	1475	105
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	916	1502	339	501	1475	105
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	229	376	85	125	369	26
Total Analysis Volume [veh/h]	916	1502	339	501	1475	105
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	



**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	38	0	31	0	23	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	21	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	92	92	92	92	92
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	20	11	62	62	62
g / C, Green / Cycle	0.22	0.12	0.67	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.17	0.09	0.31	0.32	0.06
s, saturation flow rate [veh/h]	5271	3618	3204	1519	1729
c, Capacity [veh/h]	1162	438	2135	1100	1161
d1, Uniform Delay [s]	33.84	39.21	7.50	7.41	5.29
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	2.95	0.72	1.31	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.79	0.77	0.46	0.45	0.09
d, Delay for Lane Group [s/veh]	35.07	42.16	8.21	8.72	5.45
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.43	3.84	3.98	4.12	0.67
50th-Percentile Queue Length [ft/ln]	160.80	96.12	99.43	103.11	16.65
95th-Percentile Queue Length [veh/ln]	10.59	6.92	7.16	7.42	1.20
95th-Percentile Queue Length [ft/ln]	264.78	173.02	178.98	185.59	29.98

**Movement, Approach, & Intersection Results**

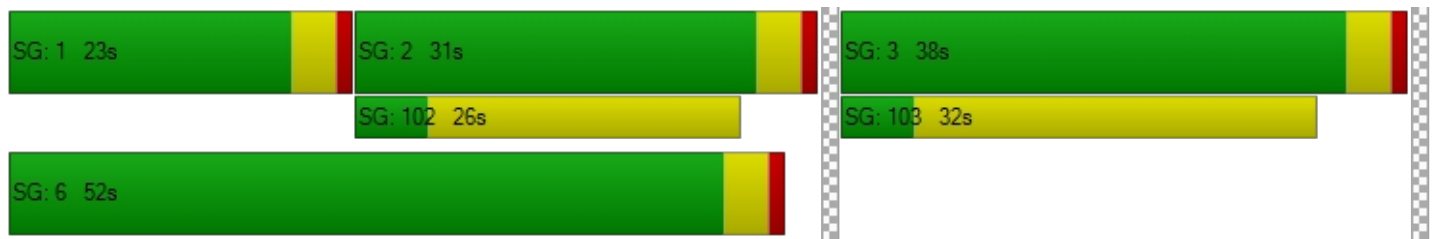
d_M, Delay for Movement [s/veh]	35.07	0.00	42.16	0.00	8.38	5.45
Movement LOS	D		D		A	A
d_A, Approach Delay [s/veh]	35.07		42.16		8.19	
Approach LOS	D		D		A	
d_I, Intersection Delay [s/veh]	20.94					
Intersection LOS	C					
Intersection V/C	0.508					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.316	2.675	2.961
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.412	5.436
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	23.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.520

**Intersection Setup**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐			⇐⇐⇐⇐			⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			No		

**Volumes**

Name	Northbound			I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	70	0	262	526	169	502	0	1794	80	323	1556	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	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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]	70	0	262	526	169	502	0	1794	80	323	1556	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	66	132	42	126	0	449	20	81	389	0
Total Analysis Volume [veh/h]	70	0	262	526	169	502	0	1794	80	323	1556	0
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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	0	0	0	6	0	0	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	0	0	0	5	0	0	5	5	5	5	0
Maximum Green [s]	30	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	40	0	0	0	40	0	0	23	23	17	40	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	31	0	0	0	31	0	0	14	14	0	14	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No				No			No	No	No	No	
Maximum Recall	No				No			No	No	No	No	
Pedestrian Recall	No				No			No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	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	0.00	2.00	2.00
g_i, Effective Green Time [s]	6	19	19	65	75	14	83
g / C, Green / Cycle	0.05	0.16	0.16	0.54	0.63	0.11	0.69
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.13	0.26	0.05	0.09	0.30
s, saturation flow rate [veh/h]	1810	3514	1872	6901	1615	3514	5176
c, Capacity [veh/h]	96	555	296	3738	1014	401	3567
d1, Uniform Delay [s]	56.00	48.85	48.81	17.03	8.75	51.84	8.29
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.28	3.04	5.38	0.44	0.15	3.83	0.39
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.73	0.82	0.81	0.48	0.08	0.80	0.44
d, Delay for Lane Group [s/veh]	66.27	51.90	54.20	17.48	8.90	55.67	8.68
Lane Group LOS	E	D	D	B	A	E	A
Critical Lane Group	Yes	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.36	6.81	7.40	7.62	0.84	4.95	5.66
50th-Percentile Queue Length [ft/ln]	59.07	170.16	184.90	190.44	21.10	123.79	141.55
95th-Percentile Queue Length [veh/ln]	4.25	11.08	11.86	12.14	1.52	8.60	9.56
95th-Percentile Queue Length [ft/ln]	106.32	277.12	296.40	303.59	37.99	215.03	239.10

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	66.27	0.00	0.00	52.18	54.20	0.00	0.00	17.48	8.90	55.67	8.68	0.00
Movement LOS	E			D	D			B	A	E	A	
d_A, Approach Delay [s/veh]	66.27			52.69			17.11			16.76		
Approach LOS	E			D			B			B		
d_I, Intersection Delay [s/veh]	23.20											
Intersection LOS	C											
Intersection V/C	0.520											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.303	2.316	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	600	317	600
d_b, Bicycle Delay [s]	60.00	29.40	42.50	29.40
I_b,int, Bicycle LOS Score for Intersection	4.132	2.706	2.333	2.593
Bicycle LOS	D	B	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	16.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐⇐						⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	664	0	285	0	0	0	375	1243	0	0	1706	1007
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	664	0	285	0	0	0	375	1243	0	0	1706	1007
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9450	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	166	0	71	0	0	0	99	311	0	0	427	252
Total Analysis Volume [veh/h]	664	0	285	0	0	0	397	1243	0	0	1706	1007
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	36	0	0	0	0	0	0	84	0	0	84	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No							No			No	
Maximum Recall	No							No			No	
Pedestrian Recall	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, Cycle Length [s]	120		120	120	120
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	26		86	86	86
g / C, Green / Cycle	0.21		0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.19		0.24	0.33	0.62
s, saturation flow rate [veh/h]	3514		5176	5176	1615
c, Capacity [veh/h]	750		3726	3726	1163
d1, Uniform Delay [s]	45.77		6.20	7.02	12.51
k, delay calibration	0.11		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.73		0.24	0.41	8.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.89		0.33	0.46	0.87
d, Delay for Lane Group [s/veh]	49.49		6.44	7.43	21.26
Lane Group LOS	D		A	A	C
Critical Lane Group	Yes		No	No	Yes
50th-Percentile Queue Length [veh/ln]	9.95		3.59	5.59	20.02
50th-Percentile Queue Length [ft/ln]	248.77		89.70	139.81	500.43
95th-Percentile Queue Length [veh/ln]	15.12		6.46	9.47	27.35
95th-Percentile Queue Length [ft/ln]	378.10		161.46	236.77	683.86

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.49	0.00	0.00	0.00	0.00	0.00	0.00	6.44	0.00	0.00	7.43	21.26
Movement LOS	D							A			A	C
d_A, Approach Delay [s/veh]	49.49			0.00			6.44			12.56		
Approach LOS	D			A			A			B		
d_I, Intersection Delay [s/veh]	16.22											
Intersection LOS	B											
Intersection V/C	0.812											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.445	2.420	3.181	3.160
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1333	1333
d_b, Bicycle Delay [s]	60.00	60.00	6.67	6.67
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.243	3.052
Bicycle LOS	D	D	B	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	32.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.641

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	1	1	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	62	702	140	741	384	295	496	169	91	94	116	548
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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	62	702	140	741	384	295	496	169	91	94	116	548
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	176	35	185	96	74	124	42	23	24	29	137
Total Analysis Volume [veh/h]	62	702	140	741	384	295	496	169	91	94	116	548
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	24	0	18	27	27	16	31	0	19	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	18	0	15	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	R	L	C
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92	92	92
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	29	29	22	47	67	15	17	17	6	7
g / C, Green / Cycle	0.04	0.31	0.31	0.24	0.51	0.72	0.17	0.18	0.18	0.07	0.08
(v / s)_i Volume / Saturation Flow Rate	0.03	0.23	0.23	0.21	0.11	0.18	0.14	0.09	0.06	0.05	0.06
s, saturation flow rate [veh/h]	1810	1900	1792	3514	3618	1615	3514	1900	1615	1810	1900
c, Capacity [veh/h]	81	596	562	853	1850	1166	588	341	290	124	153
d1, Uniform Delay [s]	43.44	28.06	28.06	33.43	12.29	4.34	37.13	33.98	32.80	42.11	41.40
k, delay calibration	0.11	0.23	0.23	0.11	0.50	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	1.00
d2, Incremental Delay [s]	13.49	3.59	3.81	2.88	0.25	0.52	13.78	1.11	0.61	9.14	7.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.76	0.73	0.73	0.87	0.21	0.25	0.84	0.50	0.31	0.76	0.76
d, Delay for Lane Group [s/veh]	56.93	31.65	31.87	36.32	12.54	4.86	50.91	35.09	33.41	51.25	48.77
Lane Group LOS	E	C	C	D	B	A	D	D	C	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.69	8.82	8.35	8.07	2.12	1.68	6.44	3.46	1.79	2.39	2.86
50th-Percentile Queue Length [ft/ln]	42.19	220.44	208.80	201.76	53.11	42.06	160.90	86.51	44.83	59.74	71.55
95th-Percentile Queue Length [veh/ln]	3.04	13.69	13.09	12.73	3.82	3.03	10.60	6.23	3.23	4.30	5.15
95th-Percentile Queue Length [ft/ln]	75.94	342.19	327.29	318.23	95.59	75.71	264.91	155.72	80.70	107.52	128.80

**Movement, Approach, & Intersection Results**

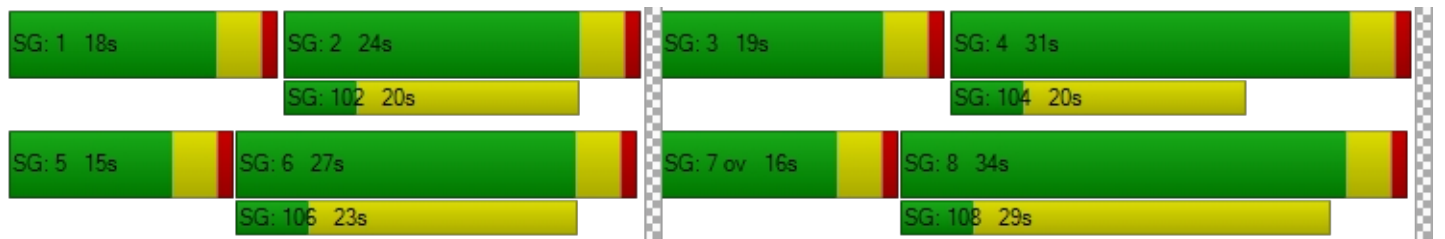
d_M, Delay for Movement [s/veh]	56.93	31.74	31.87	36.32	12.54	4.86	50.91	35.09	33.41	51.25	48.77	0.00
Movement LOS	E	C	C	D	B	A	D	D	C	D	D	
d_A, Approach Delay [s/veh]	33.49			23.35			45.26			49.88		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	32.87											
Intersection LOS	C											
Intersection V/C	0.641											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.589	3.046	2.654	2.547
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	511	600	667
d_b, Bicycle Delay [s]	27.22	24.94	22.05	20.00
I_b,int, Bicycle LOS Score for Intersection	2.305	2.731	2.807	1.906
Bicycle LOS	B	B	C	A

**Sequence**

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



## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_BO Lane

Scenario 9 BO PM

Geo\_PM\_TBB.vistro

Report File: K:\...\9 BO PM.pdf

12/12/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.737	18.1	B
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.760	23.1	C
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	SB Left	0.682	16.4	B
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	SB Right	0.961	56.8	E
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.583	18.4	B
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.800	52.7	D
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.699	21.0	C
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	NB Left	0.655	32.3	C

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



**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	18.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.737

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐⇐			⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	718	80	150	39	146	92	169	752	709	109	834	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	718	80	150	39	146	92	169	752	709	109	834	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	180	20	38	10	37	23	42	188	177	27	209	12
Total Analysis Volume [veh/h]	718	80	150	39	146	92	169	752	709	109	834	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	18	21	0	39	42	0	9	21	21	9	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	12	12	0	12	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	2.0	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	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	39	44	3	9	10	54	62	7	51	51
g / C, Green / Cycle	0.43	0.49	0.03	0.10	0.12	0.60	0.69	0.08	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.20	0.13	0.02	0.08	0.09	0.40	0.44	0.06	0.23	0.23
s, saturation flow rate [veh/h]	3514	1704	1810	1900	1810	1900	1615	1810	1900	1865
c, Capacity [veh/h]	1503	836	64	187	208	1140	1115	142	1070	1050
d1, Uniform Delay [s]	18.53	13.50	42.80	39.64	38.87	11.93	7.70	40.68	11.21	11.21
k, delay calibration	0.50	0.11	0.11	0.11	0.11	0.50	0.50	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]	1.09	0.18	9.08	7.01	7.40	3.00	2.78	8.45	0.26	0.26
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.48	0.28	0.61	0.78	0.81	0.66	0.64	0.77	0.42	0.42
d, Delay for Lane Group [s/veh]	19.62	13.68	51.88	46.65	46.27	14.93	10.48	49.13	11.47	11.48
Lane Group LOS	B	B	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.27	2.60	1.00	3.44	4.01	9.79	7.00	2.70	4.87	4.78
50th-Percentile Queue Length [ft/ln]	131.84	64.88	24.97	85.93	100.33	244.69	175.01	67.42	121.64	119.41
95th-Percentile Queue Length [veh/ln]	9.04	4.67	1.80	6.19	7.22	14.92	11.34	4.85	8.48	8.36
95th-Percentile Queue Length [ft/ln]	225.99	116.79	44.94	154.68	180.60	372.96	283.48	121.35	212.08	209.02

**Movement, Approach, & Intersection Results**

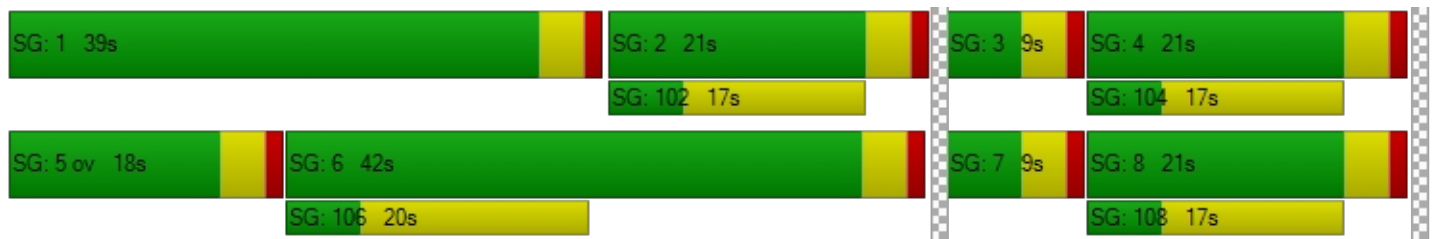
d_M, Delay for Movement [s/veh]	19.62	13.68	13.68	51.88	46.65	0.00	46.27	14.93	10.48	49.13	11.47	11.48
Movement LOS	B	B	B	D	D		D	B	B	D	B	B
d_A, Approach Delay [s/veh]	18.18			47.75			16.24			15.62		
Approach LOS	B			D			B			B		
d_I, Intersection Delay [s/veh]	18.12											
Intersection LOS	B											
Intersection V/C	0.737											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.676	2.269	2.922	2.615
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	378	844	378	378
d_b, Bicycle Delay [s]	29.61	15.02	29.61	29.61
I_b,int, Bicycle LOS Score for Intersection	3.124	1.865	4.249	2.376
Bicycle LOS	C	A	D	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	23.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.760

