Appendix K – Traffic Impact Analysis and Vehicle Miles Travelled

Traffic Study

for

Beaumont Summit Station Project
In the City of Beaumont

Prepared for:

The City of Beaumont

February 2022

Kimley»Horn

TRAFFIC STUDY
FOR THE
BEAUMONT SUMMIT STATION PROJECT

IN THE
CITY OF BEAUMONT

Prepared for:

The City of Beaumont

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February 2022

TRAFFIC STUDY
BEAUMONT SUMMIT STATION PROJECT

TABLE OF CONTENTS

Page

INTRODUCTION 1
PROJECT DESCRIPTION 1
ANALYSIS SCENARIOS AND METHODOLOGY 4
Analysis Scenarios 4
Intersection Analysis – HCM Methodology 4
Performance Criteria 6
Significance Thresholds 6
AREA CONDITIONS 6
Study Area 6
EXISTING TRANSPORTATION SYSTEM 8
Existing Roadway System 8
Existing Transit Service 9
Existing Traffic Volumes 9
EXISTING TRAFFIC OPERATING CONDITIONS 12
Peak Hour Intersection Operations 12
PROJECT TRAFFIC 12
Project Trip Generation 12
Trip Distribution and Assignment 16
OPENING YEAR 2024 CUMULATIVE CONDITIONS 25
Cumulative Projects 25
Peak Hour Intersection Operation 25
Opening Year 2024 Plus Cumulative Projects Plus Project (Phase 1) Conditions 32
OPENING YEAR 2027 CUMULATIVE CONDITIONS 35
Peak Hour Intersection Operation 35
Opening Year 2027 Plus Cumulative Projects Plus Project (Phases 1 and 2) Conditions 38
FUTURE HORIZON YEAR CONDITIONS 41
Horizon Year 2040 Forecasts 41
Horizon Year 2040 Operating Conditions 41
RECOMMENDED IMPROVEMENTS 47
I-10/CHERRY VALLEY BOULEVARD INTERCHANGE 49
SITE ADJACENT ROADWAY IMPROVEMENTS 49
SITE ACCESS IMPROVEMENTS 50
SUMMARY OF FINDINGS AND CONCLUSIONS 56

APPENDICES

Appendix A Scoping Agreement
Appendix B Existing Peak Hour Traffic Data Collection Sheets
Appendix C PCE Worksheets
Appendix D Intersection Analysis Worksheets
Appendix E RivTAM Model Plots and B-Turns Worksheets

LIST OF FIGURES

Figure 1 – Vicinity Map 2
Figure 2 – Project Site Plan 3
Figure 3 – Existing Lane Configuration and Traffic Control 7
Figure 4 – Existing Traffic Volumes 11
Figure 5 – Passenger Car Trip Distribution 17
Figure 6 – Truck Trip Distribution 18
Figure 7 – Project-Related Traffic Volumes (Phase 1) 19
Figure 8 – Project-Related Traffic Volumes (Phases 1 and 2) 22
Figure 9 – Location of Cumulative Projects 28
Figure 10 – Cumulative Project Volumes 29
Figure 11 – Opening Year 2024 Cumulative Traffic Volumes 30
Figure 12 – Opening Year 2024 Cumulative Plus Project (Phase 1) Traffic Volumes 33
Figure 13 – Opening Year 2027 Cumulative Traffic Volumes 36
Figure 14 – Opening Year 2027 Cumulative Plus Project (Phases 1 and 2) Traffic Volumes 39
Figure 15 – Horizon Year 2040 Traffic Volumes 42
Figure 16 – Horizon Year 2040 Plus Project (Phases 1 and 2) Traffic Volumes 45

LIST OF TABLES

Table 1 – Summary of Intersection Operation – Existing Conditions 13
Table 2 – Summary of Project Trip Generation – Phase 1 14
Table 3 – Summary of Project Trip Generation – Phases 1 and 2 15
Table 4 – Summary of Cumulative Project Trip Generation 26
Table 5 – Summary of Intersection Operation – Opening Year 2024 Conditions 31
Table 6 – Summary of Intersection Operation – Opening Year 2024 Plus Project (Phase 1) Conditions 34
Table 7 – Summary of Intersection Operation – Opening Year 2027 Conditions 37
Table 8 – Summary of Intersection Operation – Opening Year 2027 Plus Project (Phases 1 and 2) Conditions 40
Table 9 – Summary of Intersection Operation – Horizon Year 2040 Conditions 43
Table 10 – Summary of Intersection Operation – Horizon Year 2040 Plus Project (Phases 1 and 2) 46
Table 11 – Summary of Intersection Operation – With Recommended Improvements 51
Table 12 – Summary of Recommended Improvements in TUMF Program 52
Table 13 – Summary of Project Fair Share for Recommended Improvements – Opening Year 2024 53
Table 14 – Summary of Project Fair Share for Recommended Improvements – Opening Year 2027 54
Table 15 – Summary of Project Fair Share for Recommended Improvements – Horizon Year 2040 55

TRAFFIC STUDY
FOR THE PROPOSED
BEAUMONT SUMMIT STATION PROJECT
IN THE CITY OF BEAUMONT

INTRODUCTION

This traffic study has been prepared to evaluate the project-related traffic effects associated with the proposed Beaumont Summit Station project in the City of Beaumont.

PROJECT DESCRIPTION

The Project site is located in the northwestern area of the City of Beaumont, immediately east of the Interstate 10 (I-10) Freeway. A project vicinity map is provided on Figure 1. The site is bounded by Cherry Valley Boulevard to the north, the I-10 Freeway to the west, Brookside Avenue to the south and generally vacant land to the east. Based on the City of Beaumont General Plan, the project site is currently zoned as single-family residential, but is currently vacant. The Project site is comprised of nine vacant parcels.

The Project site is divided into five parcels and will be developed in two phases. Phase 1 will include Parcels 1, 2, and 3 designated for industrial uses. These parcels are proposed to be developed with three separate industrial warehouse buildings, as follows:

- Building 1: 985, 860 square-foot (SF) high-cube short-term storage building
- Building 2: 1,213,235 SF high-cube short-term storage building
- Building 3: 358,370 SF general warehouse

The Project proposed to amend the existing zoning from Single-Family Residential to Light Industrial for Parcels 1, 2, and 3 to allow for industrial uses. Phase 1 of construction is anticipated to begin the second quarter of 2023 and conclude in the third quarter of 2024.

Parcel 4 will be developed as part of Phase 2 and would include the development of Commercial uses, as follows:

- Four-story hotel: 220 rooms
- Shopping center: 25,000 SF
- High-turnover (sit-down) restaurant: 15,000 SF
- Fast-food restaurant with drive-throughs: 10,000 SF

Phase 2 of the Project is anticipated to begin early 2026 and finish mid to late 2027. A copy of the project site plan is provided on Figure 2. Project access would consist of three driveways along Cherry Valley Boulevard. The west and middle project driveways would be signalized and the east project driveway would be an unsignalized right-in-right-out (RIRO) only driveway.

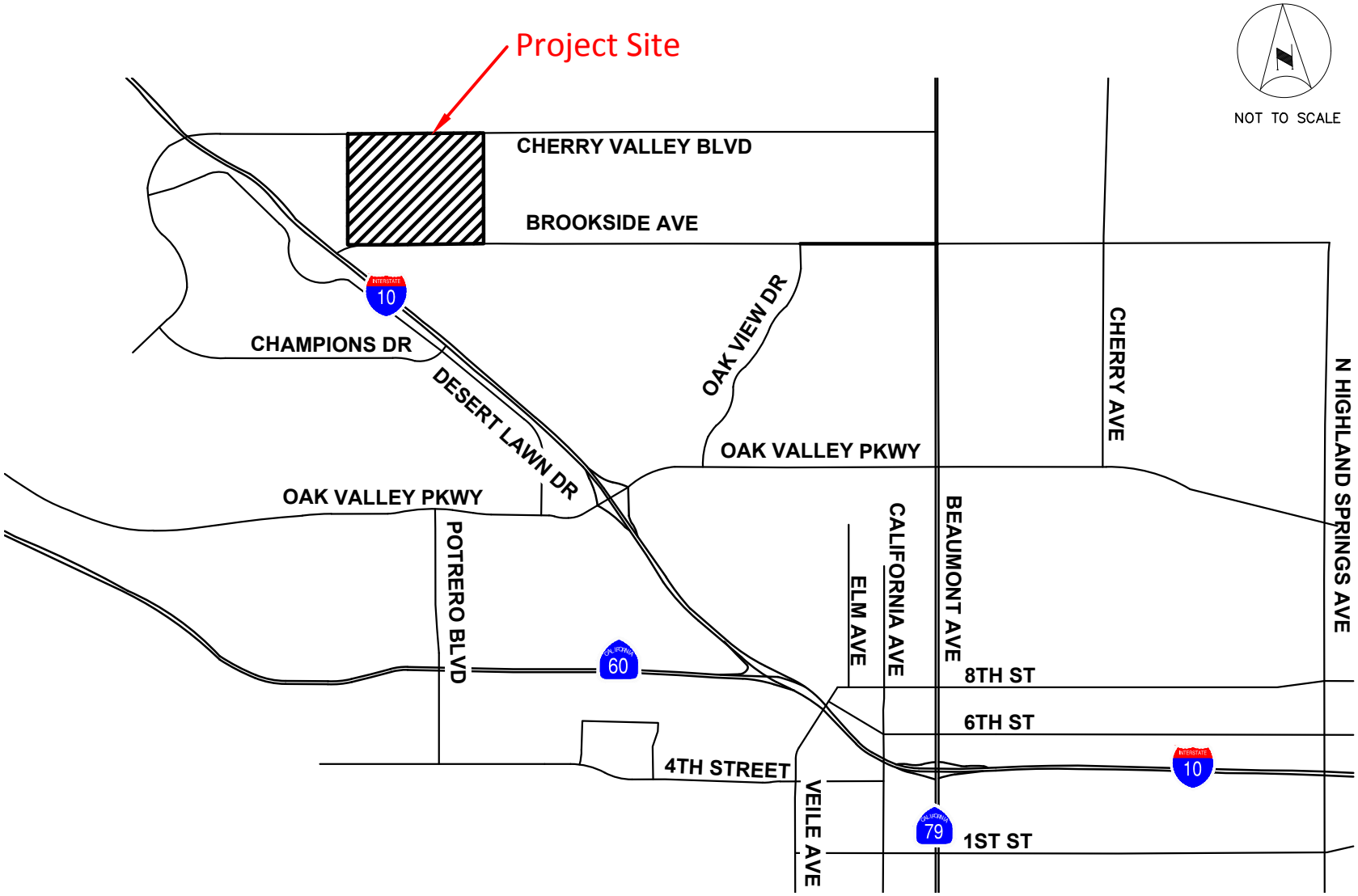

FIGURE 1
VICINITY MAP

LEGEND:
(X) = Study Intersection

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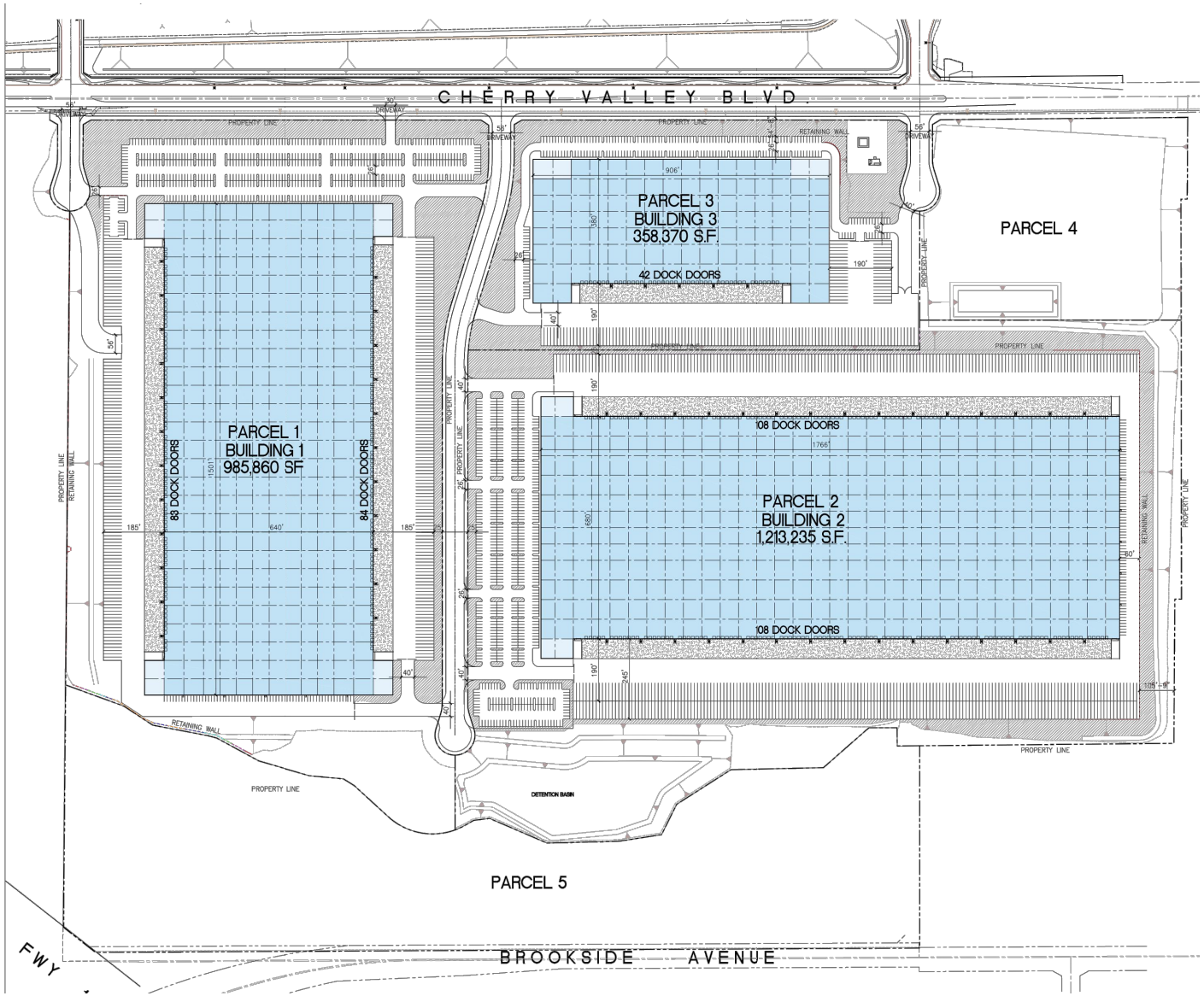


FIGURE 2
PROJECT SITE PLAN

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
- Opening Year 2024 Cumulative
- Opening Year 2024 Cumulative Plus Project (Phase 1)
- Opening Year 2027 Cumulative
- Opening Year 2027 Cumulative Plus Project (Phases 1 and 2)
- Horizon Year 2040
- Horizon Year 2040 Plus Project (Phases 1 and 2)

Intersection Analysis – HCM Methodology

The City of Beaumont follows the County of Riverside traffic study procedures (*Transportation Analysis Guidelines for Level of Service and Vehicle Miles Traveled – 2020*). Peak hour intersection operations are evaluated using the methodology outlined in the Highway Capacity Manual (HCM 6th Edition), 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 5 provide a description of the operating characteristics of each Level of Service and average seconds of delay for signalized and unsignalized intersections.

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) [1]	Unsignalized Intersections (Average delay per vehicle, in seconds) [2]
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

[1] Source: Highway Capacity Manual (HCM 6th Edition), Exhibit 18-4.

[2] Source: Highway Capacity Manual (HCM 6th 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 effect 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 effects cannot be mitigated through project conditions of approval. A cumulative effect would occur when cumulative traffic (existing plus ambient growth plus Cumulative Projects plus project traffic) exceeds the target Level of Service, and effects cannot be mitigated through the Transportation Uniform Mitigation Fee (TUMF) network, project conditions of approval, or other implementation mechanisms.

AREA CONDITIONS

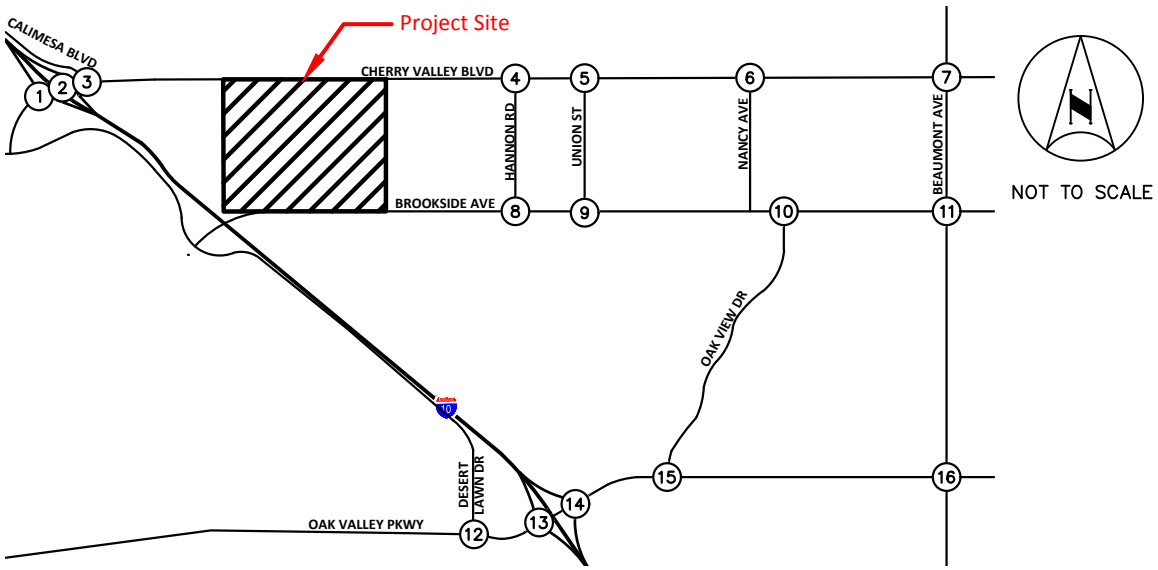
Study Area

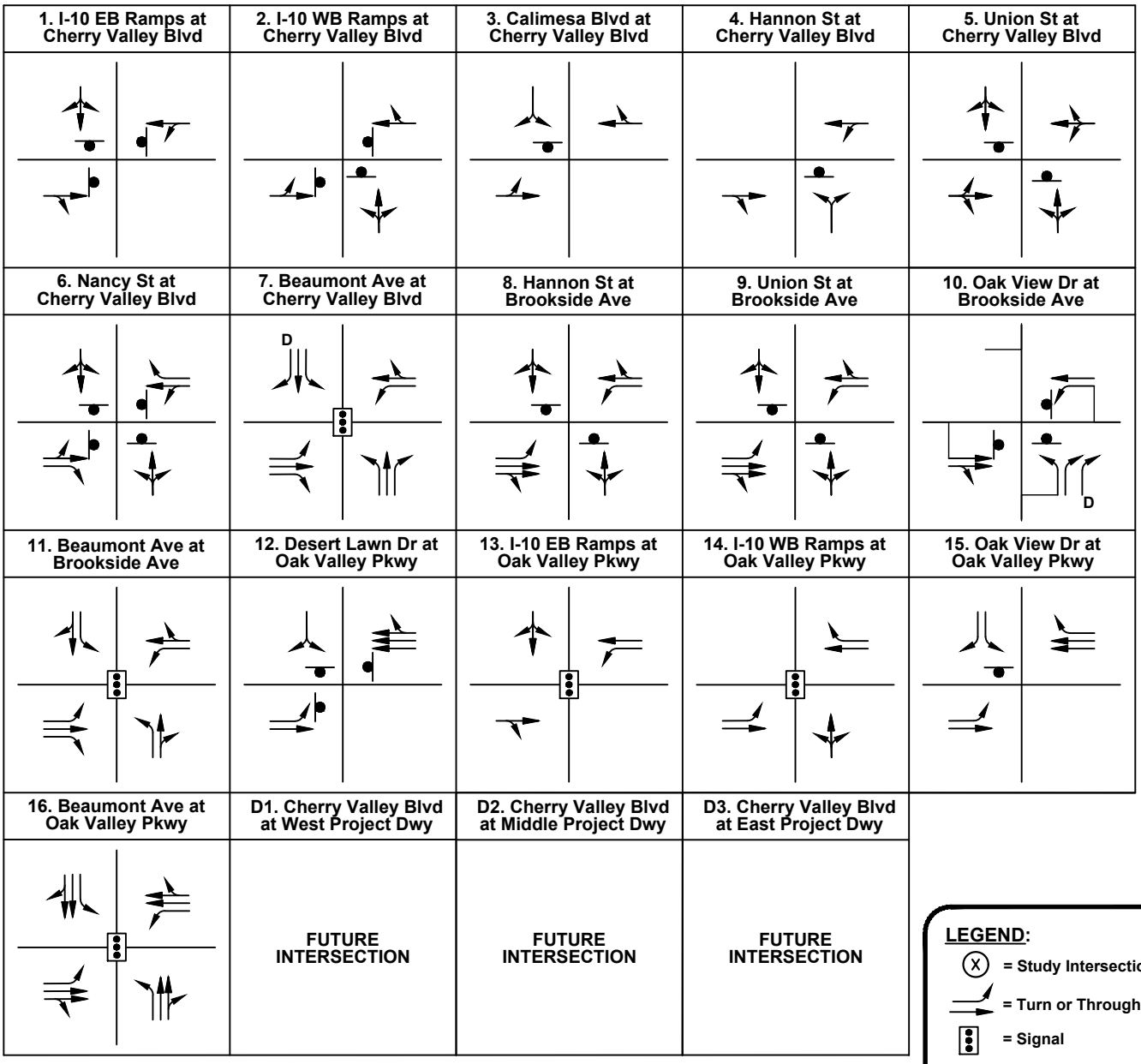
This traffic study includes documentation of existing conditions, future conditions, and identification of project-related deficiencies at the following study intersections:

1. I-10 EB Ramps at Cherry Valley Boulevard
2. I-10 WB Ramps at Cherry Valley Boulevard
3. Calimesa Boulevard at Cherry Valley Boulevard
4. Hannon Road at Cherry Valley Boulevard
5. Union Street at Cherry Valley Boulevard
6. Nancy Avenue at Cherry Valley Boulevard
7. Beaumont Avenue at Cherry Valley Boulevard
8. Hannon Road at Brookside Avenue
9. Union Street at Brookside Avenue
10. Oak View Drive at Brookside Avenue
11. Beaumont Avenue at Brookside Avenue
12. Desert Lawn Drive at Oak Valley Parkway
13. I-10 EB Ramps at Oak Valley Parkway
14. I-10 WB Ramps at Oak Valley Parkway
15. Oak View Drive at Oak Valley Parkway
16. Beaumont Avenue at Oak Valley Parkway

D1. Cherry Valley Boulevard at West Driveway
D2. Cherry Valley Boulevard at Middle Driveway
D3. Cherry Valley Boulevard at East Driveway

The study locations were established in consultation with City of Beaumont staff through the Scoping Letter Agreement process. A copy of the approved Scoping Agreement is provided in *Appendix A*. The study intersection locations and their existing lane configurations are shown on Figure 3.





LEGEND:

- X = Study Intersection
- = Turn or Through Lane
- = Signal
- = Stop Sign
- D = Defacto Right Turn

FIGURE 3
EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

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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 immediately west of the project site. The I-10 Freeway provides three travel lanes in each direction and connects directly to SR-79 (Beaumont Avenue) and SR-60. SR-60 is an east-west freeway located approximately 2.15 miles south of the project site. SR-60 provides two travel lanes in each direction. Southeast 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.

Cherry Valley Boulevard is an east-west undivided roadway that is immediately north of the project site and currently provides one travel lane in each direction. Cherry Valley Boulevard is shown as a Secondary Street in the Riverside County Circulation Element of the General Plan (Circulation Element). On-street parking is prohibited, and bike lanes are provided on both sides of the roadway. Cherry Valley Boulevard connects to the I-10 Freeway that is approximately one-half mile from the project site.

Brookside Avenue is an east-west divided roadway located immediately south of the project site and currently provides one travel lane in each direction. Brookside Avenue is shown as a Secondary Street on the City of Beaumont Circulation Element. On-street parking is prohibited on both sides of the roadway, and there are no bike lanes provided.

Oak Valley Parkway is an east-west undivided roadway that currently provides two travel lanes in each direction. Oak Valley Parkway is shown as an Urban Arterial east of Potrero Boulevard on the City of Beaumont Circulation Element. On-street parking is prohibited, and bike lanes are provided on both sides of the roadway.

Beaumont Avenue (SR-79) is north-south undivided roadway that currently provides one travel lane in each direction north of Oak Valley Parkway and two lane in each direction south of Oak Valley Parkway. Beaumont Avenue is shown as an Industrial Collector on the City of Beaumont Circulation Element. On-street parking is prohibited, and bike lanes are provided on both sides of the roadway.

Calimesa Boulevard is a north-south undivided roadway that currently provides one travel lane in each direction. Calimesa Boulevard is shown as a Secondary Street on the City of Beaumont Circulation Element. On-street parking is prohibited, and bike lanes are provided on the east side of the roadway.

Hannon Road is a north-south undivided roadway that provides one lane in each direction. Hannon Road is shown as a Local Street on the City of Beaumont Circulation Element. On-street parking is prohibited on both sides of the roadway, and no bike lanes are provided.

Union Street is a north-south undivided roadway that provides one lane in each direction. Union Street is shown as a Local Street on the City of Beaumont Circulation Element. On-street parking is prohibited on both sides of the roadway, and no bike lanes are provided.

Nancy Avenue is a north-south undivided roadway that provides one lane in each direction. Nancy Avenue is shown as a Local Street on the City of Beaumont Circulation Element. On-street parking is prohibited on both sides, and no bike lanes are provided.

Oak View Drive is a north-south undivided roadway that currently provides one travel lane in each direction. Oak View Drive is shown as an Industrial Collector on the City of Beaumont Circulation Element. On-street parking is prohibited, and bike lanes are provided on both sides of the roadway.
Desert Lawn Drive is a north-south undivided roadway that currently provides one travel lane in each direction. Desert Lawn Drive is shown as an Urban Arterial on the City of Beaumont Circulation Element. On-street parking is prohibited on both sides of the roadway, and no bike lanes are provided.

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 nearest bus stop to the Project site is Bus Route 3, located near the intersection of Cherry Valley Boulevard and Beaumont Avenue approximately 2 miles away from the project site.

Bus Route 3 ends 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

Due to the closure of schools and businesses during the COVID-19 pandemic, modifications to typical traffic count protocol have been used. Historical counts from 2017 were available for the following intersections:

1. I-10 EB Ramps at Cherry Valley Boulevard
2. I-10 WB Ramps at Cherry Valley Boulevard
3. Calimesa Boulevard at Cherry Valley Boulevard
5. Union Street at Cherry Valley Boulevard
6. Nancy Avenue at Cherry Valley Boulevard
7. Beaumont Avenue at Cherry Valley Boulevard

An ambient annual growth rate of two (2) percent per year was applied to the above study intersections to develop existing year 2021 volumes.

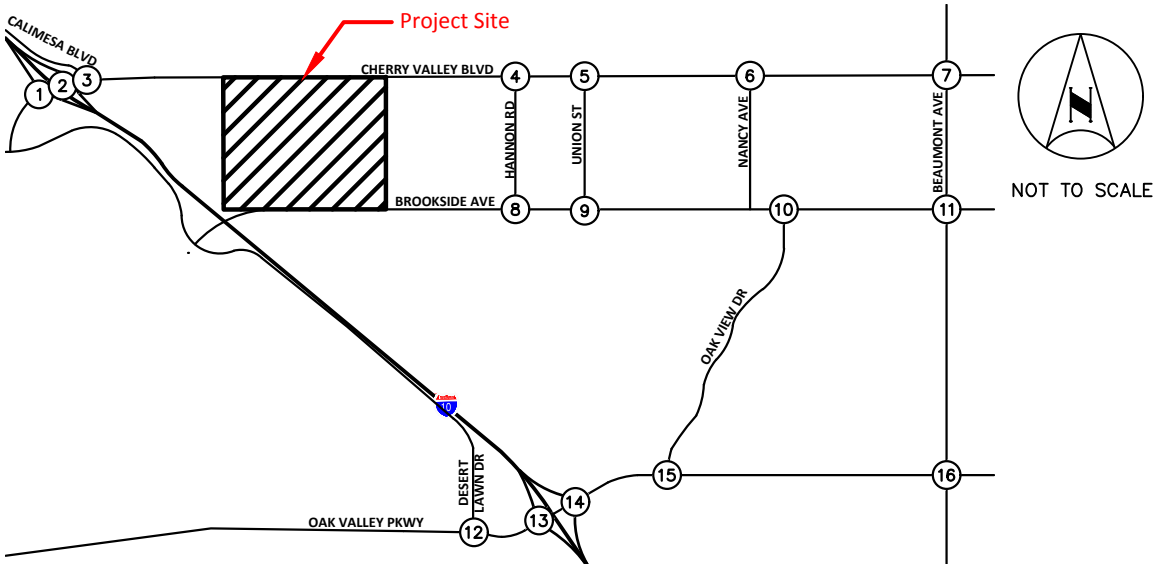
New traffic counts were collected during the morning (7-9 AM) and evening (4-6 PM) peak periods in May 2021, for all study intersections.

Based on a comparison of historical and new traffic count data, a COVID adjustment factor of 32% was applied to new traffic counts during the AM peak hour at the study intersections. In the PM peak hour, the new traffic counts were higher than the historical traffic counts grown to 2021. Therefore, the new 2021 counts were used for the study intersections in the PM peak hour.

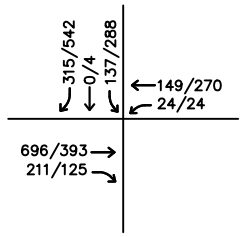
Copies of the traffic count data worksheets are provided in *Appendix B*.

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 effects of truck traffic on intersection operation.

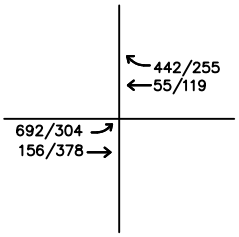
The PCE volumes were developed by applying a PCE factor of 1.5 for 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for trucks with 4 or more axles. PCE volume worksheets are provided in *Appendix C*. Existing morning and evening peak hour volumes with the PCE factors applied are presented on Figure 4.



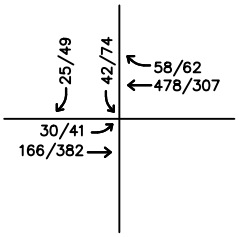
1. I-10 EB Ramps at Cherry Valley Blvd



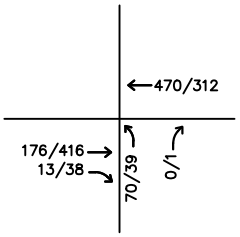
2. I-10 WB Ramps at Cherry Valley Blvd



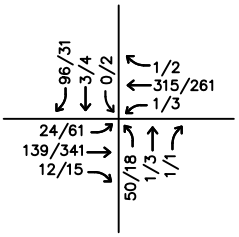
3. Calimesa Blvd at Cherry Valley Blvd



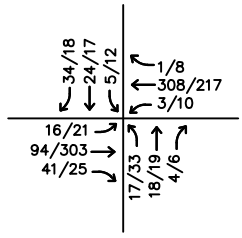
4. Hannon St at Cherry Valley Blvd



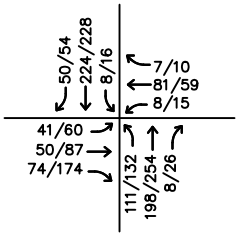
5. Union St at Cherry Valley Blvd



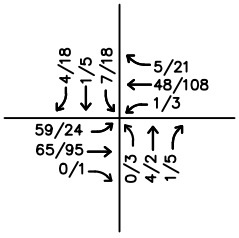
6. Nancy St at Cherry Valley Blvd



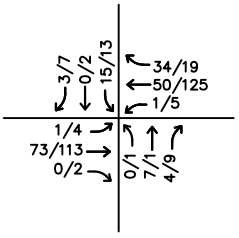
7. Beaumont Ave at Cherry Valley Blvd



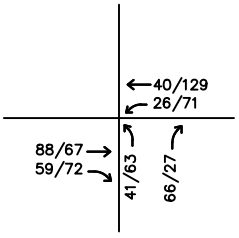
8. Hannon St at Brookside Ave



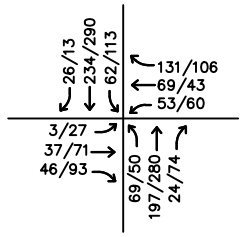
9. Union St at Brookside Ave



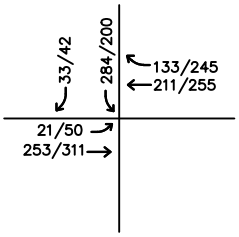
10. Oak View Dr at Brookside Ave



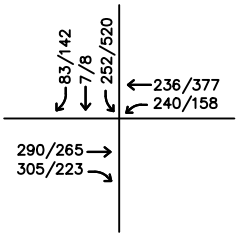
11. Beaumont Ave at Brookside Ave



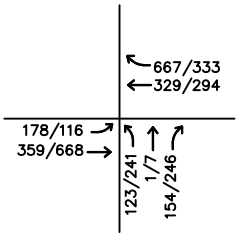
12. Desert Lawn Dr at Oak Valley Pkwy



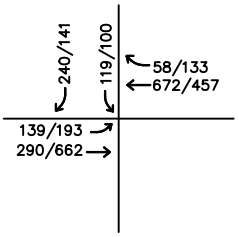
13. I-10 EB Ramps at Oak Valley Pkwy



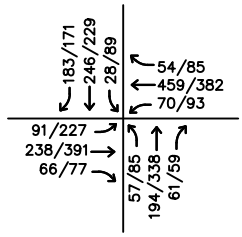
14. I-10 WB Ramps at Oak Valley Pkwy



15. Oak View Dr at Oak Valley Pkwy



16. Beaumont Ave at Oak Valley Pkwy



D1. Cherry Valley Blvd at West Project Dwy

FUTURE INTERSECTION

D2. Cherry Valley Blvd at Middle Project Dwy

FUTURE INTERSECTION

D3. Cherry Valley Blvd at East Project Dwy

FUTURE INTERSECTION

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 4
EXISTING TRAFFIC VOLUMES

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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. Intersection analysis worksheets are provided in *Appendix D*. 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 with the following exception:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS E, PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F

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 (11th Edition) for the following uses:

- ITE Land Use 154: High-Cube Short-Term Storage
- ITE Land Use 150: Warehousing
- ITE Land Use 310: Hotel
- ITE Land Use 822: Strip Retail Plaza (<40k)
- ITE Land Use 932: High-Turnover (Sit-Down) Restaurant
- ITE Land Use 934: Fast-Food Restaurant w/ Drive-Through

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 for Phase 1 of the project are summarized on Table 2. Review of this table indicates that the Project is forecasted to generate 4,667 daily PCE trips on a weekday, with 303 PCE trips during the morning peak hour (233 inbound and 70 outbound) and 362 PCE trips (102 inbound and 260 outbound) during the evening peak hour.

Trip generation rates and the resulting project PCE trips for Phases 1 and 2 of the project are summarized on Table 3. Review of this table indicates that the Project is forecasted to generate 13,152 daily PCE trips on a weekday, with 835 PCE trips during the morning peak hour (520 inbound and 315 outbound) and 832 PCE trips (349 inbound and 483 outbound) during the evening peak hour. Further breakdown of project trip generation and PCE trips can be found in *Appendix A*.

TABLE 1
SUMMARY OF INTERSECTION OPERATION
EXISTING CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	I-10 EB Ramps at Cherry Valley Boulevard	U	42.5	E	82.6	F
2	I-10 WB Ramps at Cherry Valley Boulevard	U	72.4	F	23.9	C
3	Calimesa Boulevard at Cherry Valley Boulevard	U	17.4	C	20.7	C
4	Cherry Valley Boulevard at Hannon Road	U	15.4	C	16.3	C
5	Cherry Valley Boulevard at Union Street	U	9.8	A	11.0	B
6	Cherry Valley Boulevard at Nancy Avenue	U	10.2	B	11.0	B
7	Cherry Valley Boulevard at Beaumont Avenue	S	23.4	C	26.3	C
8	Brookside Avenue at Hannon Road	U	11.0	B	11.9	B
9	Brookside Avenue at Union Street	U	10.0	A	11.6	B
10	Brookside Avenue at Oak View Drive	U	8.4	A	8.8	A
11	Brookside Avenue at Beaumont Avenue	S	27.4	C	26.6	C
12	Oak Valley Parkway at Desert Lawn Drive	U	13.7	B	15.9	C
13	Oak Valley Parkway at I-10 EB Ramps	S	51.4	D	41.8	D
14	Oak Valley Parkway at I-10 WB Ramps	S	80.5	F	30.1	C
15	Oak Valley Parkway at Oak View Drive	S	19.2	B	15.6	B
16	Oak Valley Parkway at Beaumont Avenue	S	29.6	C	31.8	C

Notes:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

TABLE 2

SUMMARY OF PROJECT TRIP GENERATION - PHASE 1

BEAUMONT SUMMIT STATION PROJECT

PROJECT TRIP GENERATION WITH PCE

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Use									
Buildings 1 & 2 (B-1 & B-2): High-Cube Short-Term Storage	2,199.095	KSF	3,826	169	51	220	78	196	274
Building 3 (B-3): Warehousing	358.370	KSF	841	64	19	83	24	64	88
Total Proposed Project PCE Trips			4,667	233	70	303	102	260	362

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

TABLE 3

SUMMARY OF PROJECT TRIP GENERATION - PHASE 1 AND 2

BEAUMONT SUMMIT STATION PROJECT

PROJECT TRIP GENERATION WITH PCE

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Use									
Buildings 1 & 2 (B-1 & B-2): High-Cube Short-Term Storage	2,199.095	KSF	3,826	169	51	220	78	196	274
Building 3 (B-3): Warehousing	358.370	KSF	841	64	19	83	24	64	88
Building 4 (B-4): Shopping Center	--	--	8,485	287	245	532	247	223	470
Total Proposed Project PCE Trips			13,152	520	315	835	349	483	832

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

Trip Distribution and Assignment

Trip distribution assumptions for the proposed project were developed based on current traffic patterns observed within the study area, as well as trip distribution assumptions for similar high-cube short-term storage buildings and 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. Passenger Car trip distribution and assignment assumptions for the Project are shown on Figure 5. Truck trip distribution and assignment assumptions for the Project are shown on Figure 6. The resulting project trips for Phase 1 and Phases 1 and 2 at the study intersections are shown on Figure 7 and Figure 8, respectively.

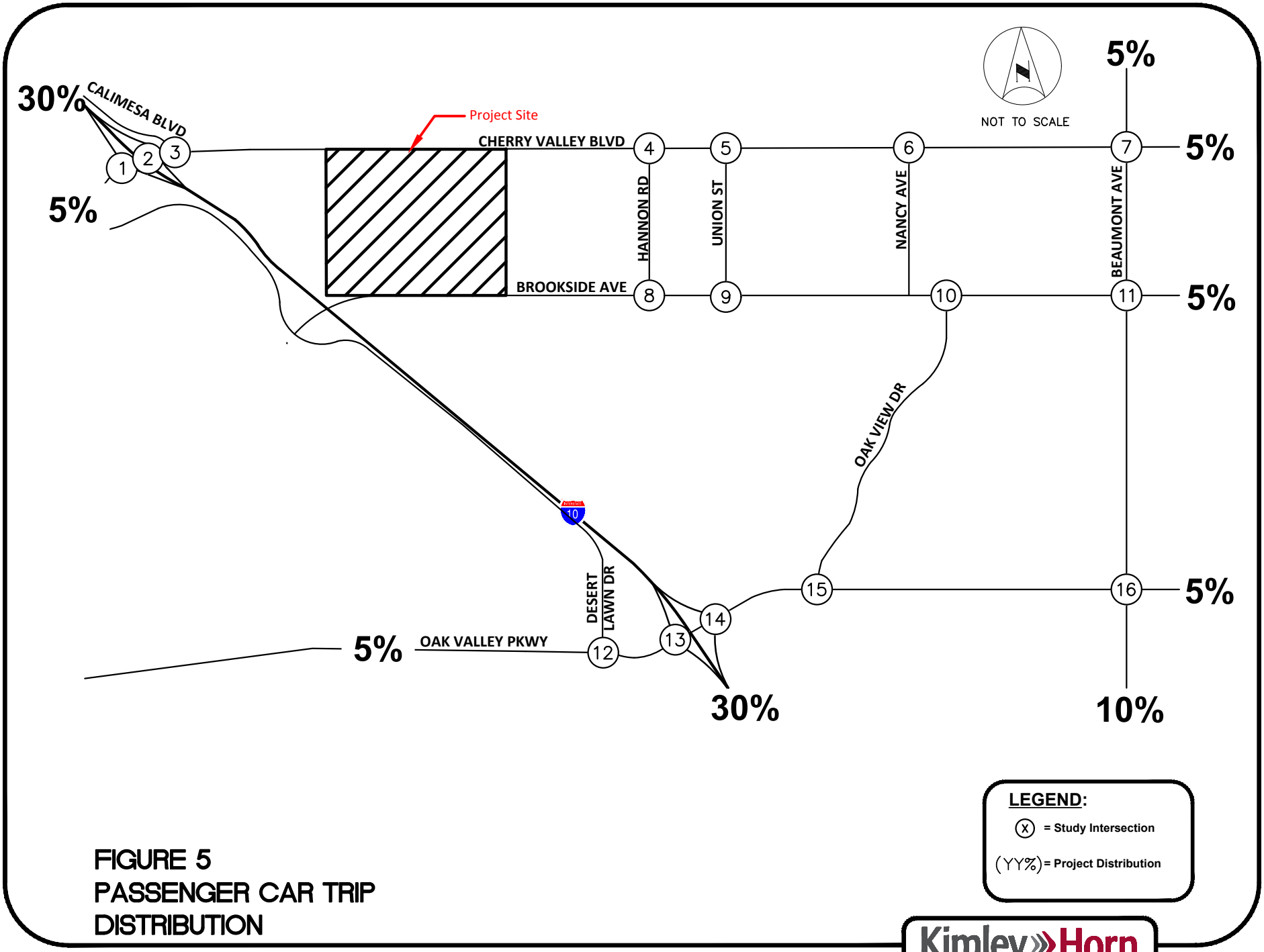


FIGURE 5
PASSENGER CAR TRIP DISTRIBUTION

Kimley»Horn

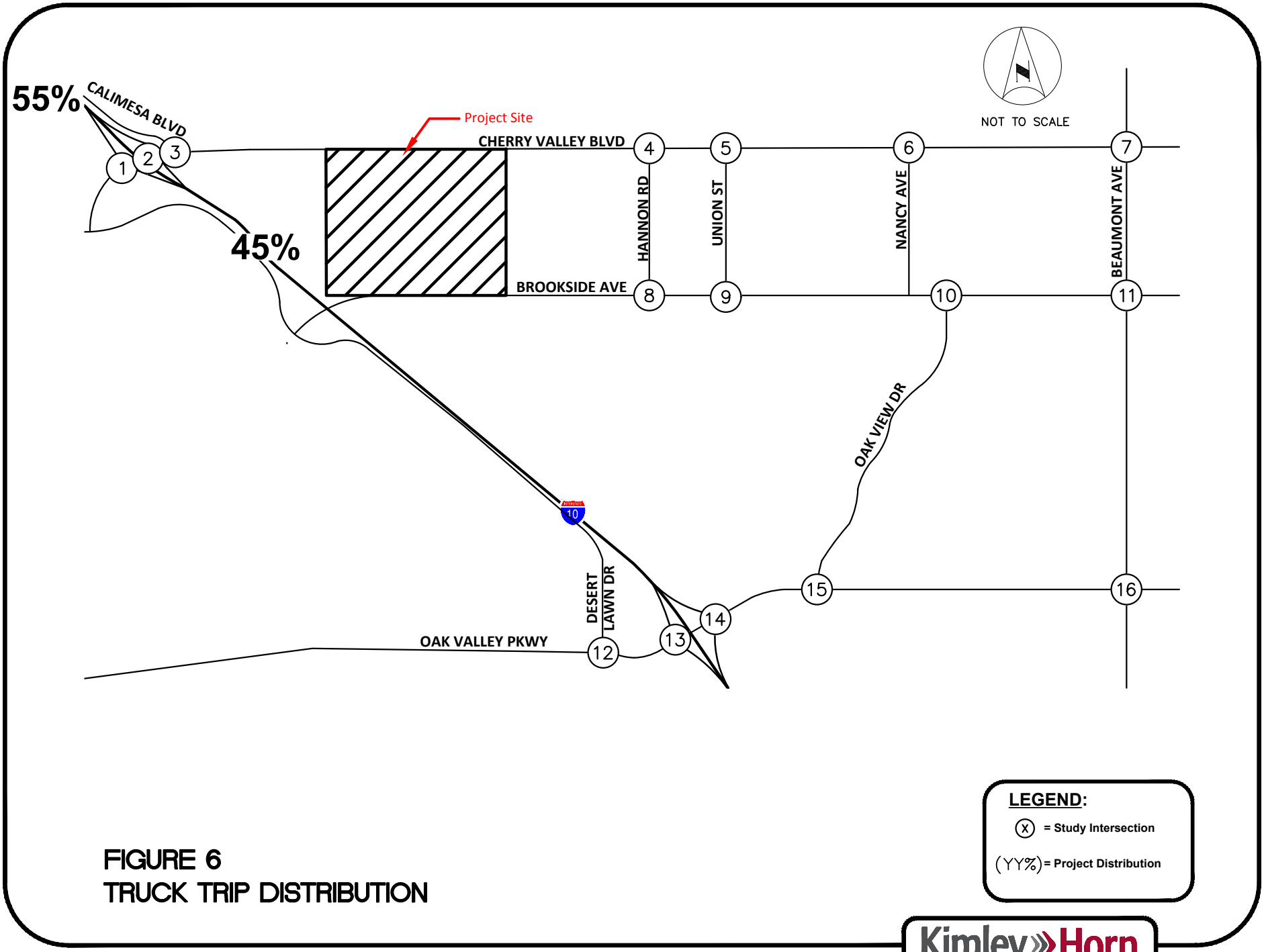
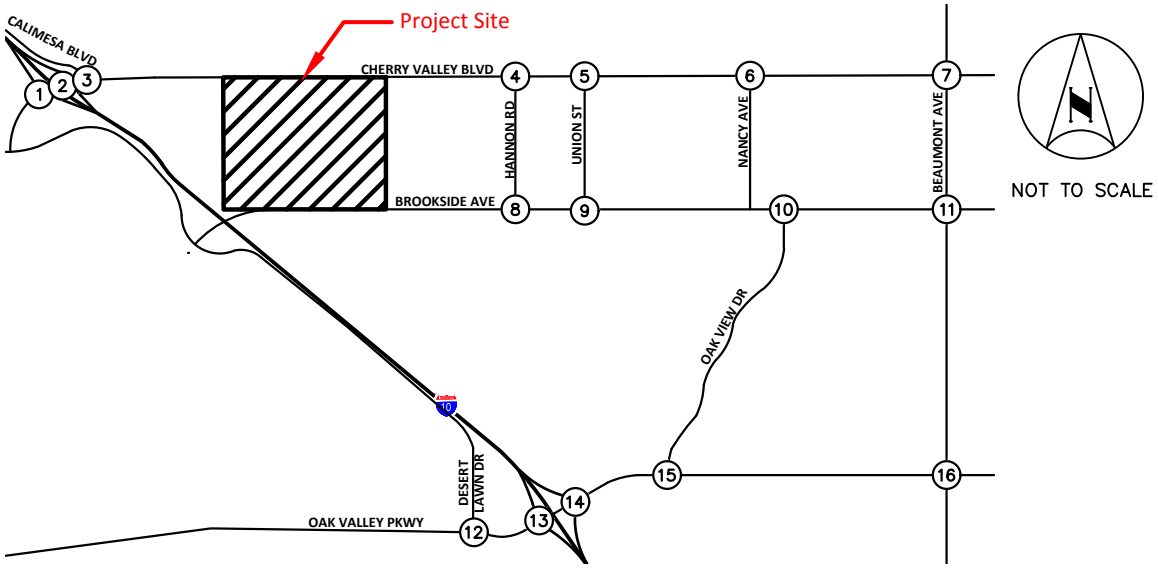


FIGURE 6
TRUCK TRIP DISTRIBUTION

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd	2. I-10 WB Ramps at Cherry Valley Blvd	3. Calimesa Blvd at Cherry Valley Blvd	4. Hannon St at Cherry Valley Blvd	5. Union St at Cherry Valley Blvd
← 3/8 ← 4/22 44/20 ↙ 8/3 →	← 13/50 ← 7/30 52/23 → 22/10 ↗	← 20/80 74/33 →	← 69/29 21/71 → 3/8 ↘ 8/3 ↗	← 53/23 15/55 → 6/16 ↘ 16/6 ↗
6. Nancy St at Cherry Valley Blvd	**7. Beaumont Ave at Cherry Valley Blvd**	**8. Hannon St at Brookside Ave**	**9. Union St at Brookside Ave**	**10. Oak View Dr at Brookside Ave**
← 31/13 11/33 → 4/22 ↘ 22/10 ↗	8/3 ↙ ← 8/3 3/8 → 3/8 → 5/17 ↘ 15/7 ↗	3/8 ↙ ← 8/3	6/16 ↙ ← 16/6 ← 8/3 3/8 →	← 16/6 6/16 → 7/30 ↘ 30/13 ↗
11. Beaumont Ave at Brookside Ave	**12. Desert Lawn Dr at Oak Valley Pkwy**	**13. I-10 EB Ramps at Oak Valley Pkwy**	**14. I-10 WB Ramps at Oak Valley Pkwy**	**15. Oak View Dr at Oak Valley Pkwy**
← 5/17 ← 8/3 3/8 → 3/8 ↘ 8/3 ↗ 15/7 ↑	← 3/8 8/3 →	← 3/8 ← 4/22 8/3 →	← 7/30 8/3 → 22/10 ↗	7/30 ↙ 30/13 ↗
16. Beaumont Ave at Oak Valley Pkwy	**D1. Cherry Valley Blvd at West Project Dwy**	**D2. Cherry Valley Blvd at Middle Project Dwy**	**D3. Cherry Valley Blvd at East Project Dwy**	
← 5/17 ← 3/8 8/3 ↖ 15/7 ↑	← 12/46 ← 9/4 46/20 → 29/13 ↘ 8/34 ↗	← 9/4 ← 69/28 5/2 → 41/18 ↘ 12/46 ↗ 18/66 ↗	← 77/32 18/66 → 5/2 ↘ 6/13 ↗	

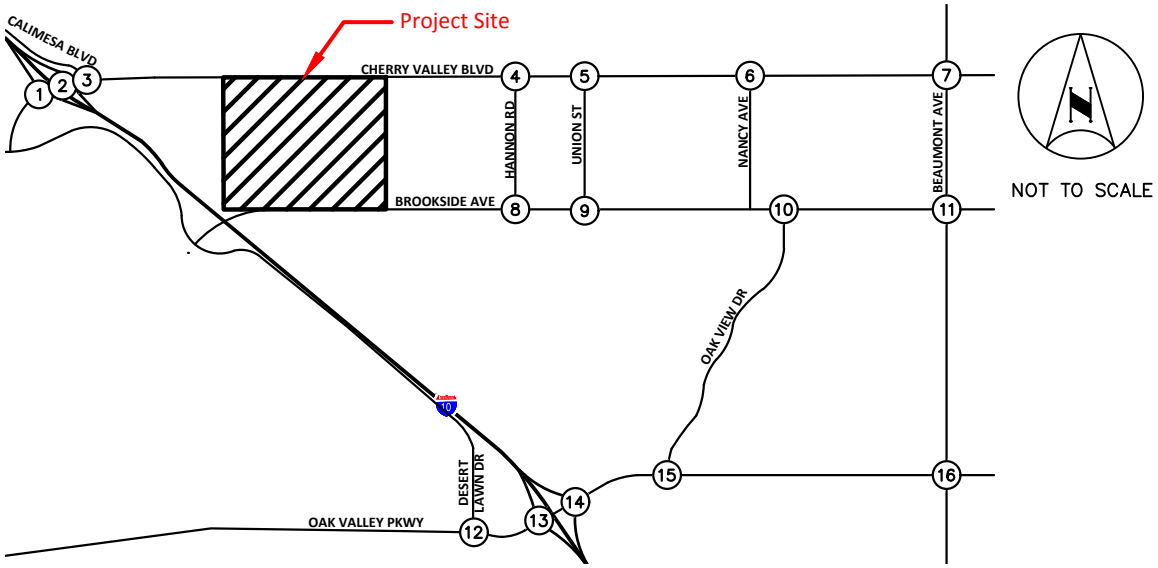
LEGEND:

Ⓧ = Study Intersection

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

FIGURE 7A
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1) - PASSENGER CARS

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd	2. I-10 WB Ramps at Cherry Valley Blvd	3. Calimesa Blvd at Cherry Valley Blvd	4. Hannon St at Cherry Valley Blvd	5. Union St at Cherry Valley Blvd
47/20 12/42	14/51 12/42 47/20 39/17	26/93 86/37		

6. Nancy St at Cherry Valley Blvd	7. Beaumont Ave at Cherry Valley Blvd	8. Hannon St at Brookside Ave	9. Union St at Brookside Ave	10. Oak View Dr at Brookside Ave

11. Beaumont Ave at Brookside Ave	12. Desert Lawn Dr at Oak Valley Pkwy	13. I-10 EB Ramps at Oak Valley Pkwy	14. I-10 WB Ramps at Oak Valley Pkwy	15. Oak View Dr at Oak Valley Pkwy

16. Beaumont Ave at Oak Valley Pkwy	D1. Cherry Valley Blvd at West Project Dwy	D2. Cherry Valley Blvd at Middle Project Dwy	D3. Cherry Valley Blvd at East Project Dwy
	17/61 58/24 28/13 9/32	58/24 17/61	

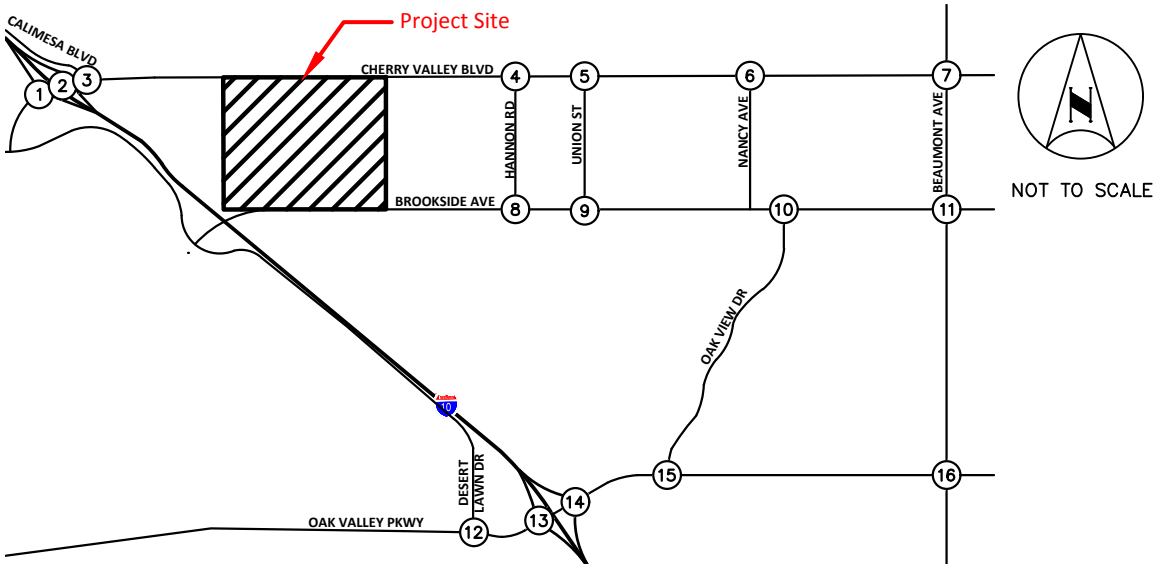
LEGEND:

(X) = Study Intersection

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

FIGURE 7B
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1) - TRUCKS (PCE)

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd	2. I-10 WB Ramps at Cherry Valley Blvd	3. Calimesa Blvd at Cherry Valley Blvd	4. Hannon St at Cherry Valley Blvd	5. Union St at Cherry Valley Blvd
←3/8 ←16/64 91/40↙ 8/3→	↖27/101 ←19/72 99/43→ 61/27↗	←46/173 160/70→	←69/29 21/71→ 3/8↘ 8/3↗	←53/23 15/55→ 6/16↘ 16/6↗
6. Nancy St at Cherry Valley Blvd	**7. Beaumont Ave at Cherry Valley Blvd**	**8. Hannon St at Brookside Ave**	**9. Union St at Brookside Ave**	**10. Oak View Dr at Brookside Ave**
←31/13 11/33→ 4/22↘ 22/10↗	8/3↙ ←8/3 3/8→ 3/8→ 5/17↘ 15/7↗	3/8↙ ↖8/3	6/16↙ ↖16/6 ←8/3 3/8→	←16/6 6/16→ 7/30↘ 30/13↗
11. Beaumont Ave at Brookside Ave	**12. Desert Lawn Dr at Oak Valley Pkwy**	**13. I-10 EB Ramps at Oak Valley Pkwy**	**14. I-10 WB Ramps at Oak Valley Pkwy**	**15. Oak View Dr at Oak Valley Pkwy**
←5/17 ←8/3 3/8→ 3/8↘ 8/3↗ 15/7↑	←3/8 8/3→	←3/8 4/22↙ 8/3→	←7/30 8/3→ 22/10↗	7/30↙ 30/13↗
16. Beaumont Ave at Oak Valley Pkwy	**D1. Cherry Valley Blvd at West Project Dwy**	**D2. Cherry Valley Blvd at Middle Project Dwy**	**D3. Cherry Valley Blvd at East Project Dwy**	
↖8/3 ←5/17 3/8↙ 15/7↑	←29/107 9/4↙ 104/44→ 57/26↘ 17/66↗	←9/4 69/28↙ 5/2→ 99/42↘ 29/107↗ 18/66↗	←77/32 18/66→ 5/2↘ 6/13↗	

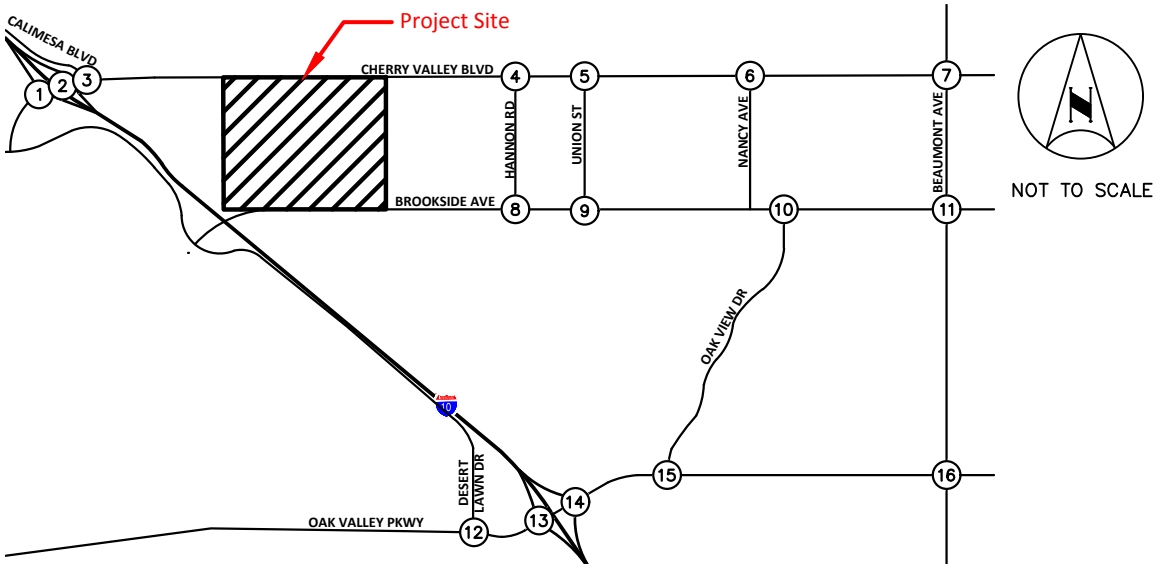
LEGEND:

Ⓧ = Study Intersection

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

FIGURE 7C
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1)

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd

130/94
15/19
41/56
22/15

2. I-10 WB Ramps at Cherry Valley Blvd

87/117
56/75
152/109
65/47

3. Calimesa Blvd at Cherry Valley Blvd

143/192
217/156

4. Hannon St at Cherry Valley Blvd

197/139
131/171
15/19
22/15

5. Union St at Cherry Valley Blvd

153/109
101/133
30/38
44/30

6. Nancy St at Cherry Valley Blvd

88/62
60/77
41/56
65/47

7. Beaumont Ave at Cherry Valley Blvd

22/15
22/15
15/19
15/19
30/39
44/32

8. Hannon St at Brookside Ave

15/19
22/15

9. Union St at Brookside Ave

30/38
44/30
22/15
15/19

10. Oak View Dr at Brookside Ave

44/30
30/38
56/75
87/62

11. Beaumont Ave at Brookside Ave

30/39
22/15
15/19
15/19
22/15
44/32

12. Desert Lawn Dr at Oak Valley Pkwy

15/19
22/15

13. I-10 EB Ramps at Oak Valley Pkwy

37/34
15/19
41/56
22/15

14. I-10 WB Ramps at Oak Valley Pkwy

56/75
22/15
65/47

15. Oak View Dr at Oak Valley Pkwy

56/75
87/62

16. Beaumont Ave at Oak Valley Pkwy

30/39
15/19
22/15
44/32

D1. Cherry Valley Blvd at West Project Dwy

135/158
9/4
189/143
29/13
8/34

D2. Cherry Valley Blvd at Middle Project Dwy

9/4
211/150
148/125
41/18
135/158
18/66

D3. Cherry Valley Blvd at East Project Dwy

219/154
18/66
148/125
128/124

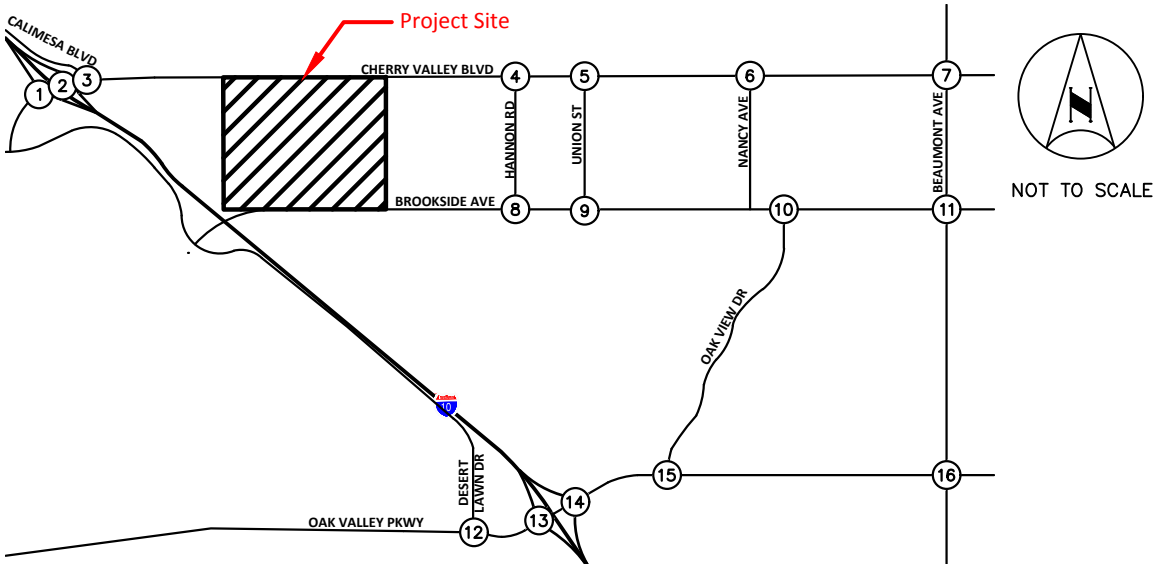
LEGEND:

(X) = Study Intersection

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

FIGURE 8A
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1 AND 2) - PASSENGER CARS

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd	2. I-10 WB Ramps at Cherry Valley Blvd	3. Calimesa Blvd at Cherry Valley Blvd	4. Hannon St at Cherry Valley Blvd	5. Union St at Cherry Valley Blvd
47/20 12/42	14/51 12/42 47/20 39/17	26/93 86/37		

6. Nancy St at Cherry Valley Blvd	7. Beaumont Ave at Cherry Valley Blvd	8. Hannon St at Brookside Ave	9. Union St at Brookside Ave	10. Oak View Dr at Brookside Ave

11. Beaumont Ave at Brookside Ave	12. Desert Lawn Dr at Oak Valley Pkwy	13. I-10 EB Ramps at Oak Valley Pkwy	14. I-10 WB Ramps at Oak Valley Pkwy	15. Oak View Dr at Oak Valley Pkwy

16. Beaumont Ave at Oak Valley Pkwy	D1. Cherry Valley Blvd at West Project Dwy	D2. Cherry Valley Blvd at Middle Project Dwy	D3. Cherry Valley Blvd at East Project Dwy
	17/61 58/24 28/13 9/32	58/24 17/61	

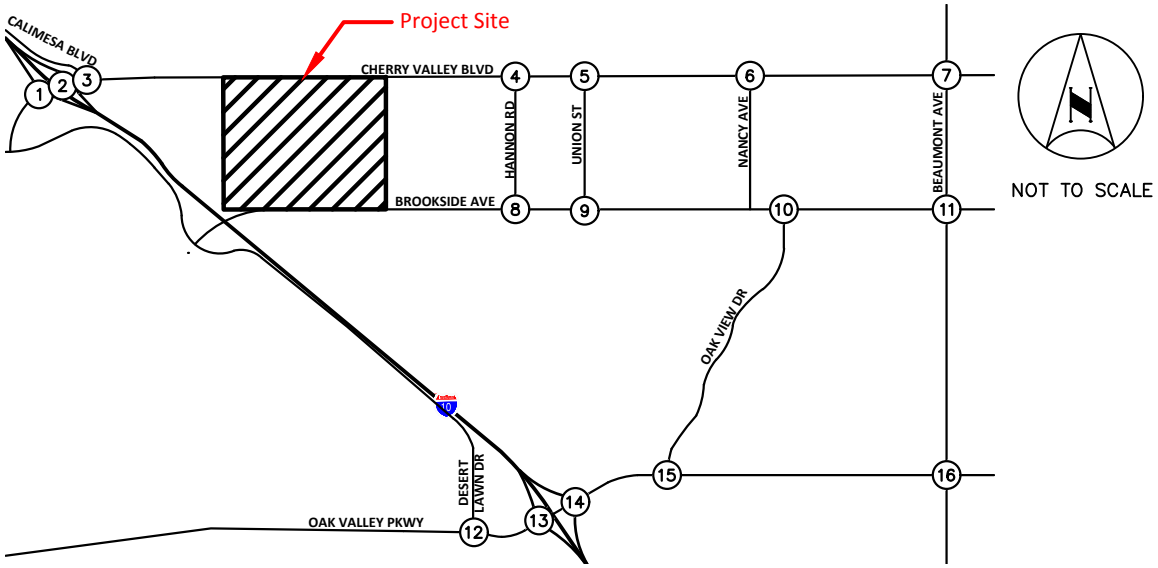
LEGEND:

(X) = Study Intersection

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

FIGURE 8B
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1 AND 2) - TRUCKS (PCE)

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd	2. I-10 WB Ramps at Cherry Valley Blvd	3. Calimesa Blvd at Cherry Valley Blvd	4. Hannon St at Cherry Valley Blvd	5. Union St at Cherry Valley Blvd
↓177/114 ←15/19 ←53/98 22/15→	←101/168 ←68/117 199/129→ ↑104/64	←169/285 303/193→	←197/139 131/171→ 15/19↘ ↑22/15	←153/109 101/133→ 30/38↘ ↑44/30
6. Nancy St at Cherry Valley Blvd	**7. Beaumont Ave at Cherry Valley Blvd**	**8. Hannon St at Brookside Ave**	**9. Union St at Brookside Ave**	**10. Oak View Dr at Brookside Ave**
←88/62 60/77→ 41/56↘ ↑65/47	↓22/15 ←22/15 15/19→ 15/19→ 30/39↘ ↑44/32	↓15/19 ←22/15	↓30/38 ←44/30 ←22/15 15/19→	←44/30 30/38→ 56/75↘ ↑87/62
11. Beaumont Ave at Brookside Ave	**12. Desert Lawn Dr at Oak Valley Pkwy**	**13. I-10 EB Ramps at Oak Valley Pkwy**	**14. I-10 WB Ramps at Oak Valley Pkwy**	**15. Oak View Dr at Oak Valley Pkwy**
↓30/39 ←22/15 15/19→ 15/19↘ ↑22/15 ↑44/32	←15/19 22/15→	↓37/34 ←15/19 ←41/56 22/15→	←56/75 22/15→ ↑65/47	↓56/75 87/62↗
16. Beaumont Ave at Oak Valley Pkwy	**D1. Cherry Valley Blvd at West Project Dwy**	**D2. Cherry Valley Blvd at Middle Project Dwy**	**D3. Cherry Valley Blvd at East Project Dwy**	
↓30/39 ↓15/19 ←22/15 ↑44/32	←152/219 ←9/4 247/167→ 57/26↘ ↑17/66	←9/4 ←211/150 148/125→ 99/42↘ ↑152/219 ↑18/66	←219/154 18/66→ 148/125↘ ↑128/124	

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 8C
PROJECT-RELATED TRAFFIC VOLUMES (PHASE 1 AND 2)

Kimley»Horn

OPENING YEAR 2024 CUMULATIVE CONDITIONS

The project Opening Year for Phase 1 is anticipated to be Year 2024. Opening Year 2024 traffic forecasts have been developed by adding an ambient growth factor of 2.0 percent per to existing traffic volumes at the study intersections.

Cumulative Projects

In addition to ambient growth, traffic from Cumulative Projects in the Project vicinity are added to the Opening Year forecasts to develop Opening Year 2024 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 previously approved traffic studies in the area. A summary of the Cumulative Projects, including the associated trip generation is provided on Table 4. 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 9.

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 10. The Cumulative Projects traffic volumes were added to the Opening Year 2024 traffic volumes to develop Opening Year 2024 Cumulative forecasts, which are shown on Figure 11.

Peak Hour Intersection Operation

The results of the Opening Year 2024 Cumulative intersection analysis are summarized on Table 5. Review of this table shows that, with the addition of ambient growth and Cumulative Project volumes, the following study intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS E; PM: LOS F
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

Intersection analysis worksheets are provided in *Appendix D*.

TABLE 4
SUMMARY OF CUMULATIVE PROJECTS

Proj #	Description	Land Use	Quantity	Units	Trip Generation Estimates						
						AM Peak Hour			PM Peak Hour		
					Daily	In	Out	Total	In	Out	Total
1	Noble Creek Vistas	Single-Family Detached Housing	648	DU	6,117	120	360	480	404	237	641
2	Cougar Ranch	Single-Family Detached Housing	148	DU	1,397	27	82	109	92	54	146
3	Oak Valley Greens Senior Center	Senior Adult Housing-Detached	372	DU	1,588	29	60	89	68	44	112
4	Oak Valley Village	Shopping Center	490.000	KSF	18,498	286	175	461	896	971	1,867
5	Kirkwood Ranch	Single-Family Detached Housing	403	DU	3,804	75	224	299	251	147	398
6	Sundance Corporate Center	General Office Building	300.000	KSF	2,922	299	49	348	55	290	345
7	Beaumont Commons	Single-Family Detached Housing	120	DU	878	13	42	55	42	25	67
8	Tuscany Townhomes	Multifamily Housing (Low-Rise)	188	DU	1,376	20	67	87	66	39	105
9	Prologis	General Light Industrial	2,200.000	KSF	10,912	1,355	185	1,540	180	1,206	1,386
10	Beaumont Industrial Park	Industrial Park	2,890.000	KSF	9,739	936	220	1,156	243	913	1,156
11	San Gorgonio Village	Shopping Center	130.000	KSF	4,908	76	46	122	238	258	496
12	Jerome Taurek	Single-Family Detached Housing	244	DU	2,303	45	135	180	152	89	241
13	Legacy Highlands (Phase 1)	Single-Family Detached Housing	1,159	DU	6,963	128	346	474	394	231	625
14	Hidden Canyon Industrial Park	No Land Use	2,890.000	KSF	5,438	221	119	340	125	253	378
15	Fairway Canyon	Single-Family Detached Housing	1,650	DU	15,576	305	916	1,221	1,030	604	1,634
16	Potrero Creek Estates	Single-Family Detached Housing	700	DU	6,608	130	389	519	437	256	693
17	High-Cube Fullfillment Center	High-Cube Parcel Hub Warehouse	4,500.000	KSF	34,875	1,575	1,575	3,150	1,958	923	2,881
	General Light Industrial	General Light Industrial	500.000	KSF	2,480	308	42	350	41	274	315
	Hotel	Hotel	125	Room	1,045	35	24	59	38	37	75
	Multipurpose Recreational Facility (Go-Cart)	Multipurpose Recreational Facility	77.00	KSF	-	-	-	-	152	124	276
	Rock Climbing	Rock Climbing Gym	26.000	KSF	-	12	24	36	24	18	42
	Miniature Golf	Miniature Golf Course	36	Hole	-	-	-	-	4	8	12
	Trampoline Park	Trampoline Park	24.000	KSF	-	-	-	-	17	19	36
	Bowling Alley	Bowling Alley	40.000	KSF	-	31	2	33	30	16	46
18	Beyond Beaumont Commercial		6.580	KSF	229	14	4	18	6	16	22
19	CUP 03629	Mini-Warehouse	90	Storage Units	1,616	64	61	125	88	88	176
20	TR 31966	Single-Family Detached Housing	60	DU	566	11	33	44	37	22	59
21	TTM 30545 Holbert Ranch	Single-Family Detached Housing	131	DU	1,237	24	73	97	82	48	130
22	Borstein Property	Single-Family Detached Housing	209	DU	1,973	39	116	155	130	76	206
	San Gorgonio Crossing	High-Cube Warehouse	1,861	KSF	3,126	141	64	205	69	154	223
23	Heartland	Single-Family Detached Housing	988	DU	9,327	183	548	731	617	362	979
		Shopping Center	126.000	KSF	4,757	73	45	118	230	250	480
24	American Villas	Single-Family Detached Housing	36	DU	340	7	20	27	22	13	35
	8th Street Condos	Multifamily Housing (Low-Rise)	16	DU	117	2	6	8	6	3	9
	Pennsylvania Ave Apartments	Multifamily Housing (Low-Rise)	8.000	DU	59	1	3	4	3	2	5
25	Sundance	Single-Family Detached Housing	4,716	DU	44,519	872	2,617	3,489	2,943	1,726	4,669
26	Rolling Hills Ranch Industrial Prologis	Warehousing	1,200.000	KSF	2,088	157	47	204	61	167	228
27	Dowling Orchard Business Park	Warehousing	548.820	KSF	955	72	21	93	28	76	104
28	Farmer Boys	Shopping Center	6.752	KSF	255	4	2	6	12	13	25
	Ramona Tire / Firestone	Shopping Center	4.792	KSF	181	3	2	5	9	9	18
29	Aspen Creek (TT 31426)	Single-Family Detached Housing	106	DU	1,001	20	59	79	66	39	105
30	Taurek (Tract No. 31162)	Single-Family Detached Housing	244	DU	2,303	45	135	180	152	89	241
31	Pacific Scene (Tract No. 32850)	Single-Family Detached Housing	95	DU	897	18	53	71	59	35	94
32	Jack Rabbit Trail	Single-Family Detached Housing	2,000	DU	18,880	370	1,110	1,480	1,248	732	1,980
		Shopping Center	49.005	KSF	1,850	29	17	46	90	97	187
33	Four Seasons (Tract NO. 31462)	Single-Family Detached Housing	2,041	DU	19,267	378	1,133	1,511	1,274	747	2,021
		Shopping Center	95.832	KSF	3,618	56	34	90	175	190	365

TABLE 4
SUMMARY OF CUMULATIVE PROJECTS

Proj #	Description	Land Use	Quantity	Units	Trip Generation Estimates						
						AM Peak Hour			PM Peak Hour		
					Daily	In	Out	Total	In	Out	Total
34	TTM 33931 Fiesta Oak Valley / Mesa Verde Estates	Single Family Residential	3535	DU	33,370	654	1,962	2,616	2,206	1,294	3,500
		Condos/Townhomes	453	DU	3,316	48	160	208	160	94	254
		Active Park	48.000	Acre	37	1	0	1	3	2	5
		Recreational Community Center	9.000	KSF	259	10	5	15	10	11	21
		Elementary School	1200	Student	2,268	434	370	804	98	106	204
		Commercial Retail	200.000	KSF	7,550	117	71	188	366	396	762
35	Summerwind Ranch	Single-Family Detached Housing	3,683	DU	34,768	681	2,044	2,725	2,298	1,348	3,646
		Elementary School	1,200	Student	2,268	434	370	804	98	106	204
		Middle School/Junior High School	900	Student	1,917	282	240	522	75	78	153
		Business Park	1,579.000	KSF	19,643	385	246	631	305	358	663
		Shopping Center	1,000.000	KSF	37,750	583	357	940	1,829	1,981	3,810
36	Sun Cal / Various Builders	Single-Family Detached Housing	2,366	DU	22,335	438	1,313	1,751	1,476	866	2,342
		Shopping Center	505.296	KSF	19,075	295	180	475	924	1,001	1,925
37	World Logistics Center	Warehousing	21,450.000	KSF	37,323	2,810	837	3,647	1,094	2,982	4,076
38	TAZ 28	Single-Family Detached Housing	193	DU	1,822	36	107	143	120	71	191
		General Office Building	182.342	KSF	1,776	182	30	212	34	176	210
		Shopping Center	130.244	KSF	4,917	76	46	122	238	258	496
39	TAZ 29	General Light Industrial	59.512	KSF	295	37	5	42	5	33	38
		General Office Building	49.876	KSF	486	50	8	58	9	48	57
		Business Park	26.737	KSF	333	7	4	11	5	6	11
		Shopping Center	69.827	KSF	2,636	41	25	66	128	138	266
40	TAZ 30	General Office Building	2.363	KSF	23	2	0	2	0	2	2
		Shopping Center	1.688	KSF	64	1	1	2	3	3	6
41	TAZ 31	General Office Building	86.826	KSF	846	87	14	101	16	84	100
		Shopping Center	62.019	KSF	2,341	36	22	58	113	123	236
42	TAZ 32	Single-Family Detached Housing	94	DU	887	17	52	69	59	34	93
43	TAZ 33	General Light Industrial	35.109	KSF	174	22	3	25	3	19	22
		Multifamily Housing (Low-Rise)	41	DU	300	4	15	19	14	8	22
		General Office Building	9.605	KSF	94	10	2	12	2	9	11
		Business Park	78.147	KSF	972	19	12	31	15	18	33
		Shopping Center	6.861	KSF	259	4	2	6	13	14	27
44	TAZ 34	General Office Building	76.459	KSF	745	76	12	88	14	74	88
		Shopping Center	54.613	KSF	2,062	32	19	51	100	108	208
45	TAZ 35	Single-Family Detached Housing	28	DU	264	5	16	21	17	10	27
46	TAZ 36	Single-Family Detached Housing	17	DU	160	3	9	12	11	6	17
47	TAZ 37	Single-Family Detached Housing	6	DU	57	1	3	4	4	2	6
		General Office Building	16.618	KSF	162	17	3	20	3	16	19
		Shopping Center	11.870	KSF	448	7	4	11	22	24	46
48	TAZ 38	General Office Building	97.269	KSF	947	97	16	113	18	94	112
		Shopping Center	69.478	KSF	2,623	41	25	66	127	138	265
49	TAZ 39	General Office Building	42.460	KSF	414	42	7	49	8	41	49
		Shopping Center	103.023	KSF	3,889	60	37	97	188	204	392
50	TAZ 40	Single-Family Detached Housing	478	DU	4,512	88	265	353	298	175	473
51	Singleton Heights (Mastercraft) TR 26811	Single-Family Detached Housing	268	DU	2,530	50	149	199	167	98	265
52	Sunset Ranch (Osborne/Dunham) TR 31450	Single-Family Detached Housing	231	DU	2,181	43	128	171	144	85	229
53	JP Ranch[5]	Single-Family Detached Housing	689	DU	6,504	127	382	509	430	252	682
		Shopping Center	72.700	KSF	2,744	42	26	68	133	144	277
Total Project Trips					526,934	17,143	20,889	38,032	27,747	25,128	52,875

DU = Dwelling Unit, KSF = 1,000 square feet, FP = Fueling Position

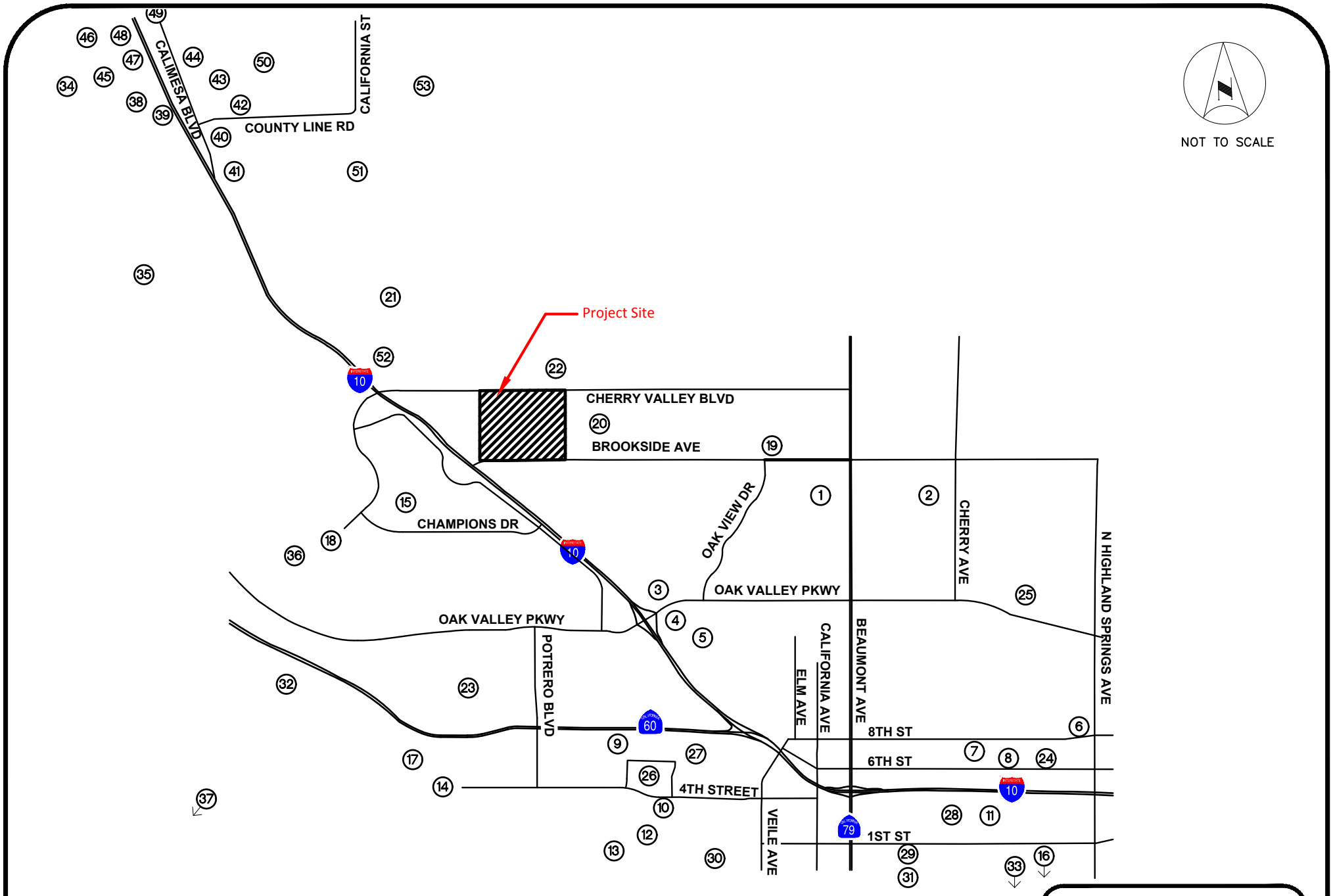
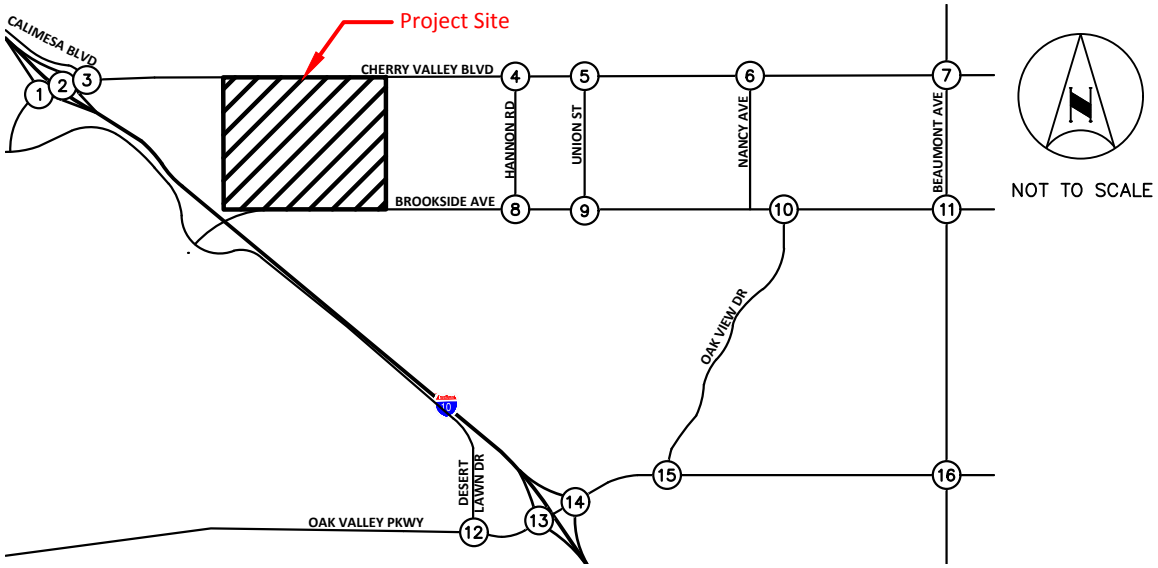


FIGURE 9
LOCATION OF CUMULATIVE PROJECTS

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd

150/481 68/202 ← 150/481 176/125
300/376 → 299/373

2. I-10 WB Ramps at Cherry Valley Blvd

92/60 ← 176/125
299/373 → 68/202 → 150/481 68/202

3. Calimesa Blvd at Cherry Valley Blvd

101/66 ← 251/185
34/113 → 101/290 →

4. Hannon St at Cherry Valley Blvd

← 176/156
97/212 → 4/15 → 13/9

5. Union St at Cherry Valley Blvd

← 178/163
104/216 →

6. Nancy St at Cherry Valley Blvd

← 154/128
78/181 → 26/35 → 24/35

7. Beaumont Ave at Cherry Valley Blvd

44/147 ←
78/181 → 154/128 131/86

8. Hannon St at Brookside Ave

9. Union St at Brookside Ave

10. Oak View Dr at Brookside Ave

11. Beaumont Ave at Brookside Ave

122/328 275/181 ← 92/309
285/214 ↑

12. Desert Lawn Dr at Oak Valley Pkwy

← 139/454
277/357 →

13. I-10 EB Ramps at Oak Valley Pkwy

97/324 258/853 ← 137/436 619/579
293/328 → 119/122 →

14. I-10 WB Ramps at Oak Valley Pkwy

634/590 ← 658/691
256/213 → 290/950 → 97/324 258/853

15. Oak View Dr at Oak Valley Pkwy

← 1080/712
360/1214 →

16. Beaumont Ave at Oak Valley Pkwy

33/22 46/30 100/336 ← 292/204 499/418 1047/690
11/37 → 189/633 → 15/51 349/1177 ↑

D1. Cherry Valley Blvd at West Project Dwy

← 251/185
101/290 →

D2. Cherry Valley Blvd at Middle Project Dwy

← 251/185
101/290 →

D3. Cherry Valley Blvd at East Project Dwy

← 251/185
101/290 →

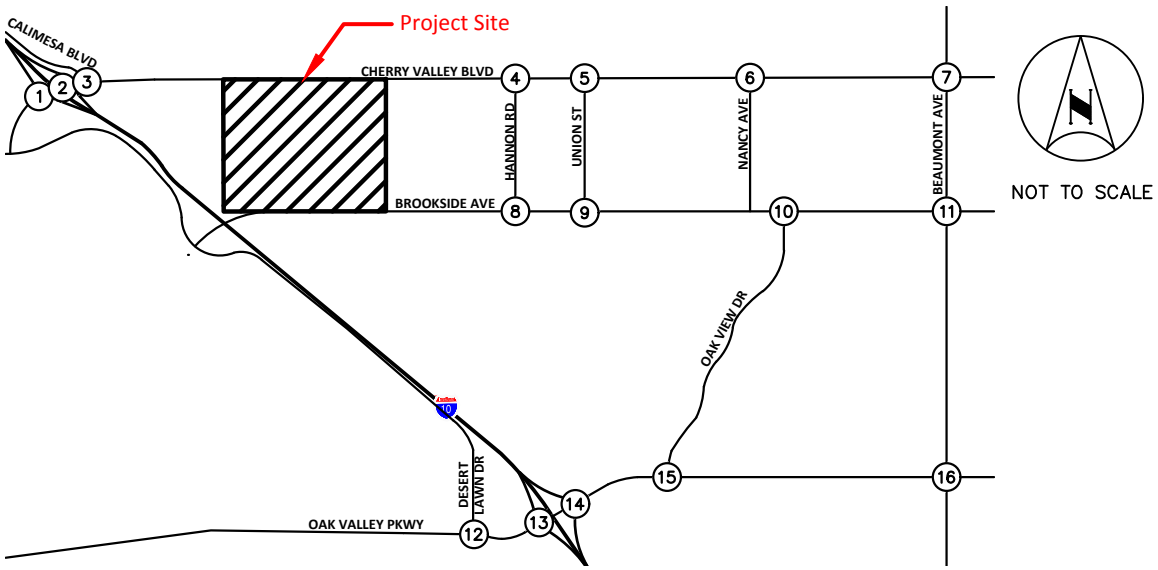
LEGEND:

Ⓧ = Study Intersection

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

FIGURE 10
CUMULATIVE PROJECT TRAFFIC VOLUMES

Kimley»Horn



1. I-10 EB Ramps at Cherry Valley Blvd

484/1056 ↓ 0/4 ↓ 213/507 ↙
←308/767
←201/150
1038/793 →
523/506 ↘

2. I-10 WB Ramps at Cherry Valley Blvd

←561/330
←234/251
1033/695 ↗
233/603 →
246/673 ↑ 1/4 ↑ 91/225 ↗

3. Calimesa Blvd at Cherry Valley Blvd

128/118 ↓ 45/78 ↓ ↖61/66
←758/510
66/156 ↗
277/695 →

4. Hannon St at Cherry Valley Blvd

←674/487
284/653 →
18/55 ↘
87/50 ↑ 0/1 ↗

5. Union St at Cherry Valley Blvd

102/33 ↓ 3/4 ↓ 0/2 ↓ ↖1/2
←512/440
←1/3
25/65 ↗
251/577 →
13/16 ↘
53/19 ↑ 1/3 ↑ 1/1 ↗

6. Nancy St at Cherry Valley Blvd

36/19 ↓ 25/18 ↓ 5/13 ↓ ↖1/8
←480/358
←3/11
17/22 ↗
178/502 →
69/62 ↘
42/70 ↑ 19/20 ↑ 4/6 ↗

7. Beaumont Ave at Cherry Valley Blvd

53/57 ↓ 281/389 ↓ 8/17 ↓ ↖7/11
←86/63
←8/16
43/64 ↗
53/92 →
156/365 ↘
272/268 ↑ 341/355 ↑ 8/28 ↗

8. Hannon St at Brookside Ave

4/19 ↓ 1/5 ↓ 7/19 ↓ ↖5/22
←51/114
←1/3
63/25 ↗
69/101 →
0/1 ↘
0/3 ↑ 4/2 ↑ 1/5 ↗

9. Union St at Brookside Ave

3/7 ↓ 0/2 ↓ 16/14 ↓ ↖36/20
←53/133
←1/5
1/4 ↗
77/120 →
0/2 ↘
0/1 ↑ 7/1 ↑ 4/10 ↗

10. Oak View Dr at Brookside Ave

←42/137
←28/75
93/71 →
63/76 ↘
43/67 ↑ 70/29 ↗

11. Beaumont Ave at Brookside Ave

28/14 ↓ 370/635 ↓ 341/301 ↓ ↖231/421
←73/46
←56/64
3/29 ↗
39/75 →
49/99 ↘
73/53 ↑ 494/511 ↑ 25/78 ↗

12. Desert Lawn Dr at Oak Valley Pkwy

35/45 ↓ 301/212 ↓ ↖141/260
←363/724
22/53 ↗
545/687 →

13. I-10 EB Ramps at Oak Valley Pkwy

185/475 ↓ 7/8 ↓ 525/1404 ↓ ←387/836
←873/746
600/609 →
442/358 ↘

14. I-10 WB Ramps at Oak Valley Pkwy

↖1341/943
←1007/1003
445/336 ↗
671/1658 →
227/579 ↑ 1/7 ↑ 421/1114 ↗

15. Oak View Dr at Oak Valley Pkwy

254/149 ↓ 126/106 ↓ ↖61/141
←1792/1196
147/205 ↗
667/1916 →

16. Beaumont Ave at Oak Valley Pkwy

227/203 ↓ 307/273 ↓ 130/430 ↓ ↖349/294
←986/823
←1121/789
107/278 ↗
441/1047 →
70/82 ↘
60/90 ↑ 221/409 ↑ 414/1240 ↗

D1. Cherry Valley Blvd at West Project Dwy

←819/576
321/773 →

D2. Cherry Valley Blvd at Middle Project Dwy

←819/576
321/773 →

D3. Cherry Valley Blvd at East Project Dwy

←819/576
321/773 →

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 11
OPENING YEAR 2024 CUMULATIVE TRAFFIC VOLUMES

Kimley»Horn

TABLE 5
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2024 CUMULATIVE CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	I-10 EB Ramps at Cherry Valley Boulevard	U	295.0	F	537.9	F
2	I-10 WB Ramps at Cherry Valley Boulevard	U	220.6	F	289.1	F
3	Calimesa Boulevard at Cherry Valley Boulevard	U	46.0	E	229.3	F
4	Hannon Road at Cherry Valley Boulevard	U	25.6	D	29.7	D
5	Union Street at Cherry Valley Boulevard	U	15.6	C	26.0	D
6	Nancy Avenue at Cherry Valley Boulevard	U	16.0	C	22.2	C
7	Beaumont Avenue at Cherry Valley Boulevard	S	26.0	C	31.1	C
8	Hannon Road at Brookside Avenue	U	11.2	B	12.1	B
9	Union Street at Brookside Avenue	U	10.1	B	11.8	B
10	Oak View Drive at Brookside Avenue	U	8.4	A	8.8	A
11	Beaumont Avenue at Brookside Avenue	S	33.4	C	54.8	D
12	Desert Lawn Drive at Oak Valley Parkway	U	60.0	F	115.2	F
13	I-10 EB Ramps at Oak Valley Parkway	S	359.2	F	1007.7	F
14	I-10 WB Ramps at Oak Valley Parkway	S	388.6	F	544.6	F
15	Oak View Drive at Oak Valley Parkway	S	23.0	C	96.9	F
16	Beaumont Avenue at Oak Valley Parkway	S	200.5	F	384.8	F

Note:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

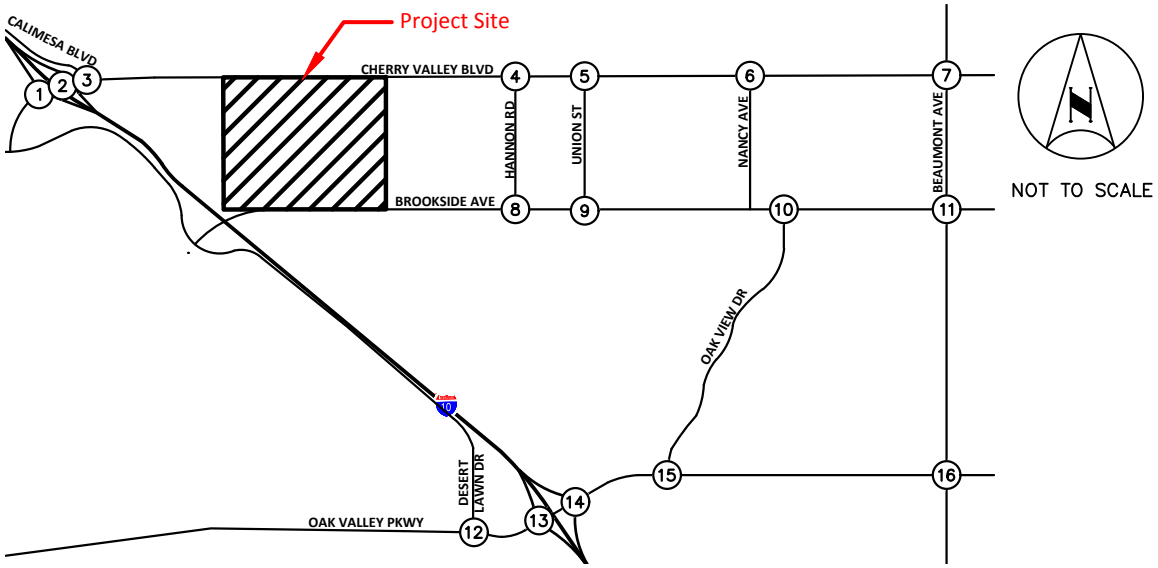
Opening Year 2024 Plus Cumulative Projects Plus Project (Phase 1) Conditions

Project-related traffic volumes for the Project were added to the Year 2024 Plus Cumulative Projects forecasts to develop Opening Year 2024 Plus Project (Phase 1) traffic forecast volumes. The resulting traffic volumes are shown on Figure 12.

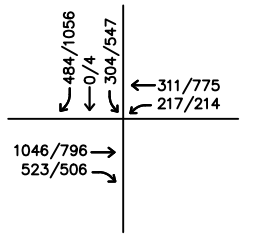
The results of the Year 2024 Plus Project (Phase 1) intersection analysis are shown on Table 6. Review of this table shows that, with the addition of ambient growth, cumulative project volumes, and the project volumes, the following study intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #4 – Hannon Road at Cherry Valley Boulevard – PM: LOS E
- #5 – Union Street at Cherry Valley Boulevard – PM: LOS E
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 Westbound Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

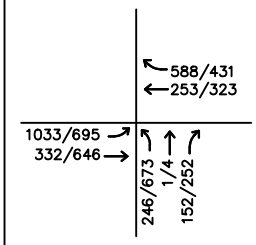
Intersection analysis worksheets are provided in *Appendix D*.



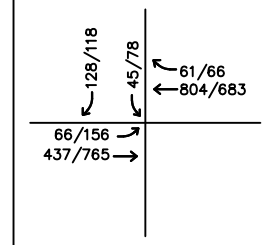
1. I-10 EB Ramps at Cherry Valley Blvd



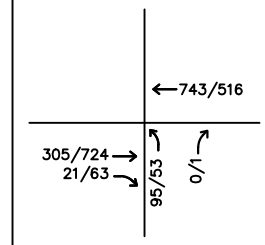
2. I-10 WB Ramps at Cherry Valley Blvd



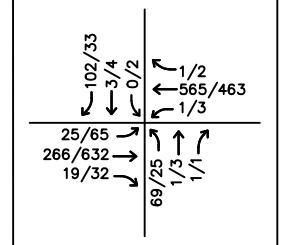
3. Calimesa Blvd at Cherry Valley Blvd



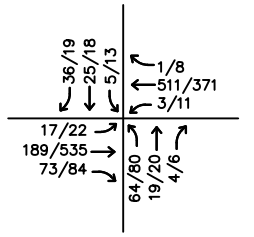
4. Hannon St at Cherry Valley Blvd



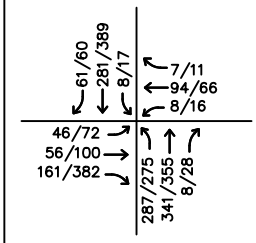
5. Union St at Cherry Valley Blvd



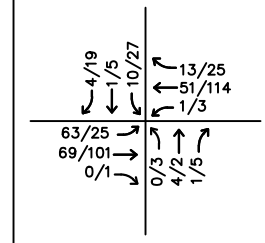
6. Nancy St at Cherry Valley Blvd



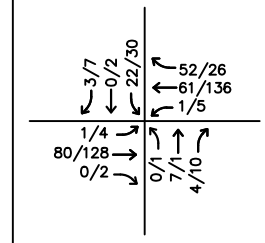
7. Beaumont Ave at Cherry Valley Blvd



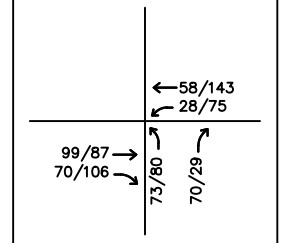
8. Hannon St at Brookside Ave



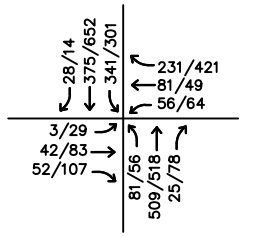
9. Union St at Brookside Ave



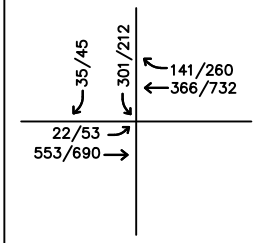
10. Oak View Dr at Brookside Ave



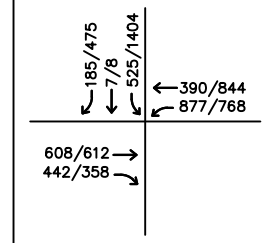
11. Beaumont Ave at Brookside Ave



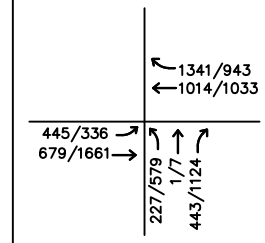
12. Desert Lawn Dr at Oak Valley Pkwy



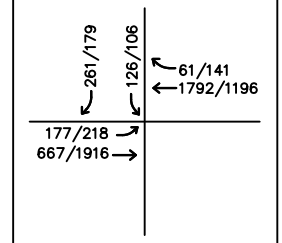
13. I-10 EB Ramps at Oak Valley Pkwy



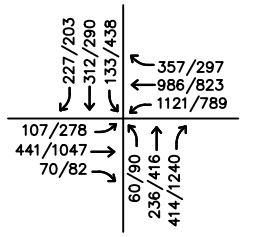
14. I-10 WB Ramps at Oak Valley Pkwy



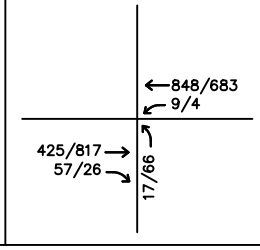
15. Oak View Dr at Oak Valley Pkwy



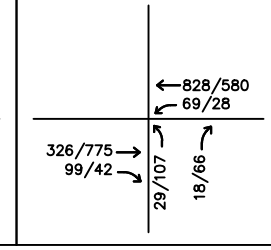
16. Beaumont Ave at Oak Valley Pkwy



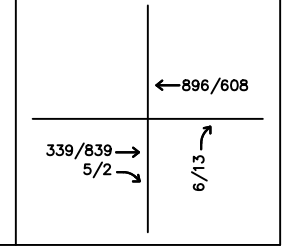
D1. Cherry Valley Blvd at West Project Dwy



D2. Cherry Valley Blvd at Middle Project Dwy



D3. Cherry Valley Blvd at East Project Dwy



LEGEND:

(X) = Study Intersection

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

FIGURE 12
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT (PHASE 1) TRAFFIC VOLUMES

Kimley»Horn

TABLE 6
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2024 CUMULATIVE PLUS PROJECT (PHASE 1) CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Sig Effect?	Without Project		With Project		Change in Delay	Sig Effect?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	I-10 EB Ramps at Cherry Valley Boulevard	U	295.0	F	316.2	F	21.2	Yes	537.9	F	561.6	F	23.7	Yes
2	I-10 WB Ramps at Cherry Valley Boulevard	U	220.6	F	253.9	F	33.3	Yes	289.1	F	322.9	F	33.8	Yes
3	Calimesa Boulevard at Cherry Valley Boulevard	U	46.0	E	71.1	F	25.1	Yes	229.3	F	548.9	F	319.6	Yes
4	Hannon Road at Cherry Valley Boulevard	U	25.6	D	31.7	D	6.1	No	29.7	D	36.2	E	6.5	Yes
5	Union Street at Cherry Valley Boulevard	U	15.6	C	19.9	C	4.3	No	26.0	D	39.7	E	13.7	Yes
6	Nancy Avenue at Cherry Valley Boulevard	U	16.0	C	19.0	C	3.0	No	22.2	C	27.2	D	5.0	No
7	Beaumont Avenue at Cherry Valley Boulevard	S	26.0	C	26.5	C	0.5	No	31.1	C	31.9	C	0.8	No
8	Hannon Road at Brookside Avenue	U	11.2	B	11.2	B	0.1	No	12.1	B	12.3	B	0.1	No
9	Union Street at Brookside Avenue	U	10.1	B	10.3	B	0.2	No	11.8	B	12.2	B	0.4	No
10	Oak View Drive at Brookside Avenue	U	8.4	A	8.8	A	0.4	No	8.8	A	9.1	A	0.3	No
11	Beaumont Avenue at Brookside Avenue	S	33.4	C	34.2	C	0.8	No	54.8	D	56.2	E	1.4	Yes
12	Desert Lawn Drive at Oak Valley Parkway	U	60.0	F	62.9	F	2.9	No	115.2	F	116.7	F	1.5	No
13	I-10 EB Ramps at Oak Valley Parkway	S	359.2	F	361.6	F	2.4	No	1007.7	F	1008.0	F	0.3	No
14	I-10 WB Ramps at Oak Valley Parkway	S	388.6	F	392.6	F	4.0	No	544.6	F	551.3	F	6.7	Yes
15	Oak View Drive at Oak Valley Parkway	S	23.0	C	25.4	C	2.4	No	96.9	F	104.8	F	7.9	Yes
16	Beaumont Avenue at Oak Valley Parkway	S	200.5	F	200.5	F	0.0	No	384.8	F	384.9	F	0.1	No
D1	Cherry Valley Boulevard at West Project Dwy	S	-	-	3.3	A	-	-	-	-	5.8	A	-	-
D2	Cherry Valley Boulevard at Middle Project Dwy	S	-	-	4.1	A	-	-	-	-	7.8	A	-	-
D3	Cherry Valley Boulevard at East Project Dwy	U	-	-	9.4	A	-	-	-	-	11.5	B	-	-

Notes:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

OPENING YEAR 2027 CUMULATIVE CONDITIONS

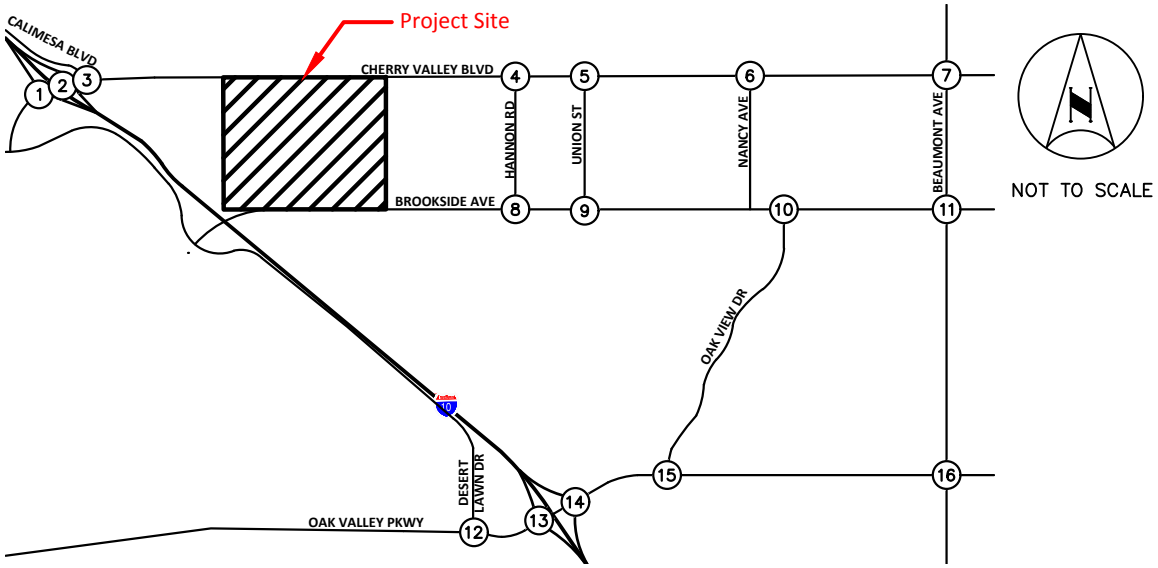
The project Opening Year for Phases 1 and 2 is anticipated to be Year 2027. Opening Year 2027 traffic forecasts have been developed by adding an ambient growth factor of 2.0 percent per year to Opening Year 2027 Cumulative traffic volumes at the study intersections. The resulting traffic volumes are shown on Figure 13.

Peak Hour Intersection Operation

The results of the Opening Year 2027 Cumulative intersection analysis are summarized on Table 7. Review of this table shows that, with the addition of ambient growth and Cumulative Project volumes, the following study intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

Intersection analysis worksheets are provided in *Appendix D*.



1. I-10 EB Ramps at Cherry Valley Blvd

503/1088
0/4
221/525
317/783
203/152
1080/816
535/513

2. I-10 WB Ramps at Cherry Valley Blvd

587/346
238/258
1074/713
243/625
252/684
1/4
93/227

3. Calimesa Blvd at Cherry Valley Blvd

129/121
47/83
65/69
786/529
68/159
287/718

4. Hannon St at Cherry Valley Blvd

702/505
294/678
19/58
91/53
0/1

5. Union St at Cherry Valley Blvd

108/35
3/4
0/2
1/2
531/455
1/3
27/68
260/598
13/17
56/20
1/3
1/1

6. Nancy St at Cherry Valley Blvd

38/20
27/19
6/13
1/9
499/371
3/11
18/24
183/520
72/63
43/72
20/21
4/7

7. Beaumont Ave at Cherry Valley Blvd

56/60
295/402
9/18
8/11
91/66
9/17
46/67
56/97
161/376
278/276
353/370
9/29

8. Hannon St at Brookside Ave

4/20
1/6
8/20
6/24
54/121
1/3
66/27
73/106
0/1
0/3
4/2
1/6

9. Union St at Brookside Ave

3/8
0/2
17/15
38/21
56/140
1/6
1/4
82/127
0/2
0/1
8/1
4/10

10. Oak View Dr at Brookside Ave

45/144
29/80
99/75
66/81
46/71
74/30

11. Beaumont Ave at Brookside Ave

29/15
384/653
344/308
239/428
77/48
59/67
3/30
41/80
52/104
77/56
506/528
27/83

12. Desert Lawn Dr at Oak Valley Pkwy

37/47
318/224
149/274
375/740
24/56
560/705

13. I-10 EB Ramps at Oak Valley Pkwy

190/483
8/9
540/1435
401/858
888/756
618/625
461/372

14. I-10 WB Ramps at Oak Valley Pkwy

1381/963
1026/1020
455/343
692/1698
235/594
1/8
430/1129

15. Oak View Dr at Oak Valley Pkwy

269/158
133/112
65/149
1833/1224
156/216
685/1955

16. Beaumont Ave at Oak Valley Pkwy

238/214
322/286
131/436
352/299
1013/846
1125/794
113/291
456/1071
74/86
64/95
232/430
417/1243

D1. Cherry Valley Blvd at West Project Dwy

851/598
334/801

D2. Cherry Valley Blvd at Middle Project Dwy

851/598
334/801

D3. Cherry Valley Blvd at East Project Dwy

851/598
334/801

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 13
OPENING YEAR 2027 CUMULATIVE TRAFFIC VOLUMES

Kimley»Horn

TABLE 7
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2027 CUMULATIVE CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	I-10 EB Ramps at Cherry Valley Boulevard	U	319.9	F	566.0	F
2	I-10 WB Ramps at Cherry Valley Boulevard	U	239.0	F	306.7	F
3	Calimesa Boulevard at Cherry Valley Boulevard	U	53.1	F	310.2	F
4	Hannon Road at Cherry Valley Boulevard	U	28.0	D	32.6	D
5	Union Street at Cherry Valley Boulevard	U	17.0	C	30.6	D
6	Nancy Avenue at Cherry Valley Boulevard	U	17.4	C	25.2	D
7	Beaumont Avenue at Cherry Valley Boulevard	S	26.2	C	31.8	C
8	Hannon Road at Brookside Avenue	U	11.3	B	12.4	B
9	Union Street at Brookside Avenue	U	10.1	B	12.0	B
10	Oak View Drive at Brookside Avenue	U	8.5	A	8.9	A
11	Beaumont Avenue at Brookside Avenue	S	34.7	C	60.3	E
12	Desert Lawn Drive at Oak Valley Parkway	U	69.5	F	127.0	F
13	I-10 EB Ramps at Oak Valley Parkway	S	379.3	F	1036.3	F
14	I-10 WB Ramps at Oak Valley Parkway	S	409.9	F	566.0	F
15	Oak View Drive at Oak Valley Parkway	S	25.6	C	105.3	F
16	Beaumont Avenue at Oak Valley Parkway	S	200.5	F	388.7	F

Note:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

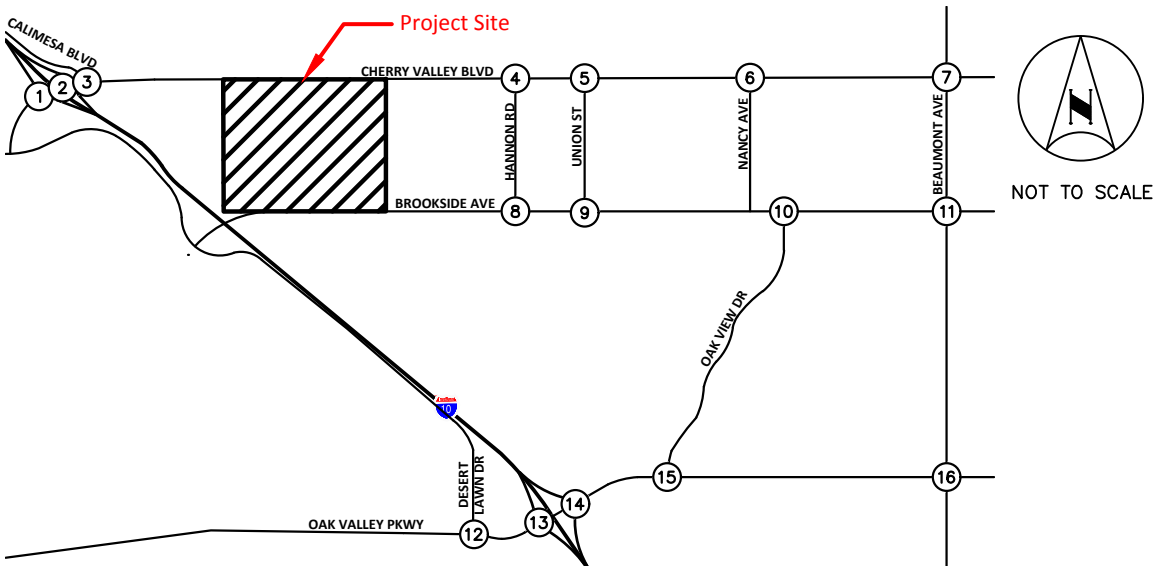
Opening Year 2027 Plus Cumulative Projects Plus Project (Phases 1 and 2) Conditions

Project-related traffic volumes for the Project were added to the Year 2027 Plus Cumulative Projects forecasts to develop Opening Year 2027 Plus Project (Phases 1 and 2) traffic forecast volumes. The resulting traffic volumes are shown on Figure 14.

The results of the Year 2027 Plus Project (Phases 1 and 2) intersection analysis are shown on Table 8. Review of this table shows that, with the addition of ambient growth, cumulative project volumes, and the project volumes, the following study intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #6 – Nancy Avenue at Cherry Valley Boulevard – AM: LOS E; PM: LOS E
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 Westbound Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

Intersection analysis worksheets are provided in *Appendix D*.