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	246	803	759	802	789	151
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	246	803	759	802	789	151
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	201	190	201	197	38
Total Analysis Volume [veh/h]	246	803	759	802	789	151
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	38	64	26	26	26	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	14	60	42	68	22	22
g / C, Green / Cycle	0.16	0.67	0.46	0.75	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.14	0.22	0.40	0.50	0.22	0.09
s, saturation flow rate [veh/h]	1810	3618	1900	1615	3514	1615
c, Capacity [veh/h]	292	2412	876	1211	859	395
d1, Uniform Delay [s]	36.65	6.43	21.76	5.59	33.13	28.34
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.59	0.37	11.22	2.86	4.54	0.61
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	0.84	0.33	0.87	0.66	0.92	0.38
d, Delay for Lane Group [s/veh]	43.23	6.80	32.99	8.45	37.67	28.95
Lane Group LOS	D	A	C	A	D	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.69	2.94	16.09	6.30	8.68	2.73
50th-Percentile Queue Length [ft/ln]	142.20	73.42	402.29	157.41	217.09	68.32
95th-Percentile Queue Length [veh/ln]	9.60	5.29	22.67	10.41	13.52	4.92
95th-Percentile Queue Length [ft/ln]	239.98	132.15	566.76	260.29	337.91	122.97

**Movement, Approach, & Intersection Results**

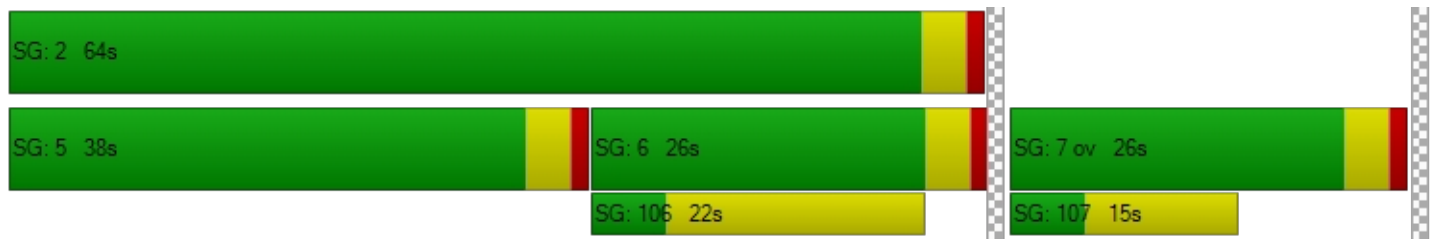
d_M, Delay for Movement [s/veh]	43.23	6.80	32.99	8.45	37.67	28.95
Movement LOS	D	A	C	A	D	C
d_A, Approach Delay [s/veh]	15.34		20.38		36.27	
Approach LOS	B		C		D	
d_I, Intersection Delay [s/veh]	23.10					
Intersection LOS	C					
Intersection V/C	0.760					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.610	2.901	2.777
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.998	6.708	4.132
Bicycle LOS	E	F	D

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	16.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.682

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	1740	1140	356	1471	0	351	0	1591	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	1740	1140	356	1471	0	351	0	1591	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	435	285	89	368	0	88	0	398	0	0	0
Total Analysis Volume [veh/h]	0	1740	1140	356	1471	0	351	0	1591	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	12	0	35	47	0	43	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	
C, Cycle Length [s]	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	54	12	70	12	
g / C, Green / Cycle	0.60	0.13	0.78	0.13	
(v / s)_i Volume / Saturation Flow Rate	0.48	0.10	0.41	0.10	
s, saturation flow rate [veh/h]	3618	3514	3618	3514	
c, Capacity [veh/h]	2185	463	2822	460	
d1, Uniform Delay [s]	13.60	37.75	3.67	37.76	
k, delay calibration	0.50	0.11	0.50	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	3.11	2.73	0.69	2.65	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.80	0.77	0.52	0.76	
d, Delay for Lane Group [s/veh]	16.71	40.48	4.36	40.40	
Lane Group LOS	B	D	A	D	
Critical Lane Group	Yes	Yes	No	Yes	
50th-Percentile Queue Length [veh/ln]	12.66	3.91	3.49	3.85	
50th-Percentile Queue Length [ft/ln]	316.60	97.65	87.29	96.14	
95th-Percentile Queue Length [veh/ln]	18.50	7.03	6.28	6.92	
95th-Percentile Queue Length [ft/ln]	462.51	175.76	157.12	173.06	

**Movement, Approach, & Intersection Results**

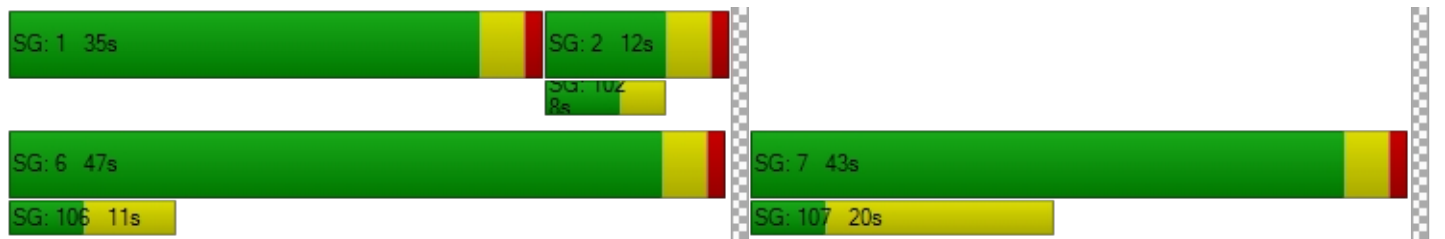
d_M, Delay for Movement [s/veh]	0.00	16.71	0.00	40.48	4.36	0.00	40.40	0.00	0.00	0.00	0.00	0.00
Movement LOS		B		D	A		D					
d_A, Approach Delay [s/veh]	16.71		11.40			40.40			0.00			
Approach LOS	B		B			D			A			
d_I, Intersection Delay [s/veh]	16.36											
Intersection LOS	B											
Intersection V/C	0.682											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.928	3.141	2.056	1.890
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	178	956	0	0
d_b, Bicycle Delay [s]	37.36	12.27	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.995	3.067	4.132	4.132
Bicycle LOS	C	C	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	56.8
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.961

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	1055	1036	0	0	804	597	0	0	0	1023	0	403
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1055	1036	0	0	804	597	0	0	0	1023	0	403
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9630	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	264	259	0	0	201	149	0	0	0	256	0	101
Total Analysis Volume [veh/h]	1055	1036	0	0	804	597	0	0	0	1023	0	403
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	6	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	5	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	30	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	28	60	0	0	32	32	0	0	0	30	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	5	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	3	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	2.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
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		L	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	24	56	28	28		26	26
g / C, Green / Cycle	0.27	0.62	0.31	0.31		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.30	0.29	0.22	0.37		0.29	0.25
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615
c, Capacity [veh/h]	937	2251	1125	502		1015	467
d1, Uniform Delay [s]	33.00	9.00	27.46	31.00		32.00	30.32
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.34
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.12	0.68	3.88	103.24		15.03	13.78
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	1.13	0.46	0.71	1.19		1.01	0.86
d, Delay for Lane Group [s/veh]	93.12	9.68	31.34	134.24		47.03	44.10
Lane Group LOS	F	A	C	F		F	D
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	17.70	4.97	8.02	24.87		12.75	9.78
50th-Percentile Queue Length [ft/ln]	442.38	124.36	200.45	621.66		318.74	244.58
95th-Percentile Queue Length [veh/ln]	26.31	8.63	12.66	36.63		18.69	14.91
95th-Percentile Queue Length [ft/ln]	657.84	215.81	316.54	915.73		467.32	372.82

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	93.12	9.68	0.00	0.00	31.34	134.24	0.00	0.00	0.00	47.03	0.00	44.10
Movement LOS	F	A			C	F				F		D
d_A, Approach Delay [s/veh]	51.78		75.19		0.00		46.20					
Approach LOS	D		E		A		D					
d_I, Intersection Delay [s/veh]	56.83											
Intersection LOS	E											
Intersection V/C	0.961											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	26.0	26.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.76	22.76	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.122	2.836	2.522	2.405
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	622	0	0
d_b, Bicycle Delay [s]	6.42	21.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.285	2.715	4.132	4.132
Bicycle LOS	C	B	D	D

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	1042	1896	179	617	1958	170
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	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1042	1896	179	617	1958	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	261	474	45	154	490	43
Total Analysis Volume [veh/h]	1042	1896	179	617	1958	170
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	36	0	45	0	9	54
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	21	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	22	7	60	60	60
g / C, Green / Cycle	0.25	0.07	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.20	0.05	0.39	0.40	0.10
s, saturation flow rate [veh/h]	5271	3618	3348	1644	1729
c, Capacity [veh/h]	1310	269	2273	1180	1145
d1, Uniform Delay [s]	31.67	40.56	8.34	8.20	5.68
k, delay calibration	0.11	0.11	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.14	2.82	1.06	1.87	0.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.80	0.67	0.57	0.55	0.15
d, Delay for Lane Group [s/veh]	32.80	43.38	9.41	10.07	5.74
Lane Group LOS	C	D	A	B	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.02	2.01	6.10	6.28	1.07
50th-Percentile Queue Length [ft/ln]	175.54	50.35	152.53	157.04	26.64
95th-Percentile Queue Length [veh/ln]	11.37	3.63	10.15	10.39	1.92
95th-Percentile Queue Length [ft/ln]	284.19	90.63	253.80	259.80	47.96

**Movement, Approach, & Intersection Results**

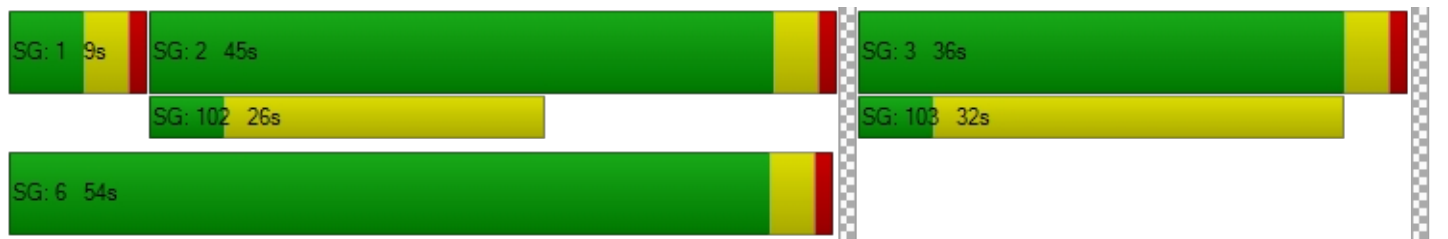
d_M, Delay for Movement [s/veh]	32.80	0.00	43.38	0.00	9.63	5.74
Movement LOS	C		D		A	A
d_A, Approach Delay [s/veh]	32.80		43.38		9.32	
Approach LOS	C		D		A	
d_I, Intersection Delay [s/veh]	18.44					
Intersection LOS	B					
Intersection V/C	0.583					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.360	2.680	2.917
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.280	5.888
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	52.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.800

**Intersection Setup**

Name	I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐⇐						⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			No		

**Volumes**

Name	I-10 SB Ramp			Oak Valley Pkwy			Oak Valley Pkwy					
Base Volume Input [veh/h]	200	0	434	1056	162	1029	0	2282	88	327	1618	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	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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]	200	0	434	1056	162	1029	0	2282	88	327	1618	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	0	109	264	41	257	0	571	22	82	405	0
Total Analysis Volume [veh/h]	200	0	434	1056	162	1029	0	2282	88	327	1618	0
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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	0	0	0	6	0	0	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	0	0	0	5	0	0	5	5	5	5	0
Maximum Green [s]	30	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	32	0	0	0	48	0	0	30	30	10	40	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	31	0	0	0	31	0	0	14	14	0	14	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	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	C	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	32	32	39	39	14	57
g / C, Green / Cycle	0.16	0.16	0.16	0.27	0.27	0.33	0.33	0.11	0.48
(v / s)_i Volume / Saturation Flow Rate	0.11	0.13	0.13	0.23	0.22	0.34	0.32	0.09	0.31
s, saturation flow rate [veh/h]	1810	1615	1615	3514	1844	5176	1851	3514	5176
c, Capacity [veh/h]	287	256	256	934	490	1699	608	400	2461
d1, Uniform Delay [s]	47.74	49.05	49.05	41.94	41.71	40.31	39.82	51.94	24.01
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.04	7.73	7.73	2.48	4.08	35.11	30.87	4.12	1.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.70	0.85	0.85	0.86	0.84	1.05	0.98	0.82	0.66
d, Delay for Lane Group [s/veh]	50.77	56.78	56.78	44.42	45.80	75.41	70.70	56.05	25.40
Lane Group LOS	D	E	E	D	D	F	E	E	C
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.90	6.86	6.86	11.58	12.08	21.98	22.23	5.03	11.77
50th-Percentile Queue Length [ft/ln]	147.49	171.45	171.45	289.42	302.08	549.57	555.74	125.71	294.20
95th-Percentile Queue Length [veh/ln]	9.88	11.15	11.15	17.16	17.78	30.58	29.96	8.71	17.39
95th-Percentile Queue Length [ft/ln]	247.08	278.82	278.82	428.92	444.60	764.58	749.04	217.65	434.85

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	50.77	0.00	56.78	44.75	45.80	0.00	0.00	74.37	70.70	56.05	25.40	0.00
Movement LOS	D		E	D	D			E	E	E	C	
d_A, Approach Delay [s/veh]	54.89			44.89			74.23			30.56		
Approach LOS	D			D			E			C		
d_I, Intersection Delay [s/veh]	52.67											
Intersection LOS	D											
Intersection V/C	0.800											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.551	2.443	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	733	433	600
d_b, Bicycle Delay [s]	60.00	24.07	36.82	29.40
I_b,int, Bicycle LOS Score for Intersection	5.179	3.569	2.537	2.629
Bicycle LOS	F	D	B	B

**Sequence**

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





**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐⇐						⇐			⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	690	0	759	0	0	0	430	2245	0	0	1624	604
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00	2.00	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	690	0	759	0	0	0	430	2245	0	0	1624	604
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9640	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	0	190	0	0	0	112	561	0	0	406	151
Total Analysis Volume [veh/h]	690	0	759	0	0	0	446	2245	0	0	1624	604
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	6	0	0	0	0	0	0	6	0	0	6	0
Maximum Green [s]	30	0	0	0	0	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	85	0	0	0	0	0	0	35	0	0	35	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No							No			No	
Maximum Recall	No							No			No	
Pedestrian Recall	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	R		C	C	R
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	37	37		75	75	75
g / C, Green / Cycle	0.31	0.31		0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.20	0.27		0.43	0.31	0.37
s, saturation flow rate [veh/h]	3514	2859		5176	5176	1615
c, Capacity [veh/h]	1096	892		3216	3216	1004
d1, Uniform Delay [s]	35.35	38.68		15.19	12.53	13.74
k, delay calibration	0.11	0.11		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.60	2.41		1.28	0.57	2.67
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.63	0.85		0.70	0.50	0.60
d, Delay for Lane Group [s/veh]	35.95	41.08		16.47	13.10	16.41
Lane Group LOS	D	D		B	B	B
Critical Lane Group	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.71	10.67		13.21	7.83	10.11
50th-Percentile Queue Length [ft/ln]	217.78	266.83		330.29	195.70	252.79
95th-Percentile Queue Length [veh/ln]	13.55	16.03		19.17	12.42	15.33
95th-Percentile Queue Length [ft/ln]	338.79	400.77		479.32	310.41	383.16