1. I-10 EB Ramps at Cherry Valley Blvd

503/1088 ↙ 0/4 ↓ 398/639 ↘
← 332/802
← 256/250
1102/831 →
535/513 ↘

2. I-10 WB Ramps at Cherry Valley Blvd

← 688/514
← 306/375
1074/713 ↗
442/754 →
252/684 ↖ 1/4 ↑ 197/291 ↗

3. Calimesa Blvd at Cherry Valley Blvd

129/121 ↙ 47/83 ↖
← 65/69
← 955/814
68/159 ↗
590/911 →

4. Hannon St at Cherry Valley Blvd

← 899/644
425/849 →
34/77 ↘
113/68 ↑ 0/1 ↗

5. Union St at Cherry Valley Blvd

108/35 ↙ 3/4 ↓ 0/2 ↘
← 1/2
← 684/564
← 1/3
27/68 ↗
361/731 →
43/55 ↘
100/50 ↖ 1/3 ↑ 1/1 ↗

6. Nancy St at Cherry Valley Blvd

38/20 ↙ 27/19 ↓ 6/13 ↘
← 1/9
← 587/433
← 3/11
18/24 ↗
243/597 →
113/119 ↘
108/119 ↖ 20/21 ↑ 4/7 ↗

7. Beaumont Ave at Cherry Valley Blvd

78/75 ↙ 295/402 ↓ 9/18 ↘
← 8/11
← 113/81
← 9/17
61/86 ↗
71/116 →
191/415 ↘
322/308 ↖ 353/370 ↑ 9/29 ↗

8. Hannon St at Brookside Ave

4/20 ↙ 1/6 ↓ 23/39 ↘
← 28/39
← 54/121
← 1/3
66/27 ↗
73/106 →
0/1 ↘
0/3 ↖ 4/2 ↑ 1/6 ↗

9. Union St at Brookside Ave

3/8 ↙ 0/2 ↓ 47/53 ↘
← 82/51
← 78/155
← 1/6
1/4 ↗
97/146 →
0/2 ↘
0/1 ↖ 8/1 ↑ 4/10 ↗

10. Oak View Dr at Brookside Ave

← 89/174
← 29/80
129/113 →
122/156 ↘
133/133 ↖ 74/30 ↗

11. Beaumont Ave at Brookside Ave

29/15 ↙ 414/692 ↓ 344/308 ↘
← 239/428
← 99/63
← 59/67
3/30 ↗
56/99 →
67/123 ↘
99/71 ↖ 550/560 ↑ 27/83 ↗

12. Desert Lawn Dr at Oak Valley Pkwy

37/47 ↙ 318/224 ↓
← 149/274
← 390/759
24/56 ↗
582/720 →

13. I-10 EB Ramps at Oak Valley Pkwy

190/483 ↙ 45/43 ↓ 540/1435 ↘
← 416/877
← 929/812
640/640 →
461/372 ↘

14. I-10 WB Ramps at Oak Valley Pkwy

← 1381/963
← 1082/1095
455/343 ↗
714/1713 →
235/594 ↖ 1/8 ↑ 495/1176 ↗

15. Oak View Dr at Oak Valley Pkwy

325/233 ↙ 133/112 ↓
← 65/149
← 1833/1224
243/278 ↗
685/1955 →

16. Beaumont Ave at Oak Valley Pkwy

238/214 ↙ 352/325 ↓ 146/455 ↘
← 374/314
← 1013/846
← 1125/794
113/291 ↗
456/1071 →
74/86 ↘
64/95 ↖ 276/462 ↑ 417/1243 ↗

D1. Cherry Valley Blvd at West Project Dwy

← 1003/817
← 9/4
581/968 →
57/26 ↘
17/66 ↖

D2. Cherry Valley Blvd at Middle Project Dwy

← 860/602
← 211/150
482/926 →
99/42 ↘
152/219 ↖ 18/66 ↗

D3. Cherry Valley Blvd at East Project Dwy

← 1070/752
352/867 →
148/125 ↘
128/124 ↗

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 14
OPENING YEAR 2027 CUMULATIVE PLUS PROJECT (PHASE 1 AND 2) TRAFFIC VOLUMES

Kimley»Horn

TABLE 8
SUMMARY OF INTERSECTION OPERATION
OPENING YEAR 2027 CUMULATIVE PLUS PROJECT (PHASE 1 AND 2) CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Sig Impact?	Without Project		With Project		Change in Delay	Sig Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	I-10 EB Ramps at Cherry Valley Boulevard	U	319.9	F	371.4	F	51.5	Yes	566.0	F	631.2	F	65.2	Yes
2	I-10 WB Ramps at Cherry Valley Boulevard	U	239.0	F	323.1	F	84.1	Yes	306.7	F	377.3	F	70.6	Yes
3	Calimesa Boulevard at Cherry Valley Boulevard	U	53.1	F	199.6	F	146.5	Yes	310.2	F	1417.6	F	1107.4	Yes
4	Hannon Road at Cherry Valley Boulevard	U	28.0	D	81.0	F	53.0	Yes	32.6	D	77.2	F	44.6	Yes
5	Union Street at Cherry Valley Boulevard	U	17.0	C	52.5	F	35.5	Yes	30.6	D	92.2	F	61.6	Yes
6	Nancy Avenue at Cherry Valley Boulevard	U	17.4	C	36.7	E	19.3	Yes	25.2	D	49.9	E	24.7	Yes
7	Beaumont Avenue at Cherry Valley Boulevard	S	26.2	C	28.2	C	2.0	No	31.8	C	34.5	C	2.7	No
8	Hannon Road at Brookside Avenue	U	11.3	B	11.6	B	0.3	No	12.4	B	12.8	B	0.4	No
9	Union Street at Brookside Avenue	U	10.1	B	10.7	B	0.6	No	12.0	B	13.3	B	1.3	No
10	Oak View Drive at Brookside Avenue	U	8.5	A	10.3	B	1.8	No	8.9	A	10.3	B	1.4	No
11	Beaumont Avenue at Brookside Avenue	S	34.7	C	37.8	D	3.1	No	60.3	E	67.2	E	6.9	Yes
12	Desert Lawn Drive at Oak Valley Parkway	U	69.5	F	79.0	F	9.5	Yes	127.0	F	134.4	F	7.4	Yes
13	I-10 EB Ramps at Oak Valley Parkway	S	379.3	F	404.8	F	25.5	Yes	1036.3	F	1057.6	F	21.3	Yes
14	I-10 WB Ramps at Oak Valley Parkway	S	409.9	F	429.1	F	19.2	Yes	566.0	F	592.9	F	26.9	Yes
15	Oak View Drive at Oak Valley Parkway	S	25.6	C	44.6	D	19.0	No	105.3	F	125.5	F	20.2	Yes
16	Beaumont Avenue at Oak Valley Parkway	S	200.5	F	200.5	F	0.0	No	388.7	F	389.0	F	0.3	No
D1	Cherry Valley Boulevard at West Project Dwy	S	-	-	3.8	A	-	-	-	-	6.5	A	-	-
D2	Cherry Valley Boulevard at Middle Project Dwy	S	-	-	8.8	A	-	-	-	-	11.4	B	-	-
D3	Cherry Valley Boulevard at East Project Dwy	U	-	-	11.1	B	-	-	-	-	14.6	B	-	-

Notes:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

FUTURE HORIZON YEAR CONDITIONS

Horizon Year 2040 Forecasts

To derive intersection forecasts for the Horizon Year 2040 condition, the Riverside Transportation Analysis Model (RivTAM) Base Year 2012 and Horizon Year 2040 future traffic projections were used. The resulting traffic forecasts for Horizon Year conditions are shown on Figure 15.

The raw volumes obtained from the model output were post- processed by determining the annual growth between the base model year and the future model year and applying the growth increment to existing count volumes. This was accomplished using the B-Turns methodology developed by the Federal Highway Administration (FHWA). As a conservative approach, if a turning movement volume produced by this process was less than the Opening Year 2027 Cumulative forecast volume for that movement, manual adjustments were made to assure that all forecast Horizon Year volumes would not be less than the Opening Year 2027 Cumulative forecast volumes. The RivTAM Model plots and B-Turns worksheets are provided in *Appendix E*

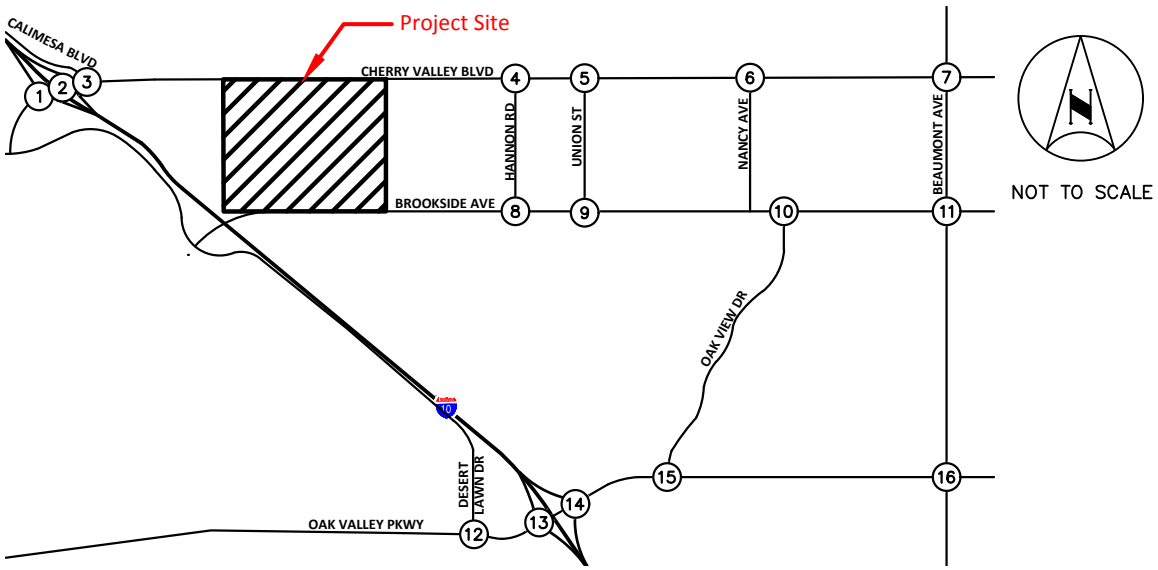
Horizon Year 2040 Operating Conditions

Intersection Level of Service analysis was conducted for the Horizon Year 2040 conditions. The resulting traffic volumes for Horizon Year 2040 conditions are shown on Figure 14 (previously mentioned). The results of the intersection analysis are shown on Table 9*.*

Review of this table indicates that, under Horizon Year 2040 conditions, the following intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #6 – Nancy Avenue at Cherry Valley Boulevard – PM: LOS F
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

Intersection analysis worksheets are provided in *Appendix D*.



1. I-10 EB Ramps at Cherry Valley Blvd

503/1088 ↙ 0/7 ↓ 221/546 ↘
← 317/783
← 203/152
1080/816 →
535/513 ↘

2. I-10 WB Ramps at Cherry Valley Blvd

↖ 733/448
← 238/258
1074/713 ↗
327/752 →
↖ 252/684 ↑ 5/9 ↗ 224/227

3. Calimesa Blvd at Cherry Valley Blvd

129/121 ↙ 53/114 ↘
↖ 173/132
← 786/529
123/159 ↗
451/818 →

4. Hannon St at Cherry Valley Blvd

← 757/579
304/795 →
42/86 ↘
↖ 194/100 ↗ 0/3

5. Union St at Cherry Valley Blvd

110/37 ↙ 5/9 ↓ 0/6 ↘
↖ 4/6
← 707/600
← 3/13
31/77 ↗
366/852 →
13/28 ↘
↖ 65/30 ↑ 2/6 ↗ 4/4

6. Nancy St at Cherry Valley Blvd

58/21 ↙ 27/19 ↓ 6/13 ↘
↖ 1/9
← 600/498
← 3/11
26/24 ↗
210/690 →
72/63 ↘
↖ 43/72 ↑ 20/21 ↗ 4/8

7. Beaumont Ave at Cherry Valley Blvd

56/60 ↙ 295/402 ↓ 13/26 ↘
↖ 13/22
← 268/213
← 38/55
46/75 ↗
118/272 →
161/376 ↘
↖ 278/276 ↑ 353/370 ↗ 33/73

8. Hannon St at Brookside Ave

9/20 ↙ 24/65 ↓ 9/20 ↘
↖ 6/26
← 54/121
← 12/42
66/55 ↗
73/106 →
0/25 ↘
↖ 0/32 ↑ 135/30 ↗ 27/35

9. Union St at Brookside Ave

8/22 ↙ 0/3 ↓ 17/24 ↘
↖ 49/32
← 71/169
← 1/6
5/11 ↗
119/153 →
0/2 ↘
↖ 0/1 ↑ 10/2 ↗ 4/10

10. Oak View Dr at Brookside Ave

← 71/169
← 29/80
119/153 →
66/81 ↘
↖ 46/71 ↗ 74/30

11. Beaumont Ave at Brookside Ave

35/23 ↙ 384/653 ↓ 344/308 ↘
↖ 247/428
← 103/67
← 80/70
4/43 ↗
47/129 →
55/104 ↘
↖ 77/62 ↑ 506/528 ↗ 28/114

12. Desert Lawn Dr at Oak Valley Pkwy

105/188 ↙ 318/224 ↘
↖ 178/283
← 625/740
53/219 ↗
560/705 →

13. I-10 EB Ramps at Oak Valley Pkwy

236/483 ↙ 8/9 ↓ 540/1435 ↘
← 589/858
← 888/756
618/661 →
461/372 ↘

14. I-10 WB Ramps at Oak Valley Pkwy

↖ 1381/963
← 1026/1020
455/343 ↗
692/1698 →
↖ 235/594 ↑ 1/8 ↗ 430/1129

15. Oak View Dr at Oak Valley Pkwy

269/158 ↙ 133/112 ↘
↖ 65/149
← 1833/1224
156/216 ↗
685/1955 →

16. Beaumont Ave at Oak Valley Pkwy

384/319 ↙ 349/318 ↓ 131/436 ↘
↖ 352/299
← 1013/846
← 1125/794
215/412 ↗
456/1071 →
131/157 ↘
↖ 105/172 ↑ 286/452 ↗ 417/1243

D1. Cherry Valley Blvd at West Project Dwy

← 959/661
504/932 →

D2. Cherry Valley Blvd at Middle Project Dwy

← 959/661
504/932 →

D3. Cherry Valley Blvd at East Project Dwy

← 959/661
504/932 →

LEGEND:

Ⓧ = Study Intersection

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

FIGURE 15
HORIZON YEAR 2040 TRAFFIC VOLUMES

Kimley»Horn

TABLE 9
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS
1	I-10 EB Ramps at Cherry Valley Boulevard	U	319.9	F	577.9	F
2	I-10 WB Ramps at Cherry Valley Boulevard	U	275.3	F	354.5	F
3	Calimesa Boulevard at Cherry Valley Boulevard	U	172.0	F	759.7	F
4	Hannon Road at Cherry Valley Boulevard	U	84.0	F	87.6	F
5	Union Street at Cherry Valley Boulevard	U	53.4	F	138.6	F
6	Nancy Avenue at Cherry Valley Boulevard	U	32.2	D	78.0	F
7	Beaumont Avenue at Cherry Valley Boulevard	S	29.4	C	32.9	C
8	Hannon Road at Brookside Avenue	U	13.3	B	15.2	C
9	Union Street at Brookside Avenue	U	10.7	B	12.1	B
10	Oak View Drive at Brookside Avenue	U	8.8	A	9.5	A
11	Beaumont Avenue at Brookside Avenue	S	36.8	D	71.0	E
12	Desert Lawn Drive at Oak Valley Parkway	U	92.9	F	158.5	F
13	I-10 EB Ramps at Oak Valley Parkway	S	379.3	F	1037.2	F
14	I-10 WB Ramps at Oak Valley Parkway	S	409.9	F	566.0	F
15	Oak View Drive at Oak Valley Parkway	S	25.6	C	105.3	F
16	Beaumont Avenue at Oak Valley Parkway	S	203.6	F	393.8	F

Note:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

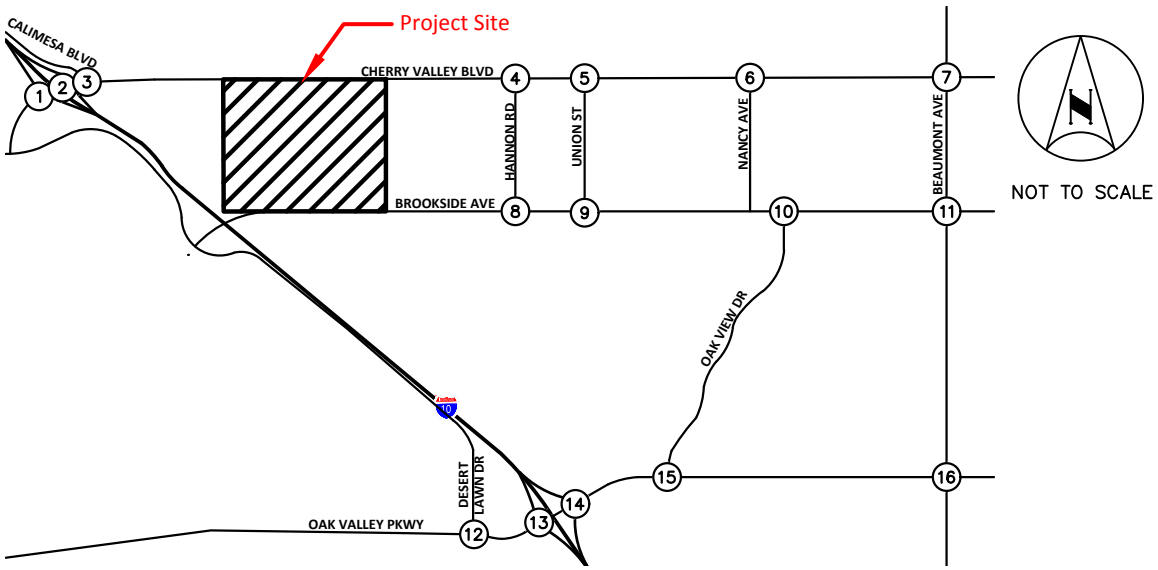
Horizon Year 2040 Plus Project (Phases 1 and 2) Conditions

Project-related traffic volumes for the Project were added to the Horizon Year 2040 forecasts to develop Horizon Year 2040 Plus Project (Phases 1 and 2) traffic forecast volumes. The resulting traffic volumes are shown on Figure 16.

The results of the Horizon Year 2040 Plus Project (Phases 1 and 2) intersection analysis are shown on Table 10. Review of this table indicates that, under Horizon Year 2040 conditions, the following intersections would operate at an unacceptable Level of Service:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #6 – Nancy Avenue at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

Intersection analysis worksheets are provided in *Appendix D*.



1. I-10 EB Ramps at Cherry Valley Blvd

503/1088 ↓ 0/7 ↓ 398/660 ↘
← 332/802
← 256/250
1102/831 →
535/513 ↘

2. I-10 WB Ramps at Cherry Valley Blvd

← 834/616
← 306/375
1074/713 ↗
526/881 →
252/684 ↑ 5/9 ↑ 328/291 ↗

3. Calimesa Blvd at Cherry Valley Blvd

129/121 ↓ 53/114 ↓
← 173/132
← 955/814
123/159 ↗
754/1011 →

4. Hannon St at Cherry Valley Blvd

← 954/718
435/966 →
57/105 ↘
216/115 ↑ 0/3 ↗

5. Union St at Cherry Valley Blvd

110/37 ↓ 5/9 ↓ 0/6 ↓
← 4/6
← 860/709
← 3/13
31/77 ↗
467/985 →
43/66 ↘
109/60 ↑ 2/6 ↑ 4/4 ↗

6. Nancy St at Cherry Valley Blvd

58/21 ↓ 27/19 ↓ 6/13 ↓
← 1/9
← 688/560
← 3/11
26/24 ↗
270/767 →
113/119 ↘
108/119 ↑ 20/21 ↑ 4/8 ↗

7. Beaumont Ave at Cherry Valley Blvd

78/75 ↓ 295/402 ↓ 13/26 ↓
← 13/22
← 290/228
← 38/55
61/94 ↗
133/291 →
191/415 ↘
322/308 ↑ 353/370 ↑ 33/73 ↗

8. Hannon St at Brookside Ave

9/20 ↓ 24/65 ↓ 24/39 ↓
← 28/41
← 54/121
← 12/42
66/55 ↗
73/106 →
0/25 ↘
0/32 ↑ 135/30 ↑ 27/35 ↗

9. Union St at Brookside Ave

8/22 ↓ 0/3 ↓ 47/62 ↓
← 93/62
← 93/184
← 1/6
5/11 ↗
134/172 →
0/2 ↘
0/1 ↑ 10/2 ↑ 4/10 ↗

10. Oak View Dr at Brookside Ave

← 115/199
← 29/80
149/191 →
122/156 ↘
133/133 ↑ 74/30 ↗

11. Beaumont Ave at Brookside Ave

35/23 ↓ 414/692 ↓ 344/308 ↓
← 247/428
← 125/82
← 80/70
4/43 ↗
62/148 →
70/123 ↘
99/77 ↑ 550/560 ↑ 28/114 ↗

12. Desert Lawn Dr at Oak Valley Pkwy

105/188 ↓ 318/224 ↓
← 178/283
← 640/759
53/219 ↗
582/720 →

13. I-10 EB Ramps at Oak Valley Pkwy

236/483 ↓ 45/43 ↓ 540/1435 ↓
← 604/877
← 929/812
640/676 →
461/372 ↘

14. I-10 WB Ramps at Oak Valley Pkwy

← 1381/963
← 1082/1095
455/343 ↗
714/1713 →
235/594 ↑ 1/8 ↑ 495/1176 ↗

15. Oak View Dr at Oak Valley Pkwy

325/233 ↓ 133/112 ↓
← 65/149
← 1833/1224
243/278 ↗
685/1955 →

16. Beaumont Ave at Oak Valley Pkwy

384/319 ↓ 379/357 ↓ 146/455 ↓
← 374/314
← 1013/846
← 1125/794
215/412 ↗
456/1071 →
131/157 ↘
105/172 ↑ 330/484 ↑ 417/1243 ↗

D1. Cherry Valley Blvd at West Project Dwy

← 1111/880
← 9/4
751/1099 →
57/26 ↘
17/66 ↑

D2. Cherry Valley Blvd at Middle Project Dwy

← 968/665
← 211/150
652/1057 →
99/42 ↘
152/219 ↑ 18/66 ↗

D3. Cherry Valley Blvd at East Project Dwy

← 1178/815
522/998 →
148/125 ↘
128/124 ↑

LEGEND:

(X) = Study Intersection

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

FIGURE 16
HORIZON YEAR 2040 PLUS PROJECT (PHASE 1 AND 2) TRAFFIC VOLUMES

Kimley»Horn

TABLE 10
SUMMARY OF INTERSECTION OPERATION
HORIZON YEAR 2040 PLUS PROJECT (PHASE 1 AND 2) CONDITIONS

Int. #	Intersection	Traffic Control	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Change in Delay	Sig Impact?	Without Project		With Project		Change in Delay	Sig Impact?
			Delay	LOS	Delay	LOS			Delay	LOS	Delay	LOS		
1	I-10 EB Ramps at Cherry Valley Boulevard	U	319.9	F	371.4	F	51.5	Yes	577.9	F	643.3	F	65.4	Yes
2	I-10 WB Ramps at Cherry Valley Boulevard	U	275.3	F	370.6	F	95.3	Yes	354.5	F	422.0	F	67.5	Yes
3	Calimesa Boulevard at Cherry Valley Boulevard	U	172.0	F	729.8	F	557.8	Yes	759.7	F	3150.6	F	2390.9	Yes
4	Hannon Road at Cherry Valley Boulevard	U	84.0	F	380.7	F	296.7	Yes	87.6	F	334.0	F	246.4	Yes
5	Union Street at Cherry Valley Boulevard	U	53.4	F	141.4	F	88.0	Yes	138.6	F	235.1	F	96.5	Yes
6	Nancy Avenue at Cherry Valley Boulevard	U	32.2	D	72.5	F	40.3	Yes	78.0	F	127.3	F	49.3	Yes
7	Beaumont Avenue at Cherry Valley Boulevard	S	29.4	C	30.9	C	1.5	No	32.9	C	35.0	C	2.1	No
8	Hannon Road at Brookside Avenue	U	13.3	B	13.9	B	0.6	No	15.2	C	15.7	C	0.5	No
9	Union Street at Brookside Avenue	U	10.7	B	11.4	B	0.7	No	12.1	B	13.1	B	1.0	No
10	Oak View Drive at Brookside Avenue	U	8.8	A	10.8	B	2.0	No	9.5	A	11.6	B	2.1	No
11	Beaumont Avenue at Brookside Avenue	S	36.8	D	41.2	D	4.4	No	71.0	E	79.7	E	8.7	Yes
12	Desert Lawn Drive at Oak Valley Parkway	U	92.9	F	102.8	F	9.9	Yes	158.5	F	166.8	F	8.3	Yes
13	I-10 EB Ramps at Oak Valley Parkway	S	379.3	F	401.8	F	22.5	Yes	1037.2	F	1058.5	F	21.3	Yes
14	I-10 WB Ramps at Oak Valley Parkway	S	409.9	F	429.1	F	19.2	Yes	566.0	F	592.9	F	26.9	Yes
15	Oak View Drive at Oak Valley Parkway	S	25.6	C	44.6	D	19.0	No	105.3	F	125.5	F	20.2	Yes
16	Beaumont Avenue at Oak Valley Parkway	S	203.6	F	205.1	F	1.5	No	393.8	F	395.8	F	2.0	No
D1	Cherry Valley Boulevard at West Project Dwy	S	-	-	4.6	A	-	-	-	-	7.6	A	-	-
D2	Cherry Valley Boulevard at Middle Project Dwy	S	-	-	9.1	A	-	-	-	-	11.4	B	-	-
D3	Cherry Valley Boulevard at East Project Dwy	U	-	-	12.2	B	-	-	-	-	16.1	C	-	-

Notes:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

RECOMMENDED IMPROVEMENTS

Based on the impact criteria presented earlier in the report (page 5), the project effects would be considered significant at the following intersections under Opening Year 2024, Opening Year 2027, and Horizon Year 2040 conditions:

- #1 – I-10 EB Ramps at Cherry Valley Boulevard
- #2 – I-10 WB Ramps at Cherry Valley Boulevard
- #3 – Calimesa Boulevard at Cherry Valley Boulevard
- #4 – Hannon Road at Cherry Valley Boulevard
- #5 – Union Street at Cherry Valley Boulevard
- #6 – Nancy Avenue at Cherry Valley Boulevard
- #11 – Beaumont Avenue at Brookside Avenue
- #12 – Desert Lawn Drive at Oak Valley Parkway
- #13 – I-10 EB Ramps at Oak Valley Parkway
- #14 – I-10 WB Ramps at Oak Valley Parkway
- #15 – Oak View Drive at Oak Valley Parkway

Implementation of the following improvements under Opening Year 2024, Opening Year 2027, and Horizon Year 2040 are recommended to either bring the intersection to an acceptable Level of Service or mitigate the project's effect at the study intersection:

<u>#1 – I-10 EB Ramps at Cherry Valley Boulevard</u>

- Install a traffic signal
- Add a westbound left-turn lane
- Add an eastbound right-turn lane
- Add a southbound right-turn lane

<u>#2 – I-10 WB Ramps at Cherry Valley Boulevard</u>

- Install a traffic signal
- Add a northbound left-turn lane
- Add an eastbound left-turn lane
- Add a westbound right-turn lane

<u>#3 – Calimesa Boulevard at Cherry Valley Boulevard</u>

- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane
- Install a traffic signal

<u>#4 – Hannon Road at Cherry Valley Boulevard</u>

- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane
- Install a traffic signal

#5 – Union Street at Cherry Valley Boulevard

- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane
- Install a traffic signal

#6 – Nancy Avenue at Cherry Valley Boulevard

- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane
- Add a dedicated eastbound right-turn lane

#11 – Beaumont Avenue at Brookside Avenue

- Add EB right-turn overlap phase
- Add WB right-turn lane
- Add WB right-turn overlap phase
- Traffic Signal relocation and modification

#12 – Desert Lawn Drive at Oak Valley Parkway

- Add a 2nd eastbound through lane

#13 – I-10 EB Ramps at Oak Valley Parkway

- Add a 2nd southbound left-turn lane
- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane

#14 – I-10 WB Ramps at Oak Valley Parkway

- Add a northbound left-turn lane
- Add a 2nd eastbound through lane
- Add a 2nd westbound through lane

#15 – Oak View Drive at Oak Valley Parkway

- Add a 2nd eastbound through lane
- Modify southbound right-turn lane to free right-turn lane
- Traffic Signal relocation and modification

A summary of the intersection operation before and after implementation of the recommended improvements is provided on Table 11. Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements toward future improvements, or a combination of these approaches. A summary of which improvements are part of the regional TUMF program are shown on Table 12. The project fair share proportion at deficient study intersections under Opening Year 2024, Opening Year 2027, and Horizon Year 2040 are shown on Tables 13, 14, and 15, respectively.

I-10/CHERRY VALLEY BOULEVARD INTERCHANGE

The City of Calimesa, with Caltrans and the County of Riverside proposes to reconstruct the Interstate 10 (I-10)/Cherry Valley Boulevard interchange to relieve congestion and improve traffic operations.

The Locally Preferred Alternative will include the following improvements:

- Widen Cherry Valley Boulevard to two lanes in each direction
- Add turn pockets along Cherry Valley Boulevard approaching on-ramps
- Add pedestrian crosswalks and curb ramps
- Reconstruct and realign on- and off-ramps
- Realign Calimesa Boulevard north of the I-10/Cherry Valley Boulevard interchange
- Provide channelized turning on Cherry Valley Boulevard to Calimesa Boulevard
- Install new traffic signals
- Construct sidewalks and bicycle lanes along Cherry Valley Boulevard
- Add a 1,300-foot-long auxiliary lane to the eastbound off-ramp and 3,400-foot-long auxiliary lane to the westbound on-ramp

The project proposes to contribute towards the planned improvements at the I-10/Cherry Valley Boulevard interchange by a payment of TUMF fee and or fair share contribution.

SITE ADJACENT ROADWAY IMPROVEMENTS

The project would construct the following site adjacent roadway improvements:

- Cherry Valley Boulevard
    - Construction along the Project frontage to its ultimate half width as an Arterial Highway (128-foot right-of-way). A raised median will be constructed by the San Gorgonio Crossing project to the north.
- Brookside Avenue
    - Construction along the Project frontage to its ultimate halfwidth as a Secondary Highway (88-foot right-of-way)

SITE ACCESS IMPROVEMENTS

Project access would consist of three driveways along Cherry Valley Boulevard. The west and middle project driveways would be signalized, and the east project driveway would be an unsignalized right-in-right-out (RIRO) driveway. The project would construct the following site access improvements:

- Cherry Valley Boulevard
  - West Project Driveway
    - A signal modification to provide a four-legged traffic signal (future traffic signal to be installed by adjacent development).
  - Middle Project Driveway
    - Install new traffic signal
    - Construct a 300-foot dedicated eastbound right-turn pocket into the project driveway.
    - One dedicated left-turn and one dedicated right-turn lane at the northbound approach
  - East Project Driveway
    - Install a stop sign on the northbound approach and permit right-in-right-out access only.
- Brookside Avenue
  - No project-related access is planned along Brookside Avenue.

TABLE 11
SUMMARY OF INTERSECTION OPERATION
RECOMMENDED IMPROVEMENTS

Int. #	Intersection	Improvements	Peak Hour	Traffic Control	Opening Year 2024						Opening Year 2027						Horizon Year 2040					
					Without Project		With Project		With Improvements		Without Project		With Project		With Improvements		Without Project		With Project		With Improvements	
					Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	I-10 EB Ramps at Cherry Valley Boulevard	Construct Traffic Signal (TUMF) Add WB left-turn lane (TUMF) Add EB right-turn lane (TUMF) Add SB right-turn lane (TUMF)	AM	S	295.0	F	316.2	F	85.1	F	319.9	F	371.4	F	115.1	F	319.9	F	371.4	F	115.1	F
			PM	S	537.9	F	561.6	F	168.6	F	566.0	F	631.2	F	222.2	F	577.9	F	643.3	F	228.0	F
2	I-10 WB Ramps at Cherry Valley Boulevard	Construct Traffic Signal (TUMF) Add NB left-turn lane (TUMF) Add EB left-turn lane Add WB right-turn lane	AM	S	220.6	F	253.9	F	82.5	F	239.0	F	323.1	F	88.7	F	275.3	F	370.6	F	113.4	F
			PM	S	289.1	F	322.9	F	21.7	C	306.7	F	377.3	F	21.5	C	354.5	F	422.0	F	21.5	C
3	Calimesa Boulevard at Cherry Valley Boulevar	Add 2nd EB through lane (TUMF) Add 2nd WB through lane (TUMF) Construct Traffic Signal	AM	S	46.0	E	71.1	F	8.6	A	53.1	F	199.6	F	8.5	A	172.0	F	729.8	F	9.7	A
			PM	S	229.3	F	548.9	F	10.0	A	310.2	F	1417.6	F	10.8	B	759.7	F	3150.6	F	12.9	B
4	Hannon Road at Cherry Valley Boulevard	Add 2nd EB through lane Add 2nd WB through lane Construct Traffic Signal	AM	S	--	--	--	--	--	--	28.0	D	81.0	F	6.1	A	84.0	F	380.7	F	9.8	A
			PM	S	29.7	D	36.2	E	3.7	A	32.6	D	77.2	F	4.1	A	87.6	F	334.0	F	5.8	A
5	Union Street at Cherry Valley Boulevard	Add 2nd EB through lane Add 2nd WB through lane Construct Traffic Signal	AM	S	--	--	--	--	--	--	17.0	C	52.5	F	14.5	B	53.4	F	141.4	F	22.2	C
			PM	S	26.0	D	39.7	E	4.0	A	30.6	D	92.2	F	4.8	A	138.6	F	235.1	F	5.5	A
6	Nancy Avenue at Cherry Valley Boulevard	Add 2nd EB through lane Add 2nd WB through lane Add dedicated EB right-turn lane	AM	U	--	--	--	--	--	--	17.4	C	36.7	E	12.5	B	32.2	D	72.5	F	14.6	B
			PM	U	--	--	--	--	--	--	25.2	D	49.9	E	13.8	B	78.0	F	127.3	F	19.5	C
11	Beaumont Avenue at Brookside Avenue	Add EB right-turn overlap Add WB right-turn lane with overlap Add WB right-turn lane Traffic Signal relocation and modification	AM	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			PM	S	54.8	D	56.2	E	27.0	C	60.3	E	67.2	E	28.6	C	71.0	E	79.7	E	30.5	C
12	Desert Lawn Drive at Oak Valley Parkway	Add 2nd EB through lane (TUMF)	AM	U	--	--	--	--	--	--	69.5	F	79.0	F	19.2	C	92.9	F	102.8	F	30.5	D
			PM	U	--	--	--	--	--	--	127.0	F	134.4	F	27.0	D	158.5	F	166.8	F	47.0	E
13	I-10 EB Ramps at Oak Valley Parkway	Add 2nd SB left-turn lane (TUMF) Add 2nd EB through lane (TUMF) Add 2nd WB through lane (TUMF)	AM	S	--	--	--	--	--	--	379.3	F	404.8	F	145.4	F	379.3	F	401.8	F	144.3	F
			PM	S	--	--	--	--	--	--	1036.3	F	1057.6	F	428.1	F	1037.2	F	1058.5	F	427.0	F
14	I-10 WB Ramps at Oak Valley Parkway	Add NB left-turn lane (TUMF) Add 2nd EB through lane (TUMF) Add 2nd WB through lane (TUMF)	AM	S	--	--	--	--	--	--	409.9	F	429.1	F	290.8	F	409.9	F	429.1	F	290.8	F
			PM	S	544.6	F	551.3	F	217.6	F	566.0	F	592.9	F	235.6	F	566.0	F	592.9	F	235.6	F
15	Oak View Drive at Oak Valley Parkway	Add 2nd EB through lane (TUMF) Modify SB right-turn lane to free right-turn lane Traffic Signal relocation and modification	AM	S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			PM	S	96.9	F	104.8	F	10.0	B	105.3	F	125.5	F	11.5	B	105.3	F	125.5	F	11.5	B

Notes:
- Bold values indicate intersections operating at an unacceptable Level of Service
- Delay values for unsignalized intersections represent the average vehicle delay on the worst (highest delay) intersection approach.

TABLE 12

SUMMARY OF RECOMMENDED IMPROVEMENTS IN TUMF PROGRAM

#	Intersection	Juridsiction	Recommended Improvements	Improvements in TUMF?
1	I-10 EB Ramps at Cherry Valley Boulevard	Caltrans	Construct Traffic Signal	Yes
			Add WB left-turn lane	Yes
			Add EB right-turn lane	Yes
			Add SB right-turn lane	Yes
2	I-10 WB Ramps at Cherry Valley Boulevard	Caltrans	Construct Traffic Signal	Yes
			Add NB left-turn lane	Yes
			Add EB left-turn lane	Yes
			Add WB right-turn lane	Yes
3	Calimesa Boulevard at Cherry Valley Boulevard	Calimesa	Add 2nd EB through lane	Yes
			Add 2nd WB through lane	Yes
			Construct Traffic Signal	No
4	Hannon Road at Cherry Valley Boulevard	Riverside County	Add 2nd EB through lane	No
			Add 2nd WB through lane	No
			Construct Traffic Signal	No
5	Union Street at Cherry Valley Boulevard	Riverside County	Add 2nd EB through lane	No
			Add 2nd WB through lane	No
			Construct Traffic Signal	No
6	Nancy Avenue at Cherry Valley Boulevard	Riverside County	Add 2nd EB through lane	No
			Add 2nd WB through lane	No
			Add dedicated EB right-turn lane	No
11	Beaumont Avenue at Brookside Avenue	Beaumont/ Riverside County	Add EB right-turn overlap	No
			Add WB right-turn lane with overlap	No
			Add WB right-turn lane	No
12	Desert Lawn Drive at Oak Valley Parkway	Beaumont	Add 2nd EB through lane	Yes
13	I-10 EB Ramps at Oak Valley Parkway	Caltrans	Add a 2nd SB left-turn lane	Yes
			Add a 2nd EB through lane	Yes
			Add a 2nd WB through lane	Yes
14	I-10 WB Ramps at Oak Valley Parkway	Caltrans	Add NB left-turn lane	Yes
			Add 2nd EB through lane	Yes
			Add 2nd WB through lane	Yes
15	Oak View Drive at Oak Valley Parkway	Beaumont	Add 2nd EB through lane	Yes
			Modify SB right-turn lane to free right-turn lane	No

TABLE 13

SUMMARY OF PROJECT FAIR SHARE FOR RECOMMENDED IMPROVEMENTS - OPENING YEAR 2024

Int. #	Intersection	AM Peak Hour					PM Peak Hour				
		Total Volume		Total	Project		Total Volume		Total	Project	
		2021	2024	Growth	Trips	%-age	2021	2024	Growth	Trips	%-age
1	I-10 EB Ramps at Cherry Valley Boulevard	1,532	2,885	1,353	118	8.7%	1,646	3,898	2,252	115	5.1%
2	I-10 WB Ramps at Cherry Valley Boulevard	1,345	2,605	1,260	206	16.3%	1,056	3,024	1,968	243	12.3%
3	Calimesa Boulevard at Cherry Valley Boulevard	799	1,541	742	206	27.8%	915	1,866	951	243	25.6%
4	Hannon Road at Cherry Valley Boulevard	729	1,164	435	101	23.2%	806	1,357	551	111	20.1%
5	Union Street at Cherry Valley Boulevard	643	1,053	410	90	22.0%	742	1,265	523	100	19.1%
11	Beaumont Avenue at Brookside Avenue	951	1,824	873	42	4.8%	1,220	2,372	1,152	46	4.0%
12	Desert Lawn Drive at Oak Valley Parkway	935	1,418	483	11	2.3%	1,103	1,992	889	11	1.2%
13	I-10 EB Ramps at Oak Valley Parkway	1,413	3,034	1,621	15	0.9%	1,693	4,469	2,776	33	1.2%
14	I-10 WB Ramps at Oak Valley Parkway	1,811	4,150	2,339	37	1.6%	1,905	5,683	3,778	43	1.1%
15	Oak View Drive at Oak Valley Parkway	1,518	3,084	1,566	37	2.4%	1,686	3,756	2,070	43	2.1%

TABLE 14

SUMMARY OF PROJECT FAIR SHARE FOR RECOMMENDED IMPROVEMENTS - OPENING YEAR 2027

		AM Peak Hour					PM Peak Hour				
		Total Volume		Total	Project		Total Volume		Total	Project	
Int. #	Intersection	2021	2027	Growth	Trips	%-age	2021	2027	Growth	Trips	%-age
1	I-10 EB Ramps at Cherry Valley Boulevard	1,532	3,126	1,594	267	16.8%	1,646	4,127	2,481	246	9.9%
2	I-10 WB Ramps at Cherry Valley Boulevard	1,345	2,960	1,615	472	29.2%	1,056	3,335	2,279	478	21.0%
3	Calimesa Boulevard at Cherry Valley Boulevard	799	1,854	1,055	472	44.7%	915	2,157	1,242	478	38.5%
4	Hannon Road at Cherry Valley Boulevard	729	1,471	742	365	49.2%	806	1,639	833	344	41.3%
5	Union Street at Cherry Valley Boulevard	643	1,330	687	328	47.7%	742	1,518	776	310	39.9%
6	Nancy Avenue at Cherry Valley Boulevard	565	1,168	603	254	42.1%	689	1,392	703	242	34.4%
11	Beaumont Avenue at Brookside Avenue	951	1,986	1,035	148	14.3%	1,220	2,539	1,319	139	10.5%
12	Desert Lawn Drive at Oak Valley Parkway	935	1,500	565	37	6.5%	1,103	2,080	977	34	3.5%
13	I-10 EB Ramps at Oak Valley Parkway	1,413	3,221	1,808	115	6.4%	1,693	4,662	2,969	124	4.2%
14	I-10 WB Ramps at Oak Valley Parkway	1,811	4,363	2,552	143	5.6%	1,905	5,892	3,987	137	3.4%
15	Oak View Drive at Oak Valley Parkway	1,518	3,284	1,766	143	8.1%	1,686	3,951	2,265	137	6.0%

TABLE 15

SUMMARY OF PROJECT FAIR SHARE FOR RECOMMENDED IMPROVEMENTS - HORIZON YEAR 2040

		AM Peak Hour					PM Peak Hour				
		Total Volume		Total	Project		Total Volume		Total	Project	
Int. #	Intersection	2021	2040	Growth	Trips	%-age	2021	2040	Growth	Trips	%-age
1	I-10 EB Ramps at Cherry Valley Boulevard	1,532	3,126	1,594	267	16.8%	1,646	4,151	2,505	246	9.8%
2	I-10 WB Ramps at Cherry Valley Boulevard	1,345	3,325	1,980	472	23.8%	1,056	3,569	2,513	478	19.0%
3	Calimesa Boulevard at Cherry Valley Boulevard	799	2,187	1,388	472	34.0%	915	2,351	1,436	478	33.3%
4	Hannon Road at Cherry Valley Boulevard	729	1,662	933	365	39.1%	806	1,907	1,101	344	31.2%
5	Union Street at Cherry Valley Boulevard	643	1,638	995	328	33.0%	742	1,978	1,236	310	25.1%
6	Nancy Avenue at Cherry Valley Boulevard	565	1,324	759	254	33.5%	689	1,691	1,002	242	24.2%
11	Beaumont Avenue at Brookside Avenue	951	2,058	1,107	148	13.4%	1,220	2,668	1,448	139	9.6%
12	Desert Lawn Drive at Oak Valley Parkway	935	1,876	941	37	3.9%	1,103	2,393	1,290	34	2.6%
13	I-10 EB Ramps at Oak Valley Parkway	1,413	3,455	2,042	115	5.6%	1,693	4,698	3,005	124	4.1%
14	I-10 WB Ramps at Oak Valley Parkway	1,811	4,363	2,552	143	5.6%	1,905	5,892	3,987	137	3.4%
15	Oak View Drive at Oak Valley Parkway	1,518	3,284	1,766	143	8.1%	1,686	3,951	2,265	137	6.0%

SUMMARY OF FINDINGS AND CONCLUSIONS

- This study has been prepared to evaluate the traffic-related effects of the proposed Beaumont Summit Station project. The project consists of a 1,213,235 square-foot high-cube short-term storage building, with 20,000 square feet of office space, a 985,860 square-foot high-cube short-term storage building with 20,000 square feet of office space, a 358,370 square-foot general warehouse with 10,000 square feet of office space, a 220-room hotel, a 25,000 square foot shopping center, a 15,000 square foot high-turnover (sit-down) restaurant, and a 10,000 square foot fast-food restaurant with drive-through. The project will be conducted in two phases, with the Light Industrial uses being constructed in Phase 1 and completed in 2024, and the Commercial uses being constructed in Phase 2 and complete in 2027. The project is located immediately east of the I-10 Freeway and in between Cherry Valley Boulevard and Brookside Avenue.

- Weekday morning peak hour and weekday evening peak hour operating conditions were evaluated at 16 study intersections for the following study scenarios:

    - Existing Conditions
    - Opening Year 2024 Cumulative
    - Opening Year 2024 Cumulative Plus Project (Phase 1)
    - Opening Year 2027 Cumulative
    - Opening Year 2027 Cumulative Plus Project (Phases 1 and 2)
    - Horizon Year 2040
    - Horizon Year 2040 Plus Project (Phases 1 and 2)

- Under Existing Conditions, the following study intersections would operate at an unacceptable Level of Service:

    - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS E, PM: LOS F
    - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F
    - #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F

- Phase 1 of the project is estimated to generate 4,667 daily PCE trips, with 303 PCE trips during the morning peak hour and 362 PCE during the evening peak hour.

- Phases 1 and 2 of the project is estimated to generate 13,152 daily PCE trips, with 835 PCE trips during the morning peak hour and 832 PCE trips during the evening peak hour.

- Ambient traffic growth at a rate of 2.0 percent per year was added to Existing Conditions to develop Opening Year 2024 forecasts.

- Under Opening Year 2024 Cumulative Conditions, the following intersections would operate at an unacceptable Level of Service with the addition of ambient growth:

    - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
    - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F

- #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS E; PM: LOS F
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- Under Opening Year 2024 Cumulative Plus Project (Phase 1) Conditions, the following intersections would operate at an unacceptable Level of Service with the of project traffic:

  - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
  - #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #14 – I-10 Westbound Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #15 – Oak View Drive at Oak Valley Parkway – AM: LOS E; PM: LOS F
  - #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- Ambient traffic growth at a rate of 2.0 percent per year was added to Opening Year 2024 volumes to develop Opening Year 2027 forecasts.

- Under Opening Year 2027 Cumulative Conditions, the following intersections would operate at an unacceptable Level of Service with the addition of ambient growth:

  - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
  - #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
  - #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- Under Opening Year 2027 Cumulative Plus Project (Phases 1 and 2) Conditions, the following intersections would operate at an unacceptable Level of Service with the of project traffic:

  - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F

- #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #6 – Nancy Avenue at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
- #11 – Beaumont Avenue at Brookside Avenue – PM: LOS F
- #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #14 – I-10 Westbound Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #15 – Oak View Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
- #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- To derive forecasts for Horizon Year 2040 Conditions, RivTAM 2012 and 2040 forecasts were used.

- Under Horizon Year 2040 Conditions, the following intersections would operate at an unacceptable Level of Service.

  - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #6 – Nancy Avenue at Cherry Valley Boulevard – PM: LOS F
  - #11 – Beaumont Avenue at Brookside Avenue – PM: LOS E
  - #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #15 – Oak View Drive at Oak Valley Parkway – PM: LOS F
  - #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- Under Horizon Year 2040 Plus Project (Phases 1 and 2) Conditions, the following intersections would continue to operate at an unacceptable Level of Service:

  - #1 – I-10 EB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #2 – I-10 WB Ramps at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #3 – Calimesa Boulevard at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #4 – Hannon Road at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #5 – Union Street at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #6 – Nancy Avenue at Cherry Valley Boulevard – AM: LOS F; PM: LOS F
  - #11 – Beaumont Avenue at Brookside Avenue – AM: LOS E; PM: LOS F
  - #12 – Desert Lawn Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #13 – I-10 EB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #14 – I-10 WB Ramps at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #15 – Oak View Drive at Oak Valley Parkway – AM: LOS F; PM: LOS F
  - #16 – Beaumont Avenue at Oak Valley Parkway – AM: LOS F; PM: LOS F

- Recommended improvements to either bring the intersection to an acceptable Level of Service or mitigate the project's effect at deficient study intersections have been addressed.

- Recommended improvements may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair-share contribution toward future improvements toward future improvements, or a combination of these approaches.

APPENDIX A

SCOPING AGREEMENT

ATTACHMENT B-1
SUMMARY OF PROJECT TRIP GENERATION
BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
High-Cube Transload and Short-Term Storag	154	KSF	1.400	0.062	0.018	0.080	0.028	0.072	0.100

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Use										
High-Cube Transload and Short-Term Storag		2,199.095	KSF	3,079	136	40	176	62	158	220
Passenger Vehicles	84.00%			2,586	114	34	148	52	133	185
Trucks	16.00%			493	22	6	28	10	25	35

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

	Vehicle Mix	Daily Vehicles	PCE Factor	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Passenger Vehicles	84.00%	2,586	1.0	2,586	114	34	148	52	133	185
2-Axle Trucks	2.71%	83	1.5	125	6	2	8	3	6	9
3-Axle Trucks	3.63%	112	2.0	224	10	3	13	5	11	16
4+ Axle Trucks	9.66%	297	3.0	891	39	12	51	18	46	64
Total Truck PCE Trips				1,240	55	17	72	26	63	89
Total Proposed Project B-1 Trips				3,826	169	51	220	78	196	274

*Trip Generation reflects updated Land Uses

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

Since approval of the Scoping Agreement, Building 2 has changed from High-Cube Fulfillment Center Sort (ITE LU 155) to High-Cube Short-Term Storage (ITE LU 154). The updates to Tables B-1 and B-2 in Appendix A reflect this change. The Traffic Study also reflects this change.

ATTACHMENT B-2

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Warehousing	150	KSF	1.710	0.131	0.039	0.170	0.050	0.130	0.180

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Proposed Use										
Warehousing		358.370	KSF	613	47	14	61	18	47	65
Passenger Vehicles	73.00%			447	34	10	44	13	34	47
Trucks	27.00%			166	13	4	17	5	13	18

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

	Vehicle Mix	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	73.00%	447	1.0	447	34	10	44	13	34	47
2-Axle Trucks	7.13%	44	1.5	66	5	1	6	2	5	7
3-Axle Trucks	6.16%	38	2.0	76	6	2	8	2	6	8
4+ Axle Trucks	13.72%	84	3.0	252	19	6	25	7	19	26
Total Truck PCE Trips				394	30	9	39	11	30	41
Total Proposed Project B-3 Trips				841	64	19	83	24	64	88

* Trip Generation relfects updated Land Uses

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

Since approval of the Scoping Agreement, Building 2 has changed from High-Cube Fulfillment Center Sort (ITE LU 155) to High-Cube Short-Term Storage (ITE LU 154). The updates to Tables B-1 and B-2 in Appendix A reflect this change. The Traffic Study also reflects this change.

ATTACHMENT B-3

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	310	Room	7.990	0.258	0.202	0.460	0.301	0.289	0.590
Shopping Center (>150k)	820	KSF	37.01	0.52	0.32	0.84	1.63	1.77	3.40
High-Turnover (Sit-Down) Restaurant	932	KSF	107.20	5.26	4.31	9.57	5.52	3.53	9.05
Fast-Food Restaurant w/ Drive-thru	934	KSF	467.48	22.75	21.86	44.61	17.18	15.85	33.03

PROJECT TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Use									
Hotel	220	Room	1,758	57	44	101	66	64	130
Strip Retail Plaza (<40k)	25.000	KSF	1,361	35	24	59	82	82	164
Pass-by Trips (34% PM) [2]			*-463*	*0*	*0*	*0*	*-28*	*-28*	*-56*
High-Turnover (Sit-Down) Restaurant	15.000	KSF	1,608	79	65	144	83	53	136
Pass-by Trips (43% PM) [2]			*-69*	*0*	*0*	*0*	*-42*	*-27*	*-69*
Fast-Food Restaurant w/ Drive-thru	10.000	KSF	4,675	228	219	447	172	159	331
Pass-by Trips (49% AM; 50% PM) [2]			*-385*	*-112*	*-107*	*-219*	*-86*	*-80*	*-166*
Total Proposed Net New Retail Trips			8,485	287	245	532	247	223	470

* Trip Generation relfects updated Land Uses

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition

[2] Trip Generation rates is equal to average rate plus standard deviation to account for higher trip generation than typical land use.

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

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 December 2020.

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: Beaumont Summit Station

Project Address: South of Cherry Blvd, North of Brookside Ave, approximately 500 ft west of Fabian Ln and appoximately 1/2 mile east of I-10 Freeway

Project Description: 1,213,235 SF High-Cube Fulfillment Center - Sort; 985,860 SF High-Cube Short-Term Storage; 358,370 SF General Warehousing; 220 Room Hotel; 25,000 SF Shopping Center; 15,000 SF High-Turnover (Sit-Down) Restaurant; 10,000 SF Fast-Food Restaurant w/ Drive-Through (See Attachment A)

	Consultant	Developer
Name:	Kimley-Horn and Associates, Inc.	Exeter Property Group
Address:	3880 Lemon Street, Suite 420	101 West Elm Street, Suite 600
	Riverside, CA 92501	Conshohocken, PA 19428
Telephone:	619-744-0144	(610) 828-3200
Fax:		

A. Trip Generation Source: (ITE 7th Edition or other)

Current GP Land Use	*Provide General Plan Land Use Designation (e.g.: MDR, CR, etc)*	Proposed Land Use	Warehouse
Current Zoning	Single Family Residential	Proposed Zoning	Light Industrial

Current Trip Generation See Attachments B 1-5	In	Out	Total	Proposed Trip Generation In	Out	Total
AM Trips	-	-	-	1,296	469	1,765
PM Trips	-	-	-	880	1,290	2,170

Internal Trip Allowance ☐ Yes ☒ No (% Trip Discount)

Pass-By Trip Allowance ☒ Yes ☐ No See Attachment B-4 (% 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 30 % S 30 % E 10 % W 30 %
(attach exhibit for detailed assignment) See Attachment C

C. Background Traffic

Project Build-out Year: *Provide realistic opening year, considering time needed for approvals and construction.* 2024 Annual Ambient Growth Rate: 2 %

Phase Year(s) N/A

Other area projects to be analyzed: We will request Cumulative Projects information form the County of Riverside and the City of Beaumont Planning Departments.

Model/Forecast methodology Ex + Growth + Cumulative Projects + Project Horizon Year: Forecasts based on the RIVTAM traffic model.

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.)* See Attachments C and D

1. Cherry Valley Boulevard at I-10 SB Ramps
2. Cherry Valley Boulevard at I-10 NB Ramps
3. Cherry Valley Boulevard at Calimesa Boulevard
4. Cherry Valley Boulevard at Hannon Street
5. Cherry Valley Boulevard at Union Street
6. Cherry Valley Boulevard at Nancy Street
7. Cherry Valley Boulevard at Beaumont Avenue
8. Brookside Avenue at Hannon Street
9. Brookside Avenue at Union Street
10. Brookside Avenue at Oak View Drive
11. Brookside Avenue at Beaumont Avenue
12. Oak Valley Parkway at Desert Lawn Drive
13. Oak Valley Parkway at I-10 SB Ramps
14. Oak Valley Parkway at I-10 NB Ramps
15. Oak Valley Parkway at Oak View Drive
16. Oak Valley Parkway at Beaumont Avenue

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

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
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: Beaumont

F. Site Plan (please attach reduced copy) See Attachment A

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.)

_____

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts Recent historical counts (within 3 years) will be used where available. Where new counts are needed, a COVID adjustment factor will be applied to the new counts.

***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:

Trevor Briggs 7/12/2021
Consultant's Representative Date

Approved Scoping Agreement:

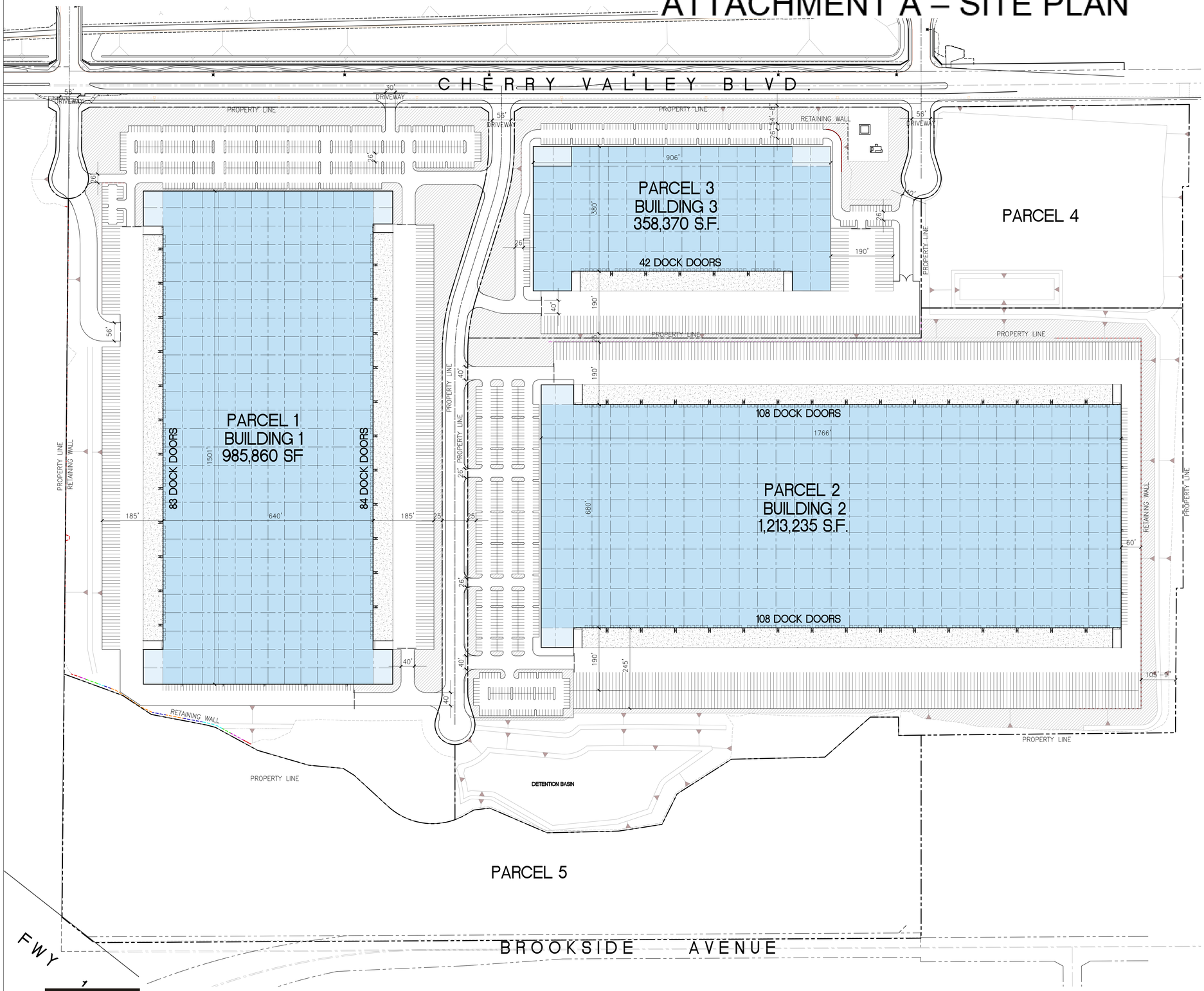
_____ _____
City of Beaumont Planning Department Date

Scoping Agreement Submitted on _____

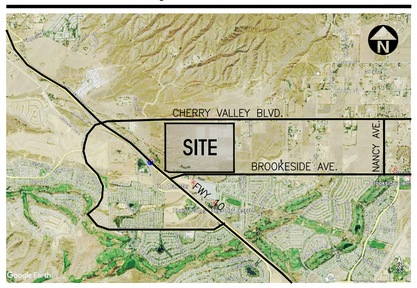
Revised on _____

CAUTION: IF THIS SHEET IS NOT 30"X42", IT IS A REDUCED PRINT

ATTACHMENT A – SITE PLAN



Aerial Map



Tabulation

	BLDG. 1	BLDG. 2	BLDG. 3	Parcel 4	Parcel 5	NET TOTAL
SITE AREA						
In s.f.	2,281,950	2,906,020	895,298	481,691	1,315,054	7,880,013 s.f.
In acres	52.39	66.71	20.55	11.06	30.19	180.90 ac
BUILDING AREA						
Office	20,000	20,000	10,000			50,000 s.f.
Warehouse	965,860	1,193,235	348,370			2,507,465 s.f.
TOTAL	985,860	1,213,235	358,370			2,557,465 s.f.
COVERAGE	43.2%	41.7%	40.0%			32.5%
AUTO PARKING REQUIRED						
1/1000sf first 40K SF	40	40	40			120 stalls
1/4000sf over 40K	236	293	80			609 stalls
TOTAL	276	333	120			729 stalls
AUTO PARKING PROVIDED						
Standard (9' x 19')	632	620	230			1,482 stalls
Trailer (10' x 55')	246	520	152			918 stalls
TOTAL	878	1,140	382			2,400 stalls

ZONING ORDINANCE FOR CITY

Zoning Designation: LIGHT INDUSTRIAL to be proposed under specific plan

MAXIMUM BUILDING HEIGHT ALLOWED

Height - 100' to be proposed under specific plan

MAXIMUM FLOOR AREA RATIO

FAR - 1.0

SETBACKS

Front -25'

Side/Rear - 0'

north

1" = 120'

0 120' 240' 360'

Legend

- POTENTIAL OFFICE
- WAREHOUSE
- DRIVE THRU DOOR

Note: This is a conceptual plan. It is based on preliminary information which is not fully verified and may be incomplete. It is meant as a comparative aid in examining alternate development strategies and any quantities indicated are subject to revision as more reliable information becomes available.

HPA architecture

EXETER PROPERTY GROUP

Conceptual Site Plan

Brookside Ave. and Cherry Valley Blvd.