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	35.95	0.00	41.08	0.00	0.00	0.00	0.00	16.47	0.00	0.00	13.10	16.41
Movement LOS	D		D					B			B	B
d_A, Approach Delay [s/veh]	38.64			0.00			16.47			14.00		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	20.96											
Intersection LOS	C											
Intersection V/C	0.699											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.598	2.028	3.296	3.338
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	517	517
d_b, Bicycle Delay [s]	60.00	60.00	33.00	33.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.794	2.785
Bicycle LOS	D	D	C	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	32.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	1	1	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	121	534	154	726	223	663	554	216	99	208	195	1028
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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	534	154	726	223	663	554	216	99	208	195	1028
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	134	39	182	56	166	139	54	25	52	49	257
Total Analysis Volume [veh/h]	121	534	154	726	223	663	554	216	99	208	195	1028
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	26	0	18	30	30	13	33	0	13	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	18	0	15	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	23	23	22	37	59	18	17	17	12	11
g / C, Green / Cycle	0.08	0.26	0.26	0.24	0.42	0.66	0.20	0.18	0.18	0.14	0.13
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.21	0.06	0.41	0.16	0.11	0.06	0.11	0.10
s, saturation flow rate [veh/h]	1810	1900	1756	3514	3618	1615	3514	1900	1615	1810	1900
c, Capacity [veh/h]	153	494	457	840	1501	1059	690	352	299	249	241
d1, Uniform Delay [s]	40.43	30.33	30.34	32.85	16.42	9.06	34.51	33.69	31.81	37.82	38.24
k, delay calibration	0.11	0.13	0.13	0.11	0.50	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	1.00
d2, Incremental Delay [s]	8.91	2.43	2.66	2.82	0.21	2.80	9.62	1.73	0.64	7.22	6.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.79	0.72	0.72	0.86	0.15	0.63	0.80	0.61	0.33	0.84	0.81
d, Delay for Lane Group [s/veh]	49.35	32.76	33.01	35.67	16.63	11.86	44.13	35.42	32.45	45.04	44.62
Lane Group LOS	D	C	C	D	B	B	D	D	C	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	7.20	6.70	7.71	1.44	7.24	6.58	4.43	1.90	4.89	4.55
50th-Percentile Queue Length [ft/ln]	74.32	180.04	167.54	192.68	35.93	180.95	164.46	110.85	47.47	122.18	113.71
95th-Percentile Queue Length [veh/ln]	5.35	11.60	10.95	12.26	2.59	11.65	10.78	7.89	3.42	8.51	8.05
95th-Percentile Queue Length [ft/ln]	133.77	290.07	273.67	306.50	64.67	291.25	269.62	197.19	85.45	212.82	201.15

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.35	32.84	33.01	35.67	16.63	11.86	44.13	35.42	32.45	45.04	44.62	0.00
Movement LOS	D	C	C	D	B	B	D	D	C	D	D	
d_A, Approach Delay [s/veh]	35.34			23.24			40.64			44.83		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	32.34											
Intersection LOS	C											
Intersection V/C	0.655											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.562	3.056	2.755	2.594
Crosswalk LOS	B	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]	489	578	644	644
d_b, Bicycle Delay [s]	25.69	22.76	20.67	20.67
I_b,int, Bicycle LOS Score for Intersection	2.227	2.890	2.993	2.225
Bicycle LOS	B	C	C	B

**Sequence**

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





## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_BO Lane

Scenario 10 BO WP AM

Geo\_AM\_TBB.vistro

Report File: K:\...\10 BO WP AM.pdf

12/12/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.527	14.7	B
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.674	14.6	B
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	EB Left	0.624	12.4	B
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	WB Right	0.839	38.9	D
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.512	20.9	C
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.522	23.3	C
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.812	16.2	B
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	EB Left	0.658	35.1	D
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.016	16.7	C
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.097	18.3	C

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	14.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.527

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐⇐			⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	527	83	68	60	88	76	133	443	428	72	859	87
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	1	1	6	0	0	13	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]	527	83	68	60	88	77	134	449	428	72	872	87
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	21	17	15	22	19	34	112	107	18	218	22
Total Analysis Volume [veh/h]	527	83	68	60	88	77	134	449	428	72	872	87
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	9	21	0	12	24	0	9	44	44	13	48	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	12	12	0	12	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	2.0	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	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	44	45	4	6	8	59	68	5	55	55
g / C, Green / Cycle	0.48	0.50	0.04	0.06	0.09	0.66	0.75	0.05	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.15	0.09	0.03	0.05	0.07	0.24	0.27	0.04	0.26	0.26
s, saturation flow rate [veh/h]	3514	1760	1810	1900	1810	1900	1615	1810	1900	1840
c, Capacity [veh/h]	1698	883	78	117	169	1246	1216	95	1168	1131
d1, Uniform Delay [s]	14.14	12.23	42.60	41.55	39.96	6.99	3.74	42.08	8.98	8.98
k, delay calibration	0.50	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.48	0.09	14.36	9.30	8.19	0.81	0.80	11.71	0.24	0.25
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	0.31	0.17	0.77	0.75	0.79	0.36	0.35	0.76	0.42	0.42
d, Delay for Lane Group [s/veh]	14.61	12.32	56.97	50.85	48.15	7.80	4.55	53.79	9.22	9.23
Lane Group LOS	B	B	E	D	D	A	A	D	A	A
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.15	1.56	1.60	2.18	3.25	3.64	2.19	1.89	4.64	4.50
50th-Percentile Queue Length [ft/ln]	78.68	39.10	40.09	54.51	81.16	91.04	54.74	47.13	116.02	112.44
95th-Percentile Queue Length [veh/ln]	5.66	2.81	2.89	3.92	5.84	6.55	3.94	3.39	8.17	7.98
95th-Percentile Queue Length [ft/ln]	141.62	70.37	72.16	98.11	146.09	163.87	98.54	84.84	204.34	199.39

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	14.61	12.32	12.32	56.97	50.85	0.00	48.15	7.80	4.55	53.79	9.23	9.23
Movement LOS	B	B	B	E	D		D	A	A	D	A	A
d_A, Approach Delay [s/veh]	14.10			53.33			11.77			12.34		
Approach LOS	B			D			B			B		
d_I, Intersection Delay [s/veh]	14.67											
Intersection LOS	B											
Intersection V/C	0.527											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.493	2.261	2.771	2.563
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	378	444	889	978
d_b, Bicycle Delay [s]	29.61	27.22	13.89	11.76
I_b,int, Bicycle LOS Score for Intersection	2.678	1.804	3.228	2.410
Bicycle LOS	B	A	C	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	130	906	530	951	455	150
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]	4	0	0	9	5	1
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	134	906	530	960	460	151
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	227	133	240	115	38
Total Analysis Volume [veh/h]	134	906	530	960	460	151
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	22	69	47	47	21	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	8	65	53	74	17	17
g / C, Green / Cycle	0.09	0.72	0.58	0.82	0.19	0.19
(v / s)_i Volume / Saturation Flow Rate	0.07	0.25	0.28	0.59	0.13	0.09
s, saturation flow rate [veh/h]	1810	3618	1900	1615	3514	1615
c, Capacity [veh/h]	171	2613	1109	1319	664	305
d1, Uniform Delay [s]	39.87	4.63	10.83	3.72	34.06	32.66
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.73	0.37	1.48	3.54	1.31	1.24
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	0.79	0.35	0.48	0.73	0.69	0.49
d, Delay for Lane Group [s/veh]	47.60	5.00	12.30	7.27	35.37	33.90
Lane Group LOS	D	A	B	A	D	C
Critical Lane Group	Yes	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.23	2.59	5.98	5.28	4.72	3.00
50th-Percentile Queue Length [ft/ln]	80.70	64.66	149.46	131.93	118.10	75.07
95th-Percentile Queue Length [veh/ln]	5.81	4.66	9.99	9.04	8.29	5.40
95th-Percentile Queue Length [ft/ln]	145.25	116.39	249.70	226.12	207.21	135.12



**Movement, Approach, & Intersection Results**

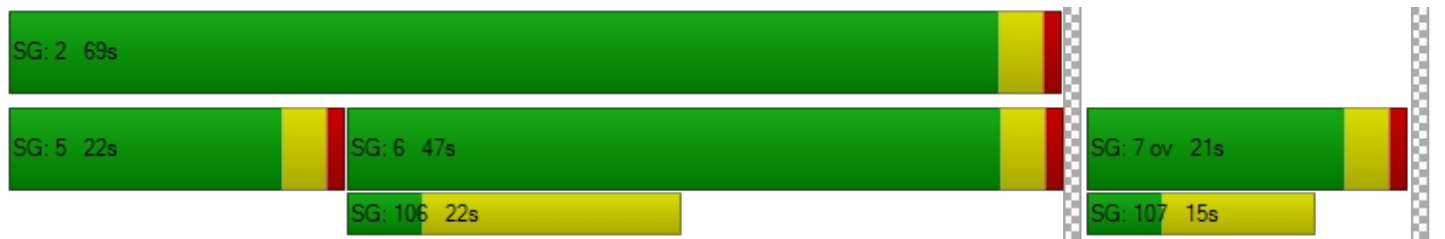
d_M, Delay for Movement [s/veh]	47.60	5.00	12.30	7.27	35.37	33.90
Movement LOS	D	A	B	A	D	C
d_A, Approach Delay [s/veh]	10.49		9.06		35.01	
Approach LOS	B		A		D	
d_I, Intersection Delay [s/veh]	14.58					
Intersection LOS	B					
Intersection V/C	0.674					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.552	2.829	2.731
Crosswalk LOS	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.990	6.591	4.132
Bicycle LOS	E	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.624

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	1755	698	288	1252	0	198	0	808	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	1	3	2	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	1755	699	291	1254	0	198	0	808	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	439	175	73	314	0	50	0	202	0	0	0
Total Analysis Volume [veh/h]	0	1755	699	291	1254	0	198	0	808	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	34	0	32	66	0	24	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	9	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	
C, Cycle Length [s]	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	61	10	75	7	
g / C, Green / Cycle	0.67	0.11	0.83	0.08	
(v / s)_i Volume / Saturation Flow Rate	0.49	0.08	0.35	0.06	
s, saturation flow rate [veh/h]	3618	3514	3618	3514	
c, Capacity [veh/h]	2435	392	3000	288	
d1, Uniform Delay [s]	9.34	38.72	2.01	40.20	
k, delay calibration	0.50	0.11	0.50	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	1.88	2.78	0.43	2.93	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.72	0.74	0.42	0.69	
d, Delay for Lane Group [s/veh]	11.21	41.50	2.44	43.13	
Lane Group LOS	B	D	A	D	
Critical Lane Group	Yes	Yes	No	Yes	
50th-Percentile Queue Length [veh/ln]	9.61	3.22	1.50	2.22	
50th-Percentile Queue Length [ft/ln]	240.25	80.47	37.46	55.59	
95th-Percentile Queue Length [veh/ln]	14.69	5.79	2.70	4.00	
95th-Percentile Queue Length [ft/ln]	367.35	144.85	67.42	100.06	

**Movement, Approach, & Intersection Results**

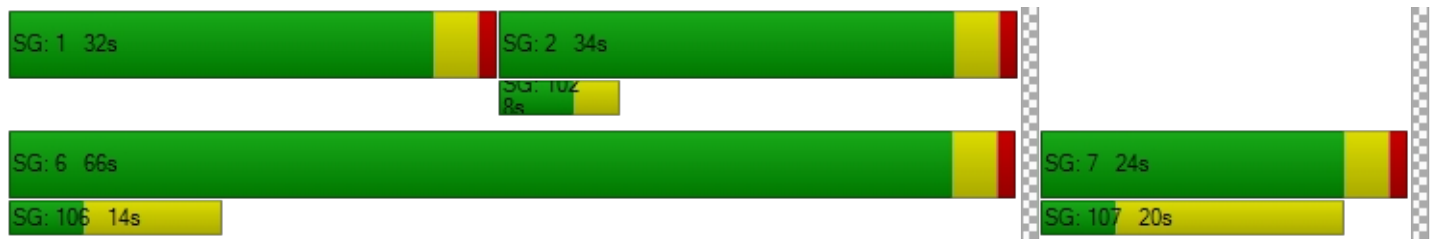
d_M, Delay for Movement [s/veh]	0.00	11.21	0.00	41.50	2.44	0.00	43.13	0.00	0.00	0.00	0.00	0.00
Movement LOS		B		D	A		D					
d_A, Approach Delay [s/veh]	11.21			9.79			43.13			0.00		
Approach LOS	B			A			D			A		
d_I, Intersection Delay [s/veh]	12.39											
Intersection LOS	B											
Intersection V/C	0.624											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.888	3.083	2.006	1.858
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	1378	0	0
d_b, Bicycle Delay [s]	20.00	4.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.007	2.834	4.132	4.132
Bicycle LOS	C	C	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	38.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.839

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	1429	524	0	0	836	282	0	0	0	704	0	312
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	3	0	0	0	0	2	0	5
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]	1429	524	0	0	839	282	0	0	0	706	0	317
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9630	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	357	131	0	0	210	71	0	0	0	177	0	79
Total Analysis Volume [veh/h]	1429	524	0	0	839	282	0	0	0	706	0	317
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	
Signal Group	5	2	0	0	6	0	0	0	0	0	3	8	0
Auxiliary Signal Groups													
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	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	0.0
Split [s]	41	67	0	0	26	0	0	0	0	0	23	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	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	0.0
I2, Clearance 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	0.0
Minimum Recall	No	No			No						Yes		
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	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	37	63	22	22		19	19
g / C, Green / Cycle	0.41	0.70	0.24	0.24		0.21	0.21
(v / s)_i Volume / Saturation Flow Rate	0.41	0.14	0.23	0.17		0.20	0.20
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615
c, Capacity [veh/h]	1445	2532	884	395		742	341
d1, Uniform Delay [s]	26.30	4.74	33.45	31.12		35.05	34.85
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.38
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	8.77	0.19	20.13	10.54		7.64	27.89
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	0.99	0.21	0.95	0.71		0.95	0.93
d, Delay for Lane Group [s/veh]	35.07	4.92	53.57	41.66		42.68	62.73
Lane Group LOS	D	A	D	D		D	E
Critical Lane Group	Yes	No	Yes	No		Yes	No
50th-Percentile Queue Length [veh/ln]	16.02	1.48	11.21	6.62		8.23	9.28
50th-Percentile Queue Length [ft/ln]	400.38	36.98	280.33	165.59		205.63	232.06
95th-Percentile Queue Length [veh/ln]	22.58	2.66	16.70	10.84		12.93	14.28
95th-Percentile Queue Length [ft/ln]	564.46	66.57	417.62	271.11		323.22	356.97



**Movement, Approach, & Intersection Results**

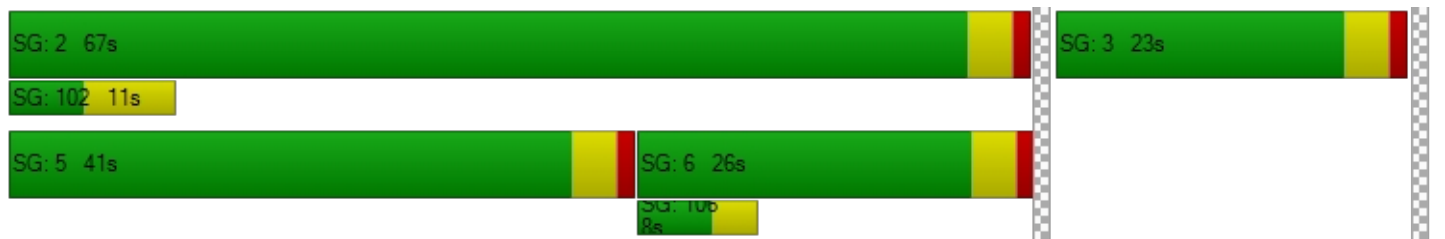
d_M, Delay for Movement [s/veh]	35.07	4.92	0.00	0.00	53.57	41.66	0.00	0.00	0.00	42.68	0.00	62.73
Movement LOS	D	A			D	D				D		E
d_A, Approach Delay [s/veh]	26.98				50.58		0.00		48.90			
Approach LOS	C				D		A		D			
d_I, Intersection Delay [s/veh]	38.91											
Intersection LOS	D											
Intersection V/C	0.839											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	19.0	19.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	28.01	28.01	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.072	2.673	2.550	2.274
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1400	489	0	0
d_b, Bicycle Delay [s]	4.05	25.69	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.171	2.484	4.132	4.132
Bicycle LOS	C	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.512

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	916	1502	339	501	1475	105
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	13	0	0	28	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	916	1515	339	501	1503	105
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	229	379	85	125	376	26
Total Analysis Volume [veh/h]	916	1515	339	501	1503	105
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	38	0	31	0	23	52
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	21	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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

**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	92	92	92	92	92
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	20	11	62	62	62
g / C, Green / Cycle	0.22	0.12	0.67	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.17	0.09	0.31	0.33	0.06
s, saturation flow rate [veh/h]	5271	3618	3204	1519	1729
c, Capacity [veh/h]	1162	438	2135	1100	1161
d1, Uniform Delay [s]	33.84	39.21	7.55	7.46	5.29
k, delay calibration	0.11	0.11	0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.23	2.95	0.74	1.36	0.15
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.79	0.77	0.47	0.46	0.09
d, Delay for Lane Group [s/veh]	35.07	42.16	8.30	8.82	5.45
Lane Group LOS	D	D	A	A	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.43	3.84	4.08	4.24	0.67
50th-Percentile Queue Length [ft/ln]	160.80	96.12	102.12	105.90	16.65
95th-Percentile Queue Length [veh/ln]	10.59	6.92	7.35	7.61	1.20
95th-Percentile Queue Length [ft/ln]	264.78	173.02	183.82	190.28	29.98

**Movement, Approach, & Intersection Results**

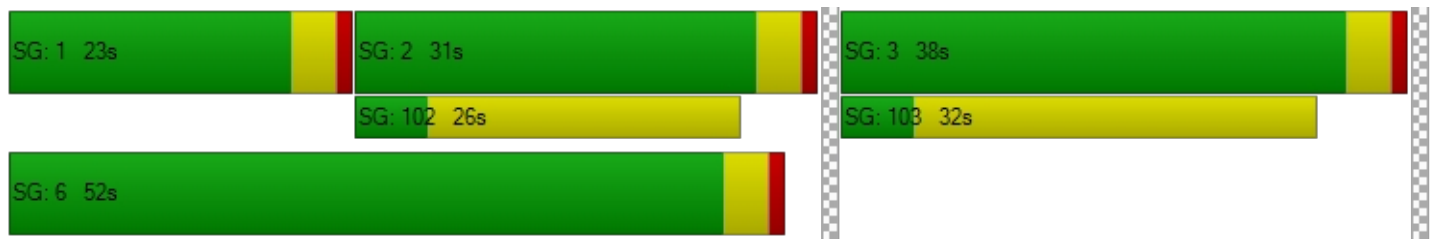
d_M, Delay for Movement [s/veh]	35.07	0.00	42.16	0.00	8.47	5.45
Movement LOS	D		D		A	A
d_A, Approach Delay [s/veh]	35.07		42.16		8.28	
Approach LOS	D		D		A	
d_I, Intersection Delay [s/veh]	20.86					
Intersection LOS	C					
Intersection V/C	0.512					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.325	2.675	2.964
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.412	5.459
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	23.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.522

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇌			⇌⇌⇌			⇌			⇌		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			No		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	70	0	262	526	169	502	0	1794	80	323	1556	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	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	26	0	13	0	0	2	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]	70	0	262	526	169	528	0	1807	80	323	1558	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	66	132	42	132	0	452	20	81	390	0
Total Analysis Volume [veh/h]	70	0	262	526	169	528	0	1807	80	323	1558	0
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	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Unsigna	Permiss	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	0	0	0	6	0	0	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	0	0	0	5	0	0	5	5	5	5	0
Maximum Green [s]	30	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	40	0	0	0	48	0	0	23	23	9	32	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	31	0	0	0	31	0	0	14	14	0	14	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No				No			No	No	No	No	
Maximum Recall	No				No			No	No	No	No	
Pedestrian Recall	No				No			No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	L	C	C	R	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	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	0.00	2.00	2.00
g_i, Effective Green Time [s]	6	19	19	50	39	50	104
g / C, Green / Cycle	0.05	0.16	0.16	0.42	0.33	0.42	0.87
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.13	0.26	0.05	0.09	0.30
s, saturation flow rate [veh/h]	1810	3514	1872	6901	1615	3514	5176
c, Capacity [veh/h]	95	548	292	2882	527	1467	4494
d1, Uniform Delay [s]	56.06	49.08	49.04	27.57	28.63	22.43	1.49
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.71	3.29	5.80	1.04	0.61	0.35	0.05
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.74	0.83	0.82	0.63	0.15	0.22	0.35
d, Delay for Lane Group [s/veh]	66.77	52.37	54.83	28.62	29.24	22.78	1.53
Lane Group LOS	E	D	D	C	C	C	A
Critical Lane Group	Yes	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.37	6.84	7.44	10.33	1.74	3.01	1.14
50th-Percentile Queue Length [ft/ln]	59.30	170.98	186.04	258.16	43.39	75.28	28.47
95th-Percentile Queue Length [veh/ln]	4.27	11.13	11.92	15.60	3.12	5.42	2.05
95th-Percentile Queue Length [ft/ln]	106.75	278.20	297.88	389.91	78.11	135.51	51.25



**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	66.77	0.00	0.00	52.68	54.83	0.00	0.00	28.62	29.24	22.78	1.53	0.00
Movement LOS	E			D	D			C	C	C	A	
d_A, Approach Delay [s/veh]	66.77			53.23			28.64			5.18		
Approach LOS	E			D			C			A		
d_I, Intersection Delay [s/veh]	23.26											
Intersection LOS	C											
Intersection V/C	0.522											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.303	2.316	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	733	317	467
d_b, Bicycle Delay [s]	60.00	24.07	42.50	35.27
I_b,int, Bicycle LOS Score for Intersection	4.132	2.706	2.338	2.594
Bicycle LOS	D	B	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	16.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.812

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	T T T T						T T T			T T T		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	664	0	285	0	0	0	375	1243	0	0	1706	1007
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00	2.00	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	12	1	0	0	2	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]	664	0	285	0	0	0	387	1244	0	0	1708	1007
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9450	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	166	0	71	0	0	0	102	311	0	0	427	252
Total Analysis Volume [veh/h]	664	0	285	0	0	0	410	1244	0	0	1708	1007
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	5	0	0	0	0	0	0	5	0	0	5	0
Maximum Green [s]	30	0	0	0	0	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	36	0	0	0	0	0	0	84	0	0	84	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No							No			No	
Maximum Recall	No							No			No	
Pedestrian Recall	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, Cycle Length [s]	120		120	120	120
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	26		86	86	86
g / C, Green / Cycle	0.21		0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.19		0.24	0.33	0.62
s, saturation flow rate [veh/h]	3514		5176	5176	1615
c, Capacity [veh/h]	750		3726	3726	1163
d1, Uniform Delay [s]	45.77		6.20	7.03	12.51
k, delay calibration	0.11		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	3.73		0.24	0.41	8.75
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.89		0.33	0.46	0.87
d, Delay for Lane Group [s/veh]	49.49		6.44	7.44	21.26
Lane Group LOS	D		A	A	C
Critical Lane Group	Yes		No	No	Yes
50th-Percentile Queue Length [veh/ln]	9.95		3.59	5.60	20.02
50th-Percentile Queue Length [ft/ln]	248.77		89.80	140.06	500.43
95th-Percentile Queue Length [veh/ln]	15.12		6.47	9.48	27.35
95th-Percentile Queue Length [ft/ln]	378.10		161.63	237.10	683.86

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.49	0.00	0.00	0.00	0.00	0.00	0.00	6.44	0.00	0.00	7.44	21.26
Movement LOS	D							A			A	C
d_A, Approach Delay [s/veh]	49.49			0.00			6.44			12.56		
Approach LOS	D			A			A			B		
d_I, Intersection Delay [s/veh]	16.22											
Intersection LOS	B											
Intersection V/C	0.812											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.445	2.420	3.181	3.161
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	1333	1333
d_b, Bicycle Delay [s]	60.00	60.00	6.67	6.67
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.244	3.053
Bicycle LOS	D	D	B	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	35.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.658

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	1	1	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	62	702	140	741	384	295	496	169	91	94	116	548
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	5	0	0	27	2	0	0	14	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]	62	702	140	746	384	295	523	171	91	94	130	548
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	176	35	187	96	74	131	43	23	24	33	137
Total Analysis Volume [veh/h]	62	702	140	746	384	295	523	171	91	94	130	548
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	15	24	0	18	27	27	16	31	0	19	34	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	18	0	15	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	R	L	C
C, Cycle Length [s]	92	92	92	92	92	92	92	92	92	92	92
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	29	29	22	47	66	15	16	16	6	8
g / C, Green / Cycle	0.04	0.31	0.31	0.24	0.51	0.71	0.16	0.18	0.18	0.07	0.09
(v / s)_i Volume / Saturation Flow Rate	0.03	0.23	0.23	0.21	0.11	0.18	0.15	0.09	0.06	0.05	0.07
s, saturation flow rate [veh/h]	1810	1900	1792	3514	3618	1615	3514	1900	1615	1810	1900
c, Capacity [veh/h]	81	594	560	858	1851	1153	558	341	290	124	169
d1, Uniform Delay [s]	43.44	28.15	28.15	33.37	12.27	4.61	38.25	34.04	32.82	42.11	40.97
k, delay calibration	0.11	0.23	0.23	0.11	0.50	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	1.00
d2, Incremental Delay [s]	13.49	3.65	3.87	2.89	0.25	0.54	25.42	1.14	0.61	9.14	7.12
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.76	0.73	0.73	0.87	0.21	0.26	0.94	0.50	0.31	0.76	0.77
d, Delay for Lane Group [s/veh]	56.93	31.80	32.02	36.26	12.53	5.14	63.67	35.18	33.44	51.25	48.10
Lane Group LOS	E	C	C	D	B	A	E	D	C	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.69	8.84	8.37	8.12	2.12	1.76	7.69	3.51	1.79	2.39	3.18
50th-Percentile Queue Length [ft/ln]	42.19	221.02	209.35	203.06	53.07	44.07	192.20	87.70	44.85	59.74	79.58
95th-Percentile Queue Length [veh/ln]	3.04	13.72	13.12	12.80	3.82	3.17	12.24	6.31	3.23	4.30	5.73
95th-Percentile Queue Length [ft/ln]	75.94	342.93	328.00	319.91	95.52	79.32	305.88	157.87	80.74	107.52	143.24



**Movement, Approach, & Intersection Results**

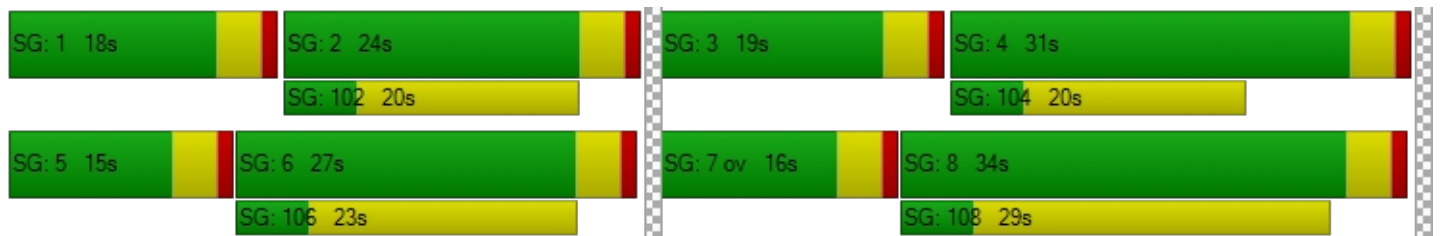
d_M, Delay for Movement [s/veh]	56.93	31.89	32.02	36.26	12.53	5.14	63.67	35.18	33.44	51.25	48.10	0.00
Movement LOS	E	C	C	D	B	A	E	D	C	D	D	
d_A, Approach Delay [s/veh]	33.62			23.43			53.96			49.42		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	35.11											
Intersection LOS	D											
Intersection V/C	0.658											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.589	3.050	2.661	2.551
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	511	600	667
d_b, Bicycle Delay [s]	27.22	24.94	22.05	20.00
I_b,int, Bicycle LOS Score for Intersection	2.305	2.735	2.855	1.929
Bicycle LOS	B	B	C	A

**Sequence**

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



**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	16.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	1746	1420	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	27	0	59	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	1773	1420	59	0	5
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	443	355	15	0	1
Total Analysis Volume [veh/h]	0	1773	1420	59	0	5
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	0.02	0.01	0.00	0.00	0.02
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	16.72
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	1.22
d_A, Approach Delay [s/veh]	0.00		0.00		16.72	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.03					
Intersection LOS	C					

**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type: Two-way stop  
 Analysis Method: HCM 6th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 18.3  
 Level Of Service: C  
 Volume to Capacity (v/c): 0.097

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	756	473	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]	29	0	0	0	0	14
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	0	0	756	473	14
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	189	118	4
Total Analysis Volume [veh/h]	29	0	0	756	473	14
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
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	0.10	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	18.28	11.00	8.31	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.32	0.32	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	7.95	7.95	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	18.28		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.42					
Intersection LOS	C					

## Beaumont Potrero Interchange Indust WH

Vistro File: K:\...\Beaumont CapRock\_BO Lane  
Geo\_PM\_TBB.vistro

Scenario 10 BO WP PM

Report File: K:\...\10 BO WP PM.pdf

12/12/2019

**Intersection Analysis Summary**

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	Veile Avenue at W 4th Street	Signalized	HCM 6th Edition	SB Left	0.746	18.2	B
2	California Ave at 4th Street	Signalized	HCM 6th Edition	NB Left	0.764	23.4	C
4	Beaumont Avenue at I-10 EB Ramp	Signalized	HCM 6th Edition	EB Left	0.684	16.5	B
5	Beaumont Avenue at I-10 WB Ramp	Signalized	HCM 6th Edition	SB Right	0.961	56.9	E
6	Potrero Blvd at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.585	18.4	B
7	I-10 SB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.804	54.4	D
8	I-10 NB Ramp at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	0.700	21.0	C
9	Potrero Boulevard at W 4th Street	Signalized	HCM 6th Edition	EB Left	0.681	34.5	C
10	Potrero Blvd / Dwy 1	Two-way stop	HCM 6th Edition	EB Right	0.043	18.6	C
11	4th St / Dwy 2	Two-way stop	HCM 6th Edition	SB Left	0.545	61.6	F

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

**Intersection Level Of Service Report**  
**Intersection 1: Veile Avenue at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	18.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.746