18831 Bardeen Ave. - Ste. #100
Irvine, CA 92612
(949) 863-1770
www.hparchs.com

Beaumont, CA

JUNE 24, 2021 / Job #21085

Scheme 7

ATTACHMENT B-1

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
High-Cube Short-Term Storage	154	KSF	1.400	0.062	0.018	0.080	0.028	0.072	0.100

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Proposed Use										
High-Cube Short-Term Storage		985.860	154	1,380	61	18	79	28	71	99
Passenger Vehicles	84.00%			1,159	51	15	66	24	60	84
Trucks	16.00%			221	10	3	13	4	11	15

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

	Vehicle Mix	Daily Vehicles	PCE Factor	Daily	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
Passenger Vehicles	84.00%	1,159	1.0	1,159	51	15	66	24	60	84
2-Axle Trucks	2.71%	37	1.5	56	2	1	3	1	3	4
3-Axle Trucks	3.63%	50	2.0	100	4	1	5	2	5	7
4+ Axle Trucks	9.66%	133	3.0	399	18	5	23	8	21	29
Total Truck PCE Trips				555	24	7	31	11	29	40
Total Proposed Project B-1 Trips				1,714	75	22	97	35	89	124

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT B-2

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
High-Cube Fulfillment Center - Sort	155	KSF	6.440	0.705	0.165	0.870	0.468	0.732	1.200

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Use										
High-Cube Fulfillment Center - Sort		1,213.235	155	7,813	855	200	1,055	568	888	1,456
Passenger Vehicles	97.00%			7,579	829	194	1,023	551	861	1,412
Trucks	3.00%			234	26	6	32	17	27	44

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

	Vehicle Mix	Daily Vehicles	PCE Factor	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Passenger Vehicles	97.00%	7,579	1.0	7,579	829	194	1,023	551	861	1,412
2-Axle Trucks	0.51%	40	1.5	60	7	2	9	4	7	11
3-Axle Trucks	0.68%	53	2.0	106	12	3	15	8	12	20
4+ Axle Trucks	1.81%	141	3.0	423	46	11	57	31	48	79
Total Truck PCE Trips				589	65	16	81	43	67	110
Total Proposed Project B-2 Trips				8,168	894	210	1,104	594	928	1,522

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT B-3

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Warehousing	150	KSF	1.740	0.131	0.039	0.170	0.051	0.139	0.190

PROJECT TRIP GENERATION

Project Land Use		Quantity	Unit	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Use										
Warehousing		358.370	150	624	47	14	61	18	50	68
Passenger Vehicles	73.00%			456	34	10	44	13	37	50
Trucks	27.00%			168	13	4	17	5	14	19

PROJECT TRIPS - PASSENGER CAR EQUIVALENTS (PCE)

	Vehicle Mix	Daily Vehicles	PCE Factor	Daily	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Passenger Vehicles	73.00%	456	1.0	456	34	10	44	13	37	50
2-Axle Trucks	7.13%	44	1.5	66	5	1	6	2	5	7
3-Axle Trucks	6.16%	38	2.0	76	6	2	8	2	6	8
4+ Axle Trucks	13.72%	86	3.0	258	19	6	25	7	21	28
Total Truck PCE Trips				400	30	9	39	11	32	43
Total Proposed Project B-3 Trips				856	64	19	83	24	69	93

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT B-4

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

TRIP GENERATION RATES [1]

ITE Land Use	ITE Code	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Hotel	310	Room	8.360	0.277	0.193	0.470	0.306	0.294	0.600
Shopping Center	820	KSF	37.750	0.583	0.357	0.940	1.829	1.981	3.810
High-Turnover (Sit-Down) Restaurant	932	KSF	112.180	5.467	4.473	9.940	6.057	3.713	9.770
Fast-Food Restaurant w/ Drive-thru	934	KSF	470.950	20.497	19.693	40.190	16.988	15.682	32.670

PROJECT TRIP GENERATION

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Use									
Hotel	220	Room	1,839	61	42	103	67	65	132
Shopping Center	25.000	KSF	944	15	9	24	46	50	96
Pass-by Trips (34% PM) [2]			*-33*	*0*	*0*	*0*	*-16*	*-17*	*-33*
High-Turnover (Sit-Down) Restaurant	15.000	KSF	1,683	82	67	149	91	56	147
Pass-by Trips (43% PM) [2]			*-74*	*0*	*0*	*0*	*-46*	*-28*	*-74*
Fast-Food Restaurant w/ Drive-thru	10.000	KSF	4,710	205	197	402	170	157	327
Pass-by Trips (49% AM; 50% PM) [2]			*-361*	*-100*	*-97*	*-197*	*-85*	*-79*	*-164*
Total Proposed Net New Retail Trips			8,708	263	218	481	227	204	431

[1] Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition

[2] Trip Generation rates is equal to average rate plus standard deviation to account for higher trip generation than typical land use.

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

ATTACHMENT B-5

SUMMARY OF PROJECT TRIP GENERATION

BEAUMONT SUMMIT STATION PROJECT

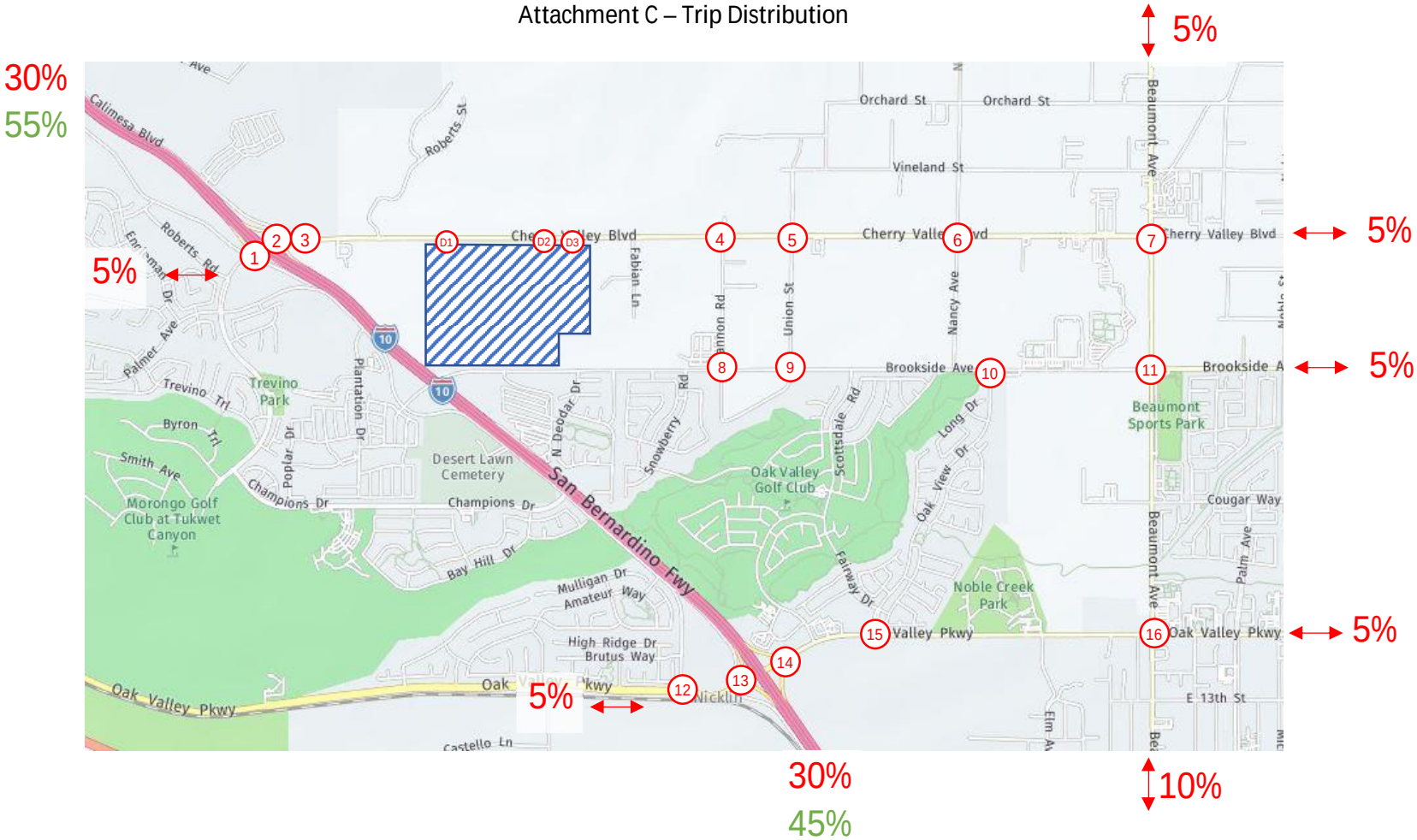
PROJECT TRIP GENERATION WITH PCE

Project Land Use	Quantity	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Proposed Use									
Building 1 (B-1): High-Cube Short-Term Storage	985.860	KSF	1,714	75	22	97	35	89	124
Building 2 (B-2): High-Cube Fulfillment Center - Sort	1,213.235	KSF	8,168	894	210	1,104	594	928	1,522
Building 3 (B-3): Warehousing	358.370	KSF	856	64	19	83	24	69	93
Commercial Uses (B-4)	--	--	8,708	263	218	481	227	204	431
Total Proposed Net New Project Trips			26,315	1,296	469	1,765	880	1,290	2,170

PCE = Passenger Car Equivalent

KSF = Thousand Square Feet

Attachment C – Trip Distribution



Legend:

= Project Site

(X) = Study Intersection

XX% = Passenger Car Distribution

YY% = Truck Distribution

Study Intersections:

1. Cherry Valley Boulevard at I-10 SB Ramps
2. Cherry Valley Boulevard at I-10 NB Ramps
3. Cherry Valley Boulevard at Calimesa Boulevard
4. Cherry Valley Boulevard at Hannon Road
5. Cherry Valley Boulevard at Union Street
6. Cherry Valley Boulevard at Nancy Avenue
7. Cherry Valley Boulevard at Beaumont Avenue
8. Brookside Avenue at Hannon Road
9. Brookside Avenue at Union Street
10. Brookside Avenue at Oak View Drive
11. Brookside Avenue at Beaumont Avenue
12. Oak Valley Parkway at Desert Lawn Drive
13. Oak Valley Parkway at I-10 SB Ramps
14. Oak Valley Parkway at I-10 NB Ramps
15. Oak Valley Parkway at Oak View Drive
16. Oak Valley Parkway at Beaumont Avenue

D1. Cherry Valley Boulevard at Driveway 1
D2. Cherry Valley Boulevard at Driveway 2
D3. Cherry Valley Boulevard at Driveway 3

APPENDIX B

EXISTING PEAK HOUR TRAFFIC DATA COLLECTION SHEETS

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-001
Date: 5/20/2021

Data - Total

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	15	0	39	0	0	144	31	0	2	35	0	0	266
7:15 AM	0	0	0	0	23	0	52	0	0	138	38	0	2	28	0	0	281
7:30 AM	0	0	0	0	23	0	57	0	0	155	41	0	2	12	0	0	290
7:45 AM	0	0	0	0	28	0	51	0	0	113	37	0	7	24	0	0	260
8:00 AM	0	0	0	0	26	0	68	0	0	114	32	0	3	43	0	0	286
8:15 AM	0	0	0	0	21	0	50	0	0	111	38	0	4	28	0	0	252
8:30 AM	0	0	0	0	30	0	62	0	0	91	24	0	2	25	0	0	234
8:45 AM	0	0	0	0	34	0	44	0	0	80	23	0	9	28	0	0	218
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	200	0	423	0	0	946	264	0	31	223	0	0	2087
APPROACH %'s :					32.10%	0.00%	67.90%	0.00%	0.00%	78.18%	21.82%	0.00%	12.20%	87.80%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	100	0	228	0	0	520	148	0	14	107	0	0	1117
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.893	0.000	0.838	0.000	0.000	0.839	0.902	0.000	0.500	0.622	0.000	0.000	0.963
					0.872				0.852				0.658				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	62	0	109	0	0	94	26	0	7	52	0	0	350
4:15 PM	0	0	0	0	71	0	137	0	0	73	41	0	4	65	0	0	391
4:30 PM	0	0	0	0	94	0	135	0	0	97	36	0	3	47	0	0	412
4:45 PM	0	0	0	0	71	1	117	0	0	90	29	0	2	59	0	0	369
5:00 PM	0	0	0	0	71	1	130	0	0	97	23	0	9	83	0	0	414
5:15 PM	0	0	0	0	73	1	140	0	0	103	30	0	4	73	0	0	424
5:30 PM	0	0	0	0	73	2	126	0	0	105	39	0	5	60	0	0	410
5:45 PM	0	0	0	0	68	0	145	0	0	88	33	0	5	53	0	0	392
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	583	5	1039	0	0	747	257	0	39	492	0	0	3162
APPROACH %'s :					35.83%	0.31%	63.86%	0.00%	0.00%	74.40%	25.60%	0.00%	7.34%	92.66%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	285	4	541	0	0	393	125	0	23	269	0	0	1640
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.976	0.500	0.933	0.000	0.000	0.936	0.801	0.000	0.639	0.810	0.000	0.000	0.967
					0.970				0.899				0.793				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-001
Date: 5/20/2021

Data - Cars

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	15	0	38	0	0	142	30	0	1	32	0	0	258
7:15 AM	0	0	0	0	22	0	50	0	0	137	36	0	2	27	0	0	274
7:30 AM	0	0	0	0	22	0	52	0	0	155	40	0	2	11	0	0	282
7:45 AM	0	0	0	0	26	0	50	0	0	111	33	0	5	24	0	0	249
8:00 AM	0	0	0	0	24	0	67	0	0	111	31	0	3	42	0	0	278
8:15 AM	0	0	0	0	20	0	50	0	0	110	33	0	3	26	0	0	242
8:30 AM	0	0	0	0	29	0	57	0	0	90	22	0	1	25	0	0	224
8:45 AM	0	0	0	0	33	0	41	0	0	79	22	0	9	28	0	0	212
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	191	0	405	0	0	935	247	0	26	215	0	0	2019
APPROACH %'s :					32.05%	0.00%	67.95%	0.00%	0.00%	79.10%	20.90%	0.00%	10.79%	89.21%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	94	0	219	0	0	514	140	0	12	104	0	0	1083
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.904	0.000	0.817	0.000	0.000	0.829	0.875	0.000	0.600	0.619	0.000	0.000	0.960
					0.860				0.838				0.644				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	61	0	108	0	0	93	26	0	7	52	0	0	347
4:15 PM	0	0	0	0	71	0	137	0	0	72	41	0	4	65	0	0	390
4:30 PM	0	0	0	0	91	0	134	0	0	95	36	0	3	47	0	0	406
4:45 PM	0	0	0	0	69	1	117	0	0	90	29	0	2	58	0	0	366
5:00 PM	0	0	0	0	71	1	130	0	0	97	23	0	9	83	0	0	414
5:15 PM	0	0	0	0	73	1	140	0	0	103	30	0	4	72	0	0	423
5:30 PM	0	0	0	0	72	2	126	0	0	105	39	0	4	60	0	0	408
5:45 PM	0	0	0	0	66	0	144	0	0	88	33	0	5	53	0	0	389
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	574	5	1036	0	0	743	257	0	38	490	0	0	3143
APPROACH %'s :					35.54%	0.31%	64.15%	0.00%	0.00%	74.30%	25.70%	0.00%	7.20%	92.80%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	282	4	540	0	0	393	125	0	22	268	0	0	1634
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.966	0.500	0.938	0.000	0.000	0.936	0.801	0.000	0.611	0.807	0.000	0.000	0.966
					0.965				0.899				0.788				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-001
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	2	0	0	1	2	0	0	6
7:15 AM	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	3
7:30 AM	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	4
7:45 AM	0	0	0	0	2	0	1	0	0	1	1	0	0	0	0	0	5
8:00 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
8:15 AM	0	0	0	0	1	0	0	0	0	1	1	0	1	1	0	0	5
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	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	7	0	7	0	0	8	3	0	2	3	0	0	30
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	0.00%	72.73%	27.27%	0.00%	40.00%	60.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	5	0	4	0	0	3	2	0	0	0	0	0	14
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.625	0.000	0.333	0.000	0.000	0.750	0.500	0.000	0.000	0.000	0.000	0.000	0.700
					0.563				0.625								

PM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	0	0	1	0	0	1	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	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	3
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	1	0	0	0	1
5:45 PM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	5	0	3	0	0	2	0	0	1	2	0	0	13
APPROACH %'s :					62.50%	0.00%	37.50%	0.00%	0.00%	100.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.500
					0.250								0.500				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-001
Date: 5/20/2021

Data - 3axle

AM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
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	1	1	0	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	3
8:45 AM	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	2	0	0	1	6	0	1	1	0	0	13
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	0.00%	14.29%	85.71%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.500
					0.500				0.250								

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
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	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%									
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
					0.500												

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-001
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
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	1	0	0	0	1	0	0	1	0	0	3
7:30 AM	0	0	0	0	0	0	2	0	0	0	1	0	0	1	0	0	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	4
8:00 AM	0	0	0	0	0	0	1	0	0	2	1	0	0	1	0	0	5
8:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	1	0	0	4
8:30 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	9	0	0	2	8	0	2	4	0	0	25
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	20.00%	80.00%	0.00%	33.33%	66.67%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	4	0	0	2	5	0	2	3	0	0	16
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.625	0.000	0.250	0.750	0.000	0.000	0.800
					0.500				0.583				0.625				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	2	0	0	0	0	0	0	3
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 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 :	0.000	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	0.000	0.000	

Prepared by National Data & Surveying Services

I-10 SB Ramps & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-001
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS

07:15 AM - 08:15 AM
NONE
05:00 PM - 06:00 PM

COUNT PERIODS

7:00 AM - 09:00 AM
NONE
4:00 PM - 06:00 PM

I-10 SB Ramps

SOUTHBOUND

AM	228	0	100	0	0	AM
NOON	0	0	0	0	0	NOON
PM	541	4	285	0	0	PM

0 1 0 0

EASTBOUND

Cherry Valley Blvd

AM	NOON	PM	
335	0	810	⇦
0	0	0	↶ 0
0	0	0	↱ 0
520	0	393	→ 1
148	0	125	↳ 0

WESTBOUND

Cherry Valley Blvd

PM	NOON	AM	
0	0	0	0 ↰
269	0	107	1 ←
23	0	14	0 ↲
0	0	0	0 ↺
678	0	620	⇨

0 0 0 0

NORTHBOUND

PM	152	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	162	0	0	0	0	AM

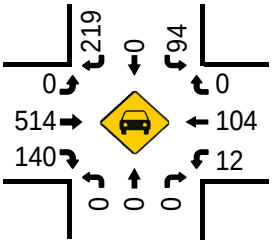
I-10 SB Ramps

CONTROL

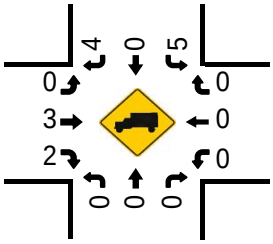
3-Way Stop (SB/EB/WB)

TEV	1117 AM	0 NOON	1640 PM
PHF	0.96		0.97

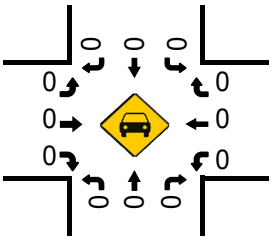
Cars (AM)



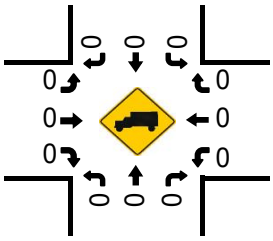
2axle (AM)



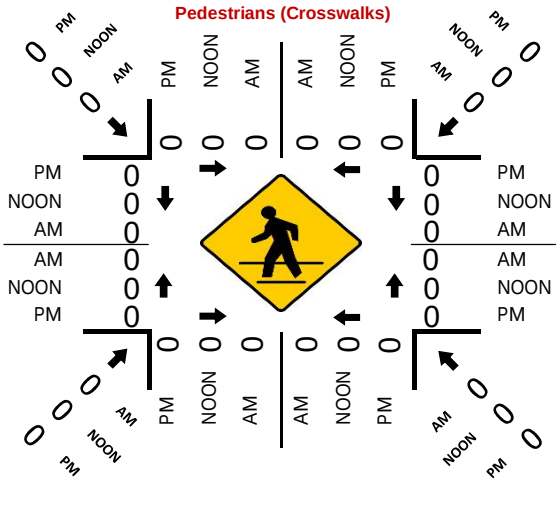
Cars (NOON)



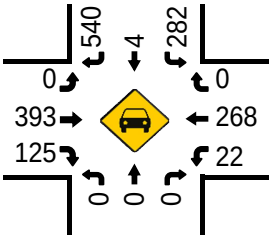
2axle (NOON)



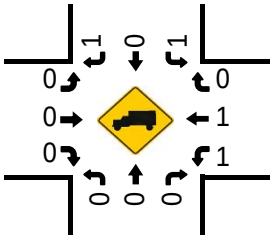
Pedestrians (Crosswalks)



Cars (PM)



2axle (PM)



National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-002
Date: 5/20/2021

Data - Total

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
7:00 AM	21	1	3	0	0	0	0	0	136	23	0	0	0	13	70	0	267
7:15 AM	22	0	3	0	0	0	0	0	125	30	0	0	0	8	94	0	282
7:30 AM	10	1	6	0	0	0	0	0	159	24	0	0	0	4	94	0	298
7:45 AM	17	0	5	0	0	0	0	0	103	37	0	0	0	19	74	0	255
8:00 AM	32	0	1	0	0	0	0	0	102	35	0	0	0	12	75	0	257
8:15 AM	14	0	5	0	0	0	0	0	95	41	0	0	0	17	50	0	222
8:30 AM	16	0	4	0	0	0	0	0	87	36	0	0	0	11	77	0	231
8:45 AM	17	1	4	0	0	0	0	0	73	38	0	0	0	21	67	0	221
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	149	3	31	0	0	0	0	0	880	264	0	0	0	105	601	0	2033
APPROACH %'s :	81.42%	1.64%	16.94%	0.00%					76.92%	23.08%	0.00%	0.00%	0.00%	14.87%	85.13%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	70	2	17	0	0	0	0	0	523	114	0	0	0	44	332	0	1102
PEAK HR FACTOR :	0.795	0.500	0.708	0.000	0.000	0.000	0.000	0.000	0.822	0.770	0.000	0.000	0.000	0.579	0.883	0.000	0.924
	0.890								0.870				0.922				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
4:00 PM	46	0	3	0	0	0	0	0	85	71	0	1	0	17	53	0	276
4:15 PM	40	0	9	0	0	0	0	0	62	82	0	0	0	24	41	0	258
4:30 PM	25	1	5	0	0	0	0	0	73	116	0	0	0	24	36	0	280
4:45 PM	38	2	5	0	0	0	0	0	61	102	0	0	0	26	58	0	292
5:00 PM	54	1	2	0	0	0	0	0	71	90	0	0	0	36	70	0	324
5:15 PM	46	0	10	0	0	0	0	0	92	88	0	0	0	30	70	0	336
5:30 PM	42	1	4	0	0	0	0	0	80	96	0	0	0	26	53	0	302
5:45 PM	35	0	5	0	0	0	0	0	76	84	0	0	0	21	43	0	264
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	326	5	43	0	0	0	0	0	600	729	0	1	0	204	424	0	2332
APPROACH %'s :	87.17%	1.34%	11.50%	0.00%					45.11%	54.81%	0.00%	0.08%	0.00%	32.48%	67.52%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	180	4	21	0	0	0	0	0	304	376	0	0	0	118	251	0	1254
PEAK HR FACTOR :	0.833	0.500	0.525	0.000	0.000	0.000	0.000	0.000	0.826	0.922	0.000	0.000	0.000	0.819	0.896	0.000	0.933
	0.899								0.944				0.870				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-002
Date: 5/20/2021

Data - Cars

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
7:00 AM	20	0	3	0	0	0	0	0	134	23	0	0	0	11	69	0	260
7:15 AM	21	0	2	0	0	0	0	0	124	29	0	0	0	8	93	0	277
7:30 AM	9	1	5	0	0	0	0	0	159	23	0	0	0	4	94	0	295
7:45 AM	17	0	4	0	0	0	0	0	101	35	0	0	0	17	73	0	247
8:00 AM	31	0	1	0	0	0	0	0	99	34	0	0	0	12	75	0	252
8:15 AM	13	0	4	0	0	0	0	0	95	38	0	0	0	15	50	0	215
8:30 AM	16	0	2	0	0	0	0	0	87	34	0	0	0	10	77	0	226
8:45 AM	17	0	3	0	0	0	0	0	73	37	0	0	0	21	66	0	217
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	144	1	24	0	0	0	0	0	872	253	0	0	0	98	597	0	1989
APPROACH %'s :	85.21%	0.59%	14.20%	0.00%					77.51%	22.49%	0.00%	0.00%	0.00%	14.10%	85.90%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	67	1	14	0	0	0	0	0	518	110	0	0	0	40	329	0	1079
PEAK HR FACTOR :	0.798	0.250	0.700	0.000	0.000	0.000	0.000	0.000	0.814	0.786	0.000	0.000	0.000	0.588	0.875	0.000	0.914
	0.891								0.863				0.913				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
4:00 PM	46	0	3	0	0	0	0	0	84	70	0	1	0	17	52	0	273
4:15 PM	40	0	8	0	0	0	0	0	61	82	0	0	0	24	40	0	255
4:30 PM	25	1	4	0	0	0	0	0	71	113	0	0	0	24	36	0	274
4:45 PM	38	2	4	0	0	0	0	0	61	100	0	0	0	25	56	0	286
5:00 PM	54	1	2	0	0	0	0	0	71	90	0	0	0	36	69	0	323
5:15 PM	45	0	10	0	0	0	0	0	92	88	0	0	0	30	69	0	334
5:30 PM	42	1	4	0	0	0	0	0	80	95	0	0	0	25	52	0	299
5:45 PM	35	0	4	0	0	0	0	0	76	82	0	0	0	21	42	0	260
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	325	5	39	0	0	0	0	0	596	720	0	1	0	202	416	0	2304
APPROACH %'s :	88.08%	1.36%	10.57%	0.00%					45.25%	54.67%	0.00%	0.08%	0.00%	32.69%	67.31%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	179	4	20	0	0	0	0	0	304	373	0	0	0	116	246	0	1242
PEAK HR FACTOR :	0.829	0.500	0.500	0.000	0.000	0.000	0.000	0.000	0.826	0.933	0.000	0.000	0.000	0.806	0.891	0.000	0.930
	0.890								0.940				0.862				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-002
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
7:00 AM	1	0	0	0	0	0	0	0	2	0	0	0	0	1	1	0	5
7:15 AM	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	3
7:30 AM	0	0	1	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	2	0	0	0	0	1	0	4
8:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	0	3	0	0	0	2	0	0	6
8:30 AM	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	4	0	0	0	0	0	5	10	0	0	0	3	3	0	26
APPROACH %'s :	20.00%	0.00%	80.00%	0.00%					33.33%	66.67%	0.00%	0.00%	0.00%	50.00%	50.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	1	0	2	0	0	0	0	0	4	4	0	0	0	1	2	0	14
PEAK HR FACTOR :	0.250	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.250	0.500	0.000	0.700
	0.750								0.667				0.375				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	2
4:30 PM	0	0	1	0	0	0	0	0	1	2	0	0	0	0	0	0	4
4:45 PM	0	0	1	0	0	0	0	0	0	2	0	0	0	1	1	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	3	0	0	0	0	0	2	5	0	0	0	2	6	0	19
APPROACH %'s :	25.00%	0.00%	75.00%	0.00%					28.57%	71.43%	0.00%	0.00%	0.00%	25.00%	75.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	2	0	0	0	2	4	0	10
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.500	1.000	0.000	0.500
	0.500								0.250				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-002
Date: 5/20/2021

Data - 3axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
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	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	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	1	1	0	0	0	2	1	0	5
APPROACH %'s :									50.00%	50.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	3
PEAK HR FACTOR :	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	0.250	0.250	0.000	0.750
									0.250				0.500				

PM

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

National Data & Surveying Services

Intersection Turning Movement Count

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

Project ID: 21-030036-002
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0	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	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
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	0	0	0	0	0	0	0	1
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
8:00 AM	1	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	3
8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	2	3	0	0	0	0	0	2	0	0	0	0	2	0	0	13
APPROACH %'s :	44.44%	22.22%	33.33%	0.00%					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	2	1	1	0	0	0	0	0	0	0	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.500	0.250	0.250	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	0.500
	1.000												0.250				

PM

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

Prepared by National Data & Surveying Services

I-10 NB Ramps & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-002
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS

AM	07:00 AM - 08:00 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

CONTROL

3-Way Stop (NB/EB/WB)

	AM	NOON	PM
TEV	1102	0	1254
PHF	0.92		0.93

SOUTHBOUND (I-10 NB Ramps)

AM	0	0	0	0	857	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	559	PM
	0	0	0	0		

EASTBOUND (Cherry Valley Blvd)

AM	NOON	PM	
114	0	298	
0	0	0	0
523	0	304	0
114	0	376	1
0	0	0	0
AM	NOON	PM	

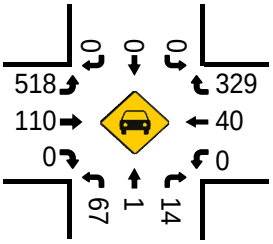
WESTBOUND (Cherry Valley Blvd)

PM	NOON	AM	
251	0	332	0
118	0	44	1
0	0	0	0
0	0	0	0
397	0	131	
PM	NOON	AM	

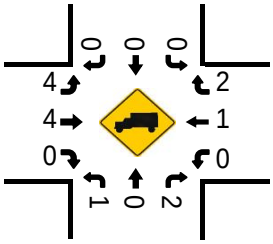
NORTHBOUND (I-10 NB Ramps)

	0	0	1	0	
PM	0	0	180	4	21	PM
NOON	0	0	0	0	0	NOON
AM	0	0	70	2	17	AM

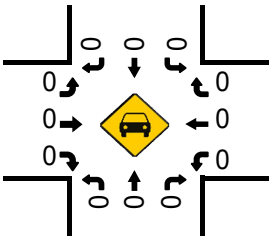
Cars (AM)



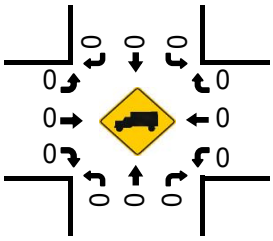
2axle (AM)



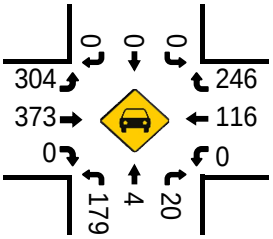
Cars (NOON)



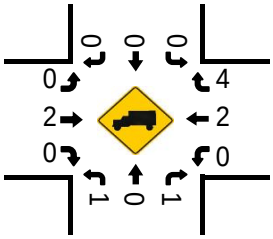
2axle (NOON)



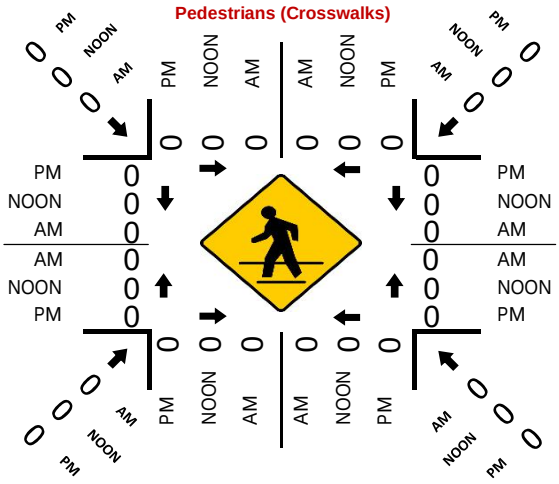
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Calimesa Blvd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (SB)

Project ID: 21-030036-003
Date: 5/20/2021

Data - Total

NS/EW Streets:	Calimesa Blvd				Calimesa Blvd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	7	0	4	0	5	19	0	0	0	86	7	0	128
7:15 AM	0	0	0	0	2	0	2	0	6	29	0	0	0	94	10	0	143
7:30 AM	0	0	0	0	9	0	3	0	6	24	0	0	0	94	13	0	149
7:45 AM	0	0	0	0	11	0	4	0	5	37	0	0	0	89	15	0	161
8:00 AM	0	0	0	0	10	0	10	0	6	30	0	0	0	79	6	0	141
8:15 AM	0	0	0	0	6	0	10	0	9	37	0	0	0	55	7	0	124
8:30 AM	0	0	0	0	8	0	7	0	5	33	0	0	0	81	13	0	147
8:45 AM	0	0	0	0	9	0	12	0	4	40	0	0	0	78	12	0	155
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	62	0	52	0	46	249	0	0	0	656	83	0	1148
APPROACH %'s :					54.39%	0.00%	45.61%	0.00%	15.59%	84.41%	0.00%	0.00%	0.00%	88.77%	11.23%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	32	0	19	0	23	120	0	0	0	356	44	0	594
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.727	0.000	0.475	0.000	0.958	0.811	0.000	0.000	0.000	0.947	0.733	0.000	0.922
					0.638				0.851				0.935				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	15	0	8	0	7	70	0	0	0	62	19	0	181
4:15 PM	0	0	0	0	18	0	8	0	10	76	0	0	0	64	13	0	189
4:30 PM	0	0	0	0	18	0	12	0	12	113	0	0	0	42	15	0	212
4:45 PM	0	0	0	0	18	0	12	0	12	93	0	0	0	71	10	0	216
5:00 PM	0	0	0	0	18	0	13	0	7	86	0	0	0	93	19	0	236
5:15 PM	0	0	0	0	20	0	12	0	10	85	0	0	0	97	17	0	241
5:30 PM	0	0	0	0	15	0	15	0	10	95	0	0	0	55	10	0	200
5:45 PM	0	0	0	0	14	0	11	0	12	76	0	0	0	54	13	0	180
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	136	0	91	0	80	694	0	0	0	538	116	0	1655
APPROACH %'s :					59.91%	0.00%	40.09%	0.00%	10.34%	89.66%	0.00%	0.00%	0.00%	82.26%	17.74%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	74	0	49	0	41	377	0	0	0	303	61	0	905
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.925	0.000	0.942	0.000	0.854	0.834	0.000	0.000	0.000	0.781	0.803	0.000	0.939
					0.961				0.836				0.798				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Calimesa Blvd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (SB)

Project ID: 21-030036-003
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Calimesa Blvd				Calimesa Blvd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	7	0	4	0	5	19	0	0	0	83	6	0	124
7:15 AM	0	0	0	0	2	0	2	0	6	27	0	0	0	93	10	0	140
7:30 AM	0	0	0	0	9	0	3	0	6	22	0	0	0	94	13	0	147
7:45 AM	0	0	0	0	11	0	4	0	5	34	0	0	0	86	15	0	155
8:00 AM	0	0	0	0	10	0	10	0	6	29	0	0	0	79	6	0	140
8:15 AM	0	0	0	0	6	0	10	0	8	34	0	0	0	53	7	0	118
8:30 AM	0	0	0	0	8	0	7	0	5	29	0	0	0	80	12	0	141
8:45 AM	0	0	0	0	9	0	12	0	4	38	0	0	0	77	12	0	152
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	62	0	52	0	45	232	0	0	0	645	81	0	1117
APPROACH %'s :					54.39%	0.00%	45.61%	0.00%	16.25%	83.75%	0.00%	0.00%	0.00%	88.84%	11.16%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	32	0	19	0	23	112	0	0	0	352	44	0	582
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.727	0.000	0.475	0.000	0.958	0.824	0.000	0.000	0.000	0.936	0.733	0.000	0.939
					0.638				0.865				0.925				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	14	0	8	0	7	70	0	0	0	61	19	0	179
4:15 PM	0	0	0	0	17	0	8	0	10	75	0	0	0	63	13	0	186
4:30 PM	0	0	0	0	18	0	12	0	12	109	0	0	0	42	15	0	208
4:45 PM	0	0	0	0	18	0	12	0	12	90	0	0	0	68	10	0	210
5:00 PM	0	0	0	0	18	0	13	0	7	85	0	0	0	92	19	0	234
5:15 PM	0	0	0	0	20	0	12	0	10	85	0	0	0	96	16	0	239
5:30 PM	0	0	0	0	15	0	15	0	10	94	0	0	0	53	10	0	197
5:45 PM	0	0	0	0	14	0	11	0	12	73	0	0	0	53	13	0	176
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	134	0	91	0	80	681	0	0	0	528	115	0	1629
APPROACH %'s :					59.56%	0.00%	40.44%	0.00%	10.51%	89.49%	0.00%	0.00%	0.00%	82.12%	17.88%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	74	0	49	0	41	369	0	0	0	298	60	0	891
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.925	0.000	0.942	0.000	0.854	0.846	0.000	0.000	0.000	0.776	0.789	0.000	0.932
					0.961				0.847				0.799				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Calimesa Blvd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (SB)

Project ID: 21-030036-003
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	Calimesa Blvd				Calimesa Blvd				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
8:00 AM	0	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	1	3	0	0	0	2	0	0	6
8:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	1	13	0	0	0	6	1	0	21
APPROACH %'s :									7.14%	92.86%	0.00%	0.00%	0.00%	85.71%	14.29%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.000	0.000	0.250	0.000	0.000	0.583
										0.750				0.250			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
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	1	0	0	0	0	0	0	0	0	1	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	8	0	0	0	8	1	0	18
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	88.89%	11.11%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	7	0	0	0	4	1	0	12
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.583	0.000	0.000	0.000	0.500	0.250	0.000	0.600
										0.583				0.625			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Calimesa Blvd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (SB)

Project ID: 21-030036-003
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Calimesa Blvd				Calimesa Blvd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	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	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	3	1	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	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	0.250	0.000	0.000	0.500
										0.250				0.250			

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

National Data & Surveying Services

Intersection Turning Movement Count

Location: Calimesa Blvd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (SB)

Project ID: 21-030036-003
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	Calimesa Blvd				Calimesa Blvd				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
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	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	1	0	0	0	2	0	0	3
8:00 AM	0	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	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	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250
										0.250				0.250			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	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	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	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	1	0	0	1
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	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	0	4
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	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	0	0	0	1	0	0	1
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	0.000	0.250	0.000	0.000	0.250
														0.250			

Prepared by National Data & Surveying Services

Calimesa Blvd & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-003
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

SOUTHBOUND (Calimesa Blvd)

AM	19	0	32	0	67	AM
NOON	0	0	0	0	0	NOON
PM	49	0	74	0	102	PM
	0	1	0	0		

EASTBOUND (Cherry Valley Blvd)

AM	NOON	PM	
375	0	352	
0	0	0	0
23	0	41	0
120	0	377	1
0	0	0	0
AM	NOON	PM	

WESTBOUND (Cherry Valley Blvd)

	PM	NOON	AM
0	61	0	44
1	303	0	356
0	0	0	0
0	0	0	0
	451	0	152
	PM	NOON	AM

NORTHBOUND (Calimesa Blvd)

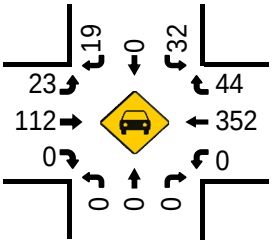
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
	0	0	0	0		

CONTROL

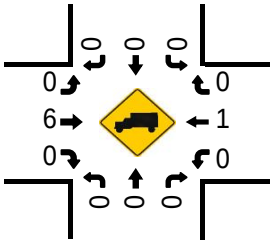
1-Way Stop (SB)

TEV	594 AM	0 NOON	905 PM
PHF	0.92		0.94

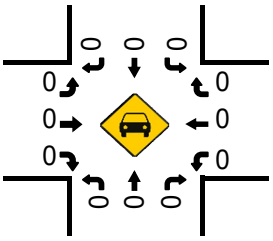
Cars (AM)



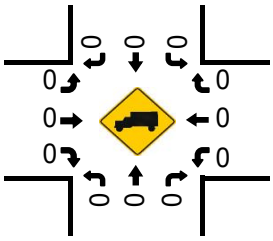
2axle (AM)



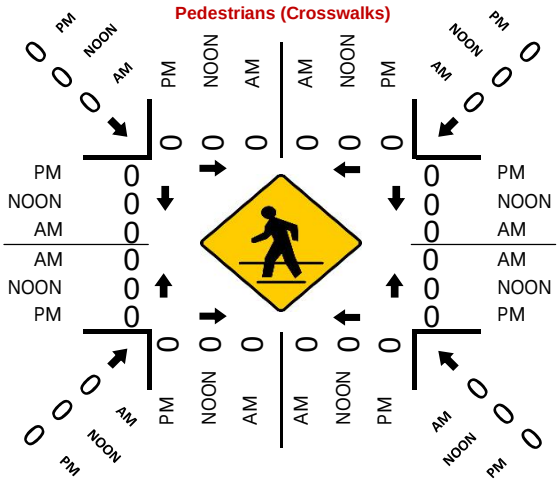
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
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0
0
0
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0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (NB)

Project ID: 21-030036-004
Date: 5/20/2021

Data - Total

NS/EW Streets:	Hannon Rd				Hannon Rd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	10	0	0	0	0	0	0	0	0	22	4	0	0	76	0	0	112
7:15 AM	16	0	0	0	0	0	0	0	0	21	2	0	0	98	0	0	137
7:30 AM	13	0	0	0	0	0	0	0	0	33	2	0	0	86	0	0	134
7:45 AM	11	0	0	0	0	0	0	0	0	33	1	0	0	97	0	0	142
8:00 AM	13	0	0	0	0	0	0	0	0	42	5	0	0	69	0	0	129
8:15 AM	4	0	0	0	0	0	0	0	0	48	4	0	0	60	0	0	116
8:30 AM	10	0	0	0	0	0	0	0	0	32	2	0	1	82	0	0	127
8:45 AM	13	0	1	0	0	0	1	0	0	41	3	0	1	73	0	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	90	0	1	0	0	0	1	0	0	272	23	0	2	641	0	0	1030
APPROACH %'s :	98.90%	0.00%	1.10%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	92.20%	7.80%	0.00%	0.31%	99.69%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	53	0	0	0	0	0	0	0	0	129	10	0	0	350	0	0	542
PEAK HR FACTOR :	0.828	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.768	0.500	0.000	0.000	0.893	0.000	0.000	0.954
	0.828				0.739								0.893				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	5	0	0	0	0	0	0	0	0	81	10	0	0	78	0	0	174
4:15 PM	7	0	1	0	0	0	0	0	0	68	10	0	0	68	0	0	154
4:30 PM	3	0	0	0	0	0	0	0	0	116	11	0	0	53	0	0	183
4:45 PM	8	0	0	0	0	0	0	0	0	108	5	0	0	78	0	0	199
5:00 PM	10	0	1	0	0	0	0	0	0	90	12	0	0	89	0	0	202
5:15 PM	17	0	0	0	0	0	0	0	0	97	9	0	0	88	0	0	211
5:30 PM	9	0	1	0	0	0	0	0	0	100	11	0	0	57	0	0	178
5:45 PM	3	0	0	0	0	0	0	0	0	84	11	0	0	65	0	0	163
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	62	0	3	0	0	0	0	0	0	744	79	0	0	576	0	0	1464
APPROACH %'s :	95.38%	0.00%	4.62%	0.00%					0.00%	90.40%	9.60%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	38	0	1	0	0	0	0	0	0	411	37	0	0	308	0	0	795
PEAK HR FACTOR :	0.559	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.886	0.771	0.000	0.000	0.865	0.000	0.000	0.942
	0.574								0.882				0.865				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (NB)

Project ID: 21-030036-004
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Hannon Rd				Hannon Rd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	10	0	0	0	0	0	0	0	0	22	4	0	0	71	0	0	107
7:15 AM	16	0	0	0	0	0	0	0	0	20	2	0	0	97	0	0	135
7:30 AM	13	0	0	0	0	0	0	0	0	30	2	0	0	86	0	0	131
7:45 AM	11	0	0	0	0	0	0	0	0	32	1	0	0	94	0	0	138
8:00 AM	13	0	0	0	0	0	0	0	0	40	5	0	0	69	0	0	127
8:15 AM	4	0	0	0	0	0	0	0	0	47	4	0	0	59	0	0	114
8:30 AM	10	0	0	0	0	0	0	0	0	31	2	0	1	79	0	0	123
8:45 AM	13	0	1	0	0	0	1	0	0	39	3	0	1	73	0	0	131
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	90	0	1	0	0	0	1	0	0	261	23	0	2	628	0	0	1006
APPROACH %'s :	98.90%	0.00%	1.10%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	91.90%	8.10%	0.00%	0.32%	99.68%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	53	0	0	0	0	0	0	0	0	122	10	0	0	346	0	0	531
PEAK HR FACTOR :	0.828	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.763	0.500	0.000	0.000	0.892	0.000	0.000	0.962
	0.828				0.733								0.892				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	5	0	0	0	0	0	0	0	0	80	10	0	0	76	0	0	171
4:15 PM	7	0	1	0	0	0	0	0	0	66	10	0	0	68	0	0	152
4:30 PM	3	0	0	0	0	0	0	0	0	113	9	0	0	53	0	0	178
4:45 PM	8	0	0	0	0	0	0	0	0	105	5	0	0	75	0	0	193
5:00 PM	10	0	1	0	0	0	0	0	0	89	12	0	0	88	0	0	200
5:15 PM	16	0	0	0	0	0	0	0	0	97	9	0	0	87	0	0	209
5:30 PM	9	0	1	0	0	0	0	0	0	99	11	0	0	57	0	0	177
5:45 PM	3	0	0	0	0	0	0	0	0	84	11	0	0	64	0	0	162
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	61	0	3	0	0	0	0	0	0	733	77	0	0	568	0	0	1442
APPROACH %'s :	95.31%	0.00%	4.69%	0.00%					0.00%	90.49%	9.51%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	37	0	1	0	0	0	0	0	0	404	35	0	0	303	0	0	780
PEAK HR FACTOR :	0.578	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.894	0.729	0.000	0.000	0.861	0.000	0.000	0.933
	0.594								0.900				0.861				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (NB)

Project ID: 21-030036-004
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	Hannon Rd				Hannon Rd				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
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	1	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	9	0	0	0	5	0	0	14
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	0.583
										0.500				0.250			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	0	7	2	0	0	6	0	0	16
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					0.00%	77.78%	22.22%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	5	2	0	0	4	0	0	12
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.250	0.000	0.000	0.500	0.000	0.000	0.600
		0.250								0.583				0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (NB)

Project ID: 21-030036-004
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Hannon Rd				Hannon Rd				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	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	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	0	6
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
PEAK HR FACTOR :	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	0.250	0.000	0.000	0.500
										0.250				0.250			

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

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Cherry Valley Blvd
City: Beaumont
Control: 1-Way Stop (NB)

Project ID: 21-030036-004
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	Hannon Rd				Hannon Rd				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
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	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	2	0	0	2
8:00 AM	0	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	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
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	0.000	0.250	0.000	0.000	0.250
														0.250			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
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	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	1	0	0	1
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	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	0	0	0	1	0	0	1
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	0.000	0.250	0.000	0.000	0.250
														0.250			

Prepared by National Data & Surveying Services

Hannon Rd & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-004
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

SOUTHBOUND (Hannon Rd)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	0	PM

EASTBOUND (Cherry Valley Blvd)

AM	NOON	PM	
403	0	346	⇦
0	0	0	↶ 0
0	0	0	↱ 0
129	0	411	→ 1
10	0	37	↳ 0
AM	NOON	PM	

WESTBOUND (Cherry Valley Blvd)

PM	NOON	AM	
0	0	0	0 ↰
308	0	350	1 ←
0	0	0	0 ↲
0	0	0	0 ↺
412	0	129	⇨
PM	NOON	AM	

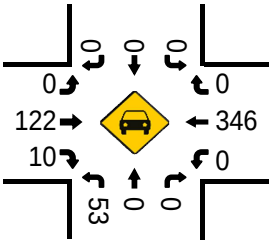
NORTHBOUND (Hannon Rd)

PM	37	0	38	0	1	PM
NOON	0	0	0	0	0	NOON
AM	10	0	53	0	0	AM

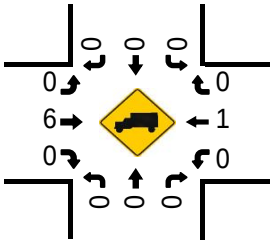
Turning movements (AM): 0 1 0 0 (southbound); 0 0 1 0 (northbound)

CONTROL			
1-Way Stop (NB)			
TEV	542 AM	0 NOON	795 PM
PHF	0.95		0.94

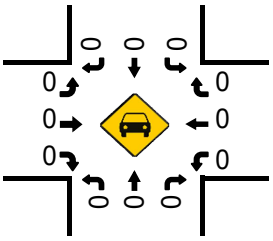
Cars (AM)



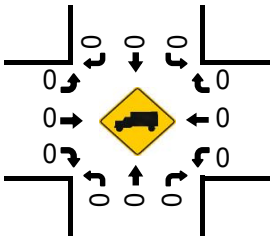
2axle (AM)



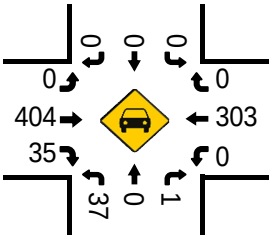
Cars (NOON)



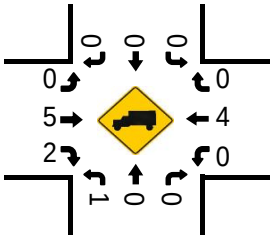
2axle (NOON)



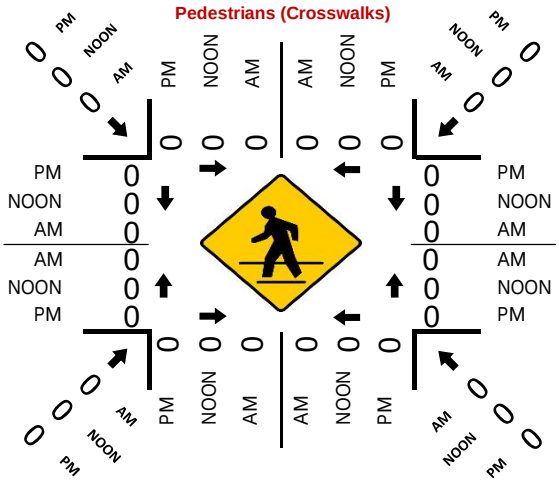
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Cherry Valley Blvd
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-005
Date: 5/20/2021

Data - Total

NS/EW Streets:	Union St				Union St				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	5	0	0	0	0	1	14	0	3	18	0	0	0	61	0	0	102
7:15 AM	9	0	1	0	0	0	17	0	1	21	2	0	1	73	0	0	125
7:30 AM	5	0	0	0	0	1	14	0	4	25	2	0	0	65	1	0	117
7:45 AM	12	0	0	0	0	0	25	0	5	26	1	0	0	56	0	0	125
8:00 AM	8	1	0	0	0	1	17	0	7	30	3	0	0	44	0	0	111
8:15 AM	5	0	0	0	0	0	15	0	9	37	1	0	0	41	0	0	108
8:30 AM	8	0	0	0	0	0	19	0	4	31	1	0	0	55	0	0	118
8:45 AM	3	1	0	0	0	2	17	0	7	31	3	0	0	56	0	0	120
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	55	2	1	0	0	5	138	0	40	219	13	0	1	451	1	0	926
APPROACH %'s :	94.83%	3.45%	1.72%	0.00%	0.00%	3.50%	96.50%	0.00%	14.71%	80.51%	4.78%	0.00%	0.22%	99.56%	0.22%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	34	1	1	0	0	2	73	0	17	102	8	0	1	238	1	0	478
PEAK HR FACTOR :	0.708	0.250	0.250	0.000	0.000	0.500	0.730	0.000	0.607	0.850	0.667	0.000	0.250	0.815	0.250	0.000	0.956
	0.750				0.750				0.794				0.811				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	5	0	0	0	1	0	11	0	14	63	5	0	0	64	0	0	163
4:15 PM	7	1	0	0	1	0	11	0	10	57	3	0	1	48	0	0	139
4:30 PM	4	0	0	0	1	0	6	0	16	91	4	0	0	47	0	0	169
4:45 PM	4	1	0	0	1	2	11	0	15	94	1	0	1	57	0	0	187
5:00 PM	6	2	0	0	0	2	8	0	15	72	4	0	1	78	2	0	190
5:15 PM	4	0	1	0	0	0	6	0	15	79	5	0	1	75	0	0	186
5:30 PM	4	0	3	0	0	1	7	0	16	85	0	0	1	41	1	0	159
5:45 PM	5	0	1	0	0	1	11	0	11	66	1	0	0	52	0	0	148
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	4	5	0	4	6	71	0	112	607	23	0	5	462	3	0	1341
APPROACH %'s :	81.25%	8.33%	10.42%	0.00%	4.94%	7.41%	87.65%	0.00%	15.09%	81.81%	3.10%	0.00%	1.06%	98.30%	0.64%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	18	3	1	0	2	4	31	0	61	336	14	0	3	257	2	0	732
PEAK HR FACTOR :	0.750	0.375	0.250	0.000	0.500	0.500	0.705	0.000	0.953	0.894	0.700	0.000	0.750	0.824	0.250	0.000	0.963
	0.688				0.661				0.926				0.809				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Cherry Valley Blvd
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-005
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Union St				Union St				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	4	0	0	0	0	1	13	0	3	18	0	0	0	57	0	0	96
7:15 AM	9	0	1	0	0	0	17	0	1	20	2	0	1	73	0	0	124
7:30 AM	5	0	0	0	0	1	14	0	4	24	1	0	0	65	1	0	115
7:45 AM	10	0	0	0	0	0	25	0	4	25	1	0	0	55	0	0	120
8:00 AM	8	1	0	0	0	1	17	0	7	28	3	0	0	44	0	0	109
8:15 AM	5	0	0	0	0	0	15	0	9	35	1	0	0	40	0	0	105
8:30 AM	7	0	0	0	0	0	19	0	4	31	1	0	0	53	0	0	115
8:45 AM	3	1	0	0	0	2	17	0	7	30	2	0	0	55	0	0	117
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	51	2	1	0	0	5	137	0	39	211	11	0	1	442	1	0	901
APPROACH %'s :	94.44%	3.70%	1.85%	0.00%	0.00%	3.52%	96.48%	0.00%	14.94%	80.84%	4.21%	0.00%	0.23%	99.55%	0.23%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	32	1	1	0	0	2	73	0	16	97	7	0	1	237	1	0	468
PEAK HR FACTOR :	0.800	0.250	0.250	0.000	0.000	0.500	0.730	0.000	0.571	0.866	0.583	0.000	0.250	0.812	0.250	0.000	0.944
	0.850				0.750				0.789				0.807				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	5	0	0	0	1	0	11	0	14	62	5	0	0	62	0	0	160
4:15 PM	7	1	0	0	1	0	11	0	10	56	3	0	1	48	0	0	138
4:30 PM	4	0	0	0	1	0	6	0	16	86	4	0	0	47	0	0	164
4:45 PM	4	1	0	0	1	2	11	0	15	93	0	0	1	54	0	0	182
5:00 PM	6	2	0	0	0	2	8	0	15	71	4	0	1	77	2	0	188
5:15 PM	4	0	1	0	0	0	6	0	15	79	5	0	1	74	0	0	185
5:30 PM	4	0	3	0	0	1	7	0	15	85	0	0	1	41	1	0	158
5:45 PM	5	0	1	0	0	1	11	0	11	66	1	0	0	51	0	0	147
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	39	4	5	0	4	6	71	0	111	598	22	0	5	454	3	0	1322
APPROACH %'s :	81.25%	8.33%	10.42%	0.00%	4.94%	7.41%	87.65%	0.00%	15.18%	81.81%	3.01%	0.00%	1.08%	98.27%	0.65%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	18	3	1	0	2	4	31	0	61	329	13	0	3	252	2	0	719
PEAK HR FACTOR :	0.750	0.375	0.250	0.000	0.500	0.500	0.705	0.000	0.953	0.884	0.650	0.000	0.750	0.818	0.250	0.000	0.956
	0.688				0.661				0.933				0.803				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Cherry Valley Blvd
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-005
Date: 5/20/2021

Data - 2axle

NS/EW Streets:	Union St				Union St				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	3
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	2	0	0	0	1	0	0	3
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	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	1	7	1	0	0	4	0	0	14
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					11.11%	77.78%	11.11%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	4	1	0	0	1	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	1.000	0.250	0.000	0.000	0.250	0.000	0.000	0.583
										0.750				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
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	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	6	1	0	0	6	0	0	13
APPROACH %'s :									0.00%	85.71%	14.29%	0.00%	0.00%	100.00%	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	5	1	0	0	4	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.250	0.000	0.000	0.500	0.000	0.000	0.625
										0.500				0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Cherry Valley Blvd
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-005
Date: 5/20/2021

Data - 3axle

AM

NS/EW Streets:	Union St				Union St				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
7:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	3	0	0	4
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	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	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	1	0	0	1	0	0	0	5	0	0	7
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :	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	0.000	0.250
										0.250							

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	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	0	0	0	0	0	0	0	0	2	0	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	1	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	1	3	0	0	0	1	0	0	5
APPROACH %'s :									25.00%	75.00%	0.00%	0.00%	0.00%	100.00%	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	2	0	0	0	0	0	0	2
PEAK HR FACTOR :	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	0.000	0.250
										0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Cherry Valley Blvd
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-005
Date: 5/20/2021

Data - 4axle

AM

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

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	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	TOTAL
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	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	1	0	0	1
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
APPROACH %'s :													0.00%	100.00%	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	0	0	0	1	0	0	1
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	0.000	0.250	0.000	0.000	0.250
													0.250				

Prepared by National Data & Surveying Services

Union St & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-005
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

SOUTHBOUND (Union St)

AM	73	2	0	0	19	AM
NOON	0	0	0	0	0	NOON
PM	31	4	2	0	66	PM
	0	1	0	0		

EASTBOUND (Cherry Valley Blvd)

AM	NOON	PM	
345	0	306	
0	0	0	0
17	0	61	0
102	0	336	1
8	0	14	0

WESTBOUND (Cherry Valley Blvd)

	PM	NOON	AM
0	2	0	1
1	257	0	238
0	3	0	1
0	0	0	0
	339	0	103

NORTHBOUND (Union St)

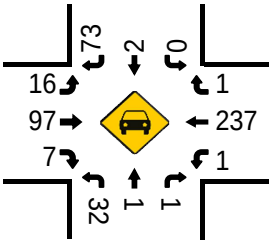
PM	21	0	18	3	1	PM
NOON	0	0	0	0	0	NOON
AM	11	0	34	1	1	AM
		0	0	1	0	

CONTROL

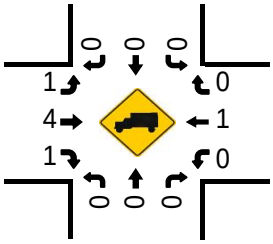
2-Way Stop (NB/SB)

TEV	478 AM	0 NOON	732 PM
PHF	0.96		0.96

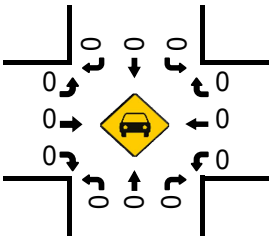
Cars (AM)



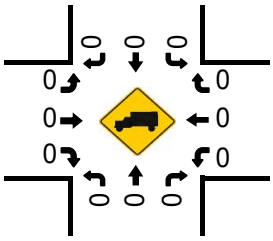
2axle (AM)



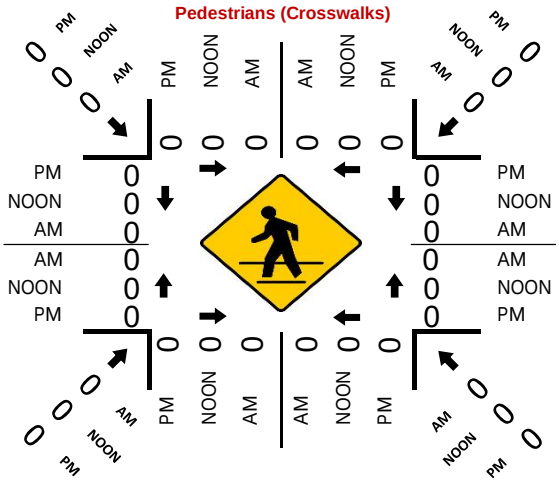
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nancy Ave & Cherry Valley Blvd
City: Beaumont
Control: 4-Way Stop