**Intersection Setup**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐			⇐⇐⇐			⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	0	1	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	260.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	35.00			35.00			30.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Veile Avenue			Veile Avenue			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	718	80	150	39	146	92	169	752	709	109	834	47
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	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	1	1	16	0	0	7	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]	718	80	150	39	146	93	170	768	709	109	841	47
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	180	20	38	10	37	23	43	192	177	27	210	12
Total Analysis Volume [veh/h]	718	80	150	39	146	93	170	768	709	109	841	47
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal Group	5	2	0	1	6	0	7	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	0	5	5	5	5	5	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0
Split [s]	18	21	0	39	42	0	9	21	21	9	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	0	12	0	0	15	0	0	12	12	0	12	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	2.0	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	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	L	C	L	C	R	L	C	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90
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	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	38	44	3	9	10	54	62	7	51	51
g / C, Green / Cycle	0.43	0.49	0.03	0.10	0.12	0.60	0.69	0.08	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.20	0.13	0.02	0.08	0.09	0.40	0.44	0.06	0.24	0.24
s, saturation flow rate [veh/h]	3514	1704	1810	1900	1810	1900	1615	1810	1900	1865
c, Capacity [veh/h]	1494	832	64	187	209	1139	1115	142	1068	1048
d1, Uniform Delay [s]	18.68	13.63	42.80	39.64	38.84	12.12	7.70	40.68	11.29	11.29
k, delay calibration	0.50	0.11	0.11	0.11	0.11	0.50	0.50	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]	1.11	0.18	9.08	7.01	7.40	3.20	2.78	8.45	0.26	0.27
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.48	0.28	0.61	0.78	0.81	0.67	0.64	0.77	0.42	0.42
d, Delay for Lane Group [s/veh]	19.79	13.81	51.88	46.65	46.24	15.32	10.48	49.13	11.55	11.56
Lane Group LOS	B	B	D	D	D	B	B	D	B	B
Critical Lane Group	Yes	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.30	2.61	1.00	3.44	4.04	10.18	7.00	2.70	4.93	4.84
50th-Percentile Queue Length [ft/ln]	132.59	65.30	24.97	85.93	100.90	254.41	175.01	67.42	123.25	121.01
95th-Percentile Queue Length [veh/ln]	9.08	4.70	1.80	6.19	7.26	15.41	11.34	4.85	8.57	8.45
95th-Percentile Queue Length [ft/ln]	227.01	117.54	44.94	154.68	181.62	385.21	283.48	121.35	214.29	211.21

**Movement, Approach, & Intersection Results**

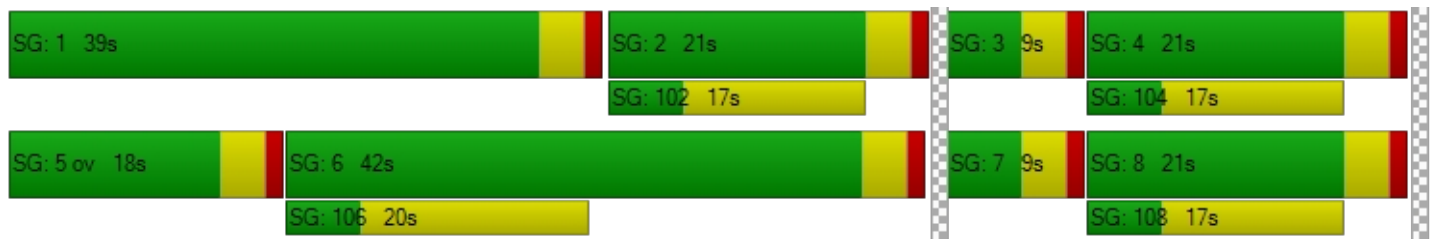
d_M, Delay for Movement [s/veh]	19.79	13.81	13.81	51.88	46.65	0.00	46.24	15.32	10.48	49.13	11.55	11.56
Movement LOS	B	B	B	D	D		D	B	B	D	B	B
d_A, Approach Delay [s/veh]	18.34			47.75			16.42			15.66		
Approach LOS	B			D			B			B		
d_I, Intersection Delay [s/veh]	18.24											
Intersection LOS	B											
Intersection V/C	0.746											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.676	2.270	2.927	2.619
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	378	844	378	378
d_b, Bicycle Delay [s]	29.61	15.02	29.61	29.61
I_b,int, Bicycle LOS Score for Intersection	3.124	1.865	4.277	2.382
Bicycle LOS	C	A	E	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 2: California Ave at 4th Street**

Control Type:	Signalized	Delay (sec / veh):	23.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

**Intersection Setup**

Name	California Ave		California Ave		W 4th Street	
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 Pocket	1	0	0	1	0	1
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	California Ave		California Ave		W 4th Street	
Base Volume Input [veh/h]	246	803	759	802	789	151
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]	2	0	0	5	10	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	248	803	759	807	799	157
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	201	190	202	200	39
Total Analysis Volume [veh/h]	248	803	759	807	799	157
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protected	Permissive	Permissive	Overlap	Permissive	Permissive
Signal Group	5	2	6	6	7	0
Auxiliary Signal Groups				6,7		
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	5	5	5	5	0
Maximum Green [s]	30	30	30	30	30	0
Amber [s]	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	38	64	26	26	26	0
Vehicle Extension [s]	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	5	5	5	5	0
Pedestrian Clearance [s]	0	10	17	17	10	0
Rest In Walk		No	No		No	
I1, Start-Up Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No	No	No	No	
Maximum Recall	No	No	No	No	No	
Pedestrian Recall	No	No	No	No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**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	R
C, Cycle Length [s]	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	0.00	2.00	2.00
g_i, Effective Green Time [s]	15	60	41	67	22	22
g / C, Green / Cycle	0.16	0.67	0.46	0.75	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.14	0.22	0.40	0.50	0.23	0.10
s, saturation flow rate [veh/h]	1810	3618	1900	1615	3514	1615
c, Capacity [veh/h]	294	2412	874	1209	859	395
d1, Uniform Delay [s]	36.60	6.43	21.85	5.67	33.25	28.46
k, delay calibration	0.11	0.50	0.50	0.50	0.11	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.59	0.37	11.40	2.93	5.18	0.65
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	0.84	0.33	0.87	0.67	0.93	0.40
d, Delay for Lane Group [s/veh]	43.19	6.80	33.25	8.60	38.43	29.10
Lane Group LOS	D	A	C	A	D	C
Critical Lane Group	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.73	2.94	16.16	6.43	8.89	2.85
50th-Percentile Queue Length [ft/ln]	143.31	73.42	404.08	160.74	222.33	71.36
95th-Percentile Queue Length [veh/ln]	9.66	5.29	22.76	10.59	13.78	5.14
95th-Percentile Queue Length [ft/ln]	241.47	132.15	568.92	264.70	344.59	128.45

**Movement, Approach, & Intersection Results**

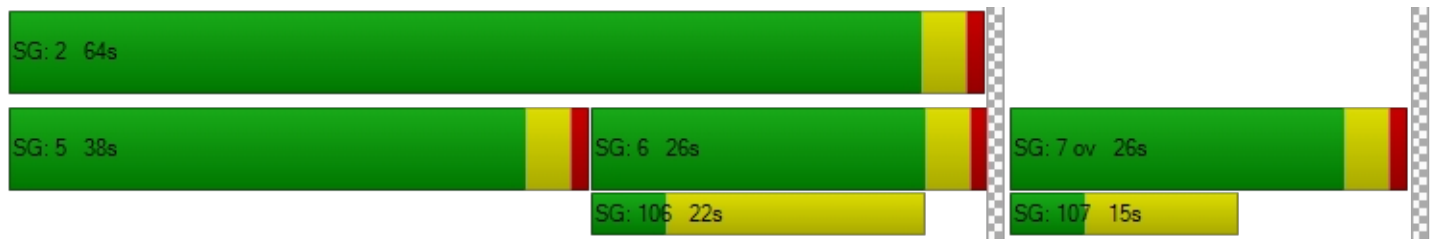
d_M, Delay for Movement [s/veh]	43.19	6.80	33.25	8.60	38.43	29.10
Movement LOS	D	A	C	A	D	C
d_A, Approach Delay [s/veh]	15.38		20.55		36.89	
Approach LOS	B		C		D	
d_I, Intersection Delay [s/veh]	23.40					
Intersection LOS	C					
Intersection V/C	0.764					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.612	2.905	2.781
Crosswalk LOS	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.999	6.716	4.132
Bicycle LOS	E	F	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 4: Beaumont Avenue at I-10 EB Ramp**

Control Type:	Signalized	Delay (sec / veh):	16.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.684

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	130.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No					
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Base Volume Input [veh/h]	0	1740	1140	356	1471	0	351	0	1591	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 [%]	2.00	0.00	0.00	0.00	0.00	2.00	0.00	2.00	0.00	2.00	2.00	2.00
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	2	6	1	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	1740	1142	362	1472	0	351	0	1591	0	0	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	435	286	91	368	0	88	0	398	0	0	0
Total Analysis Volume [veh/h]	0	1740	1142	362	1472	0	351	0	1591	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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	12	0	35	47	0	43	0	0	0	0	0
Vehicle Extension [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	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	2.0	0.0	0.0	0.0	0.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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	L	C	L	
C, Cycle Length [s]	90	90	90	90	
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	
g_i, Effective Green Time [s]	54	12	70	12	
g / C, Green / Cycle	0.60	0.13	0.78	0.13	
(v / s)_i Volume / Saturation Flow Rate	0.48	0.10	0.41	0.10	
s, saturation flow rate [veh/h]	3618	3514	3618	3514	
c, Capacity [veh/h]	2179	469	2822	460	
d1, Uniform Delay [s]	13.72	37.67	3.67	37.76	
k, delay calibration	0.50	0.11	0.50	0.11	
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	
d2, Incremental Delay [s]	3.17	2.73	0.69	2.65	
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	
Rp, platoon ratio	1.00	1.00	1.00	1.00	
PF, progression factor	1.00	1.00	1.00	1.00	

**Lane Group Results**

X, volume / capacity	0.80	0.77	0.52	0.76	
d, Delay for Lane Group [s/veh]	16.89	40.40	4.36	40.40	
Lane Group LOS	B	D	A	D	
Critical Lane Group	Yes	Yes	No	Yes	
50th-Percentile Queue Length [veh/ln]	12.75	3.97	3.50	3.85	
50th-Percentile Queue Length [ft/ln]	318.83	99.23	87.39	96.14	
95th-Percentile Queue Length [veh/ln]	18.61	7.14	6.29	6.92	
95th-Percentile Queue Length [ft/ln]	465.25	178.61	157.30	173.06	

**Movement, Approach, & Intersection Results**

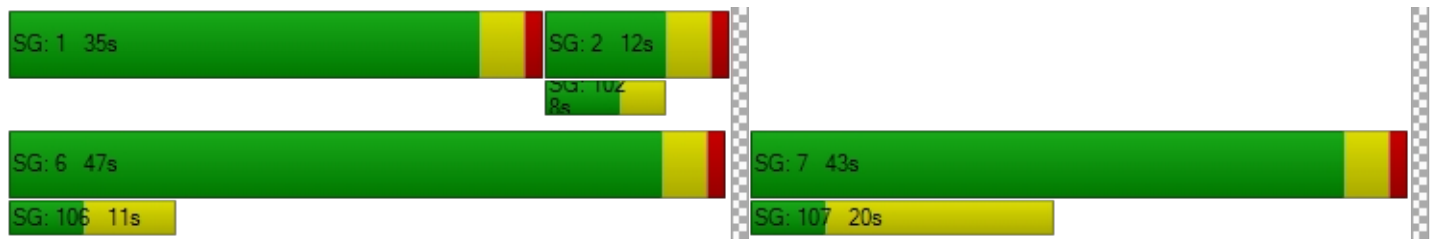
d_M, Delay for Movement [s/veh]	0.00	16.89	0.00	40.40	4.36	0.00	40.40	0.00	0.00	0.00	0.00	0.00
Movement LOS		B		D	A		D					
d_A, Approach Delay [s/veh]	16.89			11.47			40.40			0.00		
Approach LOS	B			B			D			A		
d_I, Intersection Delay [s/veh]	16.46											
Intersection LOS	B											
Intersection V/C	0.684											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.928	3.142	2.056	1.893
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	178	956	0	0
d_b, Bicycle Delay [s]	37.36	12.27	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	2.995	3.073	4.132	4.132
Bicycle LOS	C	C	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 5: Beaumont Avenue at I-10 WB Ramp**

Control Type:	Signalized	Delay (sec / veh):	56.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.961

**Intersection Setup**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	0	0	1	0	0	0	0	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No						No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Base Volume Input [veh/h]	1055	1036	0	0	804	597	0	0	0	1023	0	403
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	2.00	2.00	0.00	0.00	2.00	2.00	2.00	0.00	2.00	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	6	0	0	0	0	1	0	3
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]	1055	1036	0	0	810	597	0	0	0	1024	0	406
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9630	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	264	259	0	0	203	149	0	0	0	256	0	102
Total Analysis Volume [veh/h]	1055	1036	0	0	810	597	0	0	0	1024	0	406
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	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	6	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	5	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	30	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	28	60	0	0	32	32	0	0	0	30	0	0
Vehicle Extension [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0
Walk [s]	0	5	0	0	5	5	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	3	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	2.0	0.0	0.0	0.0	2.0	0.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
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		L	R
C, Cycle Length [s]	90	90	90	90		90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00		4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00		0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00		2.00	2.00
g_i, Effective Green Time [s]	24	56	28	28		26	26
g / C, Green / Cycle	0.27	0.62	0.31	0.31		0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.30	0.29	0.22	0.37		0.29	0.25
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615
c, Capacity [veh/h]	937	2251	1125	502		1015	467
d1, Uniform Delay [s]	33.00	9.00	27.52	31.00		32.00	30.40
k, delay calibration	0.11	0.50	0.50	0.50		0.11	0.35
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00		1.00	1.00
d2, Incremental Delay [s]	60.12	0.68	3.98	103.24		15.28	14.49
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	1.13	0.46	0.72	1.19		1.01	0.87
d, Delay for Lane Group [s/veh]	93.12	9.68	31.50	134.24		47.28	44.89
Lane Group LOS	F	A	C	F		F	D
Critical Lane Group	Yes	No	No	Yes		Yes	No
50th-Percentile Queue Length [veh/ln]	17.70	4.97	8.10	24.87		12.79	9.96
50th-Percentile Queue Length [ft/ln]	442.38	124.36	202.61	621.66		319.65	248.88
95th-Percentile Queue Length [veh/ln]	26.31	8.63	12.77	36.63		18.75	15.13
95th-Percentile Queue Length [ft/ln]	657.84	215.81	319.33	915.73		468.73	378.24

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	93.12	9.68	0.00	0.00	31.50	134.24	0.00	0.00	0.00	47.28	0.00	44.89
Movement LOS	F	A			C	F				F		D
d_A, Approach Delay [s/veh]	51.78		75.09		0.00		46.60					
Approach LOS	D		E		A		D					
d_I, Intersection Delay [s/veh]	56.93											
Intersection LOS	E											
Intersection V/C	0.961											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	26.0	26.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	22.76	22.76	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.123	2.838	2.522	2.406
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1244	622	0	0
d_b, Bicycle Delay [s]	6.42	21.36	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	3.285	2.720	4.132	4.132
Bicycle LOS	C	B	D	D

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 6: Potrero Blvd at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	18.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.585

**Intersection Setup**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	1	1	0
Pocket Length [ft]	100.00	100.00	100.00	210.00	260.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Potrero Blvd		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	1042	1896	179	617	1958	170
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	31	0	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1042	1927	179	617	1971	170
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	261	482	45	154	493	43
Total Analysis Volume [veh/h]	1042	1927	179	617	1971	170
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