Project ID: 21-030036-006
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Nancy Ave				Nancy Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	1	3	0	0	0	4	6	0	4	13	3	0	0	49	0	0	83
7:15 AM	1	4	0	0	0	5	6	0	1	14	6	0	0	68	1	0	106
7:30 AM	7	4	2	0	1	7	8	0	1	12	10	0	0	55	0	0	107
7:45 AM	4	3	1	0	0	2	6	0	3	24	12	0	2	47	0	0	104
8:00 AM	1	3	0	0	0	0	5	0	3	22	4	0	1	35	0	0	74
8:15 AM	3	2	0	0	0	4	3	0	2	22	3	0	0	42	0	0	81
8:30 AM	2	1	4	0	0	6	5	0	2	25	2	0	1	46	0	0	94
8:45 AM	1	2	0	0	1	3	7	0	1	29	2	0	2	42	0	0	90
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	22	7	0	2	31	46	0	17	161	42	0	6	384	1	0	739
APPROACH %'s :	40.82%	44.90%	14.29%	0.00%	2.53%	39.24%	58.23%	0.00%	7.73%	73.18%	19.09%	0.00%	1.53%	98.21%	0.26%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	13	14	3	0	1	18	26	0	9	63	31	0	2	219	1	0	400
PEAK HR FACTOR :	0.464	0.875	0.375	0.000	0.250	0.643	0.813	0.000	0.563	0.656	0.646	0.000	0.250	0.805	0.250	0.000	0.935
	0.577				0.703				0.660				0.804				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	4	4	4	0	2	6	0	0	5	52	4	0	3	51	0	0	135
4:15 PM	3	3	1	0	2	2	4	0	3	49	9	0	2	41	0	0	119
4:30 PM	7	4	2	0	1	5	6	0	6	72	12	0	2	42	4	0	163
4:45 PM	6	4	2	0	4	2	5	0	6	79	6	0	3	36	2	0	155
5:00 PM	10	6	2	0	2	3	4	0	2	68	4	0	0	69	2	1	173
5:15 PM	10	5	0	0	2	7	3	0	7	68	3	0	4	56	0	0	165
5:30 PM	1	6	3	0	1	2	3	0	5	81	6	0	4	32	1	0	145
5:45 PM	8	7	2	0	1	2	2	0	4	56	5	0	3	48	0	0	138
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	49	39	16	0	15	29	27	0	38	525	49	0	21	375	9	1	1193
APPROACH %'s :	47.12%	37.50%	15.38%	0.00%	21.13%	40.85%	38.03%	0.00%	6.21%	85.78%	8.01%	0.00%	5.17%	92.36%	2.22%	0.25%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	33	19	6	0	9	17	18	0	21	287	25	0	9	203	8	1	656
PEAK HR FACTOR :	0.825	0.792	0.750	0.000	0.563	0.607	0.750	0.000	0.750	0.908	0.521	0.000	0.563	0.736	0.500	0.250	0.948
	0.806				0.917				0.915				0.767				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nancy Ave & Cherry Valley Blvd
City: Beaumont
Control: 4-Way Stop

Project ID: 21-030036-006
Date: 5/20/2021

Data - Total

NS/EW Streets:	Nancy Ave				Nancy Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	1	3	0	0	0	4	6	0	4	13	3	0	0	53	0	0	87
7:15 AM	1	4	0	0	1	5	6	0	1	15	6	0	0	68	1	0	108
7:30 AM	7	4	2	0	1	7	8	0	2	13	10	0	0	55	0	0	109
7:45 AM	4	3	1	0	0	2	6	0	3	25	12	0	2	48	0	0	106
8:00 AM	1	3	0	0	0	0	5	0	3	23	5	0	1	35	0	0	76
8:15 AM	3	2	0	0	1	4	3	0	2	23	3	0	0	43	0	0	84
8:30 AM	2	1	4	0	0	6	5	0	2	26	2	0	1	48	0	0	97
8:45 AM	1	2	0	0	1	3	7	0	1	30	2	0	2	42	0	0	91
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	22	7	0	4	31	46	0	18	168	43	0	6	392	1	0	758
APPROACH %'s :	40.82%	44.90%	14.29%	0.00%	4.94%	38.27%	56.79%	0.00%	7.86%	73.36%	18.78%	0.00%	1.50%	98.25%	0.25%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	13	14	3	0	2	18	26	0	10	66	31	0	2	224	1	0	410
PEAK HR FACTOR :	0.464	0.875	0.375	0.000	0.500	0.643	0.813	0.000	0.625	0.660	0.646	0.000	0.250	0.824	0.250	0.000	0.940
	0.577				0.719				0.669				0.822				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	4	4	4	0	2	6	0	0	5	54	4	0	3	53	0	0	139
4:15 PM	3	3	1	0	3	2	4	0	3	50	9	0	2	41	0	0	121
4:30 PM	7	4	2	0	1	5	6	0	6	76	12	0	2	43	4	0	168
4:45 PM	6	4	2	0	4	2	5	0	6	80	6	0	3	38	2	0	158
5:00 PM	10	6	2	0	2	3	4	0	2	69	4	0	0	70	2	1	175
5:15 PM	10	5	0	0	3	7	3	0	7	68	3	0	4	57	0	0	167
5:30 PM	1	6	3	0	1	2	3	0	5	81	6	0	4	32	1	0	145
5:45 PM	8	7	2	0	1	2	2	0	4	56	5	0	3	49	0	0	139
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	49	39	16	0	17	29	27	0	38	534	49	0	21	383	9	1	1212
APPROACH %'s :	47.12%	37.50%	15.38%	0.00%	23.29%	39.73%	36.99%	0.00%	6.12%	85.99%	7.89%	0.00%	5.07%	92.51%	2.17%	0.24%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	33	19	6	0	10	17	18	0	21	293	25	0	9	208	8	1	668
PEAK HR FACTOR :	0.825	0.792	0.750	0.000	0.625	0.607	0.750	0.000	0.750	0.916	0.521	0.000	0.563	0.743	0.500	0.250	0.954
	0.806				0.865				0.902				0.774				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nancy Ave & Cherry Valley Blvd
City: Beaumont
Control: 4-Way Stop

Project ID: 21-030036-006
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	Nancy Ave				Nancy Ave				Cherry Valley Blvd				Cherry Valley Blvd				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
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	1	0	0	0	0	1	0	0	0	1	0	0	3
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	1	6	1	0	0	4	0	0	14
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	12.50%	75.00%	12.50%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	1	3	0	0	0	2	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.750	0.000	0.000	0.000	0.500	0.000	0.000	0.875
					0.250				0.500				0.500				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	0	0	0	0	0	1	0	0	1
4:15 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	0	5	0	0	0	6	0	0	13
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	4	0	0	0	4	0	0	9
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	1.000	0.000	0.000	0.750
					0.250				0.500				1.000				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nancy Ave & Cherry Valley Blvd
City: Beaumont
Control: 4-Way Stop

Project ID: 21-030036-006
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Nancy Ave				Nancy Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	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	0	0	0	0	1	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	4	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	0.000	0.250	0.000	0.000	0.250
													0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	0	1	0	0	0	1	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	0	0	0	0	0	0	0	0	2	0	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	3	0	0	0	1	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	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	2	0	0	0	0	0	0	2
PEAK HR FACTOR :	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	0.000	0.250
										0.250							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Nancy Ave & Cherry Valley Blvd
City: Beaumont
Control: 4-Way Stop

Project ID: 21-030036-006
Date: 5/20/2021

Data - 4axle

NS/EW Streets:	Nancy Ave				Nancy Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	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	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	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	0	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
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
APPROACH %'s :																	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	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	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	0.5	0.5	0	0	1	1	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	0	1	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	0	0	0	0	0	0	0	0	1	0	0	1
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	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	0	0	0	1	0	0	1
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	0.000	0.250	0.000	0.000	0.250
														0.250			

Prepared by National Data & Surveying Services

Nancy Ave & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-006
City: Beumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:00 AM - 08:00 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

SOUTHBOUND (Nancy Ave)

AM	26	18	2	0	25	AM
NOON	0	0	0	0	0	NOON
PM	18	17	10	0	48	PM
	0.5	0.5	0	0		

EASTBOUND (Cherry Valley Blvd)

AM	NOON	PM	
263	0	259	
0	0	0	0
10	0	21	0
66	0	293	1
31	0	25	1

WESTBOUND (Cherry Valley Blvd)

	PM	NOON	AM
1	8	0	1
1	208	0	224
0	9	0	2
0	1	0	0
	310	0	71

NORTHBOUND (Nancy Ave)

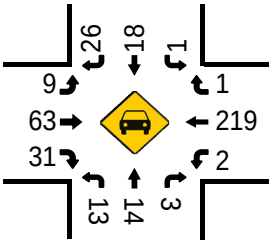
PM	51	0	33	19	6	PM
NOON	0	0	0	0	0	NOON
AM	51	0	13	14	3	AM
		0	0	1	0	

CONTROL

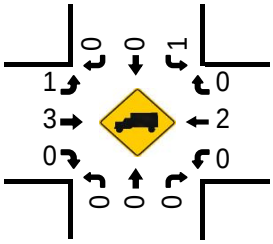
4-Way Stop

TEV	410 AM	0 NOON	668 PM
PHF	0.94		0.95

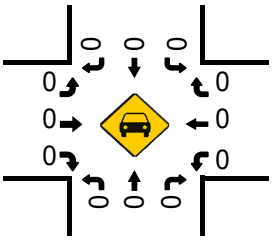
Cars (AM)



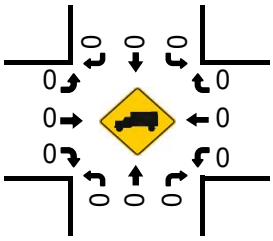
2axle (AM)



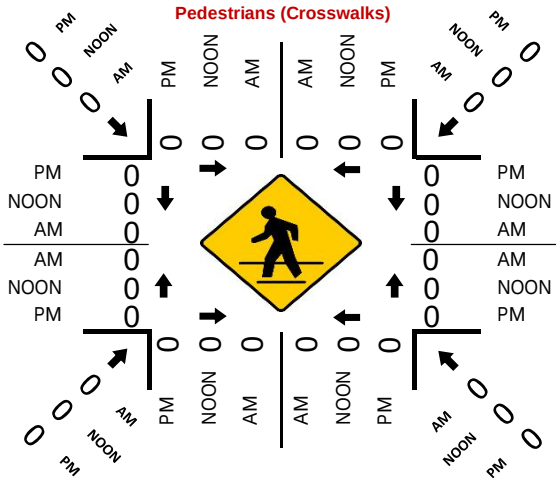
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Cherry Valley Blvd
City: Beaumont
Control: Signalized

Project ID: 21-030036-007
Date: 5/20/2021

Data - Total

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	28	28	2	0	1	32	1	0	2	2	9	0	1	24	2	0	132
7:15 AM	40	25	2	0	1	44	7	0	6	3	7	0	2	20	1	0	158
7:30 AM	35	33	1	0	0	39	10	0	6	3	13	0	3	15	0	0	158
7:45 AM	25	35	1	0	1	51	5	0	1	8	13	0	4	23	1	0	168
8:00 AM	17	20	2	0	3	51	8	0	4	10	16	0	1	13	0	0	145
8:15 AM	16	51	3	0	0	32	4	0	7	5	9	0	3	22	2	0	154
8:30 AM	24	33	0	0	2	43	14	0	10	9	15	0	0	11	1	0	162
8:45 AM	26	43	1	0	1	41	11	0	9	13	13	0	2	14	2	0	176
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	211	268	12	0	9	333	60	0	45	53	95	0	16	142	9	0	1253
APPROACH %'s :	42.97%	54.58%	2.44%	0.00%	2.24%	82.84%	14.93%	0.00%	23.32%	27.46%	49.22%	0.00%	9.58%	85.03%	5.39%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	83	147	6	0	6	167	37	0	30	37	53	0	6	60	5	0	637
PEAK HR FACTOR :	0.798	0.721	0.500	0.000	0.500	0.819	0.661	0.000	0.750	0.712	0.828	0.000	0.500	0.682	0.625	0.000	0.905
	0.843				0.847				0.857				0.657				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	34	56	5	0	4	58	15	0	9	10	35	0	2	15	2	0	245
4:15 PM	23	75	1	0	3	63	9	0	6	25	22	0	3	11	3	0	244
4:30 PM	33	61	9	0	3	63	9	0	13	22	39	0	3	10	0	0	265
4:45 PM	31	65	7	0	2	50	12	0	19	24	46	0	5	13	1	0	275
5:00 PM	35	61	5	0	5	59	14	0	12	21	42	0	2	20	4	0	280
5:15 PM	33	66	4	0	6	55	18	0	16	18	44	0	5	13	5	0	283
5:30 PM	24	47	9	0	4	53	12	0	7	27	41	0	1	9	2	0	236
5:45 PM	27	43	6	0	1	49	5	0	17	21	44	0	2	21	4	0	240
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	240	474	46	0	28	450	94	0	99	168	313	0	23	112	21	0	2068
APPROACH %'s :	31.58%	62.37%	6.05%	0.00%	4.90%	78.67%	16.43%	0.00%	17.07%	28.97%	53.97%	0.00%	14.74%	71.79%	13.46%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	132	253	25	0	16	227	53	0	60	85	171	0	15	56	10	0	1103
PEAK HR FACTOR :	0.943	0.958	0.694	0.000	0.667	0.901	0.736	0.000	0.789	0.885	0.929	0.000	0.750	0.700	0.500	0.000	0.974
	0.995				0.937				0.888				0.779				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Cherry Valley Blvd
City: Beaumont
Control: Signalized

Project ID: 21-030036-007
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	28	28	2	0	1	31	1	0	2	2	9	0	1	20	2	0	127
7:15 AM	40	23	1	0	1	44	7	0	6	3	6	0	2	20	1	0	154
7:30 AM	34	33	1	0	0	39	10	0	6	3	13	0	3	15	0	0	157
7:45 AM	24	33	1	0	1	51	5	0	1	7	13	0	4	23	1	0	164
8:00 AM	17	20	2	0	3	50	8	0	3	10	16	0	1	13	0	0	143
8:15 AM	16	49	3	0	0	32	4	0	7	5	8	0	3	22	2	0	151
8:30 AM	24	32	0	0	2	42	14	0	10	8	13	0	0	10	1	0	156
8:45 AM	25	43	1	0	1	41	10	0	8	13	13	0	2	14	2	0	173
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	208	261	11	0	9	330	59	0	43	51	91	0	16	137	9	0	1225
APPROACH %'s :	43.33%	54.38%	2.29%	0.00%	2.26%	82.91%	14.82%	0.00%	23.24%	27.57%	49.19%	0.00%	9.88%	84.57%	5.56%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	82	144	6	0	6	165	36	0	28	36	50	0	6	59	5	0	623
PEAK HR FACTOR :	0.820	0.735	0.500	0.000	0.500	0.825	0.643	0.000	0.700	0.692	0.781	0.000	0.500	0.670	0.625	0.000	0.900
	0.841				0.848				0.838				0.648				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	34	54	5	0	4	58	14	0	9	10	35	0	2	15	2	0	242
4:15 PM	23	73	1	0	3	63	9	0	5	24	21	0	3	10	3	0	238
4:30 PM	33	61	9	0	3	62	9	0	13	20	37	0	3	10	0	0	260
4:45 PM	31	65	7	0	2	50	10	0	19	22	46	0	5	12	1	0	270
5:00 PM	35	60	4	0	5	59	14	0	12	21	41	0	2	19	4	0	276
5:15 PM	33	65	4	0	6	55	18	0	16	18	43	0	5	13	5	0	281
5:30 PM	24	47	9	0	4	53	12	0	7	27	41	0	1	9	2	0	236
5:45 PM	27	43	6	0	1	49	5	0	17	21	44	0	2	20	4	0	239
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	240	468	45	0	28	449	91	0	98	163	308	0	23	108	21	0	2042
APPROACH %'s :	31.87%	62.15%	5.98%	0.00%	4.93%	79.05%	16.02%	0.00%	17.22%	28.65%	54.13%	0.00%	15.13%	71.05%	13.82%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	132	251	24	0	16	226	51	0	60	81	167	0	15	54	10	0	1087
PEAK HR FACTOR :	0.943	0.965	0.667	0.000	0.667	0.911	0.708	0.000	0.789	0.920	0.908	0.000	0.750	0.711	0.500	0.000	0.967
	0.988				0.927				0.885				0.790				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Cherry Valley Blvd
City: Beaumont
Control: Signalized

Project ID: 21-030036-007
Date: 5/20/2021

Data - 2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	2	1	0	0	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2
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	1	1	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	4	1	0	0	2	1	0	2	2	3	0	0	1	0	0	17
APPROACH %'s :	16.67%	66.67%	16.67%	0.00%	0.00%	66.67%	33.33%	0.00%	28.57%	28.57%	42.86%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	2	0	0	0	1	1	0	2	1	2	0	0	0	0	0	9
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.250	0.500	0.000	0.000	0.000	0.000	0.000	0.750
	0.250				0.500				0.625								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	2	0	0	0	0	0	0	0	1	1	0	0	1	0	0	5
4:30 PM	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
5:00 PM	0	1	1	0	0	0	0	0	0	0	1	0	0	1	0	0	4
5:15 PM	0	1	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	5	1	0	0	1	2	0	0	5	3	0	0	3	0	0	20
APPROACH %'s :	0.00%	83.33%	16.67%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	62.50%	37.50%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	2	1	0	0	1	2	0	0	4	2	0	0	1	0	0	13
PEAK HR FACTOR :	0.000	0.500	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.500	0.000	0.000	0.250	0.000	0.000	0.813
	0.375				0.375				0.750				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Cherry Valley Blvd
City: Beaumont
Control: Signalized

Project ID: 21-030036-007
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	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	1	0	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	0	0	0	0	0	0	0	0
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	0	0	0	0	1	0	0	1
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	6
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%									0.00%	100.00%	0.00%	0.00%	
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.500
	0.250												0.250				

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

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Cherry Valley Blvd
City: Beaumont
Control: Signalized

Project ID: 21-030036-007
Date: 5/20/2021

Data - 4axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Cherry Valley Blvd				Cherry Valley Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	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	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	0	0	0	1	0	0	0	0	1	0	0	0	0	0	5
APPROACH %'s :	33.33%	66.67%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	08:00 AM - 09:00 AM																TOTAL
PEAK HR VOL :	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.250	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	0.250
	0.250				0.250				0.250								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	1	0	0	0	0	0	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	1	0	0	1
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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	3
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	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	0	0	0	1	0	0	1
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	0.000	0.250	0.000	0.000	0.250
													0.250				

Prepared by National Data & Surveying Services

Beaumont Ave & Cherry Valley Blvd

Peak Hour Turning Movement Count

ID: 21-030036-007
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS

08:00 AM - 09:00 AM
NONE
04:30 PM - 05:30 PM

COUNT PERIODS

7:00 AM - 09:00 AM
NONE
4:00 PM - 06:00 PM

Beaumont Ave

SOUTHBOUND

AM	37	167	6	0	182	AM
NOON	0	0	0	0	0	NOON
PM	53	227	16	0	323	PM
	0	1	1	0		

Cherry Valley Blvd — **EASTBOUND**

AM	NOON	PM	
180	0	241	
0	0	0	0
30	0	60	1
37	0	85	1
53	0	171	0
AM	NOON	PM	

CONTROL

Signalized

TEV	637 AM	0 NOON	1103 PM
PHF	0.90		0.97

WESTBOUND — **Cherry Valley Blvd**

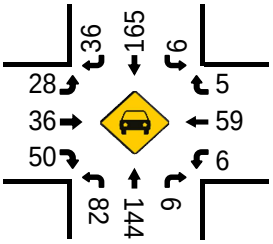
	PM	NOON	AM
0	10	0	5
1	56	0	60
1	15	0	6
0	0	0	0
	126	0	49
	PM	NOON	AM

PM	413	0	132	253	25	PM
NOON	0	0	0	0	0	NOON
AM	226	0	83	147	6	AM
		0	1	1	0	

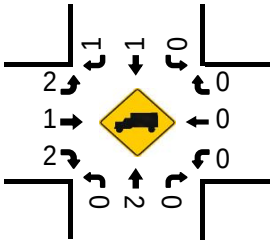
NORTHBOUND

Beaumont Ave

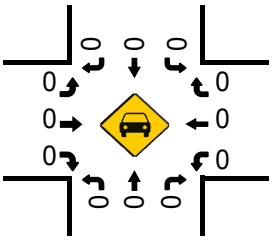
Cars (AM)



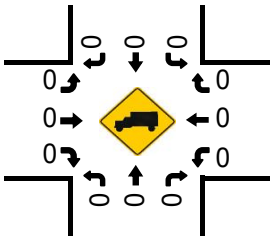
2axle (AM)



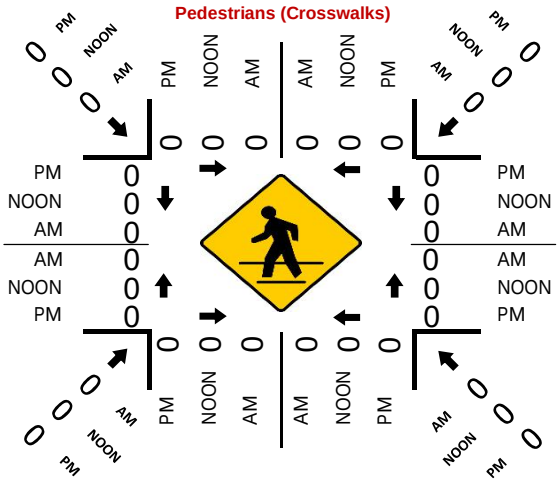
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Hannon Rd & Brookside Ave
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-008
Date: 5/20/2021

Data - Total

NS/EW Streets:	Hannon Rd				Hannon Rd				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	1	0	0	3	0	1	0	7	11	0	0	0	7	2	0	33
7:15 AM	0	2	1	0	1	1	0	0	12	14	0	1	0	5	1	0	38
7:30 AM	0	1	0	0	2	0	0	0	11	13	0	0	1	14	1	0	43
7:45 AM	0	0	0	0	1	0	0	0	10	12	0	0	0	7	1	0	31
8:00 AM	0	0	0	0	1	0	3	0	11	10	0	0	0	10	1	0	36
8:15 AM	0	1	0	0	2	0	3	0	2	13	1	0	0	1	2	0	25
8:30 AM	0	1	0	0	1	0	1	0	7	6	1	0	0	7	1	0	25
8:45 AM	1	3	0	0	0	0	3	0	7	10	0	0	1	15	4	0	44
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	9	1	0	11	1	11	0	67	89	2	1	2	66	13	0	275
APPROACH %'s :	16.67%	75.00%	8.33%	0.00%	47.83%	4.35%	47.83%	0.00%	42.14%	55.97%	1.26%	0.63%	2.47%	81.48%	16.05%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	3	1	0	5	1	3	0	44	49	0	1	1	36	4	0	148
PEAK HR FACTOR :	0.000	0.375	0.250	0.000	0.625	0.250	0.250	0.000	0.917	0.875	0.000	0.250	0.250	0.643	1.000	0.000	0.860
	0.333				0.563				0.870				0.641				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	1	0	13	1	1	0	2	16	1	0	0	25	3	0	63
4:15 PM	0	0	1	0	13	0	1	0	5	18	0	0	1	18	3	0	60
4:30 PM	0	0	0	0	4	1	4	0	1	20	0	0	2	22	1	0	55
4:45 PM	0	1	2	0	4	1	5	0	4	17	0	0	1	21	5	0	61
5:00 PM	0	0	1	0	4	2	3	0	5	23	0	0	0	19	5	0	62
5:15 PM	1	1	0	0	5	0	6	0	7	22	1	0	0	50	9	0	102
5:30 PM	2	0	2	0	5	2	4	0	8	33	0	0	2	18	2	0	78
5:45 PM	1	1	2	0	2	0	7	0	0	17	0	0	2	12	1	0	45
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	3	9	0	50	7	31	0	32	166	2	0	8	185	29	0	526
APPROACH %'s :	25.00%	18.75%	56.25%	0.00%	56.82%	7.95%	35.23%	0.00%	16.00%	83.00%	1.00%	0.00%	3.60%	83.33%	13.06%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	3	2	5	0	18	5	18	0	24	95	1	0	3	108	21	0	303
PEAK HR FACTOR :	0.375	0.500	0.625	0.000	0.900	0.625	0.750	0.000	0.750	0.720	0.250	0.000	0.375	0.540	0.583	0.000	0.743
	0.625				0.932				0.732				0.559				

Prepared by National Data & Surveying Services

Hannon Rd & Brookside Ave

Peak Hour Turning Movement Count

ID: 21-030036-008
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Hannon Rd)

AM	3	1	5	0	51	AM
NOON	0	0	0	0	0	NOON
PM	18	5	18	0	47	PM
	0	1	0	0		

EASTBOUND (Brookside Ave)

AM	NOON	PM	
40	0	129	
1	0	0	0
44	0	24	1
49	0	95	2
0	0	1	0

WESTBOUND (Brookside Ave)

	PM	NOON	AM
0	21	0	4
1	108	0	36
1	3	0	1
0	0	0	0
	118	0	55

NORTHBOUND (Hannon Rd)

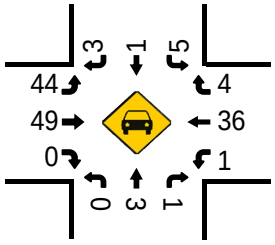
PM	9	0	3	2	5	PM
NOON	0	0	0	0	0	NOON
AM	2	0	0	3	1	AM
		0	0	1	0	

CONTROL

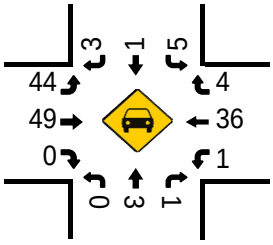
2-Way Stop (NB/SB)

	AM	NOON	PM
TEV	148	0	303
PHF	0.86		0.74

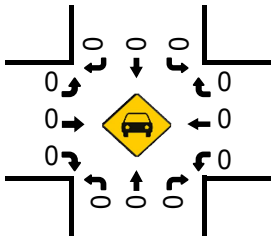
Totals (AM)



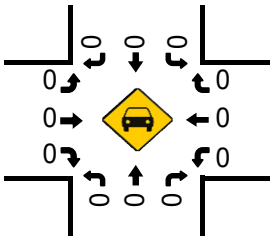
Totals (AM)



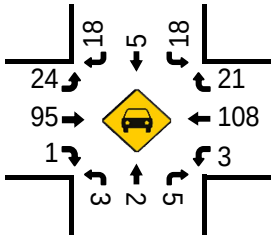
Totals (NOON)



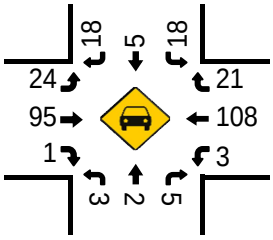
Totals (NOON)



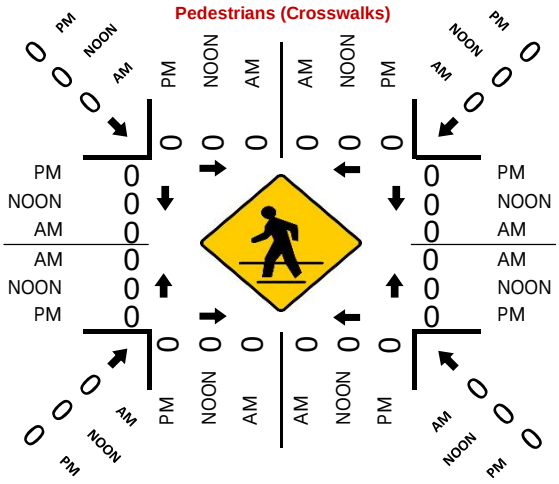
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Union St & Brookside Ave
City: Beaumont
Control: 2-Way Stop (NB/SB)

Project ID: 21-030036-009
Date: 5/20/2021

Data - Total

NS/EW Streets:	Union St				Union St				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	1	0	0	14	0	0	2	8	2	0	28
7:15 AM	0	2	1	0	4	0	0	0	1	16	0	0	0	5	8	0	37
7:30 AM	0	0	0	0	2	0	1	0	0	15	0	0	0	15	3	0	36
7:45 AM	0	2	1	0	2	0	0	0	0	13	0	0	1	8	8	0	35
8:00 AM	0	1	1	0	3	0	1	0	0	11	0	0	0	10	7	0	34
8:15 AM	0	0	0	0	1	0	0	0	1	14	0	0	0	4	5	0	25
8:30 AM	0	0	0	0	0	0	0	0	0	8	0	0	0	8	7	0	23
8:45 AM	0	1	0	0	2	0	1	0	0	10	0	0	0	18	4	0	36
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	6	3	0	15	0	4	0	2	101	0	0	3	76	44	0	254
APPROACH %'s :	0.00%	66.67%	33.33%	0.00%	78.95%	0.00%	21.05%	0.00%	1.94%	98.06%	0.00%	0.00%	2.44%	61.79%	35.77%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	5	3	0	11	0	2	0	1	55	0	0	1	38	26	0	142
PEAK HR FACTOR :	0.000	0.625	0.750	0.000	0.688	0.000	0.500	0.000	0.250	0.859	0.000	0.000	0.250	0.633	0.813	0.000	0.959
	0.667				0.813				0.824				0.903				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	2	0	0	1	1	0	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	6	0	0	0	0	31	0	0	1	28	4	0	70
4:15 PM	0	0	2	0	6	0	0	0	1	30	1	0	0	22	6	0	68
4:30 PM	1	1	1	0	1	1	0	0	1	21	0	0	2	25	1	0	55
4:45 PM	0	1	3	0	2	0	2	0	2	20	1	0	0	26	3	0	60
5:00 PM	0	0	4	0	3	0	3	0	2	27	0	0	1	25	5	0	70
5:15 PM	0	0	1	1	5	0	2	0	0	27	0	0	1	56	7	0	100
5:30 PM	0	0	1	0	3	2	0	0	0	39	1	0	3	18	4	0	71
5:45 PM	0	0	0	0	3	0	0	0	0	20	0	0	1	19	6	0	49
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	2	12	1	29	3	7	0	6	215	3	0	9	219	36	0	543
APPROACH %'s :	6.25%	12.50%	75.00%	6.25%	74.36%	7.69%	17.95%	0.00%	2.68%	95.98%	1.34%	0.00%	3.41%	82.95%	13.64%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	1	9	1	13	2	7	0	4	113	2	0	5	125	19	0	301
PEAK HR FACTOR :	0.000	0.250	0.563	0.250	0.650	0.250	0.583	0.000	0.500	0.724	0.500	0.000	0.417	0.558	0.679	0.000	0.753
	0.688				0.786				0.744				0.582				

Prepared by National Data & Surveying Services

Union St & Brookside Ave

Peak Hour Turning Movement Count

ID: 21-030036-009
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

Union St

SOUTHBOUND

AM	2	0	11	0	32	AM
NOON	0	0	0	0	0	NOON
PM	7	2	13	0	24	PM
	0	1	0	0		

EASTBOUND (Brookside Ave)

AM	NOON	PM	
40	0	132	
0	0	0	0
1	0	4	1
55	0	113	2
0	0	2	0
AM	NOON	PM	

WESTBOUND (Brookside Ave)

PM	NOON	AM	
19	0	26	0
125	0	38	1
5	0	1	1
0	0	0	0
135	0	69	
PM	NOON	AM	

CONTROL

2-Way Stop (NB/SB)

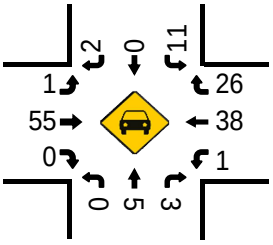
TEV	142	0	301
	AM	NOON	PM
PHF	0.96		0.75

NORTHBOUND

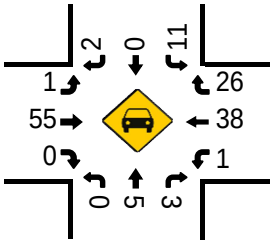
PM	10	1	0	1	9	PM
NOON	0	0	0	0	0	NOON
AM	1	0	0	5	3	AM
		0	0	1	0	

Union St

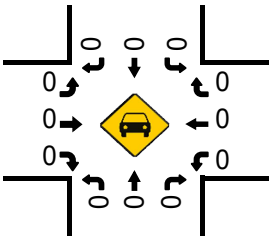
Totals (AM)



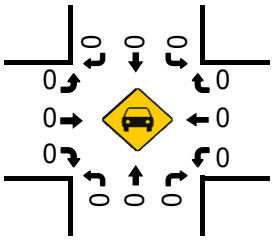
Totals (AM)



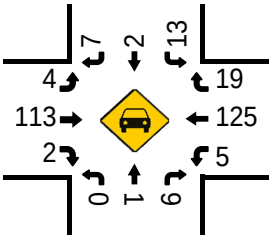
Totals (NOON)



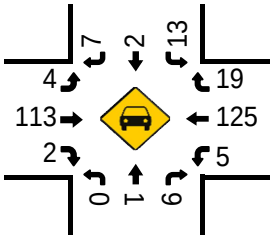
Totals (NOON)



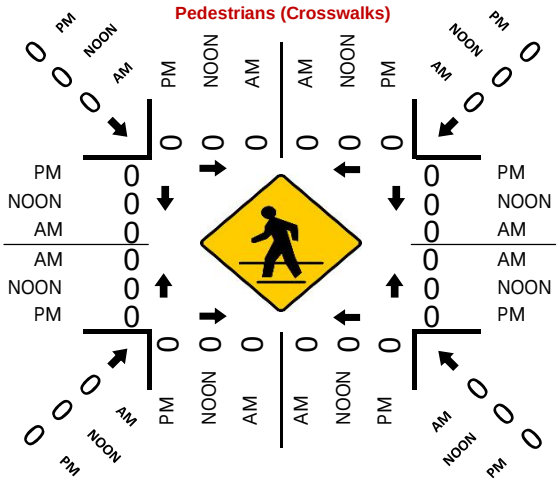
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Brookside Ave
City: Beaumont
Control: 3-Way Stop (NB/EB/WB)

Project ID: 21-030036-010
Date: 5/20/2021

Data - Total

NS/EW Streets:	Oak View Dr				Oak View Dr				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	5	0	8	0	0	0	0	0	0	13	7	0	0	7	0	0	40
7:15 AM	6	0	21	0	0	0	0	0	0	21	10	0	4	4	0	0	66
7:30 AM	6	0	12	0	0	0	0	0	0	23	7	0	7	17	0	0	72
7:45 AM	11	0	9	0	0	0	0	0	0	12	20	0	4	5	0	0	61
8:00 AM	8	0	8	0	0	0	0	0	0	11	8	0	5	4	0	0	44
8:15 AM	5	0	2	0	0	0	0	0	0	12	10	0	4	2	0	0	35
8:30 AM	7	0	2	0	0	0	0	0	0	5	6	0	6	7	0	0	33
8:45 AM	10	0	3	0	0	0	0	0	0	8	9	0	3	8	0	0	41
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	58	0	65	0	0	0	0	0	0	105	77	0	33	54	0	0	392
APPROACH %'s :	47.15%	0.00%	52.85%	0.00%					0.00%	57.69%	42.31%	0.00%	37.93%	62.07%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	31	0	50	0	0	0	0	0	0	67	45	0	20	30	0	0	243
PEAK HR FACTOR :	0.705	0.000	0.595	0.000	0.000	0.000	0.000	0.000	0.000	0.728	0.563	0.000	0.714	0.441	0.000	0.000	0.844
	0.750								0.875				0.521				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	0	10	0	0	0	0	0	0	17	18	0	5	18	0	0	76
4:15 PM	8	0	4	0	0	0	0	0	0	15	28	0	7	21	0	0	83
4:30 PM	18	0	5	0	0	0	0	0	0	19	17	0	20	18	0	0	97
4:45 PM	13	0	6	0	0	0	0	0	0	16	12	0	5	17	0	0	69
5:00 PM	16	0	11	0	0	0	0	0	1	10	21	0	25	41	0	0	125
5:15 PM	15	0	8	0	1	0	0	0	0	18	13	0	22	47	0	0	124
5:30 PM	14	0	4	0	0	0	0	0	0	25	24	0	9	15	0	1	92
5:45 PM	18	0	4	0	0	0	0	0	0	14	14	0	14	26	0	0	90
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	110	0	52	0	1	0	0	0	1	134	147	0	107	203	0	1	756
APPROACH %'s :	67.90%	0.00%	32.10%	0.00%	100.00%	0.00%	0.00%	0.00%	0.35%	47.52%	52.13%	0.00%	34.41%	65.27%	0.00%	0.32%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	63	0	27	0	1	0	0	0	1	67	72	0	70	129	0	1	431
PEAK HR FACTOR :	0.875	0.000	0.614	0.000	0.250	0.000	0.000	0.000	0.250	0.670	0.750	0.000	0.700	0.686	0.000	0.250	0.862
	0.833				0.250				0.714				0.725				

Prepared by National Data & Surveying Services

Oak View Dr & Brookside Ave

Peak Hour Turning Movement Count

ID: 21-030036-010
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS	COUNT PERIODS
07:15 AM - 08:15 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Oak View Dr)

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	0	0	1	0	1	PM

EASTBOUND (Brookside Ave)

AM	NOON	PM	
61	0	192	
0	0	0	0
0	0	1	0
67	0	67	1
45	0	72	0

WESTBOUND (Brookside Ave)

PM	NOON	AM	
0	0	0	0
129	0	30	1
70	0	20	1
1	0	0	0
96	0	117	

NORTHBOUND (Oak View Dr)

PM	142	0	63	0	27	PM
NOON	0	0	0	0	0	NOON
AM	65	0	31	0	50	AM

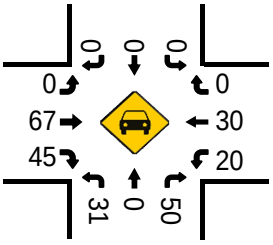
0	0	0	0
0	1	0	1

CONTROL

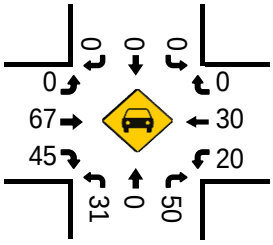
3-Way Stop (NB/EB/WB)

TEV	243 AM	0 NOON	431 PM
PHF	0.84		0.86

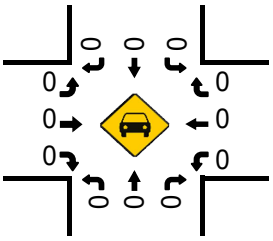
Totals (AM)



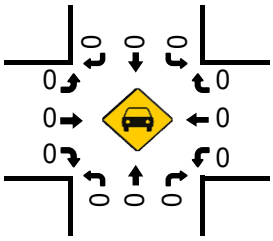
Totals (AM)



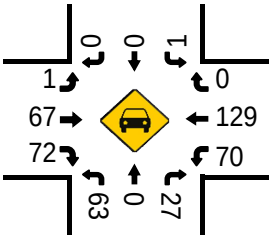
Totals (NOON)



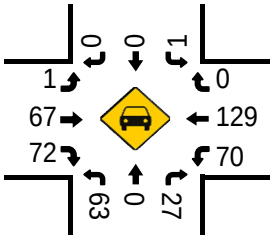
Totals (NOON)



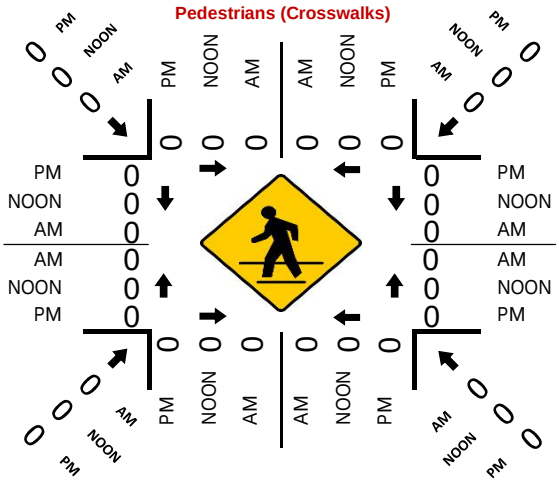
Totals (PM)



Totals (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Brookside Ave
City: Beaumont
Control: Signalized

Project ID: 21-030036-011
Date: 5/20/2021

Data - Total

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
7:00 AM	4	29	3	0	9	33	1	0	2	5	11	0	10	10	23	0	140
7:15 AM	15	34	3	0	10	39	3	0	1	15	7	0	13	15	33	0	188
7:30 AM	13	41	3	0	11	39	7	0	0	4	10	0	11	18	33	0	190
7:45 AM	11	44	7	0	13	50	4	0	0	3	8	0	5	8	14	0	167
8:00 AM	12	23	5	0	12	48	6	0	1	6	8	0	11	11	18	0	161
8:15 AM	11	47	6	0	9	36	1	0	1	5	7	0	8	8	18	0	157
8:30 AM	3	34	12	0	13	39	5	0	0	4	5	0	10	8	28	0	161
8:45 AM	7	41	11	0	16	41	1	0	2	6	5	0	15	5	22	0	172
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	293	50	0	93	325	28	0	7	48	61	0	83	83	189	0	1336
APPROACH %'s :	18.14%	69.93%	11.93%	0.00%	20.85%	72.87%	6.28%	0.00%	6.03%	41.38%	52.59%	0.00%	23.38%	23.38%	53.24%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	51	142	18	0	46	176	20	0	2	28	33	0	40	52	98	0	706
PEAK HR FACTOR :	0.850	0.807	0.643	0.000	0.885	0.880	0.714	0.000	0.500	0.467	0.825	0.000	0.769	0.722	0.742	0.000	0.929
	0.851				0.903				0.685				0.766				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
4:00 PM	10	67	27	0	19	75	3	0	7	21	18	0	15	14	20	0	296
4:15 PM	13	72	13	0	26	60	0	0	4	11	16	0	18	9	21	0	263
4:30 PM	9	74	28	0	33	74	2	0	3	18	13	0	19	4	29	0	306
4:45 PM	2	70	20	0	28	68	1	0	5	13	16	0	16	9	26	0	274
5:00 PM	17	74	11	0	19	77	4	0	9	12	24	0	17	10	22	0	296
5:15 PM	22	60	14	0	32	69	5	0	10	28	40	0	7	20	29	0	336
5:30 PM	7	65	16	0	29	60	9	0	1	11	27	0	9	7	16	0	257
5:45 PM	10	51	19	0	24	62	9	0	3	7	16	0	14	11	20	0	246
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	90	533	148	0	210	545	33	0	42	121	170	0	115	84	183	0	2274
APPROACH %'s :	11.67%	69.13%	19.20%	0.00%	26.65%	69.16%	4.19%	0.00%	12.61%	36.34%	51.05%	0.00%	30.10%	21.99%	47.91%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	50	278	73	0	112	288	12	0	27	71	93	0	59	43	106	0	1212
PEAK HR FACTOR :	0.568	0.939	0.652	0.000	0.848	0.935	0.600	0.000	0.675	0.634	0.581	0.000	0.776	0.538	0.914	0.000	0.902
	0.903				0.945				0.612				0.929				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Brookside Ave
City: Beaumont
Control: Signalized

Project ID: 21-030036-011
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
7:00 AM	4	29	3	0	9	32	1	0	2	5	11	0	10	9	23	0	138
7:15 AM	15	32	3	0	9	39	3	0	1	15	7	0	13	15	32	0	184
7:30 AM	13	40	3	0	11	39	7	0	0	4	8	0	11	18	33	0	187
7:45 AM	10	41	7	0	13	50	4	0	0	3	8	0	5	8	14	0	163
8:00 AM	12	23	5	0	12	47	6	0	1	6	8	0	11	11	18	0	160
8:15 AM	10	45	6	0	8	36	1	0	1	5	7	0	8	8	18	0	153
8:30 AM	3	34	12	0	12	37	5	0	0	4	4	0	10	8	27	0	156
8:45 AM	7	41	11	0	16	41	1	0	2	6	5	0	15	4	21	0	170
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	74	285	50	0	90	321	28	0	7	48	58	0	83	81	186	0	1311
APPROACH %'s :	18.09%	69.68%	12.22%	0.00%	20.50%	73.12%	6.38%	0.00%	6.19%	42.48%	51.33%	0.00%	23.71%	23.14%	53.14%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	50	136	18	0	45	175	20	0	2	28	31	0	40	52	97	0	694
PEAK HR FACTOR :	0.833	0.829	0.643	0.000	0.865	0.875	0.714	0.000	0.500	0.467	0.969	0.000	0.769	0.722	0.735	0.000	0.928
	0.879				0.896				0.663				0.762				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
4:00 PM	10	65	27	0	19	75	3	0	7	21	17	0	15	14	20	0	293
4:15 PM	13	70	13	0	25	60	0	0	4	11	16	0	18	9	21	0	260
4:30 PM	9	74	27	0	32	72	2	0	3	18	13	0	19	4	29	0	302
4:45 PM	2	70	20	0	28	68	1	0	5	13	16	0	16	9	26	0	274
5:00 PM	17	72	11	0	19	77	3	0	9	12	24	0	16	10	22	0	292
5:15 PM	22	59	14	0	32	68	5	0	10	28	40	0	7	20	29	0	334
5:30 PM	7	65	16	0	29	60	9	0	1	11	27	0	9	6	16	0	256
5:45 PM	10	51	19	0	24	62	9	0	3	7	16	0	14	11	20	0	246
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	90	526	147	0	208	542	32	0	42	121	169	0	114	83	183	0	2257
APPROACH %'s :	11.80%	68.94%	19.27%	0.00%	26.60%	69.31%	4.09%	0.00%	12.65%	36.45%	50.90%	0.00%	30.00%	21.84%	48.16%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	50	275	72	0	111	285	11	0	27	71	93	0	58	43	106	0	1202
PEAK HR FACTOR :	0.568	0.929	0.667	0.000	0.867	0.925	0.550	0.000	0.675	0.634	0.581	0.000	0.763	0.538	0.914	0.000	0.900
	0.902				0.960				0.612				0.924				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Brookside Ave
City: Beaumont
Control: Signalized

Project ID: 21-030036-011
Date: 5/20/2021

Data - 2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	2
7:15 AM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	5	0	0	3	2	0	0	0	0	0	0	0	2	1	0	14
APPROACH %'s :	16.67%	83.33%	0.00%	0.00%	60.00%	40.00%	0.00%	0.00%					0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	3	0	0	1	1	0	0	0	0	0	0	0	0	1	0	6
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.375
	0.375				0.500								0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
4:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
4:15 PM	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	1	0	0	0	1	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	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	6	0	0	1	2	1	0	0	0	1	0	0	1	0	0	12
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	25.00%	50.00%	25.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	2	1	0	0	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.375	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	0.500
	0.375				0.750												

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Brookside Ave
City: Beaumont
Control: Signalized

Project ID: 21-030036-011
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Brookside Ave				Brookside Ave				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
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	0	0	0	0	0	0	2	0	0	0	0	0	2
7:45 AM	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	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	0	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
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	5
APPROACH %'s :	50.00%	50.00%	0.00%	0.00%					0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4
PEAK HR FACTOR :	0.250	0.250	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	0.500
	0.250				0.250												

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
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	0	0	0	0
4:30 PM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
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	1	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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	4
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%	50.00%	50.00%	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	0	1	0	1	1	0	0	0	0	0	0	1	0	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.250	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.333
	0.250				0.250								0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Brookside Ave
City: Beaumont
Control: Signalized

Project ID: 21-030036-011
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Brookside Ave				Brookside Ave				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	0	1	0	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	0	0	0	0	0	0	0	0
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	2	0	0	0	0	1	0	0	0	1	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2	0	0	0	2	0	0	0	0	1	0	0	0	1	0	6
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
PEAK HR FACTOR :	0.000	0.500	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	0.500
	0.500																

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	0	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	TOTAL
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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	0.00%	100.00%	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	0	0	0	0	0	0	0
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	0.000	0.000	0.000	0.000	

Prepared by National Data & Surveying Services

Beaumont Ave & Brookside Ave

Peak Hour Turning Movement Count

ID: 21-030036-011
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

Beaumont Ave

SOUTHBOUND

AM	20	176	46	0	242	AM
NOON	0	0	0	0	0	NOON
PM	12	288	112	0	411	PM
	0	1	1	0		

EASTBOUND (Brookside Ave)

AM	NOON	PM	
123	0	105	
0	0	0	0
2	0	27	1
28	0	71	1
33	0	93	1
AM	NOON	PM	

WESTBOUND (Brookside Ave)

	PM	NOON	AM
0	106	0	98
1	43	0	52
1	59	0	40
0	0	0	0
	256	0	92
	PM	NOON	AM

CONTROL

Signalized

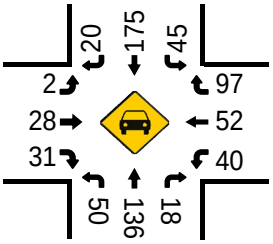
TEV	706 AM	0 NOON	1212 PM
PHF	0.93		0.90

NORTHBOUND

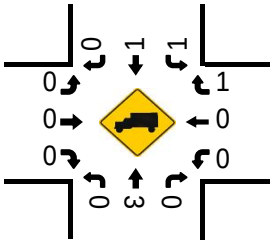
	0	1	1	0		
PM	440	0	50	278	73	PM
NOON	0	0	0	0	0	NOON
AM	249	0	51	142	18	AM

Beaumont Ave

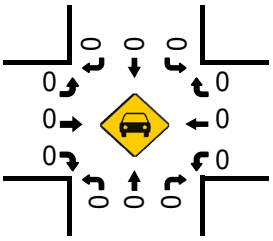
Cars (AM)



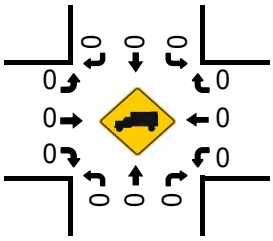
2axle (AM)



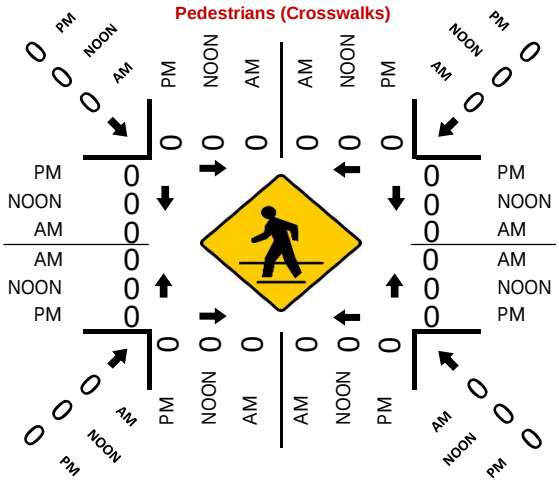
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Desert Lawn Dr & Oak Valley Pwky
City: Beaumont
Control: 3-Way Stop (SB/EB/WB)

Project ID: 21-030036-016
Date: 5/20/2021

Data - Total

NS/EW Streets:	Desert Lawn Dr				Desert Lawn Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	44	0	4	0	5	55	0	0	0	27	18	0	153
7:15 AM	0	0	0	0	50	0	5	1	3	45	0	0	0	43	27	0	174
7:30 AM	0	0	0	0	57	0	2	0	1	62	0	0	0	24	18	0	164
7:45 AM	0	0	0	0	61	0	4	0	6	57	0	0	0	26	25	0	179
8:00 AM	0	0	0	0	56	0	8	0	2	47	0	0	0	44	18	0	175
8:15 AM	0	0	0	0	51	0	7	0	3	38	0	0	0	37	31	0	167
8:30 AM	0	0	0	0	44	0	6	0	4	43	0	0	0	46	27	1	171
8:45 AM	0	0	0	0	48	0	7	0	1	46	0	0	0	41	29	0	172
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	411	0	43	1	25	393	0	0	0	288	193	1	1355
APPROACH %'s :					90.33%	0.00%	9.45%	0.22%	5.98%	94.02%	0.00%	0.00%	0.00%	59.75%	40.04%	0.21%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	212	0	25	0	15	185	0	0	0	153	101	1	692
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.869	0.000	0.781	0.000	0.625	0.811	0.000	0.000	0.000	0.832	0.815	0.250	0.966
					0.912				0.794				0.861				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	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	56	0	3	0	9	53	0	0	0	54	52	0	227
4:15 PM	0	0	0	0	44	0	6	0	7	57	0	0	0	52	50	0	216
4:30 PM	0	0	0	0	46	0	2	0	2	54	0	0	0	53	46	0	203
4:45 PM	0	0	0	0	58	0	4	0	3	54	0	0	0	70	66	0	255
5:00 PM	0	0	0	0	49	0	9	0	11	55	0	0	0	50	63	0	237
5:15 PM	0	0	0	0	50	0	6	0	12	67	0	0	0	61	56	0	252
5:30 PM	0	0	0	0	49	0	13	0	11	75	0	0	0	78	63	0	289
5:45 PM	0	0	0	0	51	0	13	0	16	102	0	0	0	63	63	0	308
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	403	0	56	0	71	517	0	0	0	481	459	0	1987
APPROACH %'s :					87.80%	0.00%	12.20%	0.00%	12.07%	87.93%	0.00%	0.00%	0.00%	51.17%	48.83%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	199	0	41	0	50	299	0	0	0	252	245	0	1086
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.975	0.000	0.788	0.000	0.781	0.733	0.000	0.000	0.000	0.808	0.972	0.000	0.881
					0.938				0.739				0.881				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Desert Lawn Dr & Oak Valley Pwky
City: Beaumont
Control: 3-Way Stop (SB/EB/WB)

Project ID: 21-030036-016
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Desert Lawn Dr				Desert Lawn Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	44	0	4	0	5	51	0	0	0	25	18	0	147
7:15 AM	0	0	0	0	50	0	5	1	3	43	0	0	0	39	27	0	168
7:30 AM	0	0	0	0	56	0	2	0	1	60	0	0	0	23	18	0	160
7:45 AM	0	0	0	0	61	0	4	0	5	54	0	0	0	26	25	0	175
8:00 AM	0	0	0	0	55	0	8	0	2	45	0	0	0	43	18	0	171
8:15 AM	0	0	0	0	49	0	7	0	3	37	0	0	0	34	31	0	161
8:30 AM	0	0	0	0	44	0	6	0	4	41	0	0	0	45	27	1	168
8:45 AM	0	0	0	0	48	0	6	0	1	42	0	0	0	40	28	0	165
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	407	0	42	1	24	373	0	0	0	275	192	1	1315
APPROACH %'s :					90.44%	0.00%	9.33%	0.22%	6.05%	93.95%	0.00%	0.00%	0.00%	58.76%	41.03%	0.21%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	209	0	25	0	14	177	0	0	0	148	101	1	675
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.857	0.000	0.781	0.000	0.700	0.819	0.000	0.000	0.000	0.822	0.815	0.250	0.964
					0.900				0.809				0.856				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	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	55	0	3	0	9	49	0	0	0	53	51	0	220
4:15 PM	0	0	0	0	43	0	6	0	7	55	0	0	0	51	50	0	212
4:30 PM	0	0	0	0	45	0	2	0	2	52	0	0	0	50	46	0	197
4:45 PM	0	0	0	0	58	0	4	0	3	51	0	0	0	69	66	0	251
5:00 PM	0	0	0	0	49	0	9	0	11	52	0	0	0	50	63	0	234
5:15 PM	0	0	0	0	49	0	6	0	12	65	0	0	0	60	56	0	248
5:30 PM	0	0	0	0	49	0	12	0	11	72	0	0	0	78	63	0	285
5:45 PM	0	0	0	0	50	0	13	0	16	101	0	0	0	62	63	0	305
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	398	0	55	0	71	497	0	0	0	473	458	0	1952
APPROACH %'s :					87.86%	0.00%	12.14%	0.00%	12.50%	87.50%	0.00%	0.00%	0.00%	50.81%	49.19%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	197	0	40	0	50	290	0	0	0	250	245	0	1072
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.985	0.000	0.769	0.000	0.781	0.718	0.000	0.000	0.000	0.801	0.972	0.000	0.879
					0.940				0.726				0.878				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Desert Lawn Dr & Oak Valley Pwky
City: Beaumont
Control: 3-Way Stop (SB/EB/WB)

Project ID: 21-030036-016
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	Desert Lawn Dr				Desert Lawn Dr				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
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	1	0	0	0	2	0	0	3
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	3
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	1	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	0	0	1	6	0	0	0	4	0	0	13
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	14.29%	85.71%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	0	0	1	3	0	0	0	1	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.750	0.000	0.000	0.000	0.250	0.000	0.000	0.583
					0.500				0.500				0.250				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	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	1	0	0	0	0	0	0	0	0	1	1	0	3
4:15 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	5	0	1	0	0	7	0	0	0	4	1	0	18
APPROACH %'s :					83.33%	0.00%	16.67%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	2	0	1	0	0	4	0	0	0	1	0	0	8
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.000	0.500	0.000	0.000	0.000	0.250	0.000	0.000	1.000
					0.750				0.500				0.250				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Desert Lawn Dr & Oak Valley Pwky
City: Beaumont
Control: 3-Way Stop (SB/EB/WB)

Project ID: 21-030036-016
Date: 5/20/2021

Data - 3axle

AM

NS/EW Streets:	Desert Lawn Dr				Desert Lawn Dr				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	2
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	2	0	0	0	0	0	0	2
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	1	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	11	0	0	0	4	1	0	17
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	5	0	0	0	2	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.500	0.000	0.000	0.875
										0.625				0.500			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	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	0	1	0	0	0	0	0	0	1
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	1	0	0	0	1	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	4
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 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 :	0.000	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	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: Desert Lawn Dr & Oak Valley Pwky
City: Beaumont
Control: 3-Way Stop (SB/EB/WB)

Project ID: 21-030036-016
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	Desert Lawn Dr				Desert Lawn Dr				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	1	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	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	1	0	0	3	0	0	0	5	0	0	10
APPROACH %'s :					50.00%	0.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	3
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.375
					0.250								0.500				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0	1	0	0	1	1	0	0	0	3	0	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	0	3	0	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	11	0	0	0	2	0	0	13
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	6
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.625	0.000	0.000	0.000	0.250	0.000	0.000	0.750
										0.625				0.250			

Prepared by National Data & Surveying Services

Desert Lawn Dr & Oak Valley Pwky

Peak Hour Turning Movement Count

ID: 21-030036-016
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS	COUNT PERIODS
07:45 AM - 08:45 AM	7:00 AM - 09:00 AM
NONE	NONE
05:00 PM - 06:00 PM	4:00 PM - 06:00 PM

SOUTHBOUND (Desert Lawn Dr)

AM	25	0	212	0	116	AM
NOON	0	0	0	0	0	NOON
PM	41	0	199	0	295	PM
	0	1	0	0		

EASTBOUND (Oak Valley Pwky)

AM	NOON	PM	
178	0	293	
0	0	0	0
15	0	50	1
185	0	299	1
0	0	0	0

WESTBOUND (Oak Valley Pwky)

	PM	NOON	AM
0	245	0	101
3	252	0	153
0	0	0	0
0	0	0	1
	498	0	398

NORTHBOUND (Desert Lawn Dr)

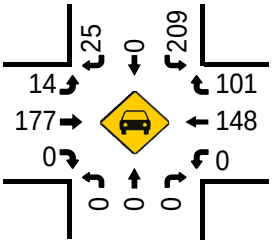
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
	0	0	0	0		

CONTROL

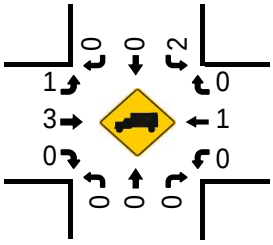
3-Way Stop (SB/EB/WB)

TEV	692 AM	0 NOON	1086 PM
PHF	0.97		0.88

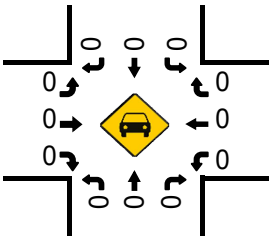
Cars (AM)



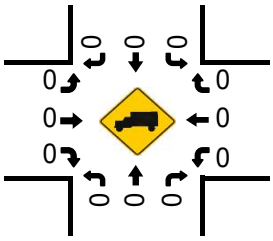
2axle (AM)