**Intersection Settings**

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permissive	Unsignalized	Permissive	Unsignalized	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	5	0	5	5
Maximum Green [s]	30	0	30	0	5	30
Amber [s]	3.0	0.0	3.0	0.0	3.0	3.0
All red [s]	1.0	0.0	1.0	0.0	1.0	1.0
Split [s]	36	0	45	0	9	54
Vehicle Extension [s]	3.0	0.0	3.0	0.0	3.0	3.0
Walk [s]	5	0	5	0	0	5
Pedestrian Clearance [s]	27	0	21	0	0	10
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	0.0	2.0	2.0
Minimum Recall	No		No		Yes	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
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

**Exclusive Pedestrian Phase**

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



**Lane Group Calculations**

Lane Group	L	C	L	C	C
C, Cycle Length [s]	90	90	90	90	90
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00	0.00	0.00	2.00
g_i, Effective Green Time [s]	22	7	60	60	60
g / C, Green / Cycle	0.25	0.07	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.20	0.05	0.39	0.40	0.10
s, saturation flow rate [veh/h]	5271	3618	3348	1644	1729
c, Capacity [veh/h]	1310	269	2273	1180	1145
d1, Uniform Delay [s]	31.67	40.56	8.38	8.23	5.68
k, delay calibration	0.11	0.11	0.50	0.50	0.11
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.14	2.82	1.08	1.90	0.06
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.80	0.67	0.58	0.56	0.15
d, Delay for Lane Group [s/veh]	32.80	43.38	9.46	10.13	5.74
Lane Group LOS	C	D	A	B	A
Critical Lane Group	Yes	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.02	2.01	6.17	6.35	1.07
50th-Percentile Queue Length [ft/ln]	175.54	50.35	154.19	158.75	26.64
95th-Percentile Queue Length [veh/ln]	11.37	3.63	10.24	10.48	1.92
95th-Percentile Queue Length [ft/ln]	284.19	90.63	256.01	262.06	47.96

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	32.80	0.00	43.38	0.00	9.68	5.74
Movement LOS	C		D		A	A
d_A, Approach Delay [s/veh]	32.80		43.38		9.37	
Approach LOS	C		D		A	
d_I, Intersection Delay [s/veh]	18.44					
Intersection LOS	B					
Intersection V/C	0.585					

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.364	2.680	2.919
Crosswalk LOS	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	45.00	45.00	45.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.280	5.899
Bicycle LOS	D	E	F

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 7: I-10 SB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	54.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.804

**Intersection Setup**

Name	Northbound			Southbound			Eastbound			Westbound		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTT			TTT			TTT			TTT		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	1	0	1	0	0	1	1	0	0
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			No			No		

**Volumes**

Name	Northbound			Southbound			Eastbound			Westbound		
Base Volume Input [veh/h]	200	0	434	1056	162	1029	0	2282	88	327	1618	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	2.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	2.00
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	12	0	31	0	0	1	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]	200	0	434	1056	162	1041	0	2313	88	327	1619	0
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	50	0	109	264	41	260	0	578	22	82	405	0
Total Analysis Volume [veh/h]	200	0	434	1056	162	1041	0	2313	88	327	1619	0
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]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Unsigna	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	5	0	0	0	6	0	0	4	4	3	8	0
Auxiliary Signal Groups									4,5			
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	0	0	0	5	0	0	5	5	5	5	0
Maximum Green [s]	30	0	0	0	30	0	0	30	30	30	30	0
Amber [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	0.0
Split [s]	32	0	0	0	48	0	0	30	30	10	40	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	0	5	0	0	5	5	0	5	0
Pedestrian Clearance [s]	31	0	0	0	31	0	0	14	14	0	14	0
Rest In Walk	No				No			No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No				No			No		No	No	
Maximum Recall	No				No			No		No	No	
Pedestrian Recall	No				No			No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	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	C	L	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	32	32	39	39	14	57
g / C, Green / Cycle	0.16	0.16	0.16	0.27	0.27	0.33	0.33	0.11	0.48
(v / s)_i Volume / Saturation Flow Rate	0.11	0.13	0.13	0.23	0.22	0.35	0.32	0.09	0.31
s, saturation flow rate [veh/h]	1810	1615	1615	3514	1844	5176	1852	3514	5176
c, Capacity [veh/h]	287	256	256	934	490	1699	608	400	2461
d1, Uniform Delay [s]	47.74	49.05	49.05	41.94	41.71	40.31	40.06	51.94	24.02
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50
l, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.04	7.73	7.73	2.48	4.08	39.76	33.57	4.12	1.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.70	0.85	0.85	0.86	0.84	1.06	0.99	0.82	0.66
d, Delay for Lane Group [s/veh]	50.77	56.78	56.78	44.42	45.80	80.07	73.63	56.05	25.41
Lane Group LOS	D	E	E	D	D	F	E	E	C
Critical Lane Group	No	Yes	No	Yes	No	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	5.90	6.86	6.86	11.58	12.08	22.72	23.01	5.03	11.78
50th-Percentile Queue Length [ft/ln]	147.49	171.45	171.45	289.42	302.08	567.88	575.32	125.71	294.47
95th-Percentile Queue Length [veh/ln]	9.88	11.15	11.15	17.16	17.78	31.73	30.88	8.71	17.41
95th-Percentile Queue Length [ft/ln]	247.08	278.82	278.82	428.92	444.60	793.36	772.00	217.65	435.19

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	50.77	0.00	56.78	44.75	45.80	0.00	0.00	78.64	73.63	56.05	25.41	0.00
Movement LOS	D		E	D	D			F	E	E	C	
d_A, Approach Delay [s/veh]	54.89			44.89			78.46			30.56		
Approach LOS	D			D			E			C		
d_I, Intersection Delay [s/veh]	54.42											
Intersection LOS	D											
Intersection V/C	0.804											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0	0.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.551	2.443	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	733	433	600
d_b, Bicycle Delay [s]	60.00	24.07	36.82	29.40
I_b,int, Bicycle LOS Score for Intersection	5.179	3.569	2.550	2.630
Bicycle LOS	F	D	B	B

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 8: I-10 NB Ramp at Oak Valley Pkwy**

Control Type:	Signalized	Delay (sec / veh):	21.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.700

**Intersection Setup**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	⇐⇐⇐⇐						⇐⇐⇐			⇐⇐⇐		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0	1	0	1	0	0	1
Pocket Length [ft]	100.00	100.00	30.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	I-10 NB Ramp						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	690	0	759	0	0	0	430	2245	0	0	1624	604
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	2.00	0.00	2.00	2.00	2.00	0.00	0.00	0.00	2.00	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	29	2	0	0	1	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]	690	0	759	0	0	0	459	2247	0	0	1625	604
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.9640	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	173	0	190	0	0	0	119	562	0	0	406	151
Total Analysis Volume [veh/h]	690	0	759	0	0	0	476	2247	0	0	1625	604
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Unsigna	Permiss	Permiss	Permiss
Signal Group	5	0	0	0	0	0	7	4	0	0	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	6	0	0	0	0	0	0	6	0	0	6	0
Maximum Green [s]	30	0	0	0	0	0	0	30	0	0	30	0
Amber [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	85	0	0	0	0	0	0	35	0	0	35	0
Vehicle Extension [s]	3.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	5	0	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	24	0	0	0	0	0	0	7	0	0	3	0
Rest In Walk	No							No			No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No							No			No	
Maximum Recall	No							No			No	
Pedestrian Recall	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	R		C	C	R
C, Cycle Length [s]	120	120		120	120	120
L, Total Lost Time per Cycle [s]	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
l2, Clearance Lost Time [s]	2.00	2.00		2.00	2.00	2.00
g_i, Effective Green Time [s]	37	37		75	75	75
g / C, Green / Cycle	0.31	0.31		0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.20	0.27		0.43	0.31	0.37
s, saturation flow rate [veh/h]	3514	2859		5176	5176	1615
c, Capacity [veh/h]	1096	892		3216	3216	1004
d1, Uniform Delay [s]	35.35	38.68		15.20	12.54	13.74
k, delay calibration	0.11	0.11		0.50	0.50	0.50
l, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00
d2, Incremental Delay [s]	0.60	2.41		1.29	0.57	2.67
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.63	0.85		0.70	0.51	0.60
d, Delay for Lane Group [s/veh]	35.95	41.08		16.48	13.11	16.41
Lane Group LOS	D	D		B	B	B
Critical Lane Group	No	Yes		Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.71	10.67		13.23	7.83	10.11
50th-Percentile Queue Length [ft/ln]	217.78	266.83		330.83	195.87	252.79
95th-Percentile Queue Length [veh/ln]	13.55	16.03		19.20	12.43	15.33
95th-Percentile Queue Length [ft/ln]	338.79	400.77		479.97	310.64	383.16

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	35.95	0.00	41.08	0.00	0.00	0.00	0.00	16.48	0.00	0.00	13.11	16.41
Movement LOS	D		D					B			B	B
d_A, Approach Delay [s/veh]	38.64			0.00			16.48			14.00		
Approach LOS	D			A			B			B		
d_I, Intersection Delay [s/veh]	20.97											
Intersection LOS	C											
Intersection V/C	0.700											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	51.34	51.34	51.34	51.34
I_p,int, Pedestrian LOS Score for Intersection	2.598	2.028	3.297	3.338
Crosswalk LOS	B	B	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	517	517
d_b, Bicycle Delay [s]	60.00	60.00	33.00	33.00
I_b,int, Bicycle LOS Score for Intersection	4.132	4.132	2.795	2.786
Bicycle LOS	D	D	C	C

**Sequence**

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



**Intersection Level Of Service Report**  
**Intersection 9: Potrero Boulevard at W 4th Street**

Control Type:	Signalized	Delay (sec / veh):	34.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

**Intersection Setup**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration	TTL			TTL			TTL			TTL		
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	1	1	0	1	1	0	1
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
Speed [mph]	30.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

**Volumes**

Name	Potrero Boulevard			Potrero Blvd			W 4th Street			W 4th Street		
Base Volume Input [veh/h]	121	534	154	726	223	663	554	216	99	208	195	1028
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	12	0	0	65	6	0	0	8	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]	121	534	154	738	223	663	619	222	99	208	203	1028
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	134	39	185	56	166	155	56	25	52	51	257
Total Analysis Volume [veh/h]	121	534	154	738	223	663	619	222	99	208	203	1028
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]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	0.00

**Phasing & Timing**

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss	Protecte	Permiss	Unsigna
Signal Group	5	2	0	1	6	6	7	4	0	3	8	0
Auxiliary Signal Groups						6,7						
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	5	0	5	5	5	5	5	0	5	5	0
Maximum Green [s]	30	30	0	30	30	30	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	3.0	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	1.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	14	26	0	18	30	30	13	33	0	13	33	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	5	0	5	0	0	5	0
Pedestrian Clearance [s]	0	15	0	0	18	18	0	15	0	0	24	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	2.0	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	2.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No	No	No	No		No	No	
Maximum Recall	No	No		No	No	No	No	No		No	No	
Pedestrian Recall	No	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	L	C	R	L	C	R	L	C
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	23	23	22	37	59	17	17	17	12	12
g / C, Green / Cycle	0.08	0.26	0.26	0.24	0.42	0.65	0.19	0.18	0.18	0.14	0.13
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.21	0.06	0.41	0.18	0.12	0.06	0.11	0.11
s, saturation flow rate [veh/h]	1810	1900	1756	3514	3618	1615	3514	1900	1615	1810	1900
c, Capacity [veh/h]	153	489	452	851	1502	1052	674	352	299	249	249
d1, Uniform Delay [s]	40.43	30.58	30.59	32.71	16.41	9.29	35.69	33.83	31.83	37.82	38.04
k, delay calibration	0.11	0.13	0.13	0.11	0.50	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	1.00
d2, Incremental Delay [s]	8.91	2.56	2.80	2.85	0.21	2.87	19.67	1.87	0.64	7.22	6.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

**Lane Group Results**

X, volume / capacity	0.79	0.73	0.73	0.87	0.15	0.63	0.92	0.63	0.33	0.84	0.81
d, Delay for Lane Group [s/veh]	49.35	33.13	33.40	35.56	16.62	12.15	55.36	35.69	32.47	45.04	44.42
Lane Group LOS	D	C	C	D	B	B	E	D	C	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.97	7.25	6.75	7.83	1.44	7.37	8.35	4.58	1.90	4.89	4.73
50th-Percentile Queue Length [ft/ln]	74.32	181.23	168.67	195.74	35.90	184.36	208.67	114.58	47.49	122.18	118.20
95th-Percentile Queue Length [veh/ln]	5.35	11.66	11.01	12.42	2.59	11.83	13.08	8.09	3.42	8.51	8.29
95th-Percentile Queue Length [ft/ln]	133.77	291.62	275.16	310.46	64.63	295.70	327.12	202.35	85.48	212.82	207.35

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	49.35	33.22	33.40	35.56	16.62	12.15	55.36	35.69	32.47	45.04	44.42	0.00
Movement LOS	D	C	C	D	B	B	E	D	C	D	D	
d_A, Approach Delay [s/veh]	35.67			23.40			48.30			44.73		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	34.53											
Intersection LOS	C											
Intersection V/C	0.681											

**Other Modes**

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft <sup>2</sup> /ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.562	3.065	2.768	2.599
Crosswalk LOS	B	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]	489	578	644	644
d_b, Bicycle Delay [s]	25.69	22.76	20.67	20.67
I_b,int, Bicycle LOS Score for Intersection	2.227	2.899	3.111	2.238
Bicycle LOS	B	C	C	B

**Sequence**

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



**Intersection Level Of Service Report  
Intersection 10: Potrero Blvd / Dwy 1**

Control Type:	Two-way stop	Delay (sec / veh):	18.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.043

**Intersection Setup**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
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 Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		Yes	

**Volumes**

Name	Potrero Blvd		Potrero Blvd		Driveway 1	
Base Volume Input [veh/h]	0	2116	1612	0	0	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	0.00	0.00	0.00	2.00	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	65	0	28	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	2181	1612	28	0	12
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	545	403	7	0	3
Total Analysis Volume [veh/h]	0	2181	1612	28	0	12
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	0.02	0.02	0.00	0.00	0.04
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	18.61
Movement LOS		A	A	A		C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.14
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	3.39
d_A, Approach Delay [s/veh]	0.00		0.00		18.61	
Approach LOS	A		A		C	
d_I, Intersection Delay [s/veh]	0.06					
Intersection LOS	C					






**Intersection Level Of Service Report**  
**Intersection 11: 4th St / Dwy 2**

Control Type: Two-way stop  
 Analysis Method: HCM 6th Edition  
 Analysis Period: 15 minutes

Delay (sec / veh): 61.6  
 Level Of Service: F  
 Volume to Capacity (v/c): 0.545

**Intersection Setup**

Name	Driveway 2		W 4th Street		W 4th Street	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	1	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

**Volumes**

Name	Driveway 2		W 4th Street		W 4th Street	
Base Volume Input [veh/h]	0	0	0	869	979	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]	71	0	0	0	0	8
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	71	0	0	869	979	8
Peak Hour Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	0	217	245	2
Total Analysis Volume [veh/h]	71	0	0	869	979	8
Pedestrian Volume [ped/h]	0		0		0	

**Intersection Settings**

Priority Scheme	Stop	Free	Free
Flared Lane	No		
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	0.55	0.00	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	61.64	40.84	10.08	0.00	0.00	0.00
Movement LOS	F	E	B	A	A	A
95th-Percentile Queue Length [veh/ln]	2.65	2.65	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	66.19	66.19	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	61.64		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	2.27					
Intersection LOS	F					

Option 1: Add 2nd SBL

Number	4											
Intersection	Beaumont Avenue at I-10 EB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	503	458	106	616	0	87	0	544	0	0	0
Total Analysis Volume [veh/h]	0	737	633	232	1105	0	384	0	952	0	0	0

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	15	0	39	54	0	36	0	0	0	0	0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	9	0	15	0	0	0	0	0
l1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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					
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.42	0.09	0.56	0.35	0.35	
(v / s)_i Volume / Saturation Flow Rate	0.20	0.07	0.31	0.21	0.33	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900	1900	
Arrival type	3	3	3	3	3	
s, saturation flow rate [veh/h]	3618	3514	3618	1810	2859	
c, Capacity [veh/h]	1522	332	2024	636	1005	
X, volume / capacity	0.48	0.70	0.55	0.60	0.95	
d, Delay for Lane Group [s/veh]	20.08	42.17	13.63	25.35	33.98	
Lane Group LOS	C	D	B	C	C	
Critical Lane Group	No	No	Yes	No	Yes	

50th-Percentile Queue Length [veh/ln]	5.59	2.58	6.76	6.73	10.29	
50th-Percentile Queue Length [ft/ln]	139.85	64.47	169.11	168.30	257.36	
95th-Percentile Queue Length [veh/ln]	9.47	4.64	11.03	10.99	15.56	
95th-Percentile Queue Length [ft/ln]	236.82	116.04	275.75	274.68	388.91	

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	20.08	0.00	42.17	13.63	0.00	25.35	0.00	33.98	0.00	0.00	0.00
Movement LOS		C		D	B		C		C			
Critical Movement		No	No	Yes	No		No		No			
d_A, Approach Delay [s/veh]	20.08		18.59			31.50			0.00			
Approach LOS	C		B			C			A			
d_I, Intersection Delay [s/veh]	23.97											
Intersection LOS	C											
Intersection V/C	0.638											

Option 1: Add 2nd SBL

Number	4											
Intersection	Beaumont Avenue at I-10 EB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue			I-10 EB Ramp					
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	0	466	414	80	964	0	107	0	805	0	0	0
Total Analysis Volume [veh/h]	0	1237	838	460	1434	0	446	0	1064	0	0	0

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Permiss	Permiss	Unsigna	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	2	0	1	6	0	7	0	0	0	0	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	Lead	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	5	0	5	5	0	5	0	0	0	0	0
Maximum Green [s]	0	30	0	30	30	0	30	0	0	0	0	0
Amber [s]	0.0	3.0	0.0	3.0	3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0
All red [s]	0.0	1.0	0.0	1.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
Split [s]	0	32	0	25	57	0	33	0	0	0	0	0
Walk [s]	0	5	0	0	5	0	5	0	0	0	0	0
Pedestrian Clearance [s]	0	3	0	0	6	0	15	0	0	0	0	0
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	2.0	2.0	0.0	2.0	0.0	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					
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.39	0.16	0.59	0.32	0.32	
(v / s)_i Volume / Saturation Flow Rate	0.34	0.13	0.40	0.25	0.37	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900	1900	
Arrival type	3	3	3	3	3	
s, saturation flow rate [veh/h]	3618	3514	3618	1810	2859	
c, Capacity [veh/h]	1391	562	2130	583	921	
X, volume / capacity	0.89	0.82	0.67	0.76	1.16	
d, Delay for Lane Group [s/veh]	34.74	39.54	14.32	32.41	103.82	
Lane Group LOS	C	D	B	C	F	
Critical Lane Group	Yes	Yes	No	No	Yes	

50th-Percentile Queue Length [veh/ln]	13.44	5.03	9.29	9.13	18.93	
50th-Percentile Queue Length [ft/ln]	336.11	125.83	232.29	228.21	473.35	
95th-Percentile Queue Length [veh/ln]	19.46	8.71	14.29	14.08	28.42	
95th-Percentile Queue Length [ft/ln]	486.45	217.81	357.26	352.09	710.46	

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	0.00	34.74	0.00	39.54	14.32	0.00	32.41	0.00	103.82	0.00	0.00	0.00
Movement LOS		C		D	B		C		F			
Critical Movement		No	No	No	No		No		Yes			
d_A, Approach Delay [s/veh]	34.74			20.45			82.73			0.00		
Approach LOS	C			C			F			A		
d_I, Intersection Delay [s/veh]	44.52											
Intersection LOS	D											
Intersection V/C	0.845											

Option 1: Add 2nd NBL

Number	5											
Intersection	Beaumont Avenue at I-10 WB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	347	242	0	0	336	78	0	0	0	400	0	134
Total Analysis Volume [veh/h]	504	510	0	0	692	266	0	0	0	772	0	396

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	0	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	43	55	0	0	12	0	0	0	0	35	0	0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	0	0	0	0	0	0	0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.18	0.63	0.41	0.41		0.28	0.28	
(v / s)_i Volume / Saturation Flow Rate	0.14	0.14	0.19	0.16		0.22	0.25	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900		1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615	
c, Capacity [veh/h]	625	2269	1464	654		998	459	
X, volume / capacity	0.81	0.22	0.47	0.41		0.77	0.86	
d, Delay for Lane Group [s/veh]	38.02	7.51	20.81	20.96		30.88	40.80	
Lane Group LOS	D	A	C	C		C	D	
Critical Lane Group	Yes	No	Yes	No		No	Yes	

50th-Percentile Queue Length [veh/ln]	5.42	1.98	5.35	4.15		7.61	9.18
50th-Percentile Queue Length [ft/ln]	135.54	49.57	133.65	103.85		190.29	229.57
95th-Percentile Queue Length [veh/ln]	9.24	3.57	9.14	7.48		12.14	14.15
95th-Percentile Queue Length [ft/ln]	231.01	89.22	228.45	186.93		303.41	353.81

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	38.02	7.51	0.00	0.00	20.81	20.96	0.00	0.00	0.00	30.88	0.00	40.80
Movement LOS	D	A			C	C				C		D
Critical Movement	No	No			No	No				No		Yes
d_A, Approach Delay [s/veh]	22.67				20.85		0.00				34.24	
Approach LOS	C				C		A				C	
d_I, Intersection Delay [s/veh]	26.42											
Intersection LOS	C											
Intersection V/C	0.580											



Option 1: Add 2nd NBL Lane

Number	5											
Intersection	Beaumont Avenue at I-10 WB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	284	309	0	0	330	132	0	0	0	684	0	140
Total Analysis Volume [veh/h]	733	935	0	0	994	470	0	0	0	948	0	374

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	0	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	36	64	0	0	28	0	0	0	0	26	0	0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	0	0	0	0	0	0	0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.24	0.67	0.38	0.38		0.24	0.24	
(v / s)_i Volume / Saturation Flow Rate	0.21	0.26	0.27	0.29		0.27	0.23	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900		1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	3514	3618	3618	1615		3514	1615	
c, Capacity [veh/h]	858	2412	1368	611		859	395	
X, volume / capacity	0.85	0.39	0.73	0.77		1.10	0.95	
d, Delay for Lane Group [s/veh]	35.05	7.21	27.40	33.60		85.20	62.61	
Lane Group LOS	D	A	C	C		F	E	
Critical Lane Group	Yes	No	No	Yes		Yes	No	

50th-Percentile Queue Length [veh/ln]	1.73	3.59	9.32	9.92		15.21	10.99
50th-Percentile Queue Length [ft/ln]	193.19	89.83	232.88	248.04		380.16	274.75
95th-Percentile Queue Length [veh/ln]	12.29	6.47	14.32	15.09		22.81	16.43
95th-Percentile Queue Length [ft/ln]	307.16	161.70	358.01	377.19		570.24	410.67

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	35.05	7.21	0.00	0.00	27.40	33.60	0.00	0.00	0.00	85.20	0.00	62.61
Movement LOS	D	A			C	C				F		E
Critical Movement	No	No			No	No				Yes		No
d_A, Approach Delay [s/veh]	19.45		29.39			0.00			78.81			
Approach LOS	B		C			A			E			
d_I, Intersection Delay [s/veh]	40.34											
Intersection LOS	D											
Intersection V/C	0.769											

Option 1: Add 2nd SBR

Number	5											
Intersection	Beaumont Avenue at I-10 WB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	1429	524	0	0	836	282	0	0	0	704	0	312
Total Analysis Volume [veh/h]	1429	524	0	0	839	282	0	0	0	706	0	317

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	0	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	0	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	0	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	41	67	0	0	26	0	0	0	0	23	0	0
Walk [s]	0	5	0	0	5	0	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	0	0	0	0	0	0	0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.41	0.70	0.24	0.24		0.21	0.21	
(v / s)_i Volume / Saturation Flow Rate	0.41	0.14	0.23	0.10		0.20	0.20	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900		1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	3514	3618	3618	2859		3514	1615	
c, Capacity [veh/h]	1445	2532	884	699		742	341	
X, volume / capacity	0.99	0.21	0.95	0.40		0.95	0.93	
d, Delay for Lane Group [s/veh]	35.07	4.92	53.57	30.23		42.68	62.73	
Lane Group LOS	D	A	D	C		D	E	
Critical Lane Group	Yes	No	Yes	No		Yes	No	

50th-Percentile Queue Length [veh/ln]	16.02	1.48	11.21	2.67		8.23	9.28
50th-Percentile Queue Length [ft/ln]	400.38	36.98	280.33	66.79		205.63	232.06
95th-Percentile Queue Length [veh/ln]	22.58	2.66	16.70	4.81		12.93	14.28
95th-Percentile Queue Length [ft/ln]	564.46	66.57	417.62	120.23		323.22	356.97

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	35.07	4.92	0.00	0.00	53.57	30.23	0.00	0.00	0.00	42.68	0.00	62.73
Movement LOS	D	A			D	C				D		E
Critical Movement	No	No			No	No				No		Yes
d_A, Approach Delay [s/veh]	26.98		47.70			0.00			48.90			
Approach LOS	C		D			A			D			
d_I, Intersection Delay [s/veh]	38.12											
Intersection LOS	D											
Intersection V/C	0.839											

Option 1: Add 2nd SBR

Number	5											
Intersection	Beaumont Avenue at I-10 WB Ramp											
Control Type	Signalized											
Analysis Method	HCM 6th Edition											
Name	Beaumont Avenue			Beaumont Avenue						I-10 WB Ramp		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Base Volume Input [veh/h]	1055	1036	0	0	804	597	0	0	0	1023	0	403
Total Analysis Volume [veh/h]	1055	1036	0	0	810	597	0	0	0	1024	0	406

Intersection Settings

Cycle Length [s]	90											
Coordination Type	Time of Day Pattern Coordinated											
Actuation Type	Semi-actuated											
Lost time [s]	0.00											
Control Type	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	5	2	0	0	6	6	0	0	0	3	8	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	5	5	0	0	5	5	0	0	0	5	0	0
Maximum Green [s]	30	30	0	0	30	30	0	0	0	5	0	0
Amber [s]	3.0	3.0	0.0	0.0	3.0	3.0	0.0	0.0	0.0	3.0	0.0	0.0
All red [s]	1.0	1.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	1.0	0.0	0.0
Split [s]	28	60	0	0	32	32	0	0	0	30	0	0
Walk [s]	0	5	0	0	5	5	0	0	0	0	0	0
Pedestrian Clearance [s]	0	6	0	0	3	3	0	0	0	0	0	0
l1, Start-Up Lost Time [s]	2.0	2.0	0.0	0.0	2.0	2.0	0.0	0.0	0.0	2.0	0.0	0.0
Minimum Recall	No	No			No					Yes		
Maximum Recall	No	No			No					No		
Pedestrian Recall	No	No			No					No		
Pedestrian Signal Group	0											
Pedestrian Walk [s]	0											
Pedestrian Clearance [s]	0											

Lane Group Calculations

g / C, Green / Cycle	0.27	0.62	0.31	0.31		0.29	0.29	
(v / s)_i Volume / Saturation Flow Rate	0.30	0.29	0.22	0.21		0.29	0.14	
so, Base Saturation Flow per Lane [veh/h/lr]	1900	1900	1900	1900		1900	1900	
Arrival type	3		3		3		3	
s, saturation flow rate [veh/h]	3514	3618	3618	2859		3514	2859	
c, Capacity [veh/h]	937	2251	1125	889		1015	826	
X, volume / capacity	1.13	0.46	0.72	0.67		1.01	0.49	
d, Delay for Lane Group [s/veh]	93.12	9.68	31.50	31.02		47.28	26.98	
Lane Group LOS	F	A	C	C		F	C	
Critical Lane Group	Yes	No	Yes	No		Yes	No	

50th-Percentile Queue Length [veh/ln]	11.70	4.97	8.10	5.91		12.79	3.58
50th-Percentile Queue Length [ft/ln]	442.38	124.36	202.61	147.67		319.65	89.40
95th-Percentile Queue Length [veh/ln]	26.31	8.63	12.77	9.89		18.75	6.44
95th-Percentile Queue Length [ft/ln]	657.84	215.81	319.33	247.31		468.73	160.92

**Movement, Approach, & Intersection Results**

d_M, Delay for Movement [s/veh]	93.12	9.68	0.00	0.00	31.50	31.02	0.00	0.00	0.00	47.28	0.00	26.98
Movement LOS	F	A			C	C				F		C
Critical Movement	Yes	No			No	No				No		No
d_A, Approach Delay [s/veh]	51.78		31.29		0.00		41.52					
Approach LOS	D		C		A		D					
d_I, Intersection Delay [s/veh]	42.95											
Intersection LOS	D											
Intersection V/C	0.816											



## MEMORANDUM

**To:** Kari Cano

**From:** Pranesh Tarikere, PE

**Date:** August 7, 2020

**Re:** Beaumont Potrero Interchange Industrial Warehouse Project Vehicle Mile Traveled (VMT) Analysis

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The memorandum documents Vehicle Miles Traveled (VMT) Analysis for the proposed Beaumont Potrero Interchange Industrial Warehouse Project (Project) in the City of Beaumont.

## Project Description

The Project site is located in the northwestern area of the City of Beaumont (City), south of State Route 60 (SR-60) and approximately 1.0 mile west of Interstate 10 (I-10). A project vicinity map is provided on **Figure 1**. The Project site is comprised of two vacant parcels. The northern parcel is located in the City of Beaumont and the southern parcel is in the County of Riverside. Annexation of the southern parcel into the City is required.

The Project consists of a 577,920-square-foot high-cube logistics warehouse building with 20,000 square feet of office space. A copy of the Project site plan is provided on **Figure 2**.

## Senate Bill 743 (SB 743)

SB 743, approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Governor's Office of Planning and Research (OPR) has recommended the use of VMT as the replacement for automobile delay-based LOS for the purposes of determining a significant transportation impact under CEQA. As of December 2018, the Natural Resources Agency finalized updates to CEQA Guidelines to incorporate SB 743 (i.e., VMT). To assist in the implementation of VMT as the primary measure of a transportation impact under CEQA, the OPR published an updated Technical Advisory on Evaluating Transportation Impacts in CEQA in December 2018. Statewide application of the new guidelines went into effect on July 1, 2020.

The City of Beaumont has adopted VMT thresholds of significance for determining the significance of transportation impacts based on the Western Riverside Council of Governments



(WRCOG) Recommended Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (updated March 2020). The City has adopted the following:

- Utilizing the Riverside County Travel Demand Model (RIVTAM/RIVCOM) as its methodology to measure VMT.
- Utilizing the Riverside County Travel Demand Model (RIVTAM/RIVCOM) as its method to analyze a project's VMT impact.
- Utilizing a threshold consistent with the City's current average VMT per service population (population plus employment).