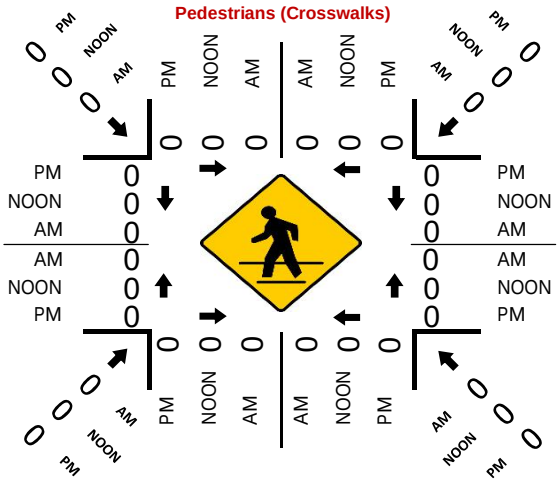
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
0
0
0
0
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-015
Date: 5/20/2021

Data - Total

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	35	0	20	0	0	50	50	0	41	27	0	0	223
7:15 AM	0	0	0	0	40	0	21	0	0	49	53	0	31	48	0	0	242
7:30 AM	0	0	0	0	49	0	12	0	0	70	55	0	39	33	0	0	258
7:45 AM	0	0	0	0	27	1	15	0	0	55	63	0	56	36	0	0	253
8:00 AM	0	0	0	0	59	0	21	0	0	52	48	0	43	50	0	0	273
8:15 AM	0	0	0	0	55	1	15	0	0	38	59	0	38	54	0	0	260
8:30 AM	0	0	0	0	34	0	31	0	0	42	44	0	33	52	0	0	236
8:45 AM	0	0	0	0	47	3	25	0	0	40	53	0	52	41	0	0	261
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	346	5	160	0	0	396	425	0	333	341	0	0	2006
APPROACH %'s :					67.71%	0.98%	31.31%	0.00%	0.00%	48.23%	51.77%	0.00%	49.41%	50.59%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	190	2	63	0	0	215	225	0	176	173	0	0	1044
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.805	0.500	0.750	0.000	0.000	0.768	0.893	0.000	0.786	0.801	0.000	0.000	0.956
					0.797				0.880				0.938				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	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	113	0	26	0	0	63	54	0	60	73	0	0	389
4:15 PM	0	0	0	0	114	1	35	0	0	53	49	0	42	64	0	0	358
4:30 PM	0	0	0	0	139	0	20	0	0	64	43	0	26	81	0	0	373
4:45 PM	0	0	0	0	144	1	30	0	0	58	54	0	42	102	0	0	431
5:00 PM	0	0	0	0	120	1	28	0	0	55	34	0	41	98	0	0	377
5:15 PM	0	0	0	0	143	1	32	0	0	64	61	0	35	91	0	0	427
5:30 PM	0	0	0	0	116	3	45	0	0	65	54	0	36	94	0	0	413
5:45 PM	0	0	0	0	140	1	34	0	0	69	73	0	44	93	0	0	454
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1029	8	250	0	0	491	422	0	326	696	0	0	3222
APPROACH %'s :					79.95%	0.62%	19.43%	0.00%	0.00%	53.78%	46.22%	0.00%	31.90%	68.10%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	519	6	139	0	0	253	222	0	156	376	0	0	1671
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.907	0.500	0.772	0.000	0.000	0.917	0.760	0.000	0.886	0.959	0.000	0.000	0.920
					0.943				0.836				0.957				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-015
Date: 5/20/2021

Data - Cars

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	32	0	18	0	0	47	49	0	41	27	0	0	214
7:15 AM	0	0	0	0	39	0	19	0	0	48	52	0	31	45	0	0	234
7:30 AM	0	0	0	0	48	0	12	0	0	69	53	0	37	32	0	0	251
7:45 AM	0	0	0	0	27	0	15	0	0	54	61	0	56	36	0	0	249
8:00 AM	0	0	0	0	59	0	21	0	0	49	48	0	42	48	0	0	267
8:15 AM	0	0	0	0	55	0	15	0	0	37	57	0	36	52	0	0	252
8:30 AM	0	0	0	0	33	0	31	0	0	41	43	0	31	51	0	0	230
8:45 AM	0	0	0	0	47	2	24	0	0	39	50	0	52	40	0	0	254
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	340	2	155	0	0	384	413	0	326	331	0	0	1951
APPROACH %'s :					68.41%	0.40%	31.19%	0.00%	0.00%	48.18%	51.82%	0.00%	49.62%	50.38%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	189	0	63	0	0	209	219	0	171	168	0	0	1019
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.801	0.000	0.750	0.000	0.000	0.757	0.898	0.000	0.763	0.808	0.000	0.000	0.954
					0.788				0.877				0.921				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	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	113	0	26	0	0	60	53	0	58	71	0	0	381
4:15 PM	0	0	0	0	113	1	35	0	0	52	46	0	42	63	0	0	352
4:30 PM	0	0	0	0	139	0	19	0	0	62	42	0	26	80	0	0	368
4:45 PM	0	0	0	0	142	0	29	0	0	56	54	0	42	102	0	0	425
5:00 PM	0	0	0	0	120	0	28	0	0	52	34	0	40	98	0	0	372
5:15 PM	0	0	0	0	143	1	32	0	0	63	60	0	34	90	0	0	423
5:30 PM	0	0	0	0	115	3	44	0	0	61	54	0	35	94	0	0	406
5:45 PM	0	0	0	0	140	1	33	0	0	68	72	0	43	93	0	0	450
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1025	6	246	0	0	474	415	0	320	691	0	0	3177
APPROACH %'s :					80.27%	0.47%	19.26%	0.00%	0.00%	53.32%	46.68%	0.00%	31.65%	68.35%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	518	5	137	0	0	244	220	0	152	375	0	0	1651
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.906	0.417	0.778	0.000	0.000	0.897	0.764	0.000	0.884	0.957	0.000	0.000	0.917
					0.938				0.829				0.955				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-015
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	1	0	1	0	0	1	0	0	0	2	0	0	5
7:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	1	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	2	0	0	1	1	0	0	4
8:15 AM	0	0	0	0	0	1	0	0	0	1	1	0	1	1	0	0	5
8:30 AM	0	0	0	0	1	0	0	0	0	0	1	0	2	0	0	0	4
8:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	4	1	2	0	0	5	4	0	5	4	0	0	25
APPROACH %'s :					57.14%	14.29%	28.57%	0.00%	0.00%	55.56%	44.44%	0.00%	55.56%	44.44%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	1	0	0	0	4	2	0	3	2	0	0	13
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.500	0.500	0.000	0.750	0.500	0.000	0.000	0.650
					0.500				0.750				0.625				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	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	0	1	0	0	0	2	0	0	3
4:15 PM	0	0	0	0	1	0	0	0	0	0	2	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	3
4:45 PM	0	0	0	0	2	1	1	0	0	1	0	0	0	0	0	0	5
5:00 PM	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3
5:30 PM	0	0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	4	1	2	0	0	7	5	0	4	4	0	0	27
APPROACH %'s :					57.14%	14.29%	28.57%	0.00%	0.00%	58.33%	41.67%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	1	0	0	4	2	0	4	1	0	0	13
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.500	0.500	0.000	1.000	0.250	0.000	0.000	0.813
					0.250				0.750				0.625				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-015
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	0	0	0	2	1	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
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	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	1	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	4	7	0	0	4	0	0	16
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	36.36%	63.64%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	1	3	0	0	1	0	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.375	0.000	0.000	0.250	0.000	0.000	0.625
										0.500				0.250			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	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	0	1	0	0	2	0	0	0	3
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	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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	66.67%	33.33%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 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 :	0.000	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	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 SB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-015
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	I-10 SB Ramps				I-10 SB Ramps				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	1	0	2	0	0	1	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	2
7:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	3
8:30 AM	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	1	0	0	0	1	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	2	3	0	0	3	1	0	2	2	0	0	14
APPROACH %'s :					16.67%	33.33%	50.00%	0.00%	0.00%	75.00%	25.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	0	0	0	1	1	0	2	2	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250	0.250	0.000	0.500	0.500	0.000	0.000	0.583
					0.250				0.500				0.500				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	0.3	0.3	0.3	0	0	1	0	0	1	1	0	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	0	1	1	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	1	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	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	3	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	1	2	0	0	8	2	0	0	0	0	0	13
APPROACH %'s :					0.00%	33.33%	66.67%	0.00%	0.00%	80.00%	20.00%	0.00%					
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	1	1	0	0	5	0	0	0	0	0	0	7
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.583
					0.500				0.417								

Prepared by National Data & Surveying Services

I-10 SB Ramps & Oak Valley Pwky

Peak Hour Turning Movement Count

ID: 21-030036-015
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:30 AM - 08:30 AM		7:00 AM - 09:00 AM
NONE		NONE
05:00 PM - 06:00 PM		4:00 PM - 06:00 PM

SOUTHBOUND (I-10 SB Ramps)

AM	63	2	190	0	0	AM
NOON	0	0	0	0	0	NOON
PM	139	6	519	0	0	PM
	0.3	0.3	0.3	0		

EASTBOUND (Oak Valley Pwky)

AM	NOON	PM	
236	0	515	
0	0	0	0
0	0	0	0
215	0	253	1
225	0	222	0

WESTBOUND (Oak Valley Pwky)

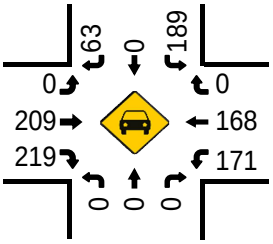
	PM	NOON	AM
0	0	0	0
1	376	0	173
1	156	0	176
0	0	0	0
	772	0	405

NORTHBOUND (I-10 SB Ramps)

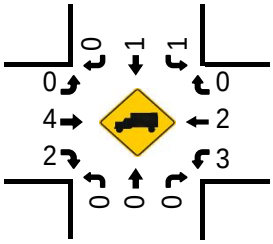
PM	384	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	403	0	0	0	0	AM
		0	0	0	0	

CONTROL			
Signalized			
TEV	1044 AM	0 NOON	1671 PM
PHF	0.96		0.92

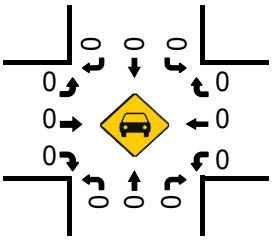
Cars (AM)



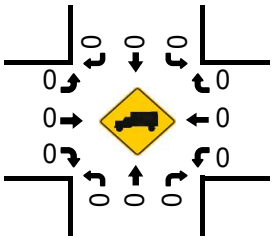
2axle (AM)



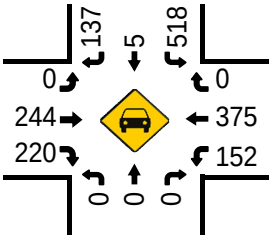
Cars (NOON)



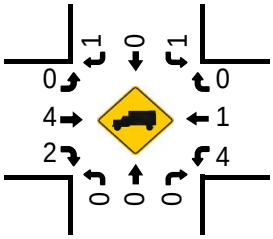
2axle (NOON)



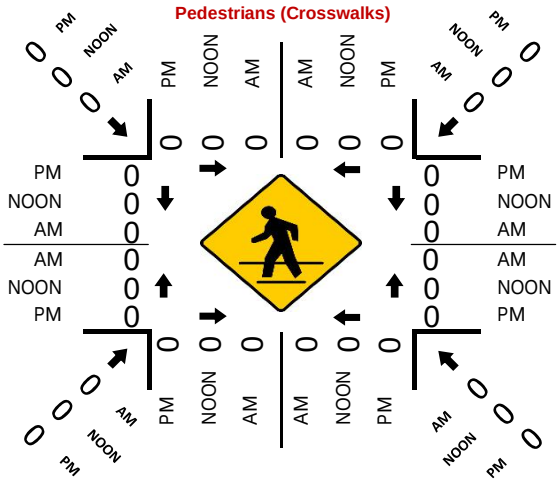
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 NB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-014
Date: 5/20/2021

Data - Total

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	20	0	25	0	0	0	0	0	35	50	0	0	0	48	145	0	323
7:15 AM	33	1	31	0	0	0	0	0	29	61	0	0	0	55	130	0	340
7:30 AM	13	0	26	0	0	0	0	0	47	71	0	0	0	50	150	0	357
7:45 AM	21	0	29	0	0	0	0	0	27	57	0	0	0	74	118	0	326
8:00 AM	23	0	31	0	0	0	0	0	28	80	0	0	0	65	102	0	329
8:15 AM	30	0	21	0	0	0	0	0	17	73	0	0	0	64	119	0	324
8:30 AM	26	0	19	0	0	0	0	0	25	54	0	0	0	63	83	0	270
8:45 AM	29	2	22	0	0	0	0	0	24	67	0	0	0	56	72	0	272
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	195	3	204	0	0	0	0	0	232	513	0	0	0	475	919	0	2541
APPROACH %'s :	48.51%	0.75%	50.75%	0.00%					31.14%	68.86%	0.00%	0.00%	0.00%	34.07%	65.93%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	90	1	117	0	0	0	0	0	131	269	0	0	0	244	500	0	1352
PEAK HR FACTOR :	0.682	0.250	0.944	0.000	0.000	0.000	0.000	0.000	0.697	0.841	0.000	0.000	0.000	0.824	0.833	0.000	0.947
	0.800								0.847				0.930				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	38	1	54	0	0	0	0	0	33	148	0	0	0	88	75	0	437
4:15 PM	46	0	50	0	0	0	0	0	16	147	0	0	0	62	79	0	400
4:30 PM	53	2	53	0	0	0	0	0	28	172	0	0	0	56	67	0	431
4:45 PM	63	0	44	0	0	0	0	0	21	186	0	0	0	79	78	0	471
5:00 PM	58	0	66	0	0	0	0	0	22	156	0	0	0	81	72	0	455
5:15 PM	63	1	63	0	0	0	0	0	23	180	0	0	0	60	78	0	468
5:30 PM	57	2	60	0	0	0	0	0	30	155	0	0	0	76	100	0	480
5:45 PM	63	2	55	0	0	0	0	0	30	176	0	0	0	74	82	0	482
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	441	8	445	0	0	0	0	0	203	1320	0	0	0	576	631	0	3624
APPROACH %'s :	49.33%	0.89%	49.78%	0.00%					13.33%	86.67%	0.00%	0.00%	0.00%	47.72%	52.28%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	241	5	244	0	0	0	0	0	105	667	0	0	0	291	332	0	1885
PEAK HR FACTOR :	0.956	0.625	0.924	0.000	0.000	0.000	0.000	0.000	0.875	0.926	0.000	0.000	0.000	0.898	0.830	0.000	0.978
	0.965								0.937				0.885				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 NB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-014
Date: 5/20/2021

Data - Cars

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	19	0	24	0	0	0	0	0	34	45	0	0	0	48	144	0	314
7:15 AM	32	1	31	0	0	0	0	0	29	59	0	0	0	54	129	0	335
7:30 AM	13	0	26	0	0	0	0	0	46	70	0	0	0	47	150	0	352
7:45 AM	21	0	29	0	0	0	0	0	26	57	0	0	0	74	116	0	323
8:00 AM	21	0	31	0	0	0	0	0	26	78	0	0	0	64	101	0	321
8:15 AM	25	0	19	0	0	0	0	0	16	73	0	0	0	62	117	0	312
8:30 AM	26	0	19	0	0	0	0	0	24	53	0	0	0	61	82	0	265
8:45 AM	29	1	22	0	0	0	0	0	23	67	0	0	0	56	69	0	267
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	186	2	201	0	0	0	0	0	224	502	0	0	0	466	908	0	2489
APPROACH %'s :	47.81%	0.51%	51.67%	0.00%					30.85%	69.15%	0.00%	0.00%	0.00%	33.92%	66.08%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	87	1	117	0	0	0	0	0	127	264	0	0	0	239	496	0	1331
PEAK HR FACTOR :	0.680	0.250	0.944	0.000	0.000	0.000	0.000	0.000	0.690	0.846	0.000	0.000	0.000	0.807	0.827	0.000	0.945
	0.801								0.843				0.933				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	37	1	54	0	0	0	0	0	30	147	0	0	0	85	75	0	429
4:15 PM	46	0	49	0	0	0	0	0	16	146	0	0	0	62	79	0	398
4:30 PM	53	2	52	0	0	0	0	0	27	171	0	0	0	55	67	0	427
4:45 PM	63	0	44	0	0	0	0	0	19	182	0	0	0	79	77	0	464
5:00 PM	58	0	64	0	0	0	0	0	21	156	0	0	0	79	72	0	450
5:15 PM	63	1	63	0	0	0	0	0	22	180	0	0	0	59	77	0	465
5:30 PM	57	2	59	0	0	0	0	0	26	154	0	0	0	75	100	0	473
5:45 PM	63	1	55	0	0	0	0	0	29	176	0	0	0	73	81	0	478
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	440	7	440	0	0	0	0	0	190	1312	0	0	0	567	628	0	3584
APPROACH %'s :	49.61%	0.79%	49.61%	0.00%					12.65%	87.35%	0.00%	0.00%	0.00%	47.45%	52.55%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	241	4	241	0	0	0	0	0	98	666	0	0	0	286	330	0	1866
PEAK HR FACTOR :	0.956	0.500	0.941	0.000	0.000	0.000	0.000	0.000	0.845	0.925	0.000	0.000	0.000	0.905	0.825	0.000	0.976
	0.957								0.932				0.880				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 NB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-014
Date: 5/20/2021

Data - 2axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	3
7:15 AM	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	0	4
7:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	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	1	0	0	0	0	0	0	0	1	1	0	0	0	1	1	0	5
8:15 AM	2	0	2	0	0	0	0	0	1	0	0	0	0	1	1	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	0	2	0	0	0	0	0	3	6	0	0	0	4	7	0	27
APPROACH %'s :	71.43%	0.00%	28.57%	0.00%					33.33%	66.67%	0.00%	0.00%	0.00%	36.36%	63.64%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	2	0	0	0	0	0	0	0	2	4	0	0	0	2	2	0	12
PEAK HR FACTOR :	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.000	0.000	0.500	0.500	0.000	0.600
	0.500								0.750				0.500				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	0	1	0	0	0	1	0	0	2
4:15 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	2
4:30 PM	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	2	3	0	0	0	0	0	0	5
5:00 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	4
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2
5:30 PM	0	0	1	0	0	0	0	0	1	1	0	0	0	1	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	5	0	0	0	0	0	4	7	0	0	0	7	2	0	25
APPROACH %'s :	0.00%	0.00%	100.00%	0.00%					36.36%	63.64%	0.00%	0.00%	0.00%	77.78%	22.22%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	2	1	0	0	0	5	2	0	13
PEAK HR FACTOR :	0.000	0.000	0.375	0.000	0.000	0.000	0.000	0.000	0.500	0.250	0.000	0.000	0.000	0.625	0.500	0.000	0.813
	0.375								0.375				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 NB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-014
Date: 5/20/2021

Data - 3axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
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	1	1	0	0	0	0	0	0	2
8:15 AM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
8:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	0	0	0	0	0	0	0	2	4	0	0	0	3	1	0	12
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					33.33%	66.67%	0.00%	0.00%	0.00%	75.00%	25.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	4
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.500
										0.250				0.500			

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0	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	1	0	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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	2	0	0	0	0	2	0	0	5
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 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 :	0.000	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	0.000	0.000	

National Data & Surveying Services

Intersection Turning Movement Count

Location: I-10 NB Ramps & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-014
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	I-10 NB Ramps				I-10 NB Ramps				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	0	0	1	0	0	0	0	0	1	1	0	0	0	0	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	1	0	0	0	0	1	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
8:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	1	1	0	0	0	0	0	3	1	0	0	0	2	3	0	13
APPROACH %'s :	50.00%	25.00%	25.00%	0.00%					75.00%	25.00%	0.00%	0.00%	0.00%	40.00%	60.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	0	0	0	0	0	0	0	1	0	0	0	0	1	2	0	5
PEAK HR FACTOR :	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.250	0.000	0.625
	0.250								0.250				0.375				

PM

NS/EW Streets:	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0.3	0.3	0.3	0	0	0	0	0	1	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	2	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	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	1	0	0	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	3
5:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	7	1	0	0	0	0	1	0	10
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%					87.50%	12.50%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	5	0	0	0	0	0	0	0	6
PEAK HR FACTOR :	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.417	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500
	0.250								0.417								

Prepared by National Data & Surveying Services

I-10 NB Ramps & Oak Valley Pwky

Peak Hour Turning Movement Count

ID: 21-030036-014
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	05:00 PM - 06:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

CONTROL

Signalized

	AM	NOON	PM
TEV	1352	0	1885
PHF	0.95		0.98

SOUTHBOUND (I-10 NB Ramps)

AM	0	0	0	0	632	AM
NOON	0	0	0	0	0	NOON
PM	0	0	0	0	442	PM

EASTBOUND (Oak Valley Pwky)

AM	NOON	PM	
334	0	532	
0	0	0	0
131	0	105	1
269	0	667	1
0	0	0	0
AM	NOON	PM	

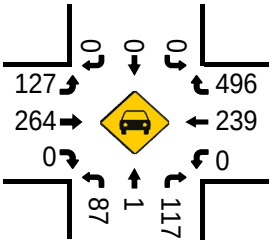
WESTBOUND (Oak Valley Pwky)

PM	NOON	AM	
332	0	500	1
291	0	244	1
0	0	0	0
0	0	0	0
911	0	386	
PM	NOON	AM	

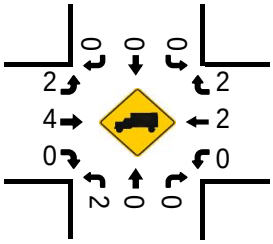
NORTHBOUND (I-10 NB Ramps)

PM	0	0	241	5	244	PM
NOON	0	0	0	0	0	NOON
AM	0	0	90	1	117	AM

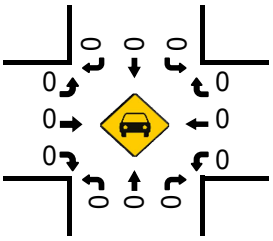
Cars (AM)



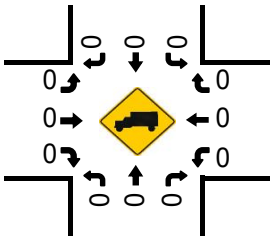
2axle (AM)



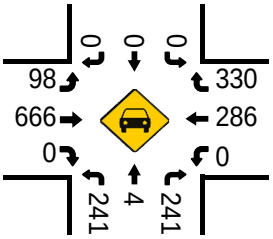
Cars (NOON)



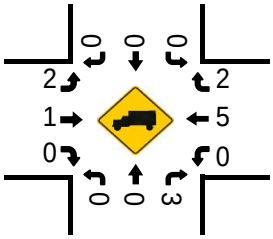
2axle (NOON)



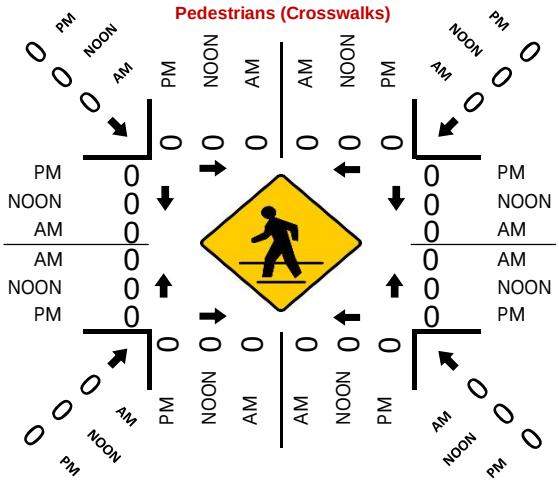
Cars (PM)



2axle (PM)



Pedestrians (Crosswalks)



National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-013
Date: 5/20/2021

Data - Total

NS/EW Streets:	Oak View Dr				Oak View Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	11	0	46	0	20	51	0	0	0	138	12	0	278
7:15 AM	0	0	0	0	17	0	41	2	34	50	0	0	0	120	7	0	271
7:30 AM	0	0	0	0	18	0	42	1	20	50	0	0	0	159	9	0	299
7:45 AM	0	0	0	0	27	0	54	1	24	53	0	0	0	115	15	0	289
8:00 AM	0	0	0	0	22	0	43	0	27	65	0	0	0	110	11	0	278
8:15 AM	0	0	0	0	13	0	31	0	21	57	0	0	0	119	6	0	247
8:30 AM	0	0	0	0	12	0	37	0	14	49	0	0	0	101	12	0	225
8:45 AM	0	0	0	0	14	0	25	0	24	56	0	0	0	91	23	0	233
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	134	0	319	4	184	431	0	0	0	953	95	0	2120
APPROACH %'s :					29.32%	0.00%	69.80%	0.88%	29.92%	70.08%	0.00%	0.00%	0.00%	90.94%	9.06%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	84	0	180	4	105	218	0	0	0	504	42	0	1137
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.778	0.000	0.833	0.500	0.772	0.838	0.000	0.000	0.000	0.792	0.700	0.000	0.951
					0.817				0.878				0.813				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	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	26	0	43	0	59	148	0	0	0	106	28	0	410
4:15 PM	0	0	0	0	21	0	35	1	42	133	0	0	0	88	29	0	349
4:30 PM	0	0	0	0	32	0	31	0	53	152	0	0	0	87	45	0	400
4:45 PM	0	0	0	0	23	0	33	0	43	174	0	0	0	123	42	0	438
5:00 PM	0	0	0	0	19	0	29	0	52	149	0	0	0	102	26	0	377
5:15 PM	0	0	0	0	27	0	34	0	49	178	0	0	0	98	33	0	419
5:30 PM	0	0	0	0	31	0	44	0	47	157	0	0	0	132	32	0	443
5:45 PM	0	0	0	0	21	0	36	0	61	154	0	0	0	103	36	0	411
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	200	0	285	1	406	1245	0	0	0	839	271	0	3247
APPROACH %'s :					41.15%	0.00%	58.64%	0.21%	24.59%	75.41%	0.00%	0.00%	0.00%	75.59%	24.41%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	100	0	140	0	191	658	0	0	0	455	133	0	1677
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.806	0.000	0.795	0.000	0.918	0.924	0.000	0.000	0.000	0.862	0.792	0.000	0.946
					0.800				0.935				0.891				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-013
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Oak View Dr				Oak View Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	11	0	46	0	16	49	0	0	0	137	12	0	271
7:15 AM	0	0	0	0	16	0	40	2	34	49	0	0	0	120	7	0	268
7:30 AM	0	0	0	0	18	0	41	1	20	50	0	0	0	159	7	0	296
7:45 AM	0	0	0	0	26	0	54	1	24	53	0	0	0	113	15	0	286
8:00 AM	0	0	0	0	22	0	43	0	27	64	0	0	0	109	10	0	275
8:15 AM	0	0	0	0	13	0	31	0	20	57	0	0	0	118	6	0	245
8:30 AM	0	0	0	0	12	0	35	0	14	48	0	0	0	101	11	0	221
8:45 AM	0	0	0	0	13	0	23	0	24	56	0	0	0	88	23	0	227
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	131	0	313	4	179	426	0	0	0	945	91	0	2089
APPROACH %'s :					29.24%	0.00%	69.87%	0.89%	29.59%	70.41%	0.00%	0.00%	0.00%	91.22%	8.78%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	82	0	178	4	105	216	0	0	0	501	39	0	1125
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.788	0.000	0.824	0.500	0.772	0.844	0.000	0.000	0.000	0.788	0.650	0.000	0.950
					0.815				0.882				0.813				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	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	24	0	41	0	59	146	0	0	0	105	26	0	401
4:15 PM	0	0	0	0	21	0	35	1	42	133	0	0	0	88	29	0	349
4:30 PM	0	0	0	0	32	0	30	0	51	151	0	0	0	87	45	0	396
4:45 PM	0	0	0	0	23	0	33	0	42	174	0	0	0	123	42	0	437
5:00 PM	0	0	0	0	19	0	28	0	50	146	0	0	0	101	26	0	370
5:15 PM	0	0	0	0	27	0	34	0	49	178	0	0	0	96	33	0	417
5:30 PM	0	0	0	0	31	0	44	0	47	156	0	0	0	132	32	0	442
5:45 PM	0	0	0	0	21	0	35	0	61	154	0	0	0	102	36	0	409
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	198	0	280	1	401	1238	0	0	0	834	269	0	3221
APPROACH %'s :					41.34%	0.00%	58.46%	0.21%	24.47%	75.53%	0.00%	0.00%	0.00%	75.61%	24.39%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	100	0	139	0	188	654	0	0	0	452	133	0	1666
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.806	0.000	0.790	0.000	0.940	0.919	0.000	0.000	0.000	0.856	0.792	0.000	0.942
					0.797				0.927				0.886				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-013
Date: 5/20/2021

Data - 2axle

NS/EW Streets:	Oak View Dr				Oak View Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
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	1	1	0	3
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	1	0	0	1	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	2	0	0	2	0	0	0	4	2	0	11
APPROACH %'s :					33.33%	0.00%	66.67%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	66.67%	33.33%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	0	0	0	1	0	0	0	1	2	0	5
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	0.250	0.500	0.000	0.417
					0.250				0.250				0.375				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	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	1	0	0	1	0	0	0	0	1	0	3
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	1	0	2	1	0	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	1	0	2	2	0	0	0	1	0	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
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	1	0	0	0	0	0	0	1	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	4	0	5	5	0	0	0	4	1	0	19
APPROACH %'s :					0.00%	0.00%	100.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	80.00%	20.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	1	0	3	3	0	0	0	3	0	0	10
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.375	0.375	0.000	0.000	0.000	0.375	0.000	0.000	0.417
					0.250				0.375				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-013
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Oak View Dr				Oak View Dr				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
7:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	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	1	0	0	0	0	1	0	0	2
8:30 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
8:45 AM	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	2	0	4	0	5	1	0	0	0	1	2	0	15
APPROACH %'s :					33.33%	0.00%	66.67%	0.00%	83.33%	16.67%	0.00%	0.00%	0.00%	33.33%	66.67%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	1	0	2	0	0	1	0	0	0	0	1	0	5
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.250	0.000	0.500	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.625
					0.750				0.250				0.250				

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

National Data & Surveying Services

Intersection Turning Movement Count

Location: Oak View Dr & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-013
Date: 5/20/2021

Data - 4axle

AM

NS/EW Streets:	Oak View Dr				Oak View Dr				Oak Valley Pwky				Oak Valley Pwky				
	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	1	0	0	0	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	2	0	0	0	0	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	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
8:00 AM	0	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	0	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
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	0	5
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
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	0.000	0.250	0.000	0.000	0.250
													0.250				

PM

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

Prepared by National Data & Surveying Services

Oak View Dr & Oak Valley Pwky

Peak Hour Turning Movement Count

ID: 21-030036-013
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:15 AM - 08:15 AM		7:00 AM - 09:00 AM
NONE		NONE
04:45 PM - 05:45 PM		4:00 PM - 06:00 PM

SOUTHBOUND (Oak View Dr)

AM	180	0	84	4	151	AM
NOON	0	0	0	0	0	NOON
PM	140	0	100	0	324	PM
	1	0	1	0		

EASTBOUND (Oak Valley Pwky)

AM	NOON	PM	
684	0	595	
0	0	0	0
105	0	191	1
218	0	658	1
0	0	0	0

WESTBOUND (Oak Valley Pwky)

	PM	NOON	AM
1	133	0	42
2	455	0	504
0	0	0	0
0	0	0	0
	758	0	302

NORTHBOUND (Oak View Dr)

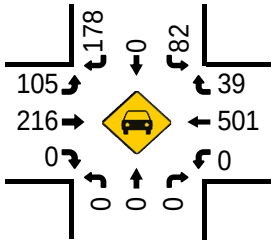
PM	0	0	0	0	0	PM
NOON	0	0	0	0	0	NOON
AM	0	0	0	0	0	AM
	0	0	0	0		

CONTROL

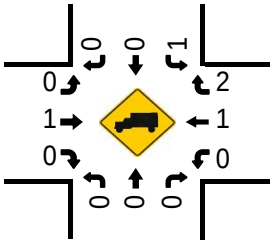
Signalized

TEV	1137	0	1677
	AM	NOON	PM
PHF	0.95		0.95

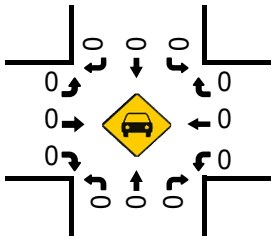
Cars (AM)



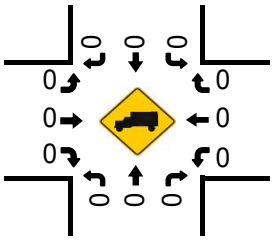
2axle (AM)



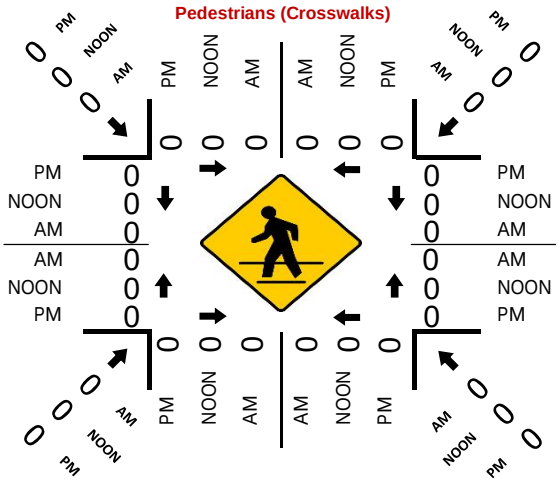
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-012
Date: 5/20/2021

Data - Total

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	7	24	6	0	4	42	36	0	19	37	7	0	8	94	6	0	290
7:15 AM	6	32	9	0	12	47	39	0	18	29	15	0	9	106	6	0	328
7:30 AM	10	36	14	0	2	47	42	0	16	37	8	0	15	98	9	0	334
7:45 AM	13	41	12	0	10	48	27	0	11	53	12	0	10	82	10	0	329
8:00 AM	9	29	5	0	5	53	27	0	23	49	17	0	11	74	7	0	309
8:15 AM	10	34	13	0	4	37	41	0	19	39	12	0	16	88	15	0	328
8:30 AM	12	38	11	0	6	38	45	0	14	31	11	0	13	63	6	0	288
8:45 AM	8	36	10	0	10	34	33	0	25	34	10	0	13	60	7	0	280
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	75	270	80	0	53	346	290	0	145	309	92	0	95	665	66	0	2486
APPROACH %'s :	17.65%	63.53%	18.82%	0.00%	7.69%	50.22%	42.09%	0.00%	26.56%	56.59%	16.85%	0.00%	11.50%	80.51%	7.99%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	42	140	44	0	21	185	137	0	69	178	49	0	52	342	41	0	1300
PEAK HR FACTOR :	0.808	0.854	0.786	0.000	0.525	0.873	0.815	0.000	0.750	0.840	0.721	0.000	0.813	0.872	0.683	0.000	0.973
	0.856				0.942				0.831				0.891				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	19	77	15	0	14	59	30	0	39	78	20	0	26	87	14	0	478
4:15 PM	24	72	18	0	25	48	32	0	50	89	22	0	26	99	17	0	522
4:30 PM	21	94	13	0	23	56	41	0	63	90	17	0	20	104	28	0	570
4:45 PM	23	67	14	0	21	48	45	0	51	103	18	0	22	110	23	0	545
5:00 PM	25	97	15	0	18	55	39	0	53	87	13	0	23	82	13	0	520
5:15 PM	16	75	17	0	26	69	46	0	59	109	28	0	27	85	21	0	578
5:30 PM	18	74	21	0	24	62	41	0	53	95	24	0	21	77	20	0	530
5:45 PM	25	64	11	0	12	39	49	0	55	90	21	0	31	88	18	0	503
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	171	620	124	0	163	436	323	0	423	741	163	0	196	732	154	0	4246
APPROACH %'s :	18.69%	67.76%	13.55%	0.00%	17.68%	47.29%	35.03%	0.00%	31.88%	55.84%	12.28%	0.00%	18.11%	67.65%	14.23%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	85	333	59	0	88	228	171	0	226	389	76	0	92	381	85	0	2213
PEAK HR FACTOR :	0.850	0.858	0.868	0.000	0.846	0.826	0.929	0.000	0.897	0.892	0.679	0.000	0.852	0.866	0.759	0.000	0.957
	0.870				0.863				0.881				0.900				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-012
Date: 5/20/2021

Data - Cars

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	7	22	5	0	4	41	36	0	17	35	7	0	8	94	6	0	282
7:15 AM	6	32	9	0	12	46	39	0	18	29	15	0	8	106	6	0	326
7:30 AM	10	33	13	0	2	47	41	0	16	36	8	0	15	98	9	0	328
7:45 AM	12	40	12	0	10	48	26	0	11	52	12	0	10	80	10	0	323
8:00 AM	9	29	5	0	5	52	27	0	23	48	16	0	11	73	7	0	305
8:15 AM	10	32	12	0	4	37	41	0	19	39	12	0	15	87	15	0	323
8:30 AM	12	36	11	0	5	36	44	0	14	30	11	0	13	62	6	0	280
8:45 AM	8	36	10	0	10	34	33	0	24	34	10	0	13	59	7	0	278
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	74	260	77	0	52	341	287	0	142	303	91	0	93	659	66	0	2445
APPROACH %'s :	18.00%	63.26%	18.73%	0.00%	7.65%	50.15%	42.21%	0.00%	26.49%	56.53%	16.98%	0.00%	11.37%	80.56%	8.07%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	41	134	42	0	21	184	135	0	69	175	48	0	51	338	41	0	1279
PEAK HR FACTOR :	0.854	0.838	0.808	0.000	0.525	0.885	0.823	0.000	0.750	0.841	0.750	0.000	0.850	0.862	0.683	0.000	0.975
	0.848				0.944				0.839				0.881				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	19	75	14	0	14	59	30	0	39	77	20	0	25	87	14	0	473
4:15 PM	22	71	18	0	25	47	32	0	49	88	22	0	26	99	17	0	516
4:30 PM	21	92	13	0	23	55	41	0	63	89	16	0	20	104	28	0	565
4:45 PM	23	66	14	0	20	48	45	0	51	103	18	0	21	110	23	0	542
5:00 PM	25	95	15	0	18	54	39	0	52	85	13	0	23	80	13	0	512
5:15 PM	16	75	17	0	26	69	46	0	59	109	28	0	27	85	21	0	578
5:30 PM	18	74	21	0	24	61	40	0	52	95	24	0	21	77	20	0	527
5:45 PM	25	64	11	0	12	39	49	0	55	90	21	0	31	87	18	0	502
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	169	612	123	0	162	432	322	0	420	736	162	0	194	729	154	0	4215
APPROACH %'s :	18.69%	67.70%	13.61%	0.00%	17.69%	47.16%	35.15%	0.00%	31.87%	55.84%	12.29%	0.00%	18.01%	67.69%	14.30%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	85	328	59	0	87	226	171	0	225	386	75	0	91	379	85	0	2197
PEAK HR FACTOR :	0.850	0.863	0.868	0.000	0.837	0.819	0.929	0.000	0.893	0.885	0.670	0.000	0.843	0.861	0.759	0.000	0.950
	0.874				0.858				0.875				0.901				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-012
Date: 5/20/2021

Data - 2axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	1	0	0	1	0	0	0	1	0	0	0	0	0	0	4
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
7:45 AM	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
8:00 AM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	2
8:15 AM	0	2	1	0	0	0	0	0	0	0	0	0	1	0	0	0	4
8:30 AM	0	2	0	0	0	0	1	0	0	1	0	0	0	1	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	6	2	0	0	2	2	0	0	4	1	0	1	1	0	0	20
APPROACH %'s :	11.11%	66.67%	22.22%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	80.00%	20.00%	0.00%	50.00%	50.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	1	3	1	0	0	1	1	0	0	2	1	0	1	0	0	0	11
PEAK HR FACTOR :	0.250	0.375	0.250	0.000	0.000	0.250	0.250	0.000	0.000	0.500	0.250	0.000	0.250	0.000	0.000	0.000	0.688
	0.417				0.500				0.750				0.250				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	2	1	0	0	0	0	0	0	1	0	0	1	0	0	0	5
4:15 PM	2	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	5
4:30 PM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	3
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
5:00 PM	0	2	0	0	0	1	0	0	1	1	0	0	0	2	0	0	7
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	1	1	0	1	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	2	6	1	0	0	3	1	0	3	4	1	0	2	3	0	0	26
APPROACH %'s :	22.22%	66.67%	11.11%	0.00%	0.00%	75.00%	25.00%	0.00%	37.50%	50.00%	12.50%	0.00%	40.00%	60.00%	0.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	3	0	0	0	2	0	0	1	2	1	0	1	2	0	0	12
PEAK HR FACTOR :	0.000	0.375	0.000	0.000	0.000	0.500	0.000	0.000	0.250	0.500	0.250	0.000	0.250	0.250	0.000	0.000	0.429
	0.375				0.500				0.500				0.375				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-012
Date: 5/20/2021

Data - 3axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	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	1	0	0	2
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	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	1	0	0	1	1	0	2	1	0	0	0	2	0	0	9
APPROACH %'s :	0.00%	50.00%	50.00%	0.00%	0.00%	50.00%	50.00%	0.00%	66.67%	33.33%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	1	1	0	0	0	1	0	0	1	0	0	0	2	0	0	6
PEAK HR FACTOR :	0.000	0.250	0.250	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.000	0.500	0.000	0.000	0.750
	0.500				0.250				0.250				0.500				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	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	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	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	0	0	0	0	1
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	1	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	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
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	4
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	3
PEAK HR FACTOR :	0.000	0.250	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	0.750
	0.250				0.250				0.250								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Beaumont Ave & Oak Valley Pwky
City: Beaumont
Control: Signalized

Project ID: 21-030036-012
Date: 5/20/2021

Data - 4axle

NS/EW Streets:	Beaumont Ave				Beaumont Ave				Oak Valley Pwky				Oak Valley Pwky				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	0	0	1	2	0	0	1	2	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
7:30 AM	0	2	0	0	0	0	0	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	2	0	0	2
8:00 AM	0	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	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3	0	0	1	2	0	0	1	1	0	0	1	3	0	0	12
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	33.33%	66.67%	0.00%	0.00%	50.00%	50.00%	0.00%	0.00%	25.00%	75.00%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	2	0	0	0	0	0	0	0	0	0	0	0	2	0	0	4
PEAK HR FACTOR :	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	0.000	0.500
	0.250												0.250				

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

Prepared by National Data & Surveying Services

Beaumont Ave & Oak Valley Pwky

Peak Hour Turning Movement Count

ID: 21-030036-012
City: Beaumont

Day: Thursday
Date: 5/20/2021

PEAK HOURS		COUNT PERIODS
07:30 AM - 08:30 AM		7:00 AM - 09:00 AM
NONE		NONE
04:30 PM - 05:30 PM		4:00 PM - 06:00 PM

Beaumont Ave

SOUTHBOUND

AM	137	185	21	0	250	AM
NOON	0	0	0	0	0	NOON
PM	171	228	88	0	644	PM
	0	2	1	0		

EASTBOUND (Oak Valley Pwky)

AM	NOON	PM	
521	0	637	
0	0	0	0
69	0	226	1
178	0	389	2
49	0	76	0

WESTBOUND (Oak Valley Pwky)

	PM	NOON	AM
0	85	0	41
2	381	0	342
1	92	0	52
0	0	0	0
	536	0	243

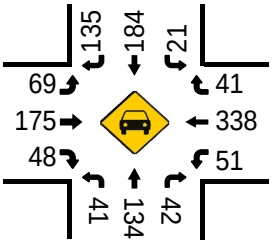
NORTHBOUND

PM	396	0	85	333	59	PM
NOON	0	0	0	0	0	NOON
AM	286	0	42	140	44	AM
		0	1	2	0	

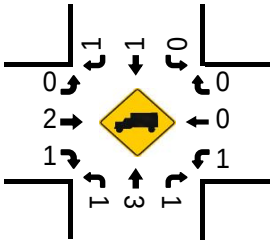
Beaumont Ave

CONTROL			
Signalized			
TEV	1300 AM	0 NOON	2213 PM
PHF	0.97		0.96

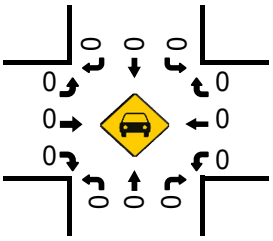
Cars (AM)



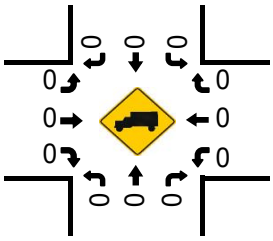
2axle (AM)



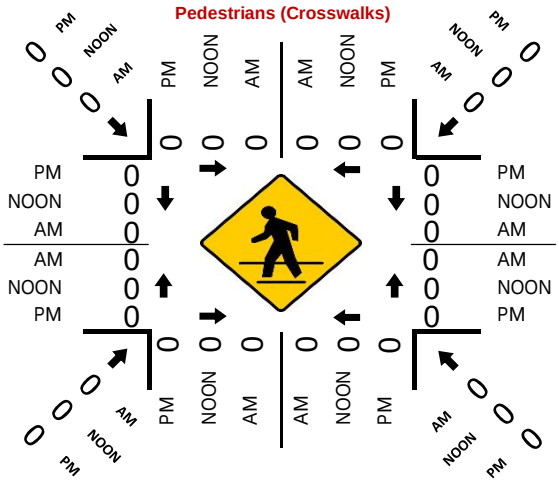
Cars (NOON)



2axle (NOON)



Pedestrians (Crosswalks)


PM
NOON
AM
0
0
0
0
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0
0
0
0
0
0

COVID Factor Development																
	2014 HISTORIC COUNTS	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total Volume	Net Change in Volume	COVID Factor
	HISTORIC COUNTS GROWN TO 2020	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR			
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	154	3	174	0	596	127	29	100	0	1183		
2	I-10 WB Ramps at Cherry Valley Boulevard	41	2	24	0	0	0	528	224	0	0	87	432	1338		
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	33	0	32	31	215	0	0	487	25	823		
4	Union Street at Cherry Valley Boulevard	17	1	9	0	1	64	15	217	6	2	403	3	738		
5	Nancy Avenue at Cherry Valley Boulevard	52	27	134	26	31	45	21	179	32	81	298	14	940		
6	Beaumont Avenue at Cherry Valley Boulevard	243	201	14	21	188	69	33	129	337	19	217	17	1488		
	NEW 2020 COUNTS	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR			
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	104	0	239	0	527	160	18	113	0	1161	22	2%
2	I-10 WB Ramps at Cherry Valley Boulevard	69	1	17	0	0	0	524	118	0	0	42	335	1106	232	17%
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	32	0	19	23	126	0	0	362	44	606	217	26%
4	Union Street at Cherry Valley Boulevard	53	0	0	0	0	0	0	133	10	0	356	0	552	186	25%
5	Nancy Avenue at Cherry Valley Boulevard	38	1	1	0	2	73	18	105	9	1	239	1	488	452	48%
6	Beaumont Avenue at Cherry Valley Boulevard	13	14	3	4	18	26	12	71	31	2	233	1	428	1060	71%
															AVG	32%

COVID Factor Application

	COVID Factor	1.32											
	2020 COUNTS (with PCE)												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	104	0	239	0	527	160	18	113	0
2	I-10 WB Ramps at Cherry Valley Boulevard	69	1	17	0	0	0	524	118	0	0	42	335
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	32	0	19	23	126	0	0	362	44
4	Cherry Valley Boulevard at Hannon Road	53	0	0	0	0	0	0	133	10	0	356	0
5	Cherry Valley Boulevard at Union Street	38	1	1	0	2	73	18	105	9	1	239	1
6	Cherry Valley Boulevard at Nancy Avenue	13	14	3	4	18	26	12	71	31	2	233	1
7	Cherry Valley Boulevard at Beaumont Avenue	84	150	6	6	170	38	31	38	56	6	61	5
8	Brookside Avenue at Hannon Road	0	3	1	5	1	3	45	49	0	1	36	4
9	Brookside Avenue at Union Street	0	5	3	11	0	2	1	55	0	1	38	26
10	Brookside Avenue at Oak View Drive	31	0	50	0	0	0	0	67	45	20	30	0
11	Brookside Avenue at Beaumont Avenue	52	149	18	47	177	20	2	28	35	40	52	99
12	Oak Valley Parkway at Desert Lawn Drive	0	0	0	215	0	25	16	192	0	1	160	101
13	Oak Valley Parkway at I-10 SB Ramps	0	0	0	191	5	63	0	220	231	182	179	0
14	Oak Valley Parkway at I-10 NB Ramps	93	1	117	0	0	0	135	272	0	0	249	505
15	Oak Valley Parkway at Oak View Drive	0	0	0	90	0	182	105	220	0	0	509	44
16	Oak Valley Parkway at Beaumont Avenue	43	147	46	21	186	139	69	180	50	53	348	41

	2020 COUNTS WITH COVID FACTOR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	137	0	315	0	696	211	24	149	0
2	I-10 WB Ramps at Cherry Valley Boulevard	91	1	22	0	0	0	692	156	0	0	55	442
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	42	0	25	30	166	0	0	478	58
4	Cherry Valley Boulevard at Hannon Road	70	0	0	0	0	0	0	176	13	0	470	0
5	Cherry Valley Boulevard at Union Street	50	1	1	0	3	96	24	139	12	1	315	1
6	Cherry Valley Boulevard at Nancy Avenue	17	18	4	5	24	34	16	94	41	3	308	1
7	Cherry Valley Boulevard at Beaumont Avenue	111	198	8	8	224	50	41	50	74	8	81	7
8	Brookside Avenue at Hannon Road	0	4	1	7	1	4	59	65	0	1	48	5
9	Brookside Avenue at Union Street	0	7	4	15	0	3	1	73	0	1	50	34
10	Brookside Avenue at Oak View Drive	41	0	66	0	0	0	0	88	59	26	40	0
11	Brookside Avenue at Beaumont Avenue	69	197	24	62	234	26	3	37	46	53	69	131
12	Oak Valley Parkway at Desert Lawn Drive	0	0	0	284	0	33	21	253	0	1	211	133
13	Oak Valley Parkway at I-10 SB Ramps	0	0	0	252	7	83	0	290	305	240	236	0
14	Oak Valley Parkway at I-10 NB Ramps	123	1	154	0	0	0	178	359	0	0	329	667
15	Oak Valley Parkway at Oak View Drive	0	0	0	119	0	240	139	290	0	0	672	58
16	Oak Valley Parkway at Beaumont Avenue	57	194	61	28	246	183	91	238	66	70	459	54
101	Cherry Valley Blvd at West Project Dwy	0	0	0	0	0	0	0	208	0	0	536	0
102	Cherry Valley Blvd at Middle Project Dwy	0	0	0	0	0	0	0	208	0	0	536	0
103	Cherry Valley Blvd at East Project Dwy	0	0	0	0	0	0	0	208	0	0	536	0

COVID Factor Development																
	2014 HISTORIC COUNTS	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	Total Volume	Net Change in Volume	COVID Factor
	HISTORIC COUNTS GROWN TO 2020	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR			
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	421	2	450	0	282	67	27	157	0	1406		
2	I-10 WB Ramps at Cherry Valley Boulevard	110	1	21	0	0	0	239	464	0	0	75	193	1103		
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	51	0	37	31	454	0	0	231	30	834		
4	Union Street at Cherry Valley Boulevard	14	1	10	0	3	30	57	362	23	3	204	1	708		
5	Nancy Avenue at Cherry Valley Boulevard	30	21	27	9	17	21	41	302	28	25	151	12	684		
6	Beaumont Avenue at Cherry Valley Boulevard	157	287	16	25	273	49	67	104	202	13	55	28	1276		
	NEW 2020 COUNTS	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR			
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	288	4	542	0	393	125	24	270	0	1646	-240	-17%
2	I-10 WB Ramps at Cherry Valley Boulevard	181	4	22	0	0	0	304	378	0	0	119	255	1263	-160	-15%
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	74	0	49	41	382	0	0	307	62	915	-81	-10%
4	Union Street at Cherry Valley Boulevard	39	0	1	0	0	0	0	416	38	0	312	0	806	-98	-14%
5	Nancy Avenue at Cherry Valley Boulevard	18	3	1	2	4	31	61	341	15	3	261	2	742	-58	-8%
6	Beaumont Avenue at Cherry Valley Boulevard	33	19	6	12	17	18	21	303	25	10	217	8	689	587	46%
															AVG	-3%

COVID Factor Application

	COVID Factor	1											
	2020 COUNTS (with PCE)												
#	Intersection	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	288	4	542	0	393	125	24	270	0
2	I-10 WB Ramps at Cherry Valley Boulevard	181	4	22	0	0	0	304	378	0	0	119	255
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	74	0	49	41	382	0	0	307	62
4	Cherry Valley Boulevard at Hannon Road	39	0	1	0	0	0	0	416	38	0	312	0
5	Cherry Valley Boulevard at Union Street	18	3	1	2	4	31	61	341	15	3	261	2
6	Cherry Valley Boulevard at Nancy Avenue	33	19	6	12	17	18	21	303	25	10	217	8
7	Cherry Valley Boulevard at Beaumont Avenue	132	254	26	16	228	54	60	87	174	15	59	10
8	Brookside Avenue at Hannon Road	3	2	5	18	5	18	24	95	1	3	108	21
9	Brookside Avenue at Union Street	1	1	9	13	2	7	4	113	2	5	125	19
10	Brookside Avenue at Oak View Drive	63	0	27	1	0	0	1	67	72	71	129	0
11	Brookside Avenue at Beaumont Avenue	50	280	74	113	290	13	27	71	93	60	43	106
12	Oak Valley Parkway at Desert Lawn Drive	0	0	0	200	0	42	50	311	0	0	255	245
13	Oak Valley Parkway at I-10 SB Ramps	0	0	0	520	8	142	0	265	223	158	377	0
14	Oak Valley Parkway at I-10 NB Ramps	241	7	246	0	0	0	116	668	0	0	294	333
15	Oak Valley Parkway at Oak View Drive	0	0	0	100	0	141	193	662	0	0	457	133
16	Oak Valley Parkway at Beaumont Avenue	85	338	59	89	229	171	227	391	77	93	382	85

	2020 COUNTS WITH COVID FACTOR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	I-10 EB Ramps at Cherry Valley Boulevard	0	0	0	288	4	542	0	393	125	24	270	0
2	I-10 WB Ramps at Cherry Valley Boulevard	181	4	22	0	0	0	304	378	0	0	119	255
3	Calimesa Boulevard at Cherry Valley Boulevard	0	0	0	74	0	49	41	382	0	0	307	62
4	Cherry Valley Boulevard at Hannon Road	39	0	1	0	0	0	0	416	38	0	312	0
5	Cherry Valley Boulevard at Union Street	18	3	1	2	4	31	61	341	15	3	261	2
6	Cherry Valley Boulevard at Nancy Avenue	33	19	6	12	17	18	21	303	25	10	217	8
7	Cherry Valley Boulevard at Beaumont Avenue	132	254	26	16	228	54	60	87	174	15	59	10
8	Brookside Avenue at Hannon Road	3	2	5	18	5	18	24	95	1	3	108	21
9	Brookside Avenue at Union Street	1	1	9	13	2	7	4	113	2	5	125	19
10	Brookside Avenue at Oak View Drive	63	0	27	1	0	0	1	67	72	71	129	0
11	Brookside Avenue at Beaumont Avenue	50	280	74	113	290	13	27	71	93	60	43	106
12	Oak Valley Parkway at Desert Lawn Drive	0	0	0	200	0	42	50	311	0	0	255	245
13	Oak Valley Parkway at I-10 SB Ramps	0	0	0	520	8	142	0	265	223	158	377	0
14	Oak Valley Parkway at I-10 NB Ramps	241	7	246	0	0	0	116	668	0	0	294	333
15	Oak Valley Parkway at Oak View Drive	0	0	0	100	0	141	193	662	0	0	457	133
16	Oak Valley Parkway at Beaumont Avenue	85	338	59	89	229	171	227	391	77	93	382	85
101	Cherry Valley Blvd at West Project Dwy	0	0	0	0	0	0	0	456	0	0	369	0
102	Cherry Valley Blvd at Middle Project Dwy	0	0	0	0	0	0	0	456	0	0	369	0
103	Cherry Valley Blvd at East Project Dwy	0	0	0	0	0	0	0	456	0	0	369	0

APPENDIX C

PCE WORKSHEETS

Existing Peak Hour Volumes - Classification Counts

1 I-10 EB Ramps at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	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	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	94	5	1	0	6	6.0%	10	1.7	104	282	1	2	0	3	1.1%	6	2.0	288
ST	0	0	0	0	0	0.0%	0	0.0	0	4	0	0	0	0	0.0%	0	0.0	4
SR	219	4	1	4	9	3.9%	20	2.2	239	540	1	0	0	1	0.2%	2	2.0	542
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	514	3	1	2	6	1.2%	13	2.2	527	393	0	0	0	0	0.0%	0	0.0	393
ER	140	2	1	5	8	5.4%	20	2.5	160	125	0	0	0	0	0.0%	0	0.0	125
WL	12	0	0	2	2	14.3%	6	3.0	18	22	1	0	0	1	4.3%	2	2.0	24
WT	104	0	0	3	3	2.8%	9	3.0	113	268	1	0	0	1	0.4%	2	2.0	270
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,161									1,646
North Leg Volumes																		
Approach	313	9	2	4	15		30		343	826	2	2	0	4		8		834
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	313	9	2	4	15	4.6%	30	2.0	343	826	2	2	0	4	0.5%	8	2.0	834
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	152	2	1	7	10		26		178	151	1	0	0	1		2		153
Total	152	2	1	7	10	6.2%	26	2.6	178	151	1	0	0	1	0.7%	2	2.0	153
East Leg Volumes																		
Approach	116	0	0	5	5		15		131	290	2	0	0	2		4		294
Depart	608	8	2	2	12		23		631	675	1	2	0	3		6		681
Total	724	8	2	7	17	2.3%	38	2.2	762	965	3	2	0	5	0.5%	10	2.0	975
West Leg Volumes																		
Approach	654	5	2	7	14		33		687	518	0	0	0	0		0		518
Depart	323	4	1	7	12		29		352	808	2	0	0	2		4		812
Total	977	9	3	14	26	2.6%	62	2.4	1,039	1,326	2	0	0	2	0.2%	4	2.0	1,330
All Legs																		
Approach	1,083	14	4	16	34		78		1,161	1,634	4	2	0	6		12		1,646
Depart	1,083	14	4	16	34		78		1,161	1,634	4	2	0	6		12		1,646
Total	2,166	28	8	32	68	3.0%	156	2.3	2,322	3,268	8	4	0	12	0.4%	24	2.0	3,292

Existing Peak Hour Volumes - Classification Counts

2 I-10 WB Ramps at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	67	1	0	0	1	1.5%	2	2.0	69	179	1	0	0	1	0.6%	2	2.0	181
NT	1	0	0	0	0	0.0%	0	0.0	1	4	0	0	0	0	0.0%	0	0.0	4
NR	14	2	0	0	2	12.5%	3	1.5	17	20	1	0	0	1	4.8%	2	2.0	22
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	518	4	0	0	4	0.8%	6	1.5	524	304	0	0	0	0	0.0%	0	0.0	304
ET	110	4	1	0	5	4.3%	8	1.6	118	373	2	1	0	3	0.8%	5	1.7	378
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	40	1	0	0	1	2.4%	2	2.0	42	116	2	0	0	2	1.7%	3	1.5	119
WR	329	2	0	1	3	0.9%	6	2.0	335	246	4	0	1	5	2.0%	9	1.8	255
									1,106									1,263
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	848	6	0	1	7		12		860	554	4	0	1	5		9		563
Total	848	6	0	1	7	0.8%	12	1.7	860	554	4	0	1	5	0.9%	9	1.8	563
South Leg Volumes																		
Approach	82	3	0	0	3		5		87	203	2	0	0	2		4		207
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	82	3	0	0	3	3.5%	5	1.7	87	203	2	0	0	2	1.0%	4	2.0	207
East Leg Volumes																		
Approach	369	3	0	1	4		8		377	362	6	0	1	7		12		374
Depart	124	6	1	0	7		11		135	393	3	1	0	4		7		400
Total	493	9	1	1	11	2.2%	19	1.7	512	755	9	1	1	11	1.4%	19	1.7	774
West Leg Volumes																		
Approach	628	8	1	0	9		14		642	677	2	1	0	3		5		682
Depart	107	2	0	0	2		4		111	295	3	0	0	3		5		300
Total	735	10	1	0	11	1.5%	18	1.6	753	972	5	1	0	6	0.6%	10	1.7	982
All Legs																		
Approach	1,079	14	1	1	16		27		1,106	1,242	10	1	1	12		21		1,263
Depart	1,079	14	1	1	16		27		1,106	1,242	10	1	1	12		21		1,263
Total	2,158	28	2	2	32	1.5%	54	1.7	2,212	2,484	20	2	2	24	1.0%	42	1.8	2,526

Existing Peak Hour Volumes - Classification Counts

3 Calimesa Boulevard at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	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	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	32	0	0	0	0	0.0%	0	0.0	32	74	0	0	0	0	0.0%	0	0.0	74
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	19	0	0	0	0	0.0%	0	0.0	19	49	0	0	0	0	0.0%	0	0.0	49
EL	23	0	0	0	0	0.0%	0	0.0	23	41	0	0	0	0	0.0%	0	0.0	41
ET	112	6	1	1	8	6.7%	14	1.8	126	369	7	1	0	8	2.1%	13	1.6	382
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	352	1	1	2	4	1.1%	10	2.5	362	298	4	0	1	5	1.7%	9	1.8	307
WR	44	0	0	0	0	0.0%	0	0.0	44	60	1	0	0	1	1.6%	2	2.0	62
									606									915
North Leg Volumes																		
Approach	51	0	0	0	0		0		51	123	0	0	0	0		0		123
Depart	67	0	0	0	0		0		67	101	1	0	0	1		2		103
Total	118	0	0	0	0	0.0%	0	0.0	118	224	1	0	0	1	0.4%	2	2.0	226
South 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
East Leg Volumes																		
Approach	396	1	1	2	4		10		406	358	5	0	1	6		11		369
Depart	144	6	1	1	8		14		158	443	7	1	0	8		13		456
Total	540	7	2	3	12	2.2%	24	2.0	564	801	12	1	1	14	1.7%	24	1.7	825
West Leg Volumes																		
Approach	135	6	1	1	8		14		149	410	7	1	0	8		13		423
Depart	371	1	1	2	4		10		381	347	4	0	1	5		9		356
Total	506	7	2	3	12	2.3%	24	2.0	530	757	11	1	1	13	1.7%	22	1.7	779
All Legs																		
Approach	582	7	2	3	12		24		606	891	12	1	1	14		24		915
Depart	582	7	2	3	12		24		606	891	12	1	1	14		24		915
Total	1,164	14	4	6	24	2.0%	48	2.0	1,212	1,782	24	2	2	28	1.5%	48	1.7	1,830

Existing Peak Hour Volumes - Classification Counts

4 Hannon Road at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	53	0	0	0	0	0.0%	0	0.0	53	37	1	0	0	1	2.6%	2	2.0	39
NT	0	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	1	0	0	0	0	0.0%	0	0.0	1
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	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	122	6	1	0	7	5.4%	11	1.6	133	404	5	2	0	7	1.7%	12	1.7	416
ER	10	0	0	0	0	0.0%	0	0.0	10	35	2	0	0	2	5.4%	3	1.5	38
WL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WT	346	1	1	2	4	1.1%	10	2.5	356	303	4	0	1	5	1.6%	9	1.8	312
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									552									806
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	0
South Leg Volumes																		
Approach	53	0	0	0	0		0		53	38	1	0	0	1		2		40
Depart	10	0	0	0	0		0		10	35	2	0	0	2		3		38
Total	63	0	0	0	0	0.0%	0	0.0	63	73	3	0	0	3	3.9%	5	1.7	78
East Leg Volumes																		
Approach	346	1	1	2	4		10		356	303	4	0	1	5		9		312
Depart	122	6	1	0	7		11		133	405	5	2	0	7		12		417
Total	468	7	2	2	11	2.3%	21	1.9	489	708	9	2	1	12	1.7%	21	1.8	729
West Leg Volumes																		
Approach	132	6	1	0	7		11		143	439	7	2	0	9		15		454
Depart	399	1	1	2	4		10		409	340	5	0	1	6		11		351
Total	531	7	2	2	11	2.0%	21	1.9	552	779	12	2	1	15	1.9%	26	1.7	805
All Legs																		
Approach	531	7	2	2	11		21		552	780	12	2	1	15		26		806
Depart	531	7	2	2	11		21		552	780	12	2	1	15		26		806
Total	1,062	14	4	4	22	2.0%	42	1.9	1,104	1,560	24	4	2	30	1.9%	52	1.7	1,612

Existing Peak Hour Volumes - Classification Counts

5 Union Street at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	32	0	0	2	2	5.9%	6	3.0	38	18	0	0	0	0	0.0%	0	0.0	18
NT	1	0	0	0	0	0.0%	0	0.0	1	3	0	0	0	0	0.0%	0	0.0	3
NR	1	0	0	0	0	0.0%	0	0.0	1	1	0	0	0	0	0.0%	0	0.0	1
SL	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
ST	2	0	0	0	0	0.0%	0	0.0	2	4	0	0	0	0	0.0%	0	0.0	4
SR	73	0	0	0	0	0.0%	0	0.0	73	31	0	0	0	0	0.0%	0	0.0	31
EL	16	1	0	0	1	5.9%	2	2.0	18	61	0	0	0	0	0.0%	0	0.0	61
ET	97	4	1	0	5	4.9%	8	1.6	105	329	5	2	0	7	2.1%	12	1.7	341
ER	7	1	0	0	1	12.5%	2	2.0	9	13	1	0	0	1	7.1%	2	2.0	15
WL	1	0	0	0	0	0.0%	0	0.0	1	3	0	0	0	0	0.0%	0	0.0	3
WT	237	1	0	0	1	0.4%	2	2.0	239	252	4	0	1	5	1.9%	9	1.8	261
WR	1	0	0	0	0	0.0%	0	0.0	1	2	0	0	0	0	0.0%	0	0.0	2
									488									742
North Leg Volumes																		
Approach	75	0	0	0	0		0		75	37	0	0	0	0		0		37
Depart	18	1	0	0	1		2		20	66	0	0	0	0		0		66
Total	93	1	0	0	1	1.1%	2	2.0	95	103	0	0	0	0	0.0%	0	0.0	103
South Leg Volumes																		
Approach	34	0	0	2	2		6		40	22	0	0	0	0		0		22
Depart	10	1	0	0	1		2		12	20	1	0	0	1		2		22
Total	44	1	0	2	3	6.4%	8	2.7	52	42	1	0	0	1	2.3%	2	2.0	44
East Leg Volumes																		
Approach	239	1	0	0	1		2		241	257	4	0	1	5		9		266
Depart	98	4	1	0	5		8		106	332	5	2	0	7		12		344
Total	337	5	1	0	6	1.7%	10	1.7	347	589	9	2	1	12	2.0%	21	1.8	610
West Leg Volumes																		
Approach	120	6	1	0	7		12		132	403	6	2	0	8		14		417
Depart	342	1	0	2	3		8		350	301	4	0	1	5		9		310
Total	462	7	1	2	10	2.1%	20	2.0	482	704	10	2	1	13	1.8%	23	1.8	727
All Legs																		
Approach	468	7	1	2	10		20		488	719	10	2	1	13		23		742
Depart	468	7	1	2	10		20		488	719	10	2	1	13		23		742
Total	936	14	2	4	20	2.1%	40	2.0	976	1,438	20	4	2	26	1.8%	46	1.8	1,484

Existing Peak Hour Volumes - Classification Counts

6 Nancy Avenue at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	13	0	0	0	0	0.0%	0	0.0	13	33	0	0	0	0	0.0%	0	0.0	33
NT	14	0	0	0	0	0.0%	0	0.0	14	19	0	0	0	0	0.0%	0	0.0	19
NR	3	0	0	0	0	0.0%	0	0.0	3	6	0	0	0	0	0.0%	0	0.0	6
SL	2	1	0	0	1	33.3%	2	2.0	4	10	1	0	0	1	9.1%	2	2.0	12
ST	18	0	0	0	0	0.0%	0	0.0	18	17	0	0	0	0	0.0%	0	0.0	17
SR	26	0	0	0	0	0.0%	0	0.0	26	18	0	0	0	0	0.0%	0	0.0	18
EL	10	1	0	0	1	9.1%	2	2.0	12	21	0	0	0	0	0.0%	0	0.0	21
ET	66	3	0	0	3	4.3%	5	1.7	71	293	4	2	0	6	2.0%	10	1.7	303
ER	31	0	0	0	0	0.0%	0	0.0	31	25	0	0	0	0	0.0%	0	0.0	25
WL	2	0	0	0	0	0.0%	0	0.0	2	10	0	0	0	0	0.0%	0	0.0	10
WT	224	2	3	0	5	2.2%	9	1.8	233	208	4	0	1	5	2.3%	9	1.8	217
WR	1	0	0	0	0	0.0%	0	0.0	1	8	0	0	0	0	0.0%	0	0.0	8
									428									689
North Leg Volumes																		
Approach	46	1	0	0	1		2		48	45	1	0	0	1		2		47
Depart	25	1	0	0	1		2		27	48	0	0	0	0		0		48
Total	71	2	0	0	2	2.7%	4	2.0	75	93	1	0	0	1	1.1%	2	2.0	95
South Leg Volumes																		
Approach	30	0	0	0	0		0		30	58	0	0	0	0		0		58
Depart	51	0	0	0	0		0		51	52	0	0	0	0		0		52
Total	81	0	0	0	0	0.0%	0	0.0	81	110	0	0	0	0	0.0%	0	0.0	110
East Leg Volumes																		
Approach	227	2	3	0	5		9		236	226	4	0	1	5		9		235
Depart	71	4	0	0	4		7		78	309	5	2	0	7		12		321
Total	298	6	3	0	9	2.9%	16	1.8	314	535	9	2	1	12	2.2%	21	1.8	556
West Leg Volumes																		
Approach	107	4	0	0	4		7		114	339	4	2	0	6		10		349
Depart	263	2	3	0	5		9		272	259	4	0	1	5		9		268
Total	370	6	3	0	9	2.4%	16	1.8	386	598	8	2	1	11	1.8%	19	1.7	617
All Legs																		
Approach	410	7	3	0	10		18		428	668	9	2	1	12		21		689
Depart	410	7	3	0	10		18		428	668	9	2	1	12		21		689
Total	820	14	6	0	20	2.4%	36	1.8	856	1,336	18	4	2	24	1.8%	42	1.8	1,378

Existing Peak Hour Volumes - Classification Counts

7 Beaumont Avenue at Cherry Valley Boulevard

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	82	0	1	0	1	1.2%	2	2.0	84	132	0	0	0	0	0.0%	0	0.0	132
NT	144	2	0	1	3	2.0%	6	2.0	150	251	2	0	0	2	0.8%	3	1.5	254
NR	6	0	0	0	0	0.0%	0	0.0	6	24	1	0	0	1	4.0%	2	2.0	26
SL	6	0	0	0	0	0.0%	0	0.0	6	16	0	0	0	0	0.0%	0	0.0	16
ST	165	1	0	1	2	1.2%	5	2.5	170	226	1	0	0	1	0.4%	2	2.0	228
SR	36	1	0	0	1	2.7%	2	2.0	38	51	2	0	0	2	3.8%	3	1.5	54
EL	28	2	0	0	2	6.7%	3	1.5	31	60	0	0	0	0	0.0%	0	0.0	60
ET	36	1	0	0	1	2.7%	2	2.0	38	81	4	0	0	4	4.7%	6	1.5	87
ER	50	2	0	1	3	5.7%	6	2.0	56	167	2	2	0	4	2.3%	7	1.8	174
WL	6	0	0	0	0	0.0%	0	0.0	6	15	0	0	0	0	0.0%	0	0.0	15
WT	59	0	1	0	1	1.7%	2	2.0	61	54	1	0	1	2	3.6%	5	2.5	59
WR	5	0	0	0	0	0.0%	0	0.0	5	10	0	0	0	0	0.0%	0	0.0	10
									651									1,115
North Leg Volumes																		
Approach	207	2	0	1	3		7		214	293	3	0	0	3		5		298
Depart	177	4	0	1	5		9		186	321	2	0	0	2		3		324
Total	384	6	0	2	8	2.0%	16	2.0	400	614	5	0	0	5	0.8%	8	1.6	622
South Leg Volumes																		
Approach	232	2	1	1	4		8		240	407	3	0	0	3		5		412
Depart	221	3	0	2	5		11		232	408	3	2	0	5		9		417
Total	453	5	1	3	9	1.9%	19	2.1	472	815	6	2	0	8	1.0%	14	1.8	829
East Leg Volumes																		
Approach	70	0	1	0	1		2		72	79	1	0	1	2		5		84
Depart	48	1	0	0	1		2		50	121	5	0	0	5		8		129
Total	118	1	1	0	2	1.7%	4	2.0	122	200	6	0	1	7	3.4%	13	1.9	213
West Leg Volumes																		
Approach	114	5	0	1	6		11		125	308	6	2	0	8		13		321
Depart	177	1	2	0	3		6		183	237	3	0	1	4		8		245
Total	291	6	2	1	9	3.0%	17	1.9	308	545	9	2	1	12	2.2%	21	1.8	566
All Legs																		
Approach	623	9	2	3	14		28		651	1,087	13	2	1	16		28		1,115
Depart	623	9	2	3	14		28		651	1,087	13	2	1	16		28		1,115
Total	1,246	18	4	6	28	2.2%	56	2.0	1,302	2,174	26	4	2	32	1.5%	56	1.8	2,230

Existing Peak Hour Volumes - Classification Counts

8 Hannon Road at Brookside Avenue

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	0	0	0	0	0.0%	0	0.0	0	3	0	0	0	0	0.0%	0	0.0	3
NT	3	0	0	0	0	0.0%	0	0.0	3	2	0	0	0	0	0.0%	0	0.0	2
NR	1	0	0	0	0	0.0%	0	0.0	1	5	0	0	0	0	0.0%	0	0.0	5
SL	5	0	0	0	0	0.0%	0	0.0	5	18	0	0	0	0	0.0%	0	0.0	18
ST	1	0	0	0	0	0.0%	0	0.0	1	5	0	0	0	0	0.0%	0	0.0	5
SR	3	0	0	0	0	0.0%	0	0.0	3	18	0	0	0	0	0.0%	0	0.0	18
EL	45	0	0	0	0	0.0%	0	0.0	45	24	0	0	0	0	0.0%	0	0.0	24
ET	49	0	0	0	0	0.0%	0	0.0	49	95	0	0	0	0	0.0%	0	0.0	95
ER	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
WL	1	0	0	0	0	0.0%	0	0.0	1	3	0	0	0	0	0.0%	0	0.0	3
WT	36	0	0	0	0	0.0%	0	0.0	36	108	0	0	0	0	0.0%	0	0.0	108
WR	4	0	0	0	0	0.0%	0	0.0	4	21	0	0	0	0	0.0%	0	0.0	21
									148									303
North Leg Volumes																		
Approach	9	0	0	0	0		0		9	41	0	0	0	0		0		41
Depart	52	0	0	0	0		0		52	47	0	0	0	0		0		47
Total	61	0	0	0	0	0.0%	0	0.0	61	88	0	0	0	0	0.0%	0	0.0	88
South Leg Volumes																		
Approach	4	0	0	0	0		0		4	10	0	0	0	0		0		10
Depart	2	0	0	0	0		0		2	9	0	0	0	0		0		9
Total	6	0	0	0	0	0.0%	0	0.0	6	19	0	0	0	0	0.0%	0	0.0	19
East Leg Volumes																		
Approach	41	0	0	0	0		0		41	132	0	0	0	0		0		132
Depart	55	0	0	0	0		0		55	118	0	0	0	0		0		118
Total	96	0	0	0	0	0.0%	0	0.0	96	250	0	0	0	0	0.0%	0	0.0	250
West Leg Volumes																		
Approach	94	0	0	0	0		0		94	120	0	0	0	0		0		120
Depart	39	0	0	0	0		0		39	129	0	0	0	0		0		129
Total	133	0	0	0	0	0.0%	0	0.0	133	249	0	0	0	0	0.0%	0	0.0	249
All Legs																		
Approach	148	0	0	0	0		0		148	303	0	0	0	0		0		303
Depart	148	0	0	0	0		0		148	303	0	0	0	0		0		303
Total	296	0	0	0	0	0.0%	0	0.0	296	606	0	0	0	0	0.0%	0	0.0	606

Existing Peak Hour Volumes - Classification Counts

9 Union Street at Brookside Avenue

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
NT	5	0	0	0	0	0.0%	0	0.0	5	1	0	0	0	0	0.0%	0	0.0	1
NR	3	0	0	0	0	0.0%	0	0.0	3	9	0	0	0	0	0.0%	0	0.0	9
SL	11	0	0	0	0	0.0%	0	0.0	11	13	0	0	0	0	0.0%	0	0.0	13
ST	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
SR	2	0	0	0	0	0.0%	0	0.0	2	7	0	0	0	0	0.0%	0	0.0	7
EL	1	0	0	0	0	0.0%	0	0.0	1	4	0	0	0	0	0.0%	0	0.0	4
ET	55	0	0	0	0	0.0%	0	0.0	55	113	0	0	0	0	0.0%	0	0.0	113
ER	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
WL	1	0	0	0	0	0.0%	0	0.0	1	5	0	0	0	0	0.0%	0	0.0	5
WT	38	0	0	0	0	0.0%	0	0.0	38	125	0	0	0	0	0.0%	0	0.0	125
WR	26	0	0	0	0	0.0%	0	0.0	26	19	0	0	0	0	0.0%	0	0.0	19
									142									301
North Leg Volumes																		
Approach	13	0	0	0	0		0		13	22	0	0	0	0		0		22
Depart	32	0	0	0	0		0		32	24	0	0	0	0		0		24
Total	45	0	0	0	0	0.0%	0	0.0	45	46	0	0	0	0	0.0%	0	0.0	46
South Leg Volumes																		
Approach	8	0	0	0	0		0		8	11	0	0	0	0		0		11
Depart	1	0	0	0	0		0		1	9	0	0	0	0		0		9
Total	9	0	0	0	0	0.0%	0	0.0	9	20	0	0	0	0	0.0%	0	0.0	20
East Leg Volumes																		
Approach	65	0	0	0	0		0		65	149	0	0	0	0		0		149
Depart	69	0	0	0	0		0		69	135	0	0	0	0		0		135
Total	134	0	0	0	0	0.0%	0	0.0	134	284	0	0	0	0	0.0%	0	0.0	284
West Leg Volumes																		
Approach	56	0	0	0	0		0		56	119	0	0	0	0		0		119
Depart	40	0	0	0	0		0		40	133	0	0	0	0		0		133
Total	96	0	0	0	0	0.0%	0	0.0	96	252	0	0	0	0	0.0%	0	0.0	252
All Legs																		
Approach	142	0	0	0	0		0		142	301	0	0	0	0		0		301
Depart	142	0	0	0	0		0		142	301	0	0	0	0		0		301
Total	284	0	0	0	0	0.0%	0	0.0	284	602	0	0	0	0	0.0%	0	0.0	602

Existing Peak Hour Volumes - Classification Counts

10 Oak View Drive at Brookside Avenue

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	31	0	0	0	0	0.0%	0	0.0	31	63	0	0	0	0	0.0%	0	0.0	63
NT	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
NR	50	0	0	0	0	0.0%	0	0.0	50	27	0	0	0	0	0.0%	0	0.0	27
SL	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
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	0	0	0	0	0	0.0%	0	0.0	0	1	0	0	0	0	0.0%	0	0.0	1
ET	67	0	0	0	0	0.0%	0	0.0	67	67	0	0	0	0	0.0%	0	0.0	67
ER	45	0	0	0	0	0.0%	0	0.0	45	72	0	0	0	0	0.0%	0	0.0	72
WL	20	0	0	0	0	0.0%	0	0.0	20	71	0	0	0	0	0.0%	0	0.0	71
WT	30	0	0	0	0	0.0%	0	0.0	30	129	0	0	0	0	0.0%	0	0.0	129
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									243									431
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	1	0	0	0	0		0		1
Depart	0	0	0	0	0		0		0	1	0	0	0	0		0		1
Total	0	0	0	0	0	0.0%	0	0.0	0	2	0	0	0	0	0.0%	0	0.0	2
South Leg Volumes																		
Approach	81	0	0	0	0		0		81	90	0	0	0	0		0		90
Depart	65	0	0	0	0		0		65	143	0	0	0	0		0		143
Total	146	0	0	0	0	0.0%	0	0.0	146	233	0	0	0	0	0.0%	0	0.0	233
East Leg Volumes																		
Approach	50	0	0	0	0		0		50	200	0	0	0	0		0		200
Depart	117	0	0	0	0		0		117	95	0	0	0	0		0		95
Total	167	0	0	0	0	0.0%	0	0.0	167	295	0	0	0	0	0.0%	0	0.0	295
West Leg Volumes																		
Approach	112	0	0	0	0		0		112	140	0	0	0	0		0		140
Depart	61	0	0	0	0		0		61	192	0	0	0	0		0		192
Total	173	0	0	0	0	0.0%	0	0.0	173	332	0	0	0	0	0.0%	0	0.0	332
All Legs																		
Approach	243	0	0	0	0		0		243	431	0	0	0	0		0		431
Depart	243	0	0	0	0		0		243	431	0	0	0	0		0		431
Total	486	0	0	0	0	0.0%	0	0.0	486	862	0	0	0	0	0.0%	0	0.0	862

Existing Peak Hour Volumes - Classification Counts

11 Beaumont Avenue at Brookside Avenue

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	50	0	1	0	1	2.0%	2	2.0	52	50	0	0	0	0	0.0%	0	0.0	50
NT	136	3	1	2	6	4.2%	13	2.2	149	275	3	0	0	3	1.1%	5	1.7	280
NR	18	0	0	0	0	0.0%	0	0.0	18	72	0	1	0	1	1.4%	2	2.0	74
SL	45	1	0	0	1	2.2%	2	2.0	47	111	0	1	0	1	0.9%	2	2.0	113
ST	175	1	0	0	1	0.6%	2	2.0	177	285	2	1	0	3	1.0%	5	1.7	290
SR	20	0	0	0	0	0.0%	0	0.0	20	11	1	0	0	1	8.3%	2	2.0	13
EL	2	0	0	0	0	0.0%	0	0.0	2	27	0	0	0	0	0.0%	0	0.0	27
ET	28	0	0	0	0	0.0%	0	0.0	28	71	0	0	0	0	0.0%	0	0.0	71
ER	31	0	2	0	2	6.1%	4	2.0	35	93	0	0	0	0	0.0%	0	0.0	93
WL	40	0	0	0	0	0.0%	0	0.0	40	58	0	1	0	1	1.7%	2	2.0	60
WT	52	0	0	0	0	0.0%	0	0.0	52	43	0	0	0	0	0.0%	0	0.0	43
WR	97	1	0	0	1	1.0%	2	2.0	99	106	0	0	0	0	0.0%	0	0.0	106
									719									1,220
North Leg Volumes																		
Approach	240	2	0	0	2		4		244	407	3	2	0	5		9		416
Depart	235	4	1	2	7		15		250	408	3	0	0	3		5		413
Total	475	6	1	2	9	1.9%	19	2.1	494	815	6	2	0	8	1.0%	14	1.8	829
South Leg Volumes																		
Approach	204	3	2	2	7		15		219	397	3	1	0	4		7		404
Depart	246	1	2	0	3		6		252	436	2	2	0	4		7		443
Total	450	4	4	2	10	2.2%	21	2.1	471	833	5	3	0	8	1.0%	14	1.8	847
East Leg Volumes																		
Approach	189	1	0	0	1		2		191	207	0	1	0	1		2		209
Depart	91	1	0	0	1		2		93	254	0	2	0	2		4		258
Total	280	2	0	0	2	0.7%	4	2.0	284	461	0	3	0	3	0.6%	6	2.0	467
West Leg Volumes																		
Approach	61	0	2	0	2		4		65	191	0	0	0	0		0		191
Depart	122	0	1	0	1		2		124	104	1	0	0	1		2		106
Total	183	0	3	0	3	1.6%	6	2.0	189	295	1	0	0	1	0.3%	2	2.0	297
All Legs																		
Approach	694	6	4	2	12		25		719	1,202	6	4	0	10		18		1,220
Depart	694	6	4	2	12		25		719	1,202	6	4	0	10		18		1,220
Total	1,388	12	8	4	24	1.7%	50	2.1	1,438	2,404	12	8	0	20	0.8%	36	1.8	2,440

Existing Peak Hour Volumes - Classification Counts

12 Desert Lawn Drive at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	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	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	209	2	0	1	3	1.4%	6	2.0	215	197	2	0	0	2	1.0%	3	1.5	200
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	25	0	0	0	0	0.0%	0	0.0	25	40	1	0	0	1	2.4%	2	2.0	42
EL	14	1	0	0	1	6.7%	2	2.0	16	50	0	0	0	0	0.0%	0	0.0	50
ET	177	3	5	0	8	4.3%	15	1.9	192	290	4	0	5	9	3.0%	21	2.3	311
ER	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
WL	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0	0.0%	0	0.0	0
WT	148	1	2	2	5	3.3%	12	2.4	160	250	1	0	1	2	0.8%	5	2.5	255
WR	101	0	0	0	0	0.0%	0	0.0	101	245	0	0	0	0	0.0%	0	0.0	245
									710									1,103
North Leg Volumes																		
Approach	234	2	0	1	3		6		240	237	3	0	0	3		5		242
Depart	115	1	0	0	1		2		117	295	0	0	0	0		0		295
Total	349	3	0	1	4	1.1%	8	2.0	357	532	3	0	0	3	0.6%	5	1.7	537
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	1	0	0	0	0		0		1	0	0	0	0	0		0		0
Total	1	0	0	0	0	0.0%	0	0.0	1	0	0	0	0	0	0.0%	0	0.0	0
East Leg Volumes																		
Approach	250	1	2	2	5		12		262	495	1	0	1	2		5		500
Depart	386	5	5	1	11		21		407	487	6	0	5	11		24		511
Total	636	6	7	3	16	2.5%	33	2.1	669	982	7	0	6	13	1.3%	29	2.2	1,011
West Leg Volumes																		
Approach	191	4	5	0	9		17		208	340	4	0	5	9		21		361
Depart	173	1	2	2	5		12		185	290	2	0	1	3		7		297
Total	364	5	7	2	14	3.7%	29	2.1	393	630	6	0	6	12	1.9%	28	2.3	658
All Legs																		
Approach	675	7	7	3	17		35		710	1,072	8	0	6	14		31		1,103
Depart	675	7	7	3	17		35		710	1,072	8	0	6	14		31		1,103
Total	1,350	14	14	6	34	2.5%	70	2.1	1,420	2,144	16	0	12	28	1.3%	62	2.2	2,206

Existing Peak Hour Volumes - Classification Counts

13 I-10 SB Ramps at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	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	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	189	1	0	0	1	0.5%	2	2.0	191	518	1	0	0	1	0.2%	2	2.0	520
ST	0	1	0	1	2	100.0%	5	2.5	5	5	0	0	1	1	16.7%	3	3.0	8
SR	63	0	0	0	0	0.0%	0	0.0	63	137	1	0	1	2	1.4%	5	2.5	142
EL	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
ET	209	4	1	1	6	2.8%	11	1.8	220	244	4	0	5	9	3.6%	21	2.3	265
ER	219	2	3	1	6	2.7%	12	2.0	231	220	2	0	0	2	0.9%	3	1.5	223
WL	171	3	0	2	5	2.8%	11	2.2	182	152	4	0	0	4	2.6%	6	1.5	158
WT	168	2	1	2	5	2.9%	11	2.2	179	375	1	0	0	1	0.3%	2	2.0	377
WR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
									1,071									1,693
North Leg Volumes																		
Approach	252	2	0	1	3		7		259	660	2	0	2	4		10		670
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	252	2	0	1	3	1.2%	7	2.3	259	660	2	0	2	4	0.6%	10	2.5	670
South Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	390	6	3	4	13		28		418	377	6	0	1	7		12		389
Total	390	6	3	4	13	3.2%	28	2.2	418	377	6	0	1	7	1.8%	12	1.7	389
East Leg Volumes																		
Approach	339	5	1	4	10		22		361	527	5	0	0	5		8		535
Depart	398	5	1	1	7		13		411	762	5	0	5	10		23		785
Total	737	10	2	5	17	2.3%	35	2.1	772	1,289	10	0	5	15	1.2%	31	2.1	1,320
West Leg Volumes																		
Approach	428	6	4	2	12		23		451	464	6	0	5	11		24		488
Depart	231	2	1	2	5		11		242	512	2	0	1	3		7		519
Total	659	8	5	4	17	2.5%	34	2.0	693	976	8	0	6	14	1.4%	31	2.2	1,007
All Legs																		
Approach	1,019	13	5	7	25		52		1,071	1,651	13	0	7	20		42		1,693
Depart	1,019	13	5	7	25		52		1,071	1,651	13	0	7	20		42		1,693
Total	2,038	26	10	14	50	2.4%	104	2.1	2,142	3,302	26	0	14	40	1.2%	84	2.1	3,386

Existing Peak Hour Volumes - Classification Counts

14 I-10 NB Ramps at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	87	2	0	1	3	3.3%	6	2.0	93	241	0	0	0	0	0.0%	0	0.0	241
NT	1	0	0	0	0	0.0%	0	0.0	1	4	0	0	1	1	20.0%	3	3.0	7
NR	117	0	0	0	0	0.0%	0	0.0	117	241	3	0	0	3	1.2%	5	1.7	246
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	127	2	1	1	4	3.1%	8	2.0	135	98	2	0	5	7	6.7%	18	2.6	116
ET	264	4	1	0	5	1.9%	8	1.6	272	666	1	0	0	1	0.1%	2	2.0	668
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	239	2	2	1	5	2.0%	10	2.0	249	286	5	0	0	5	1.7%	8	1.6	294
WR	496	2	0	2	4	0.8%	9	2.3	505	330	2	0	0	2	0.6%	3	1.5	333
									1,372									1,905
North Leg Volumes																		
Approach	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Depart	624	4	1	3	8		17		641	432	4	0	6	10		24		456
Total	624	4	1	3	8	1.3%	17	2.1	641	432	4	0	6	10	2.3%	24	2.4	456
South Leg Volumes																		
Approach	205	2	0	1	3		6		211	486	3	0	1	4		8		494
Depart	0	0	0	0	0		0		0	0	0	0	0	0		0		0
Total	205	2	0	1	3	1.4%	6	2.0	211	486	3	0	1	4	0.8%	8	2.0	494
East Leg Volumes																		
Approach	735	4	2	3	9		19		754	616	7	0	0	7		11		627
Depart	381	4	1	0	5		8		389	907	4	0	0	4		7		914
Total	1,116	8	3	3	14	1.2%	27	1.9	1,143	1,523	11	0	0	11	0.7%	18	1.6	1,541
West Leg Volumes																		
Approach	391	6	2	1	9		16		407	764	3	0	5	8		20		784
Depart	326	4	2	2	8		16		342	527	5	0	0	5		8		535
Total	717	10	4	3	17	2.3%	32	1.9	749	1,291	8	0	5	13	1.0%	28	2.2	1,319
All Legs																		
Approach	1,331	12	4	5	21		41		1,372	1,866	13	0	6	19		39		1,905
Depart	1,331	12	4	5	21		41		1,372	1,866	13	0	6	19		39		1,905
Total	2,662	24	8	10	42	1.6%	82	2.0	2,744	3,732	26	0	12	38	1.0%	78	2.1	3,810

Existing Peak Hour Volumes - Classification Counts

15 Oak View Drive at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	0	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	0
NR	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SL	86	1	1	0	2	2.3%	4	2.0	90	100	0	0	0	0	0.0%	0	0.0	100
ST	0	0	0	0	0	0.0%	0	0.0	0	0	0	0	0	0	0.0%	0	0.0	0
SR	178	0	2	0	2	1.1%	4	2.0	182	139	1	0	0	1	0.7%	2	2.0	141
EL	105	0	0	0	0	0.0%	0	0.0	105	188	3	0	0	3	1.6%	5	1.7	193
ET	216	1	1	0	2	0.9%	4	2.0	220	654	3	0	1	4	0.6%	8	2.0	662
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	501	1	0	2	3	0.6%	8	2.7	509	452	3	0	0	3	0.7%	5	1.7	457
WR	39	2	1	0	3	7.1%	5	1.7	44	133	0	0	0	0	0.0%	0	0.0	133
									1,150									1,686
North Leg Volumes																		
Approach	264	1	3	0	4		8		272	239	1	0	0	1		2		241
Depart	144	2	1	0	3		5		149	321	3	0	0	3		5		326
Total	408	3	4	0	7	1.7%	13	1.9	421	560	4	0	0	4	0.7%	7	1.8	567
South 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
East Leg Volumes																		
Approach	540	3	1	2	6		13		553	585	3	0	0	3		5		590
Depart	302	2	2	0	4		8		310	754	3	0	1	4		8		762
Total	842	5	3	2	10	1.2%	21	2.1	863	1,339	6	0	1	7	0.5%	13	1.9	1,352
West Leg Volumes																		
Approach	321	1	1	0	2		4		325	842	6	0	1	7		13		855
Depart	679	1	2	2	5		12		691	591	4	0	0	4		7		598
Total	1,000	2	3	2	7	0.7%	16	2.3	1,016	1,433	10	0	1	11	0.8%	20	1.8	1,453
All Legs																		
Approach	1,125	5	5	2	12		25		1,150	1,666	10	0	1	11		20		1,686
Depart	1,125	5	5	2	12		25		1,150	1,666	10	0	1	11		20		1,686
Total	2,250	10	10	4	24	1.1%	50	2.1	2,300	3,332	20	0	2	22	0.7%	40	1.8	3,372

Existing Peak Hour Volumes - Classification Counts

16 Beaumont Avenue at Oak Valley Parkway

	AM Peak Hour Volumes									PM Peak Hour Volumes								
		Truck Volumes							Total		Truck Volumes							Total
	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume	Passenger Vehicles	2-Axle 1.5	3-Axle 2.0	4-Axle 3.0	Total Trucks	Truck %-age	PCE	Average PCE	PCE Volume
NL	41	1	0	0	1	2.4%	2	2.0	43	85	0	0	0	0	0.0%	0	0.0	85
NT	134	3	1	2	6	4.3%	13	2.2	147	328	3	1	1	5	1.5%	10	2.0	338
NR	42	1	1	0	2	4.5%	4	2.0	46	59	0	0	0	0	0.0%	0	0.0	59
SL	21	0	0	0	0	0.0%	0	0.0	21	87	0	1	0	1	1.1%	2	2.0	89
ST	184	1	0	0	1	0.5%	2	2.0	186	226	2	0	0	2	0.9%	3	1.5	229
SR	135	1	1	0	2	1.5%	4	2.0	139	171	0	0	0	0	0.0%	0	0.0	171
EL	69	0	0	0	0	0.0%	0	0.0	69	225	1	0	0	1	0.4%	2	2.0	227
ET	175	2	1	0	3	1.7%	5	1.7	180	386	2	1	0	3	0.8%	5	1.7	391
ER	48	1	0	0	1	2.0%	2	2.0	50	75	1	0	0	1	1.3%	2	2.0	77
WL	51	1	0	0	1	1.9%	2	2.0	53	91	1	0	0	1	1.1%	2	2.0	93
WT	338	0	2	2	4	1.2%	10	2.5	348	379	2	0	0	2	0.5%	3	1.5	382
WR	41	0	0	0	0	0.0%	0	0.0	41	85	0	0	0	0	0.0%	0	0.0	85
									1,323									2,226
North Leg Volumes																		
Approach	340	2	1	0	3		6		346	484	2	1	0	3		5		489
Depart	244	3	1	2	6		13		257	638	4	1	1	6		12		650
Total	584	5	2	2	9	1.5%	19	2.1	603	1,122	6	2	1	9	0.8%	17	1.9	1,139
South Leg Volumes																		
Approach	217	5	2	2	9		19		236	472	3	1	1	5		10		482
Depart	283	3	0	0	3		6		289	392	4	0	0	4		7		399
Total	500	8	2	2	12	2.3%	25	2.1	525	864	7	1	1	9	1.0%	17	1.9	881
East Leg Volumes																		
Approach	430	1	2	2	5		12		442	555	3	0	0	3		5		560
Depart	238	3	2	0	5		9		247	532	2	2	0	4		7		539
Total	668	4	4	2	10	1.5%	21	2.1	689	1,087	5	2	0	7	0.6%	12	1.7	1,099
West Leg Volumes																		
Approach	292	3	1	0	4		7		299	686	4	1	0	5		9		695
Depart	514	2	3	2	7		16		530	635	2	0	0	2		3		638
Total	806	5	4	2	11	1.3%	23	2.1	829	1,321	6	1	0	7	0.5%	12	1.7	1,333
All Legs																		
Approach	1,279	11	6	4	21		44		1,323	2,197	12	3	1	16		29		2,226
Depart	1,279	11	6	4	21		44		1,323	2,197	12	3	1	16		29		2,226
Total	2,558	22	12	8	42	1.6%	88	2.1	2,646	4,394	24	6	2	32	0.7%	58	1.8	4,452

APPENDIX D

INTERSECTION ANALYSIS WORKSHEETS

Beaumont Summit Station

Vistro File: \...\Cherry Valley Base AM.vistro
Report File: \...\1 EX AM.pdf

Scenario 1 EX AM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.035	42.5	E
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	1.167	72.4	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.133	17.4	C
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.175	15.4	C
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.415	9.8	A
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.453	10.2	B
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.276	23.4	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.002	11.0	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.010	10.0	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.216	8.4	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.319	27.4	C
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	SB Left	0.565	13.7	B
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Right	0.699	51.4	D
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	0.713	80.5	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.432	19.2	B
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.353	29.6	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	42.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.035

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	137	0	315	0	696	211	24	149	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	137	0	315	0	696	211	24	149	0
Peak Hour Factor	1.000	1.000	1.000	0.963	0.963	0.963	1.000	0.963	0.963	0.963	0.963	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	36	0	82	0	181	55	6	39	0
Total Analysis Volume [veh/h]	0	0	0	142	0	327	0	723	219	25	155	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		632	942	764
Degree of Utilization, x		0.74	1.03	0.24

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		6.55	20.87	0.91
95th-Percentile Queue Length [ft]		163.84	521.82	22.83
Approach Delay [s/veh]	0.00	23.33	58.38	9.16
Approach LOS	A	C	F	A
Intersection Delay [s/veh]	42.48			
Intersection LOS	E			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	72.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.167

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	91	1	22	0	0	0	692	156	0	0	55	442
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	91	1	22	0	0	0	692	156	0	0	55	442
Peak Hour Factor	0.924	0.924	0.924	1.000	1.000	1.000	0.924	0.924	1.000	1.000	0.924	0.924
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	25	0	6	0	0	0	187	42	0	0	15	120
Total Analysis Volume [veh/h]	98	1	24	0	0	0	749	169	0	0	60	478
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]			918	866
Degree of Utilization, x			1.17	0.62

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]			28.48	4.43
95th-Percentile Queue Length [ft]			711.89	110.77
Approach Delay [s/veh]	0.00	0.00	106.75	13.70
Approach LOS	A	A	F	B
Intersection Delay [s/veh]	72.37			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.133

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	42	25	30	166	478	58
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]	42	25	30	166	478	58
Peak Hour Factor	0.9220	0.9220	0.9220	0.9220	0.9220	0.9220
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	7	8	45	130	16
Total Analysis Volume [veh/h]	46	27	33	180	518	63
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	0.13	0.05	0.03	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	17.42	13.69	8.71	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.66	0.66	0.10	0.10	0.00	0.00
95th-Percentile Queue Length [ft/ln]	16.54	16.54	2.55	2.55	0.00	0.00
d_A, Approach Delay [s/veh]	16.04		1.35		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.68					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	15.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.175

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	70	0	176	13	0	470
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]	70	0	176	13	0	470
Peak Hour Factor	0.9540	0.9540	0.9540	0.9540	0.9540	0.9540
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	46	3	0	123
Total Analysis Volume [veh/h]	73	0	184	14	0	493
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	0.17	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.44	11.03	0.00	0.00	7.60	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.63	0.63	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	15.67	15.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.44		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	1.48					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.415

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	50	1	1	0	3	96	24	139	12	1	315	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	50	1	1	0	3	96	24	139	12	1	315	1
Peak Hour Factor	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956	0.956
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	13	0	0	0	1	25	6	36	3	0	82	0
Total Analysis Volume [veh/h]	52	1	1	0	3	100	25	145	13	1	329	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	663	783	771	797
Degree of Utilization, x	0.08	0.13	0.24	0.42

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.27	0.45	0.92	2.06
95th-Percentile Queue Length [ft]	6.63	11.30	23.05	51.48
Approach Delay [s/veh]	8.91	8.29	9.12	10.69
Approach LOS	A	A	A	B
Intersection Delay [s/veh]	9.75			
Intersection LOS	A			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.453

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	17	18	4	5	24	34	16	94	41	3	308	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	17	18	4	5	24	34	16	94	41	3	308	1
Peak Hour Factor	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940	0.940
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	5	5	1	1	6	9	4	25	11	1	82	0
Total Analysis Volume [veh/h]	18	19	4	5	26	36	17	100	44	3	328	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	690	743	701	825	730	853
Degree of Utilization, x	0.06	0.09	0.17	0.05	0.45	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.19	0.30	0.60	0.17	2.38	0.00
95th-Percentile Queue Length [ft]	4.73	7.41	14.93	4.22	59.39	0.09
Approach Delay [s/veh]	8.55	8.32	8.44		11.64	
Approach LOS	A	A	A		B	
Intersection Delay [s/veh]	10.20					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.276

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	111	198	8	8	224	50	41	50	74	8	81	7
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	111	198	8	8	224	50	41	50	74	8	81	7
Peak Hour Factor	0.905	0.905	0.905	0.905	0.905	0.905	0.905	0.905	0.905	0.905	0.905	0.905
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	31	55	2	2	62	14	11	14	20	2	22	2
Total Analysis Volume [veh/h]	123	219	9	9	248	55	45	55	82	9	90	8
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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	39	0	19	25	0	9	23	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	60	60	1	54	54	3	12	12	1	9
g / C, Green / Cycle	0.09	0.67	0.67	0.01	0.60	0.60	0.04	0.13	0.13	0.01	0.10
(v / s)_i Volume / Saturation Flow Rate	0.07	0.12	0.01	0.00	0.13	0.03	0.02	0.03	0.05	0.00	0.05
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1873
c, Capacity [veh/h]	159	1273	1082	22	1129	959	68	244	208	21	192
d1, Uniform Delay [s]	40.15	5.55	4.93	44.11	8.53	7.68	42.74	35.20	36.01	44.19	38.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.65	0.29	0.01	11.13	0.45	0.11	10.39	0.46	1.22	13.40	2.10
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	0.77	0.17	0.01	0.40	0.22	0.06	0.66	0.23	0.40	0.43	0.51
d, Delay for Lane Group [s/veh]	47.79	5.84	4.95	55.24	8.98	7.79	53.13	35.66	37.23	57.59	40.36
Lane Group LOS	D	A	A	E	A	A	D	D	D	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.85	1.20	0.04	0.26	2.14	0.43	1.15	1.08	1.66	0.27	2.09
50th-Percentile Queue Length [ft/ln]	71.22	30.04	1.11	6.62	53.51	10.74	28.82	26.92	41.62	6.78	52.21
95th-Percentile Queue Length [veh/ln]	5.13	2.16	0.08	0.48	3.85	0.77	2.08	1.94	3.00	0.49	3.76
95th-Percentile Queue Length [ft/ln]	128.2	54.08	2.00	11.91	96.32	19.33	51.88	48.46	74.91	12.20	93.98

Movement, Approach, & Intersection Results

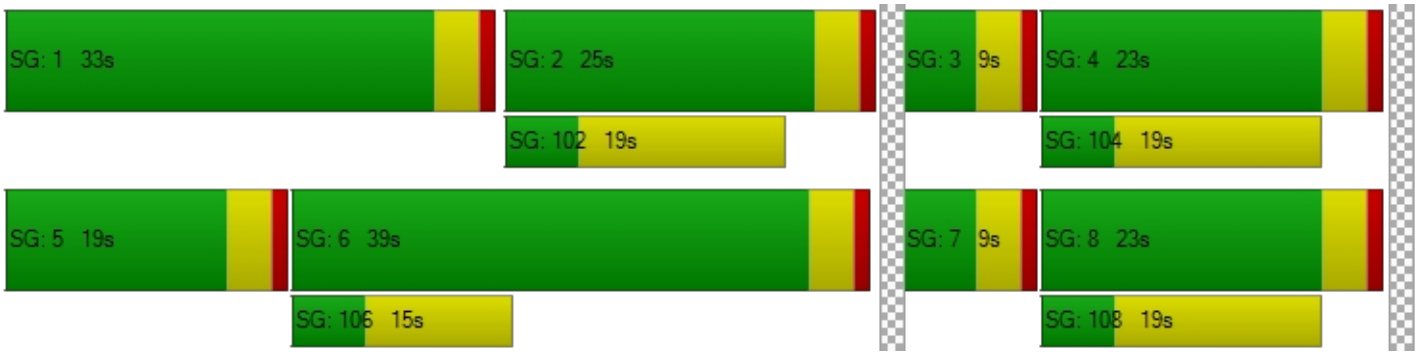
d_M, Delay for Movement [s/veh]	47.79	5.84	4.95	55.24	8.98	7.79	53.13	35.66	37.23	57.59	40.36	40.36
Movement LOS	D	A	A	E	A	A	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	20.52			10.10			40.68			41.81		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	23.35											
Intersection LOS	C											
Intersection V/C	0.276											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.413	2.299	2.279	2.020
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	778	467	422	422
d_b, Bicycle Delay [s]	16.81	26.45	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.139	2.074	1.860	1.736
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
Peak Hour Factor	0.860	0.860	0.860	0.860	0.860	0.860	0.860	0.860	0.860	0.860	0.860	0.860
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	0	2	0	1	17	19	0	0	14	1
Total Analysis Volume [veh/h]	0	5	1	8	1	5	69	76	0	1	56	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.48	11.00	8.54	10.45	11.02	8.54	7.42	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.06	0.06	0.06	0.14	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.70	0.70	0.70	1.40	1.40	1.40	3.48	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.59			9.81			3.53			0.12		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	3.16											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
Peak Hour Factor	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959	0.959
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	2	1	4	0	1	0	19	0	0	13	9
Total Analysis Volume [veh/h]	0	7	4	16	0	3	1	76	0	1	52	35
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.23	10.00	8.55	9.35	9.93	8.61	7.37	0.00	0.00	7.35	0.00	0.00
Movement LOS	A	B	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.02	1.02	1.02	1.68	1.68	1.68	0.05	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	9.47			9.23			0.10			0.08		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.51											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.216

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	41	66	88	59	26	40
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]	41	66	88	59	26	40
Peak Hour Factor	0.8440	0.8440	0.8440	0.8440	0.8440	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	20	26	17	8	12
Total Analysis Volume [veh/h]	49	78	104	70	31	47
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	644	820	806	659	726
Degree of Utilization, x	0.08	0.10	0.22	0.05	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.25	0.31	0.82	0.15	0.21
95th-Percentile Queue Length [ft]	6.16	7.86	20.46	3.69	5.18
Approach Delay [s/veh]	8.02		8.70	8.17	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.36				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	27.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.319

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	69	197	24	62	234	26	3	37	46	53	69	131
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	69	197	24	62	234	26	3	37	46	53	69	131
Peak Hour Factor	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929	0.929
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	19	53	6	17	63	7	1	10	12	14	19	35
Total Analysis Volume [veh/h]	74	212	26	67	252	28	3	40	50	57	74	141
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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	23	0	9	23	0	9	25	0	33	49	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	56	4	55	0	10	10	4	14
g / C, Green / Cycle	0.05	0.62	0.05	0.61	0.00	0.11	0.11	0.04	0.15
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.04	0.15	0.00	0.02	0.03	0.03	0.13
s, saturation flow rate [veh/h]	1810	1864	1810	1867	1810	1900	1615	1810	1703
c, Capacity [veh/h]	96	1153	87	1146	8	212	180	80	258
d1, Uniform Delay [s]	42.10	7.50	42.36	7.90	44.68	36.30	36.67	42.43	37.10
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	12.47	0.41	13.54	0.51	26.70	0.43	0.83	10.93	6.96
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	0.77	0.21	0.77	0.24	0.38	0.19	0.28	0.71	0.83
d, Delay for Lane Group [s/veh]	54.57	7.91	55.91	8.41	71.38	36.73	37.50	53.36	44.06
Lane Group LOS	D	A	E	A	E	D	D	D	D
Critical Lane Group	Yes	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.90	1.81	1.72	2.09	0.12	0.80	1.02	1.45	4.90
50th-Percentile Queue Length [ft/ln]	47.51	45.36	42.95	52.15	3.10	19.91	25.38	36.37	122.54
95th-Percentile Queue Length [veh/ln]	3.42	3.27	3.09	3.75	0.22	1.43	1.83	2.62	8.53
95th-Percentile Queue Length [ft/ln]	85.52	81.65	77.32	93.87	5.58	35.83	45.69	65.47	213.31

Movement, Approach, & Intersection Results

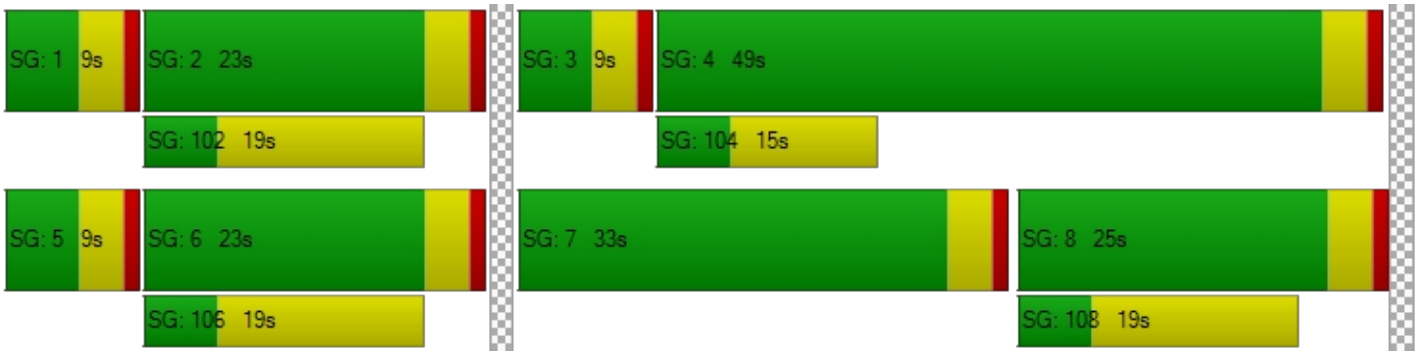
d_M, Delay for Movement [s/veh]	54.57	7.91	7.91	55.91	8.41	8.41	71.38	36.73	37.50	53.36	44.06	44.06
Movement LOS	D	A	A	E	A	A	E	D	D	D	D	D
d_A, Approach Delay [s/veh]	18.97			17.58			38.26			46.01		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	27.43											
Intersection LOS	C											
Intersection V/C	0.319											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.351	2.322	2.220	2.264
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	422	467	1000
d_b, Bicycle Delay [s]	28.01	28.01	26.45	11.25
I_b,int, Bicycle LOS Score for Intersection	2.074	2.132	1.713	2.008
Bicycle LOS	B	B	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.565

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	284	33	21	253	211	133
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]	284	33	21	253	211	133
Peak Hour Factor	0.9660	0.9660	0.9660	0.9660	0.9660	0.9660
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	73	9	5	65	55	34
Total Analysis Volume [veh/h]	294	34	22	262	218	138
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	580	508	547	589	589	667
Degree of Utilization, x	0.57	0.04	0.48	0.19	0.19	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.51	0.14	2.57	0.67	0.67	0.77
95th-Percentile Queue Length [ft]	87.81	3.39	64.29	16.84	16.84	19.34
Approach Delay [s/veh]	16.97	14.79		9.93		
Approach LOS	C	B		A		
Intersection Delay [s/veh]	13.74					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	51.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	252	7	83	0	290	305	240	236	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	252	7	83	0	290	305	240	236	0
Peak Hour Factor	1.000	1.000	1.000	0.956	0.956	0.956	1.000	0.956	0.956	0.956	0.956	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	66	2	22	0	76	80	63	62	0
Total Analysis Volume [veh/h]	0	0	0	264	7	87	0	303	319	251	247	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	24	0	0	49	0	17	66	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		33	30	15	49
g / C, Green / Cycle		0.37	0.33	0.16	0.54
(v / s)_i Volume / Saturation Flow Rate		0.20	0.36	0.14	0.13
s, saturation flow rate [veh/h]		1760	1742	1810	1900
c, Capacity [veh/h]		649	585	293	1030
d1, Uniform Delay [s]		22.49	29.90	36.68	10.84
k, delay calibration		0.50	0.50	0.11	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		3.35	55.41	7.08	0.12
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		0.55	1.06	0.86	0.24
d, Delay for Lane Group [s/veh]		25.84	85.31	43.76	10.96
Lane Group LOS		C	F	D	B
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		5.67	20.30	5.64	2.28
50th-Percentile Queue Length [ft/ln]		141.76	507.48	141.04	56.98
95th-Percentile Queue Length [veh/ln]		9.58	28.84	9.54	4.10
95th-Percentile Queue Length [ft/ln]		239.39	720.90	238.43	102.57

Movement, Approach, & Intersection Results

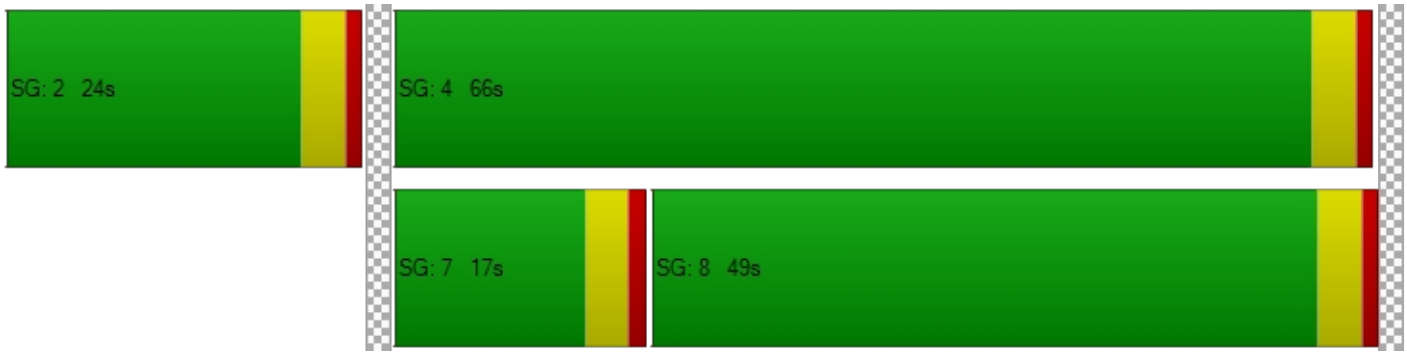
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	25.84	25.84	25.84	0.00	85.31	85.31	43.76	10.96	0.00
Movement LOS				C	C	C		F	F	D	B	
d_A, Approach Delay [s/veh]	0.00			25.84			85.31			27.49		
Approach LOS	A			C			F			C		
d_I, Intersection Delay [s/veh]	51.42											
Intersection LOS	D											
Intersection V/C	0.699											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	444	1000	1378
d_b, Bicycle Delay [s]	45.00	27.22	11.25	4.36
I_b,int, Bicycle LOS Score for Intersection	4.132	2.150	2.586	2.381
Bicycle LOS	D	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	80.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.713

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	123	1	154	0	0	0	178	359	0	0	329	667
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	123	1	154	0	0	0	178	359	0	0	329	667
Peak Hour Factor	0.947	0.947	0.947	1.000	1.000	1.000	0.947	0.947	1.000	1.000	0.947	0.947
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	32	0	41	0	0	0	47	95	0	0	87	176
Total Analysis Volume [veh/h]	130	1	163	0	0	0	188	379	0	0	347	704
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	15	76	0	0	61	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	37		11	45	30	30
g / C, Green / Cycle	0.41		0.13	0.51	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.17		0.10	0.20	0.18	0.44
s, saturation flow rate [veh/h]	1697		1810	1900	1900	1615
c, Capacity [veh/h]	686		229	962	638	542
d1, Uniform Delay [s]	19.29		38.32	13.69	24.31	29.90
k, delay calibration	0.50		0.11	0.11	0.12	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.95		7.18	0.26	0.80	147.74
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	0.43		0.82	0.39	0.54	1.30
d, Delay for Lane Group [s/veh]	21.24		45.50	13.95	25.10	177.64
Lane Group LOS	C		D	B	C	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	4.06		4.43	4.56	5.98	33.46
50th-Percentile Queue Length [ft/ln]	101.57		110.82	113.98	149.52	836.45
95th-Percentile Queue Length [veh/ln]	7.31		7.89	8.06	9.99	50.03
95th-Percentile Queue Length [ft/ln]	182.82		197.14	201.52	249.78	1250.85

Movement, Approach, & Intersection Results

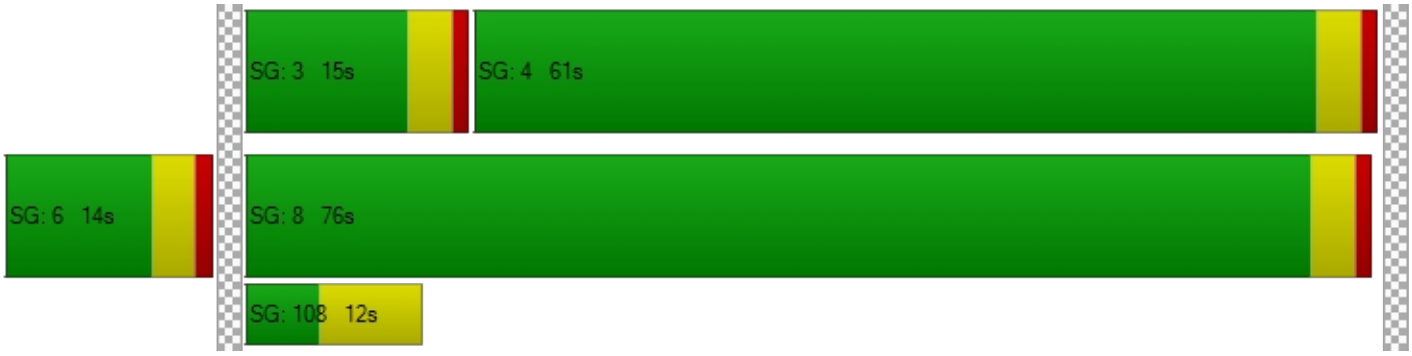
d_M, Delay for Movement [s/veh]	21.24	21.24	21.24	0.00	0.00	0.00	45.50	13.95	0.00	0.00	25.10	177.6
Movement LOS	C	C	C				D	B			C	F
d_A, Approach Delay [s/veh]	21.24			0.00			24.41			127.28		
Approach LOS	C			A			C			F		
d_I, Intersection Delay [s/veh]	80.47											
Intersection LOS	F											
Intersection V/C	0.713											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.027	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	0	1600	1267
d_b, Bicycle Delay [s]	35.56	45.00	1.80	6.05
I_b,int, Bicycle LOS Score for Intersection	2.045	4.132	2.495	3.294
Bicycle LOS	B	D	B	C

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	19.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.432