## VMT Thresholds

The City of Beaumont staff report for SB 743 VMT Thresholds for CEQA Compliance Related to Transportation Analysis (June 16, 2020) recommends VMT thresholds consistent with the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) future year VMT by jurisdiction as described below:

*The portions of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) that affect Beaumont are based on the land use element of the General Plan. As such, using this option assumes that projects consistent with the General Plan are also consistent with the RTP/SCS and should not require additional analysis for VMT. Projects that require amendment to the General Plan that would trigger an EIR would need to complete a VMT analysis using the methodology described above. Other amendments to the General Plan would need to be evaluated on a case-by-case basis. Rather than the 15% reduction in VMT recommended in the OPR guidance, staff is recommending that future projects demonstrate that they will reduce existing VMT by at least 3%. Projects that cannot demonstrate a 3% reduction in VMT will be required to conduct additional analysis and add mitigation as appropriate. If project design or operational features cannot reduce VMT below the threshold then an EIR may be required in order for the City to consider a statement of overriding considerations.*

As the project related entitlements includes a General Plan Amendment, a full VMT analysis has been conducted for the Project consistent with the City of Beaumont guidelines.



## VMT Analysis

A logical way to evaluate this type of facility is to consider the major trip purposes of the site in terms of their trip length and frequency. Given the description, three types of trips were broadly considered for this development given its context: (1) employee commute trips; (2) other trips related to functioning of the business and/or its employees and (3) truck trips related to shipping activities; and. The following discussion is provided regarding these three broad trip types.

- (1) Employee commute trips.** These are the primary automobile trips associated with employment generating uses such as the proposed Project. This facility is expected to provide additional jobs and some related trips to the area. The efficiency of VMT associated with employee commute trips has been assessed based on RivTAM consistent with the City's guidelines.
- (2) Other trips.** These are often the smallest number and shortest distance of trips for a facility like this and include a broad range of trip types, such as, employee lunches off-site, maintenance teams for on-site infrastructure, office supply deliveries, etc. As such their impact to the overall VMT of the site is likely minimal. As such it is not likely that they are impactful to the local transportation system and are secondary to the other two trip types discussed. The efficiency of VMT associated other trips has also been assessed based on RivTAM consistent with the adopted City's guidelines.
- (3) Truck trips related to shipping activities.** CEQA Guidelines Section 15064.3, subdivision (a) states "For the purposes of this section 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." The OPR's 2018 Technical Advisory indicates that, although heavy vehicle traffic can be included for analysis convenience, the provided analysis requirements are specific to passenger-vehicles and light duty trucks. While it may be appropriate to consider heavy vehicle traffic if directed by the lead agency, it is generally understood that Interstate commerce and related heavy vehicle traffic are regulated by the federal government as it relates to commerce. Irrespective of this and considering that the end-user of this facility is unknown at this time (so the nature of the business enterprise and its probably origins and destinations are unknown), it is reasonable to assume that the ultimate end user will select this location, at least in part, as to how it effects their transportation costs. Most often businesses who have shipping as a significant part of their operations are sensitive to transportation costs and their relative proximity to customers and suppliers. Accordingly, it is reasonable to assume that warehouses are often located in a manner to reduce VMT given that it is the interest of the business. It is also recognized that the Project would generate Heavy Duty Truck (HDT) traffic and has been considered in this VMT assessment. For consistency with other CEQA technical studies, HDT VMT identified in this analysis will be reflected in other applicable technical studies (e.g. Air Quality Impact Analysis, Greenhouse Gas Analysis, etc.).

### ***Project VMT***

The calculation of vehicle miles traveled has two components – the total number of trips generated and the average trip length of each vehicle. RivTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households and employment. Project VMT was calculated using the most current version of RivTAM. Adjustments in socio-economic data (households, population and employment) were made to the appropriate traffic analysis zone (TAZ) within the RivTAM model to reflect the Project's proposed land use. Socio-economic data inputs were derived based on Riverside County General Plan, Appendix E-2: Socioeconomic Build- out Assumptions and Methodology.

#### **Project Home-Based Work (HBW) VMT per Employee**

The home-based work (HBW) VMT per employee is the HBW attraction VMT divided by the number of employees derived from the RivTAM model. The HBW VMT per Employee is used to measure efficiency of VMT generated by employment-based uses. The Project HBW VMT per Employee calculated based on RivTAM is 16.34.

#### **Project VMT per Service Population (SP)**

Service population is defined as the sum of population and employment. Since the Project does not have any residential component, the Project SP consists of employees only. The VMT per SP is the total VMT (including all trip purposes) divided by the number of workers derived from the RivTAM model. The VMT per SP is used to measure efficiency of VMT generated by all trip purposes. The Project VMT per SP calculated based on RivTAM is 32.1.

#### **Heavy Truck VMT**

Consistent with air quality and greenhouse gas analyses, the average trip length for heavy trucks were based on the data provided in Forecasting Metropolitan Commercial and Freight Travel (NCHRP Synthesis 384, Transportation Research Board, 2008) document. The document cites average internal trip lengths of 5.92 miles for light truck, 13.06 for medium truck, and 24.11 for heavy trucks. As a conservative measure, a trip length of 25 miles has been utilized for all trucks multiplied by the daily truck trips (476) estimated in the TIA based on Institute of Transportation Engineer (ITE) trip rates, resulting in a heavy truck daily VMT of 11,900.

### ***VMT Thresholds***

For purposes of this VMT assessment the Project's HBW VMT per Employee and VMT per SP has been compared to 3% below citywide average future year (2040) VMT for the City of Beaumont, based on data provided by WRCOG. Table 1 shows the calculated VMT thresholds for HBW VMT per Employee and VMT per SP:

**TABLE 1: VMT THRESHOLDS**

Threshold Option	Citywide Average	Threshold (3% below)
Future Year (2040) HBW VMT per Employee	9.2	8.9
Future Year (2040) VMT per SP	31.3	30.4

***Potential Impacts***

As shown in Table 2, the Project’s HBW VMT per Employee and VMT per SP would not meet the 3% below citywide future year threshold. As such, the Project’s transportation impact is potentially significant based on City of Beaumont’s recommended thresholds.

**TABLE 2: VMT IMPACT EVALUATION**

Threshold Option	Threshold	Project	Change in VMT	Potentially Significant?
HBW VMT Employee	8.9	16.34	+7.44	Yes
VMT per SP	30.4	32.1	+1.7	Yes

***Mitigation***

Transportation demand management (TDM) strategies have been evaluated for reducing VMT impacts determined to be potentially significant. Given the jurisdiction’s rural / suburban land use context, the following key strategies may be considered for the project.

- Improving pedestrian networks
- Implementing traffic calming infrastructure
- Building low-street bicycle network improvements
- Encouraging alternative work schedules
- Providing ride-share programs.

The effectiveness of the above-noted TDM measures would be dependent on the ultimate building tenant(s), which are unknown at this time. Beyond project design and tenancy considerations, land use context is a major factor relevant to the potential application and effectiveness of TDM measures. More specifically, the land use context of the Project is characteristically suburban. Of itself, the project’s suburban context acts to reduce the range of feasible TDM measures and their potential effectiveness.

Based on available research, for projects located within a suburban context, a maximum 10% reduction in VMT is achievable when combining multiple mitigation strategies. Due to limitations of

project-level approaches to reducing VMT, the City or region may consider larger mitigation programs such as VMT mitigation banks and exchanges. VMT mitigation banks and exchanges have not yet been developed or tested. WRCOG is undertaking a study to evaluate the feasibility of a VMT mitigation bank or exchange in order to assist lead agencies in implementing SB 743.

## Conclusion

The Project's transportation impact based on VMT is potentially significant based on City of Beaumont's recommended thresholds. As the efficacy of TDM measures and reduction of VMT impacts below thresholds cannot be assured, project's VMT impact is therefore considered significant and unavoidable.

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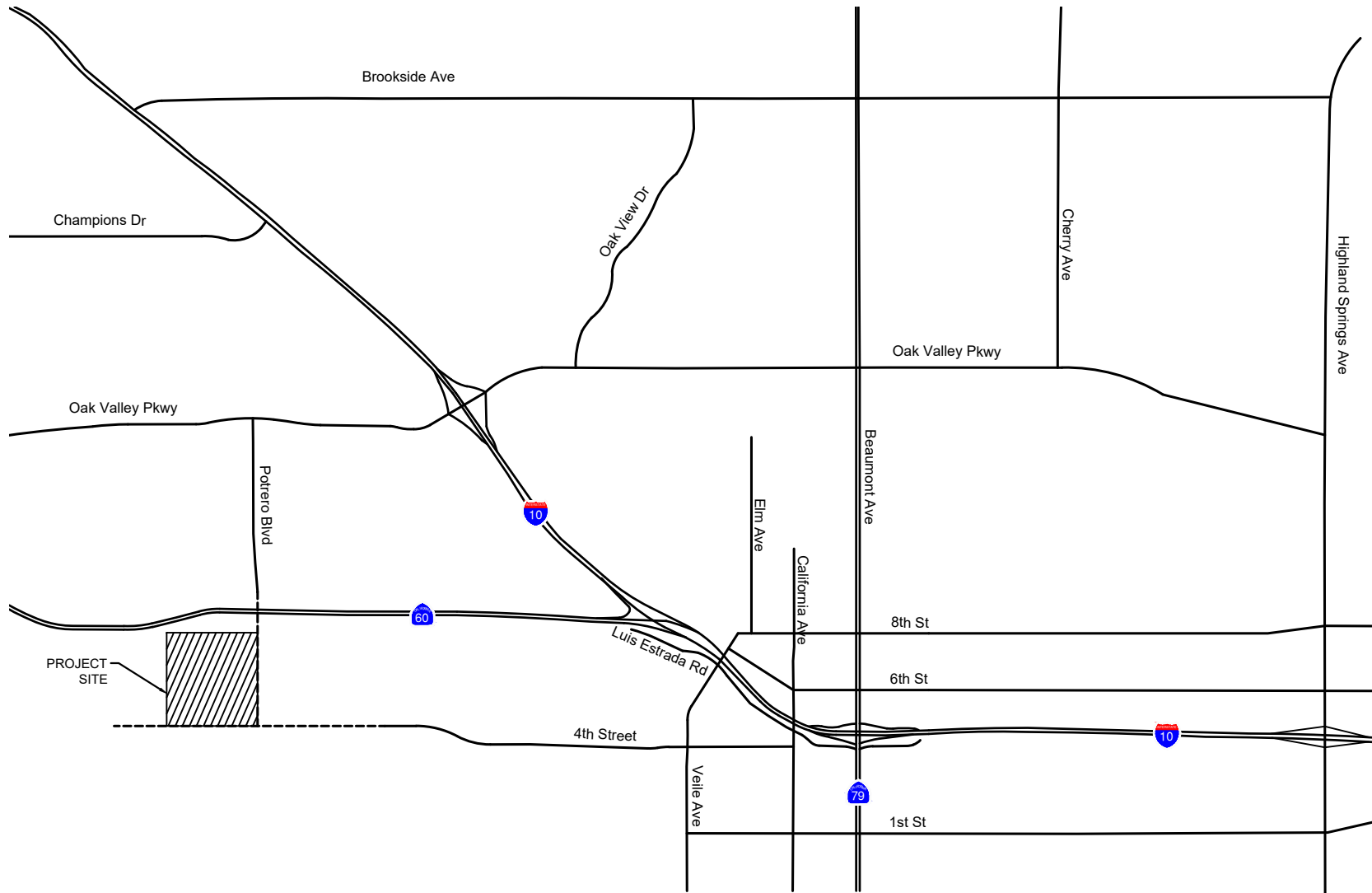


FIGURE 1  
VICINITY MAP

LEGEND:  
--- = Future Roadway



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NOT TO SCALE

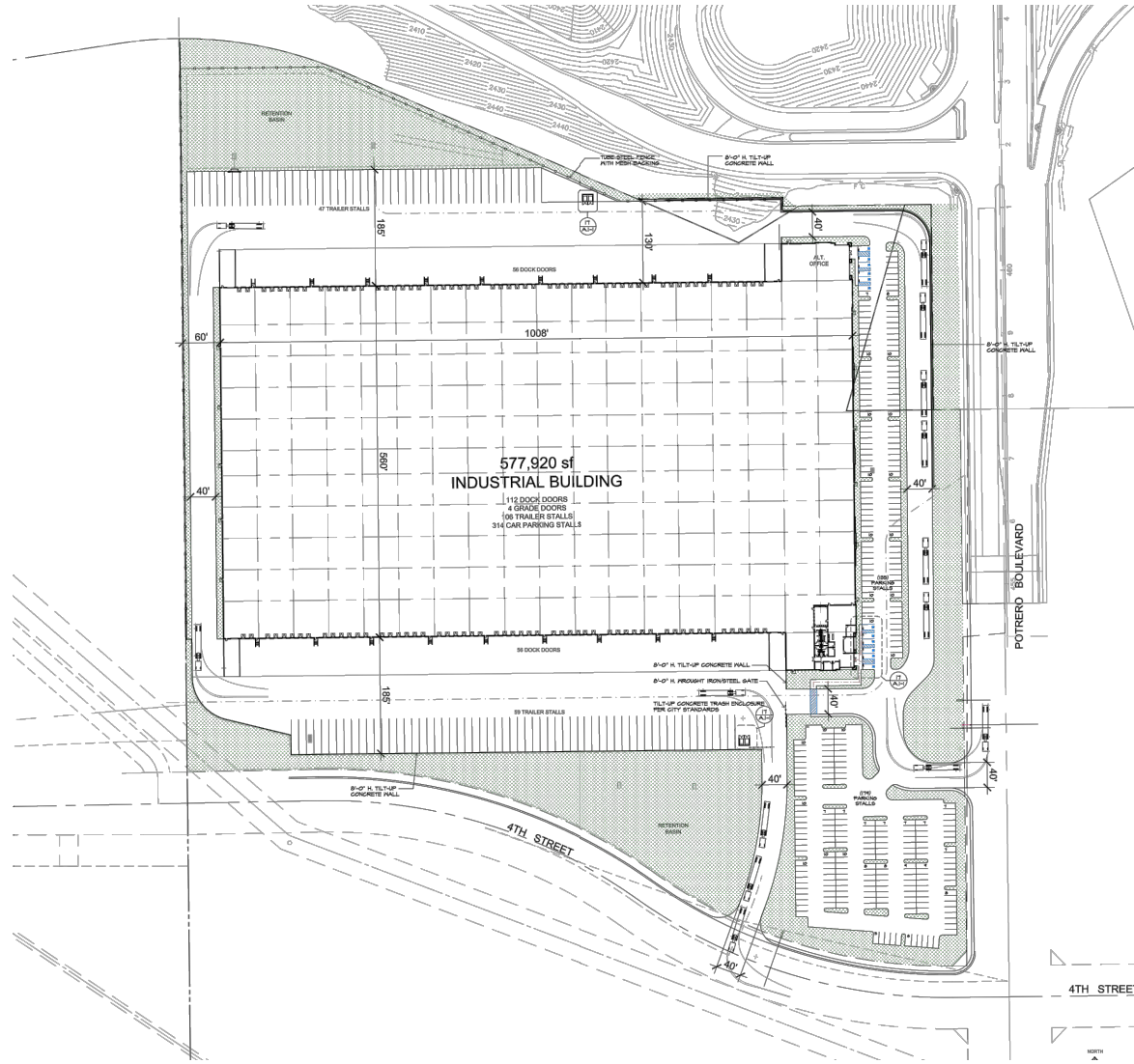


FIGURE 2  
PROJECT SITE PLAN