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	119	240	139	290	672	58
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]	119	240	139	290	672	58
Peak Hour Factor	0.9510	0.9510	0.9510	0.9510	0.9510	0.9510
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	63	37	76	177	15
Total Analysis Volume [veh/h]	125	252	146	305	707	61
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	53	0	15	37	22	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	17	17	9	65	52	52
g / C, Green / Cycle	0.18	0.18	0.10	0.73	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.07	0.16	0.08	0.16	0.20	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	336	300	180	1379	2104	939
d1, Uniform Delay [s]	32.07	35.37	39.70	4.04	9.79	8.18
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.69	6.31	8.47	0.37	0.43	0.13
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	0.37	0.84	0.81	0.22	0.34	0.06
d, Delay for Lane Group [s/veh]	32.75	41.68	48.17	4.41	10.22	8.32
Lane Group LOS	C	D	D	A	B	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.38	5.68	3.43	1.33	3.14	0.47
50th-Percentile Queue Length [ft/ln]	59.59	142.08	85.83	33.26	78.56	11.75
95th-Percentile Queue Length [veh/ln]	4.29	9.59	6.18	2.39	5.66	0.85
95th-Percentile Queue Length [ft/ln]	107.26	239.82	154.49	59.87	141.41	21.15

Movement, Approach, & Intersection Results

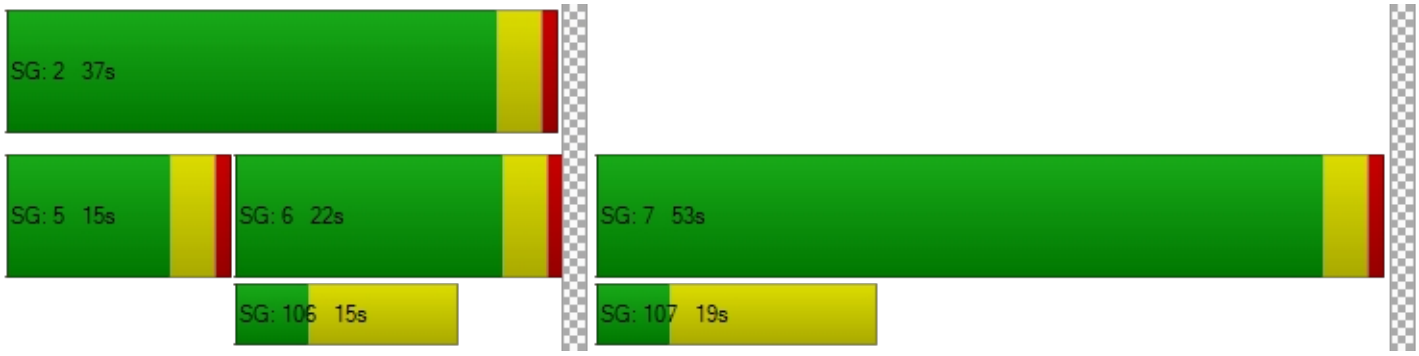
d_M, Delay for Movement [s/veh]	32.75	41.68	48.17	4.41	10.22	8.32
Movement LOS	C	D	D	A	B	A
d_A, Approach Delay [s/veh]	38.72		18.58		10.07	
Approach LOS	D		B		B	
d_I, Intersection Delay [s/veh]	19.24					
Intersection LOS	B					
Intersection V/C	0.432					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.163	2.648	0.000
Crosswalk LOS	B	B	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1089	733	400
d_b, Bicycle Delay [s]	9.34	18.05	28.80
I_b,int, Bicycle LOS Score for Intersection	1.560	2.304	2.193
Bicycle LOS	A	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

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):	0.353

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	57	194	61	28	246	183	91	238	66	70	459	54
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	57	194	61	28	246	183	91	238	66	70	459	54
Peak Hour Factor	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973	0.973
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	15	50	16	7	63	47	23	61	17	18	118	14
Total Analysis Volume [veh/h]	59	199	63	29	253	188	94	245	68	72	472	55
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	11	31	0	10	30	0	14	26	0	23	35	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	50	50	3	49	49	6	17	17	5	15	15
g / C, Green / Cycle	0.04	0.55	0.55	0.03	0.54	0.54	0.07	0.19	0.19	0.05	0.17	0.17
(v / s)_i Volume / Saturation Flow Rate	0.03	0.07	0.07	0.02	0.12	0.13	0.05	0.08	0.09	0.04	0.14	0.14
s, saturation flow rate [veh/h]	1810	1900	1748	1810	1900	1639	1810	1900	1761	1810	1900	1831
c, Capacity [veh/h]	79	1051	967	53	1024	883	122	353	327	98	328	316
d1, Uniform Delay [s]	42.57	9.67	9.70	43.10	10.90	10.96	41.29	32.59	32.67	41.93	35.86	35.89
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.37	0.25	0.28	8.55	0.52	0.63	9.86	0.92	1.03	10.14	4.97	5.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.75	0.13	0.13	0.55	0.23	0.24	0.77	0.45	0.47	0.73	0.82	0.82
d, Delay for Lane Group [s/veh]	55.94	9.92	9.98	51.65	11.42	11.59	51.15	33.51	33.70	52.06	40.83	41.18
Lane Group LOS	E	A	A	D	B	B	D	C	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.55	1.20	1.15	0.74	2.31	2.10	2.29	3.03	2.90	1.82	5.93	5.78
50th-Percentile Queue Length [ft/ln]	38.68	29.98	28.85	18.57	57.76	52.55	57.31	75.80	72.43	45.44	148.3	144.4
95th-Percentile Queue Length [veh/ln]	2.78	2.16	2.08	1.34	4.16	3.78	4.13	5.46	5.21	3.27	9.93	9.72
95th-Percentile Queue Length [ft/ln]	69.62	53.96	51.92	33.43	103.9	94.59	103.1	136.4	130.3	81.80	248.1	243.0

Movement, Approach, & Intersection Results

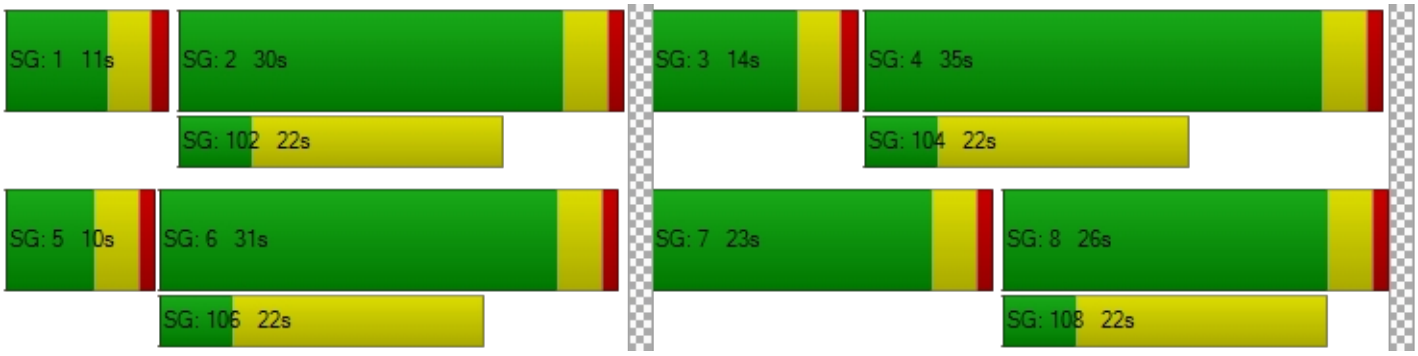
d_M, Delay for Movement [s/veh]	55.94	9.94	9.98	51.65	11.43	11.59	51.15	33.57	33.70	52.06	40.98	41.18
Movement LOS	E	A	A	D	B	B	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	18.40			13.97			37.65			42.33		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	29.58											
Intersection LOS	C											
Intersection V/C	0.353											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.487	2.514	2.631	2.514
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	578	489	689
d_b, Bicycle Delay [s]	22.05	22.76	25.69	19.34
I_b,int, Bicycle LOS Score for Intersection	1.824	1.947	1.895	2.054
Bicycle LOS	A	A	A	B

Sequence

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



Beaumont Summit Station

Vistro File: \...\Cherry Valley Base PM.vistro
Report File: \...\1 EX PM.pdf

Scenario 1 EX PM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	1.271	82.6	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.888	23.9	C
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.251	20.7	C
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.114	16.3	C
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.526	11.0	B
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.479	11.0	B
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	EB Left	0.317	26.3	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.013	11.9	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.005	11.6	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.206	8.8	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	WB Left	0.398	26.6	C
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	0.674	15.9	C
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	0.809	41.8	D
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.655	30.1	C
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Right	0.461	15.6	B
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Left	0.434	31.8	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	82.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.271

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	288	4	542	0	393	125	24	270	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	288	4	542	0	393	125	24	270	0
Peak Hour Factor	1.000	1.000	1.000	0.967	0.967	0.967	1.000	0.967	0.967	0.967	0.967	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	74	1	140	0	102	32	6	70	0
Total Analysis Volume [veh/h]	0	0	0	298	4	560	0	406	129	25	279	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		862	887	816
Degree of Utilization, x		1.27	0.60	0.37

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		32.81	4.17	1.73
95th-Percentile Queue Length [ft]		820.37	104.27	43.37
Approach Delay [s/veh]	0.00	151.40	13.04	10.01
Approach LOS	A	F	B	B
Intersection Delay [s/veh]	82.61			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	23.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.888

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	181	4	22	0	0	0	304	378	0	0	119	255
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	181	4	22	0	0	0	304	378	0	0	119	255
Peak Hour Factor	0.933	0.933	0.933	1.000	1.000	1.000	0.933	0.933	1.000	1.000	0.933	0.933
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	48	1	6	0	0	0	81	101	0	0	32	68
Total Analysis Volume [veh/h]	194	4	24	0	0	0	326	405	0	0	128	273
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]			823	854
Degree of Utilization, x			0.89	0.47

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]			11.78	2.54
95th-Percentile Queue Length [ft]			294.59	63.60
Approach Delay [s/veh]	0.00	0.00	31.05	10.90
Approach LOS	A	A	D	B
Intersection Delay [s/veh]	23.91			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	20.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.251

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	74	49	41	382	307	62
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]	74	49	41	382	307	62
Peak Hour Factor	0.9390	0.9390	0.9390	0.9390	0.9390	0.9390
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	13	11	102	82	17
Total Analysis Volume [veh/h]	79	52	44	407	327	66
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	0.25	0.08	0.04	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	20.69	14.50	8.18	0.00	0.00	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.39	1.39	0.12	0.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	34.85	34.85	2.91	2.91	0.00	0.00
d_A, Approach Delay [s/veh]	18.24		0.80		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	2.82					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	16.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.114

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	39	1	416	38	0	312
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]	39	1	416	38	0	312
Peak Hour Factor	0.9420	0.9420	0.9420	0.9420	0.9420	0.9420
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	110	10	0	83
Total Analysis Volume [veh/h]	41	1	442	40	0	331
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	0.11	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	16.28	12.25	0.00	0.00	8.30	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.69	9.69	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.18		0.00		0.00	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	0.79					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.526

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	18	3	1	2	4	31	61	341	15	3	261	2
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	18	3	1	2	4	31	61	341	15	3	261	2
Peak Hour Factor	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963	0.963
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	5	1	0	1	1	8	16	89	4	1	68	1
Total Analysis Volume [veh/h]	19	3	1	2	4	32	63	354	16	3	271	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	634	718	823	796
Degree of Utilization, x	0.04	0.05	0.53	0.35

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.11	0.17	3.13	1.55
95th-Percentile Queue Length [ft]	2.82	4.18	78.27	38.85
Approach Delay [s/veh]	8.89	8.29	12.13	9.90
Approach LOS	A	A	B	A
Intersection Delay [s/veh]	11.04			
Intersection LOS	B			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.479

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	33	19	6	12	17	18	21	303	25	10	217	8
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	33	19	6	12	17	18	21	303	25	10	217	8
Peak Hour Factor	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954	0.954
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	9	5	2	3	4	5	6	79	7	3	57	2
Total Analysis Volume [veh/h]	35	20	6	13	18	19	22	318	26	10	227	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	656	681	710	831	698	811
Degree of Utilization, x	0.09	0.07	0.48	0.03	0.34	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.31	0.24	2.61	0.10	1.50	0.03
95th-Percentile Queue Length [ft]	7.67	5.93	65.23	2.42	37.62	0.75
Approach Delay [s/veh]	9.06	8.71	11.97		10.39	
Approach LOS	A	A	B		B	
Intersection Delay [s/veh]	10.96					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	26.3
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.317

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	132	254	26	16	228	54	60	87	174	15	59	10
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	132	254	26	16	228	54	60	87	174	15	59	10
Peak Hour Factor	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974	0.974
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	34	65	7	4	59	14	15	22	45	4	15	3
Total Analysis Volume [veh/h]	136	261	27	16	234	55	62	89	179	15	61	10
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	15	23	0	15	23	0	29	43	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	58	58	2	52	52	4	12	12	2	10
g / C, Green / Cycle	0.09	0.65	0.65	0.02	0.57	0.57	0.05	0.14	0.14	0.02	0.11
(v / s)_i Volume / Saturation Flow Rate	0.08	0.14	0.02	0.01	0.12	0.03	0.03	0.05	0.11	0.01	0.04
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1854
c, Capacity [veh/h]	169	1230	1046	35	1089	926	84	262	223	32	202
d1, Uniform Delay [s]	39.99	6.48	5.68	43.68	9.34	8.48	42.36	35.10	37.62	43.79	37.15
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.62	0.39	0.05	9.30	0.45	0.12	11.74	0.76	6.68	10.30	1.04
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	0.80	0.21	0.03	0.46	0.21	0.06	0.74	0.34	0.80	0.47	0.35
d, Delay for Lane Group [s/veh]	48.61	6.87	5.73	52.98	9.79	8.60	54.10	35.86	44.30	54.09	38.19
Lane Group LOS	D	A	A	D	A	A	D	D	D	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.18	1.64	0.15	0.44	2.15	0.46	1.59	1.76	4.08	0.41	1.46
50th-Percentile Queue Length [ft/ln]	79.50	41.10	3.76	10.88	53.70	11.52	39.80	43.95	102.0	10.31	36.41
95th-Percentile Queue Length [veh/ln]	5.72	2.96	0.27	0.78	3.87	0.83	2.87	3.16	7.35	0.74	2.62
95th-Percentile Queue Length [ft/ln]	143.1	73.97	6.76	19.59	96.66	20.73	71.63	79.10	183.7	18.56	65.54

Movement, Approach, & Intersection Results

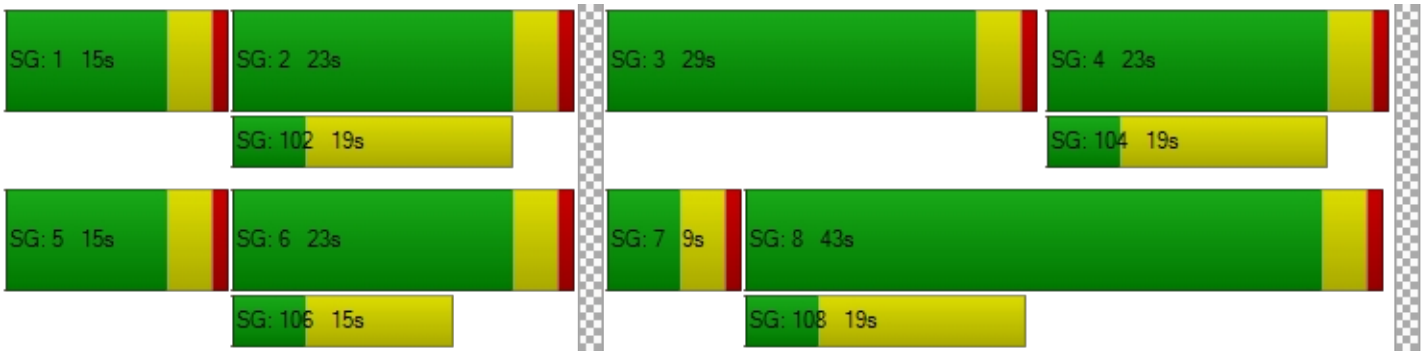
d_M, Delay for Movement [s/veh]	48.61	6.87	5.73	52.98	9.79	8.60	54.10	35.86	44.30	54.09	38.19	38.19
Movement LOS	D	A	A	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	20.19			11.85			43.87			40.97		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	26.35											
Intersection LOS	C											
Intersection V/C	0.317											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.479	2.314	2.322	2.036
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	422	867	422
d_b, Bicycle Delay [s]	28.01	28.01	14.45	28.01
I_b,int, Bicycle LOS Score for Intersection	2.259	2.063	2.104	1.702
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	3	2	5	18	5	18	24	95	1	3	108	21
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	3	2	5	18	5	18	24	95	1	3	108	21
Peak Hour Factor	0.743	0.743	0.743	0.743	0.743	0.743	0.743	0.743	0.743	0.743	0.743	0.743
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	1	1	2	6	2	6	8	32	0	1	36	7
Total Analysis Volume [veh/h]	4	3	7	24	7	24	32	128	1	4	145	28
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.04	0.01	0.02	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.97	11.69	8.72	11.23	11.89	9.16	7.60	0.00	0.00	7.46	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.25	0.25	0.25	0.07	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.46	1.46	1.46	6.18	6.18	6.18	1.73	0.00	0.00	0.20	0.00	0.00
d_A, Approach Delay [s/veh]	10.00			10.41			1.51			0.17		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.42											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	1	9	13	2	7	4	113	2	5	125	19
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	9	13	2	7	4	113	2	5	125	19
Peak Hour Factor	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753	0.753
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	3	4	1	2	1	38	1	2	42	6
Total Analysis Volume [veh/h]	1	1	12	17	3	9	5	150	3	7	166	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.53	11.49	8.75	10.80	11.55	9.01	7.59	0.00	0.00	7.51	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.13	0.13	0.13	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.19	1.19	1.19	3.21	3.21	3.21	0.27	0.00	0.00	0.37	0.00	0.00
d_A, Approach Delay [s/veh]	9.08			10.33			0.24			0.27		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	1.30											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.206

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	63	27	67	72	71	129
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]	63	27	67	72	71	129
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	8	19	21	21	37
Total Analysis Volume [veh/h]	73	31	78	84	82	150
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	607	762	791	663	730
Degree of Utilization, x	0.12	0.04	0.20	0.12	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.41	0.13	0.77	0.42	0.77
95th-Percentile Queue Length [ft]	10.19	3.18	19.13	10.53	19.20
Approach Delay [s/veh]	8.90		8.72	8.90	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.84				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	26.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.398

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	50	280	74	113	290	13	27	71	93	60	43	106
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	50	280	74	113	290	13	27	71	93	60	43	106
Peak Hour Factor	0.902	0.902	0.902	0.902	0.902	0.902	0.902	0.902	0.902	0.902	0.902	0.902
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	14	78	21	31	80	4	7	20	26	17	12	29
Total Analysis Volume [veh/h]	55	310	82	125	322	14	30	79	103	67	48	118
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	17	24	0	26	33	0	9	23	0	17	31	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	52	8	56	3	10	10	4	12
g / C, Green / Cycle	0.04	0.58	0.09	0.62	0.03	0.11	0.11	0.05	0.13
(v / s)_i Volume / Saturation Flow Rate	0.03	0.21	0.07	0.18	0.02	0.04	0.06	0.04	0.10
s, saturation flow rate [veh/h]	1810	1832	1810	1886	1810	1900	1615	1810	1688
c, Capacity [veh/h]	77	1052	160	1170	53	210	179	88	220
d1, Uniform Delay [s]	42.57	10.39	40.15	7.89	43.10	37.13	38.01	42.28	37.77
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.85	1.01	7.92	0.62	8.93	1.11	2.91	12.36	5.24
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	0.72	0.37	0.78	0.29	0.56	0.38	0.58	0.76	0.76
d, Delay for Lane Group [s/veh]	54.41	11.40	48.07	8.51	52.02	38.24	40.92	54.63	43.00
Lane Group LOS	D	B	D	A	D	D	D	D	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.42	3.93	2.90	2.52	0.77	1.62	2.22	1.73	3.71
50th-Percentile Queue Length [ft/ln]	35.53	98.23	72.61	62.99	19.27	40.57	55.61	43.16	92.79
95th-Percentile Queue Length [veh/ln]	2.56	7.07	5.23	4.54	1.39	2.92	4.00	3.11	6.68
95th-Percentile Queue Length [ft/ln]	63.96	176.81	130.69	113.39	34.69	73.03	100.0	77.68	167.02

Movement, Approach, & Intersection Results

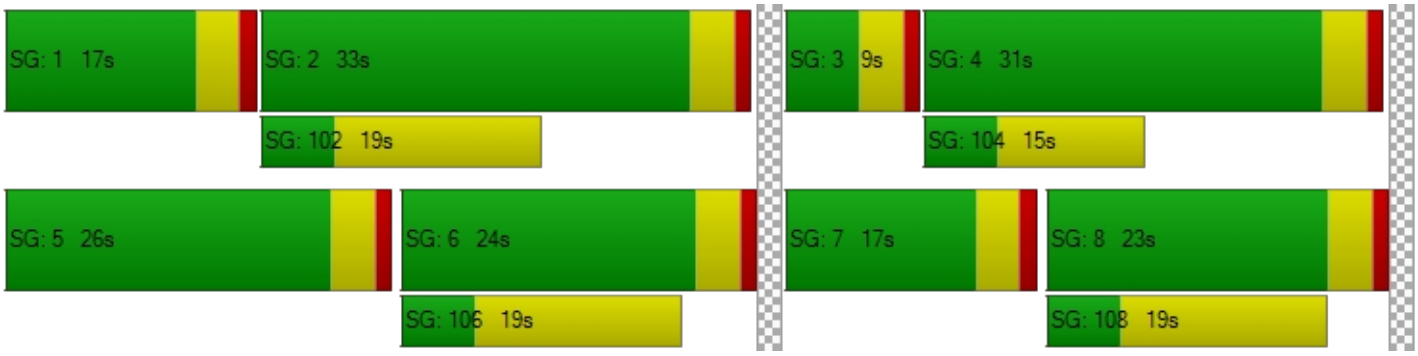
d_M, Delay for Movement [s/veh]	54.41	11.40	11.40	48.07	8.51	8.51	52.02	38.24	40.92	54.63	43.00	43.00
Movement LOS	D	B	B	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	16.70			19.24			41.49			46.35		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	26.55											
Intersection LOS	C											
Intersection V/C	0.398											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.438	2.439	2.240	2.301
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	444	644	422	600
d_b, Bicycle Delay [s]	27.22	20.67	28.01	22.05
I_b,int, Bicycle LOS Score for Intersection	2.297	2.320	1.909	1.944
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	15.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.674

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	200	42	50	311	255	245
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]	200	42	50	311	255	245
Peak Hour Factor	0.8810	0.8810	0.8810	0.8810	0.8810	0.8810
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	12	14	88	72	70
Total Analysis Volume [veh/h]	227	48	57	353	289	278
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	528	488	524	578	578	653
Degree of Utilization, x	0.52	0.12	0.67	0.25	0.25	0.43

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	2.99	0.39	5.02	0.98	0.98	2.13
95th-Percentile Queue Length [ft]	74.64	9.86	125.55	24.56	24.56	53.22
Approach Delay [s/veh]	17.02	21.02		11.61		
Approach LOS	C	C		B		
Intersection Delay [s/veh]	15.88					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	41.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.809

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	520	8	142	0	265	223	158	377	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	520	8	142	0	265	223	158	377	0
Peak Hour Factor	1.000	1.000	1.000	0.920	0.920	0.920	1.000	0.920	0.920	0.920	0.920	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	141	2	39	0	72	61	43	102	0
Total Analysis Volume [veh/h]	0	0	0	565	9	154	0	288	242	172	410	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	32	0	13	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		39	29	10	43
g / C, Green / Cycle		0.43	0.32	0.12	0.48
(v / s)_i Volume / Saturation Flow Rate		0.41	0.30	0.10	0.22
s, saturation flow rate [veh/h]		1766	1758	1810	1900
c, Capacity [veh/h]		763	561	209	910
d1, Uniform Delay [s]		24.68	29.88	38.91	15.58
k, delay calibration		0.50	0.38	0.11	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		23.09	22.17	7.88	0.35
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		0.95	0.95	0.82	0.45
d, Delay for Lane Group [s/veh]		47.78	52.05	46.79	15.93
Lane Group LOS		D	D	D	B
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		16.96	13.49	3.98	5.02
50th-Percentile Queue Length [ft/ln]		424.10	337.25	99.47	125.57
95th-Percentile Queue Length [veh/ln]		23.72	19.51	7.16	8.70
95th-Percentile Queue Length [ft/ln]		592.97	487.83	179.05	217.46

Movement, Approach, & Intersection Results

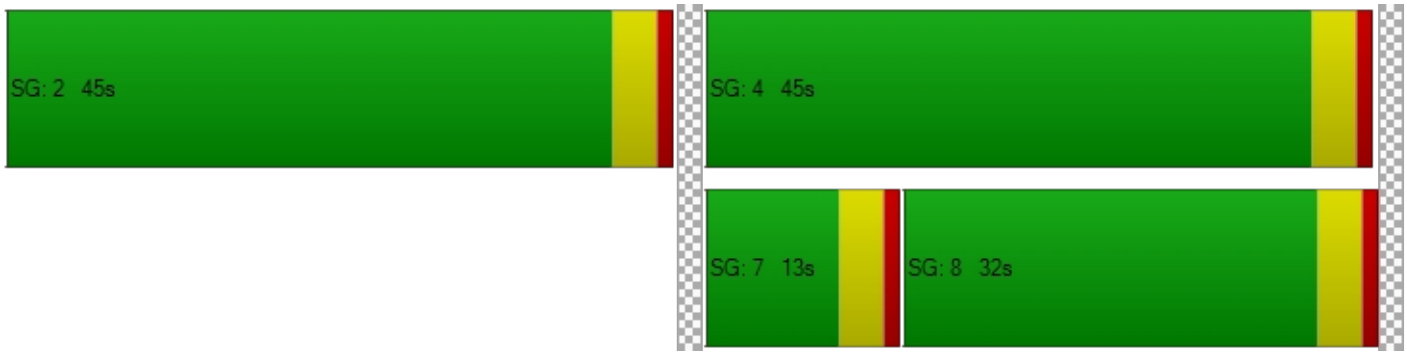
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	47.78	47.78	47.78	0.00	52.05	52.05	46.79	15.93	0.00
Movement LOS				D	D	D		D	D	D	B	
d_A, Approach Delay [s/veh]	0.00			47.78			52.05			25.05		
Approach LOS	A			D			D			C		
d_I, Intersection Delay [s/veh]	41.82											
Intersection LOS	D											
Intersection V/C	0.809											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	911	622	911
d_b, Bicycle Delay [s]	45.00	13.34	21.36	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.761	2.434	2.520
Bicycle LOS	D	C	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	30.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.655

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	241	7	246	0	0	0	116	668	0	0	294	333
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	241	7	246	0	0	0	116	668	0	0	294	333
Peak Hour Factor	0.978	0.978	0.978	0.978	0.978	0.978	0.978	0.978	1.000	1.000	0.978	0.978
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	62	2	63	0	0	0	30	171	0	0	75	85
Total Analysis Volume [veh/h]	246	7	252	0	0	0	119	683	0	0	301	340
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	20	76	0	0	56	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	47		8	35	23	23
g / C, Green / Cycle	0.52		0.09	0.39	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.30		0.07	0.36	0.16	0.21
s, saturation flow rate [veh/h]	1708		1810	1900	1900	1615
c, Capacity [veh/h]	895		157	735	486	413
d1, Uniform Delay [s]	14.48		40.18	26.39	29.60	31.55
k, delay calibration	0.50		0.11	0.11	0.11	0.18
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.57		7.31	5.82	1.29	6.70
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		0.76	0.93	0.62	0.82
d, Delay for Lane Group [s/veh]	17.05		47.49	32.21	30.89	38.26
Lane Group LOS	B		D	C	C	D
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.95		2.86	14.46	5.79	7.53
50th-Percentile Queue Length [ft/ln]	148.84		71.58	361.59	144.72	188.27
95th-Percentile Queue Length [veh/ln]	9.96		5.15	20.70	9.73	12.03
95th-Percentile Queue Length [ft/ln]	248.88		128.84	517.52	243.37	300.78

Movement, Approach, & Intersection Results

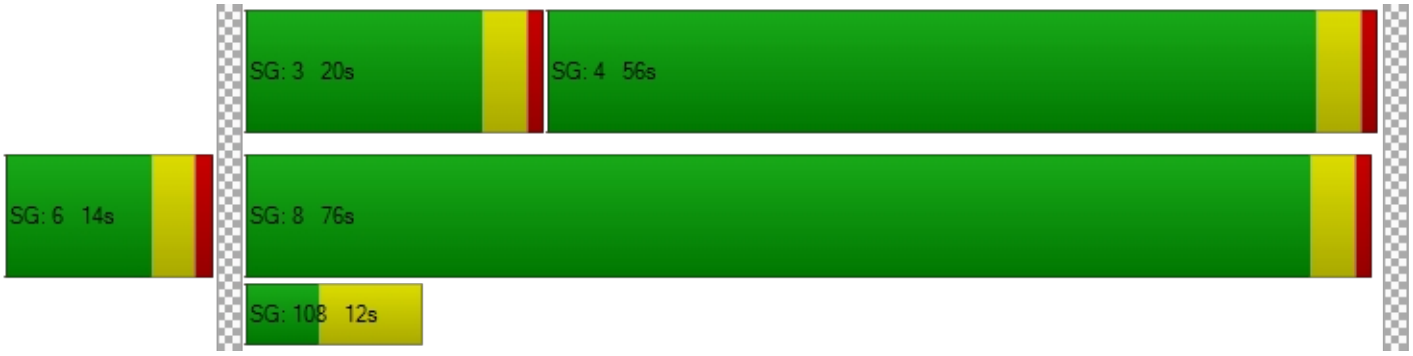
d_M, Delay for Movement [s/veh]	17.05	17.05	17.05	0.00	0.00	0.00	47.49	32.21	0.00	0.00	30.89	38.26
Movement LOS	B	B	B				D	C			C	D
d_A, Approach Delay [s/veh]	17.05			0.00			34.48			34.80		
Approach LOS	B			A			C			C		
d_I, Intersection Delay [s/veh]	30.06											
Intersection LOS	C											
Intersection V/C	0.655											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.250	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	0	1600	1156
d_b, Bicycle Delay [s]	35.56	45.00	1.80	8.02
I_b,int, Bicycle LOS Score for Intersection	2.393	4.132	2.883	2.617
Bicycle LOS	B	D	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	100	141	193	662	457	133
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]	100	141	193	662	457	133
Peak Hour Factor	0.9460	0.9460	0.9460	0.9460	0.9460	0.9460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	37	51	175	121	35
Total Analysis Volume [veh/h]	106	149	204	700	483	141
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	48	67	19	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	10	10	12	72	55	55
g / C, Green / Cycle	0.12	0.12	0.14	0.79	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.06	0.09	0.11	0.37	0.13	0.09
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	211	189	248	1509	2217	990
d1, Uniform Delay [s]	37.29	38.67	37.76	3.01	7.79	7.39
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.84	7.21	6.67	1.03	0.23	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	0.50	0.79	0.82	0.46	0.22	0.14
d, Delay for Lane Group [s/veh]	39.13	45.88	44.43	4.04	8.02	7.70
Lane Group LOS	D	D	D	A	A	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.24	3.49	4.60	2.17	1.77	1.02
50th-Percentile Queue Length [ft/ln]	56.11	87.31	115.09	54.31	44.22	25.62
95th-Percentile Queue Length [veh/ln]	4.04	6.29	8.12	3.91	3.18	1.84
95th-Percentile Queue Length [ft/ln]	101.00	157.15	203.06	97.76	79.60	46.12

Movement, Approach, & Intersection Results

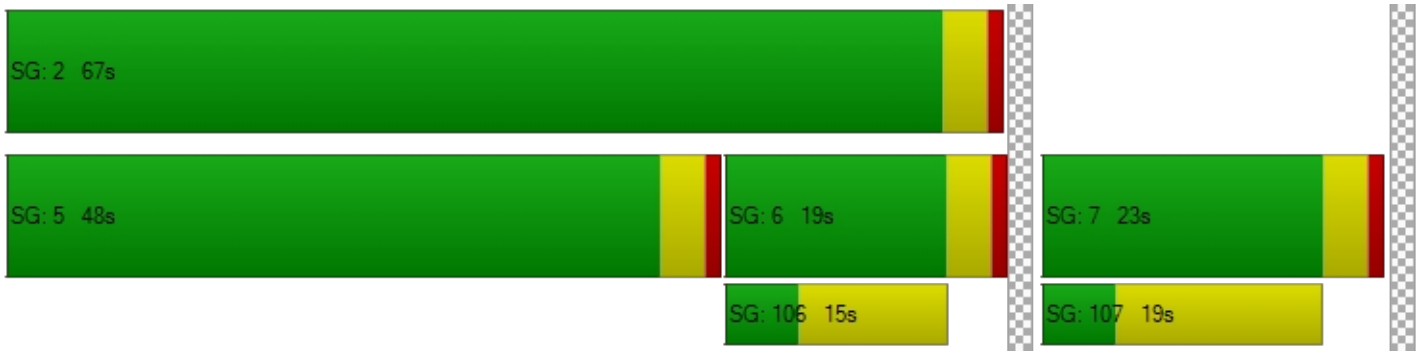
d_M, Delay for Movement [s/veh]	39.13	45.88	44.43	4.04	8.02	7.70
Movement LOS	D	D	D	A	A	A
d_A, Approach Delay [s/veh]	43.07		13.16		7.94	
Approach LOS	D		B		A	
d_I, Intersection Delay [s/veh]	15.61					
Intersection LOS	B					
Intersection V/C	0.461					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.169	2.694	0.000
Crosswalk LOS	B	B	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	333
d_b, Bicycle Delay [s]	28.01	4.05	31.25
I_b,int, Bicycle LOS Score for Intersection	1.560	3.051	2.074
Bicycle LOS	A	C	B

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.434

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	85	338	59	89	229	171	227	391	77	93	382	85
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	85	338	59	89	229	171	227	391	77	93	382	85
Peak Hour Factor	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957	0.957
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	22	88	15	23	60	45	59	102	20	24	100	22
Total Analysis Volume [veh/h]	89	353	62	93	239	179	237	409	80	97	399	89
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	10	26	0	10	26	0	28	28	0	26	26	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	40	40	6	40	40	14	22	22	6	15	15
g / C, Green / Cycle	0.06	0.44	0.44	0.07	0.44	0.44	0.15	0.25	0.25	0.07	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.05	0.11	0.11	0.05	0.12	0.12	0.13	0.13	0.13	0.05	0.13	0.13
s, saturation flow rate [veh/h]	1810	1900	1803	1810	1900	1637	1810	1900	1794	1810	1900	1782
c, Capacity [veh/h]	114	834	792	119	839	723	279	467	441	130	310	291
d1, Uniform Delay [s]	41.54	15.93	15.95	41.41	15.87	15.94	37.04	29.51	29.53	40.97	36.31	36.37
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	10.86	0.73	0.78	10.58	0.77	0.93	7.09	0.97	1.03	8.27	5.02	5.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78	0.25	0.26	0.78	0.26	0.27	0.85	0.54	0.54	0.75	0.81	0.82
d, Delay for Lane Group [s/veh]	52.40	16.66	16.74	51.99	16.63	16.86	44.13	30.48	30.56	49.24	41.33	41.96
Lane Group LOS	D	B	B	D	B	B	D	C	C	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.22	2.71	2.62	2.31	2.83	2.56	5.35	4.55	4.32	2.36	5.58	5.33
50th-Percentile Queue Length [ft/ln]	55.61	67.78	65.41	57.81	70.82	63.93	133.6	113.6	107.9	59.01	139.4	133.2
95th-Percentile Queue Length [veh/ln]	4.00	4.88	4.71	4.16	5.10	4.60	9.14	8.05	7.73	4.25	9.45	9.12
95th-Percentile Queue Length [ft/ln]	100.1	122.0	117.7	104.0	127.4	115.0	228.4	201.1	193.1	106.2	236.2	227.9

Movement, Approach, & Intersection Results

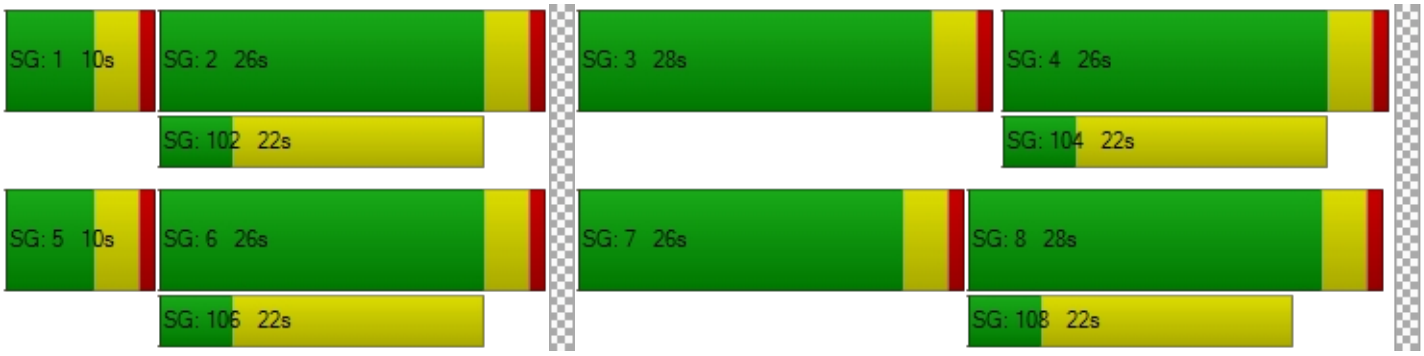
d_M, Delay for Movement [s/veh]	52.40	16.69	16.74	51.99	16.65	16.86	44.13	30.51	30.56	49.24	41.56	41.96
Movement LOS	D	B	B	D	B	B	D	C	C	D	D	D
d_A, Approach Delay [s/veh]	23.00			23.16			34.96			42.90		
Approach LOS	C			C			C			D		
d_I, Intersection Delay [s/veh]	31.77											
Intersection LOS	C											
Intersection V/C	0.434											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.541	2.611	2.709	2.563
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	533	489
d_b, Bicycle Delay [s]	25.69	25.69	24.20	25.69
I_b,int, Bicycle LOS Score for Intersection	1.975	1.981	2.159	2.042
Bicycle LOS	A	A	B	B

Sequence

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



Beaumont Summit Station

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Scenario 3 OY 2024 CUM AM
2/4/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.955	295.0	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	1.806	220.6	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.276	46.0	E
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.347	25.6	D
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.724	15.6	C
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.737	16.0	C
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.420	26.0	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.002	11.2	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.010	10.1	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.230	8.4	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.681	33.4	C
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.183	60.0	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.558	359.2	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.540	388.6	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.772	23.0	C
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.143	200.5	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	295.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.955

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	137	0	315	0	696	211	24	149	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	68	0	150	0	300	299	176	150	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	0	484	0	1038	523	201	308	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	127	0	273	138	53	81	0
Total Analysis Volume [veh/h]	0	0	0	224	0	509	0	1093	551	212	324	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		733	1644	755
Degree of Utilization, x		1.28	1.96	0.71

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		29.37	106.21	6.00
95th-Percentile Queue Length [ft]		734.22	2655.24	150.10
Approach Delay [s/veh]	0.00	159.15	445.79	18.50
Approach LOS	A	F	F	C
Intersection Delay [s/veh]	295.04			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	220.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.806

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	91	1	22	0	0	0	692	156	0	0	55	442
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	150	0	68	0	0	0	299	68	0	0	176	92
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]	246	1	91	0	0	0	1033	233	0	0	234	561
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	0	24	0	0	0	272	61	0	0	62	148
Total Analysis Volume [veh/h]	259	1	96	0	0	0	1087	245	0	0	246	591
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	517		1332	845
Degree of Utilization, x	0.69		1.81	0.99

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.26		80.50	17.24
95th-Percentile Queue Length [ft]	131.62		2012.38	431.11
Approach Delay [s/veh]	23.99	0.00	381.05	48.87
Approach LOS	C	A	F	E
Intersection Delay [s/veh]	220.60			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	46.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.276

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	42	25	30	166	478	58
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	101	34	101	251	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]	45	128	66	277	758	61
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	34	17	73	199	16
Total Analysis Volume [veh/h]	47	135	69	292	798	64
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	0.28	0.36	0.09	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	46.01	34.50	10.00	0.00	0.00	0.00
Movement LOS	E	D	B	A	A	A
95th-Percentile Queue Length [veh/ln]	4.03	4.03	0.29	0.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	100.79	100.79	7.17	7.17	0.00	0.00
d_A, Approach Delay [s/veh]	37.47		1.91		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	5.34					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	25.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.347

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	70	0	176	13	0	470
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	13	0	97	4	0	176
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]	87	0	284	18	0	674
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	0	75	5	0	177
Total Analysis Volume [veh/h]	92	0	299	19	0	709
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	0.35	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	25.59	16.92	0.00	0.00	7.87	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.49	1.49	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	37.24	37.24	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	25.59		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	15.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.724

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	50	1	1	0	3	96	24	139	12	1	315	1
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	104	0	0	178	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]	53	1	1	0	3	102	25	251	13	1	512	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	0	0	1	27	7	66	3	0	135	0
Total Analysis Volume [veh/h]	56	1	1	0	3	107	26	264	14	1	539	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	564	655	707	746
Degree of Utilization, x	0.10	0.17	0.43	0.72

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.34	0.60	2.17	6.33
95th-Percentile Queue Length [ft]	8.55	15.01	54.27	158.25
Approach Delay [s/veh]	10.11	9.60	11.88	19.41
Approach LOS	B	A	B	C
Intersection Delay [s/veh]	15.56			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.737

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	17	18	4	5	24	34	16	94	41	3	308	1
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	24	0	0	0	0	0	0	78	26	0	154	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]	42	19	4	5	25	36	17	178	69	3	480	1
Peak Hour Factor	0.9400	0.9400	0.9400	0.9500	0.9400	0.9500	0.9500	0.9500	0.9400	0.9400	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	5	1	1	7	9	4	47	18	1	126	0
Total Analysis Volume [veh/h]	45	20	4	5	27	38	18	187	73	3	505	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	591	632	657	760	689	797
Degree of Utilization, x	0.12	0.11	0.31	0.10	0.74	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.39	0.37	1.33	0.32	6.53	0.00
95th-Percentile Queue Length [ft]	9.86	9.29	33.30	7.94	163.24	0.09
Approach Delay [s/veh]	9.90	9.40	9.95		21.08	
Approach LOS	A	A	A		C	
Intersection Delay [s/veh]	16.02					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.420

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	111	198	8	8	224	50	41	50	74	8	81	7
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	154	131	0	0	44	0	0	0	78	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]	272	341	8	8	281	53	43	53	156	8	86	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	90	2	2	74	14	11	14	41	2	23	2
Total Analysis Volume [veh/h]	286	359	8	8	296	56	45	56	164	8	91	7
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	39	0	19	23	0	9	23	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	60	60	1	45	45	3	12	12	1	9
g / C, Green / Cycle	0.18	0.67	0.67	0.01	0.50	0.50	0.04	0.13	0.13	0.01	0.10
(v / s)_i Volume / Saturation Flow Rate	0.16	0.19	0.00	0.00	0.16	0.03	0.02	0.03	0.10	0.00	0.05
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1876
c, Capacity [veh/h]	330	1275	1083	20	950	808	68	246	209	19	192
d1, Uniform Delay [s]	35.75	6.01	4.90	44.18	13.33	11.65	42.74	35.13	37.94	44.26	38.26
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.93	0.55	0.01	11.74	0.86	0.17	10.39	0.46	6.31	14.38	2.09
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	0.87	0.28	0.01	0.39	0.31	0.07	0.66	0.23	0.78	0.42	0.51
d, Delay for Lane Group [s/veh]	42.68	6.56	4.91	55.92	14.18	11.82	53.13	35.59	44.26	58.64	40.34
Lane Group LOS	D	A	A	E	B	B	D	D	D	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.29	2.15	0.04	0.24	3.51	0.58	1.15	1.10	3.73	0.25	2.09
50th-Percentile Queue Length [ft/ln]	157.32	53.66	0.98	6.01	87.79	14.52	28.82	27.38	93.28	6.18	52.19
95th-Percentile Queue Length [veh/ln]	10.41	3.86	0.07	0.43	6.32	1.05	2.08	1.97	6.72	0.45	3.76
95th-Percentile Queue Length [ft/ln]	260.17	96.59	1.76	10.82	158.02	26.14	51.88	49.28	167.91	11.13	93.95

Movement, Approach, & Intersection Results

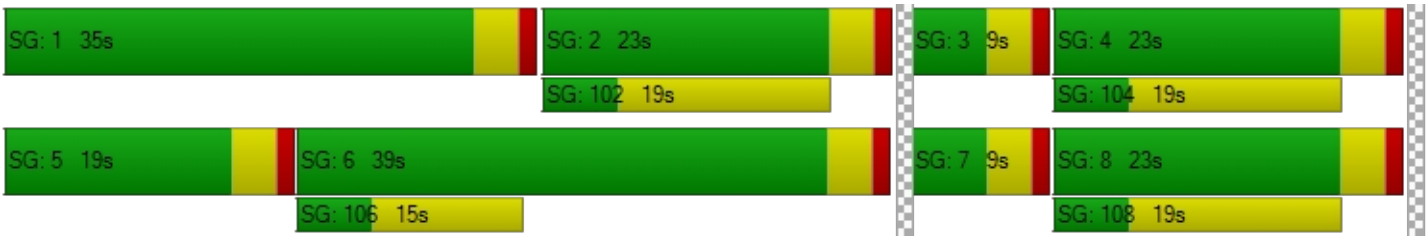
d_M, Delay for Movement [s/veh]	42.68	6.56	4.91	55.92	14.18	11.82	53.13	35.59	44.26	58.64	40.34	40.34
Movement LOS	D	A	A	E	B	B	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	22.36			14.74			43.93			41.73		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	25.99											
Intersection LOS	C											
Intersection V/C	0.420											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.588	2.352	2.359	2.019
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]	778	422	422	422
d_b, Bicycle Delay [s]	16.81	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.637	2.154	1.997	1.735
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	1	7	1	4	63	69	0	1	51	5
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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	1	0	2	0	1	18	20	0	0	15	1
Total Analysis Volume [veh/h]	0	5	1	8	1	5	73	80	0	1	59	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.61	11.14	8.55	10.58	11.15	8.55	7.44	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.06	0.06	0.06	0.15	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.71	0.71	0.71	1.43	1.43	1.43	3.70	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.71			9.90			3.55			0.11		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	3.15											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	7	4	16	0	3	1	77	0	1	53	36
Peak Hour Factor	0.9500	0.9500	0.9590	0.9590	0.9500	0.9500	0.9500	0.9590	0.9500	0.9590	0.9590	0.9590
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	2	1	4	0	1	0	20	0	0	14	9
Total Analysis Volume [veh/h]	0	7	4	17	0	3	1	80	0	1	55	38
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.27	10.07	8.56	9.40	9.99	8.63	7.38	0.00	0.00	7.35	0.00	0.00
Movement LOS	A	B	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.07	0.07	0.07	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.04	1.04	1.04	1.79	1.79	1.79	0.05	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	9.52			9.29			0.09			0.08		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.48											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.230

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	41	66	88	59	26	40
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	43	70	93	63	28	42
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	18	28	19	7	12
Total Analysis Volume [veh/h]	51	74	110	75	29	50
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	641	815	806	658	725
Degree of Utilization, x	0.08	0.09	0.23	0.04	0.07

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.26	0.30	0.88	0.14	0.22
95th-Percentile Queue Length [ft]	6.46	7.47	22.10	3.45	5.54
Approach Delay [s/veh]	8.07		8.79	8.18	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.43				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	33.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	69	197	24	62	234	26	3	37	46	53	69	131
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	285	0	275	122	0	0	0	0	0	0	92
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]	73	494	25	341	370	28	3	39	49	56	73	231
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	130	7	90	97	7	1	10	13	15	19	61
Total Analysis Volume [veh/h]	77	520	26	359	389	29	3	41	52	59	77	243
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	23	0	35	23	0	9	23	0	9	23	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	35	20	49	0	16	16	4	19
g / C, Green / Cycle	0.06	0.38	0.22	0.55	0.00	0.17	0.17	0.04	0.21
(v / s)_i Volume / Saturation Flow Rate	0.04	0.29	0.20	0.22	0.00	0.02	0.03	0.03	0.19
s, saturation flow rate [veh/h]	1810	1884	1810	1877	1810	1900	1615	1810	1675
c, Capacity [veh/h]	105	722	402	1028	8	330	281	78	356
d1, Uniform Delay [s]	41.72	24.11	33.95	11.85	44.68	31.39	31.74	42.61	34.51
k, delay calibration	0.11	0.50	0.14	0.50	0.11	0.11	0.11	0.11	0.14
I, 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]	9.60	7.26	8.80	1.19	26.70	0.17	0.31	13.98	10.14
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	0.74	0.76	0.89	0.41	0.38	0.12	0.19	0.76	0.90
d, Delay for Lane Group [s/veh]	51.32	31.37	42.75	13.04	71.38	31.56	32.05	56.59	44.64
Lane Group LOS	D	C	D	B	E	C	C	E	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.91	10.74	7.99	4.37	0.12	0.74	0.96	1.56	7.47
50th-Percentile Queue Length [ft/ln]	47.67	268.53	199.83	109.22	3.10	18.53	23.88	38.94	186.74
95th-Percentile Queue Length [veh/ln]	3.43	16.12	12.63	7.80	0.22	1.33	1.72	2.80	11.95
95th-Percentile Queue Length [ft/ln]	85.80	402.91	315.75	194.92	5.58	33.35	42.98	70.09	298.80

Movement, Approach, & Intersection Results

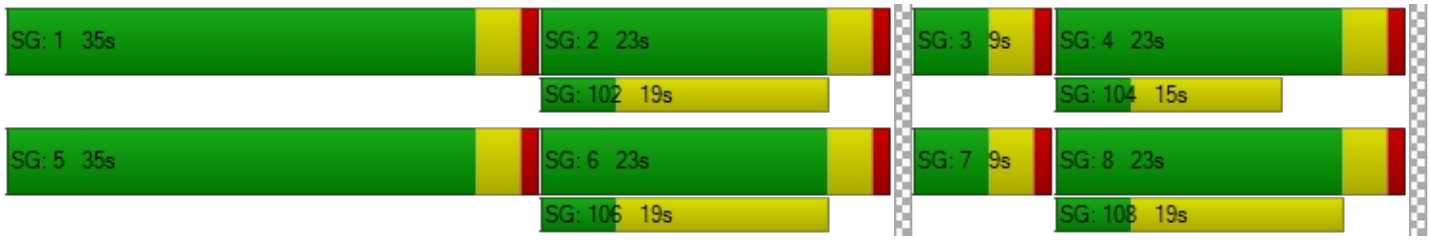
d_M, Delay for Movement [s/veh]	51.32	31.37	31.37	42.75	13.04	13.04	71.38	31.56	32.05	56.59	44.64	44.64
Movement LOS	D	C	C	D	B	B	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	33.84			26.77			33.07			46.50		
Approach LOS	C			C			C			D		
d_I, Intersection Delay [s/veh]	33.43											
Intersection LOS	C											
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 [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.498	2.777	2.223	2.394
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]	422	422	422	422
d_b, Bicycle Delay [s]	28.01	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.588	2.842	1.718	2.185
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	60.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.183

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	284	33	21	253	211	133
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	277	139	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]	301	35	22	545	363	141
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	79	9	6	143	96	37
Total Analysis Volume [veh/h]	317	37	23	574	382	148
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	494	454	574	522	522	571
Degree of Utilization, x	0.72	0.05	1.18	0.34	0.34	0.31

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.72	0.16	21.23	1.48	1.48	1.31
95th-Percentile Queue Length [ft]	142.96	3.99	530.73	37.12	37.12	32.78
Approach Delay [s/veh]	26.63	121.91		12.67		
Approach LOS	D	F		B		
Intersection Delay [s/veh]	60.04					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	359.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.558

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	252	7	83	0	290	305	240	236	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	258	0	97	0	293	119	619	137	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	525	7	185	0	600	442	873	387	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	138	2	49	0	158	116	230	102	0
Total Analysis Volume [veh/h]	0	0	0	553	7	195	0	632	465	919	407	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.43	0.62	0.51	0.21
s, saturation flow rate [veh/h]		1756	1768	1810	1900
c, Capacity [veh/h]		354	589	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	4.83
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		519.26	394.24	247.30	0.12
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		2.13	1.86	1.53	0.30
d, Delay for Lane Group [s/veh]		555.19	424.24	277.37	4.96
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		57.93	75.91	53.02	1.95
50th-Percentile Queue Length [ft/ln]		1448.19	1897.74	1325.52	48.78
95th-Percentile Queue Length [veh/ln]		91.06	119.52	81.26	3.51
95th-Percentile Queue Length [ft/ln]		2276.53	2987.99	2031.48	87.81

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	555.19	555.19	555.19	0.00	424.24	424.24	277.37	4.96	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			555.19			424.24			193.76		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	359.18											
Intersection LOS	F											
Intersection V/C	1.558											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.805	3.370	3.748
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	388.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.540

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	123	1	154	0	0	0	178	359	0	0	329	667
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	97	0	258	0	0	0	256	290	0	0	658	634
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]	227	1	421	0	0	0	445	671	0	0	1007	1341
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	60	0	111	0	0	0	117	177	0	0	265	353
Total Analysis Volume [veh/h]	239	1	443	0	0	0	468	706	0	0	1060	1412
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	18	76	0	0	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	23		25	59	30	30
g / C, Green / Cycle	0.25		0.28	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.41		0.26	0.37	0.56	0.87
s, saturation flow rate [veh/h]	1679		1810	1900	1900	1615
c, Capacity [veh/h]	426		505	1249	634	539
d1, Uniform Delay [s]	33.58		31.55	8.41	29.98	29.98
k, delay calibration	0.50		0.29	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	282.23		17.06	0.40	308.89	733.83
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	1.60		0.93	0.57	1.67	2.62
d, Delay for Lane Group [s/veh]	315.81		48.62	8.81	338.87	763.81
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	41.50		11.93	6.50	67.54	121.06
50th-Percentile Queue Length [ft/ln]	1037.61		298.37	162.61	1688.62	3026.41
95th-Percentile Queue Length [veh/ln]	64.56		17.60	10.69	104.49	193.80
95th-Percentile Queue Length [ft/ln]	1613.90		440.01	267.18	2612.24	4844.96

Movement, Approach, & Intersection Results

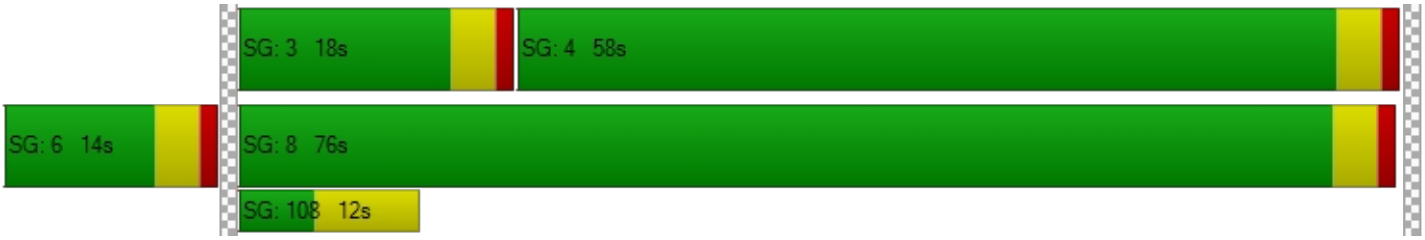
d_M, Delay for Movement [s/veh]	315.81	315.81	315.81	0.00	0.00	0.00	48.62	8.81	0.00	0.00	338.87	763.81
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	315.81			0.00			24.68			581.59		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	388.63											
Intersection LOS	F											
Intersection V/C	1.540											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.438	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	0	1600	1200
d_b, Bicycle Delay [s]	35.56	45.00	1.80	7.20
I_b,int, Bicycle LOS Score for Intersection	2.687	4.132	3.497	5.638
Bicycle LOS	B	D	C	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

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):	0.772

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	119	240	139	290	672	58
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	360	1080	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]	126	254	147	667	1792	61
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	67	39	176	472	16
Total Analysis Volume [veh/h]	133	267	155	702	1886	64
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	17	17	9	65	52	52
g / C, Green / Cycle	0.19	0.19	0.10	0.72	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.07	0.17	0.09	0.37	0.52	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	341	304	181	1373	2092	934
d1, Uniform Delay [s]	31.99	35.51	39.86	5.49	16.72	8.33
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.73	8.00	10.97	1.36	6.83	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.88	0.86	0.51	0.90	0.07
d, Delay for Lane Group [s/veh]	32.72	43.51	50.84	6.85	23.55	8.48
Lane Group LOS	C	D	D	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.54	6.18	3.76	4.24	15.68	0.50
50th-Percentile Queue Length [ft/ln]	63.46	154.48	94.03	106.02	392.06	12.50
95th-Percentile Queue Length [veh/ln]	4.57	10.26	6.77	7.62	22.18	0.90
95th-Percentile Queue Length [ft/ln]	114.24	256.40	169.26	190.45	554.43	22.51

Movement, Approach, & Intersection Results

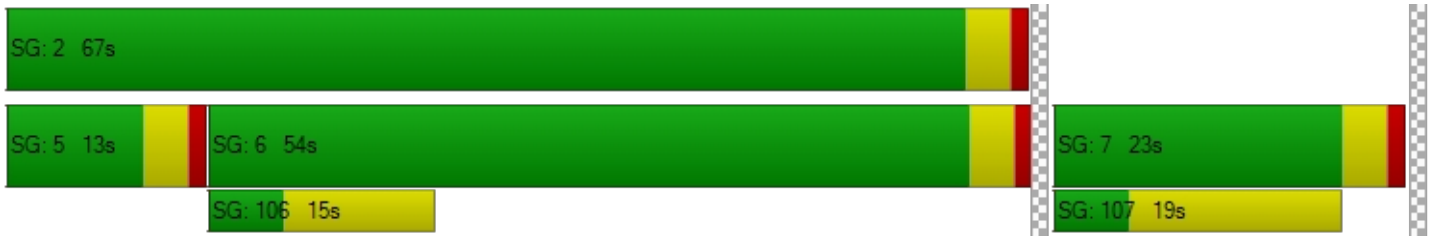
d_M, Delay for Movement [s/veh]	32.72	43.51	50.84	6.85	23.55	8.48
Movement LOS	C	D	D	A	C	A
d_A, Approach Delay [s/veh]	39.92		14.81		23.05	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	22.95					
Intersection LOS	C					
Intersection V/C	0.772					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.176	3.233	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	2.974	3.168
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	200.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.143

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	57	194	61	28	246	183	91	238	66	70	459	54
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	15	349	100	46	33	11	189	0	1047	499	292
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]	60	221	414	130	307	227	107	441	70	1121	986	349
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	58	109	34	81	60	28	116	18	295	259	92
Total Analysis Volume [veh/h]	63	233	436	137	323	239	113	464	74	1180	1038	367
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	23	26	0	29	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	23	23	5	24	24	7	21	21	25	38	38
g / C, Green / Cycle	0.04	0.26	0.26	0.06	0.27	0.27	0.08	0.23	0.23	0.28	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.03	0.12	0.27	0.08	0.16	0.16	0.06	0.14	0.15	0.65	0.37	0.40
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1636	1810	1900	1810	1810	1900	1740
c, Capacity [veh/h]	81	495	421	101	516	444	145	433	413	503	808	740
d1, Uniform Delay [s]	42.52	28.03	33.27	42.50	28.38	28.44	40.59	31.34	31.37	32.50	23.56	24.91
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.34	0.40
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.35	3.18	53.26	176.68	4.75	5.64	8.58	1.54	1.64	612.59	8.77	19.51
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.47	1.04	1.36	0.58	0.59	0.78	0.63	0.64	2.35	0.87	0.95
d, Delay for Lane Group [s/veh]	56.88	31.21	86.52	219.18	33.13	34.08	49.17	32.89	33.01	645.09	32.33	44.42
Lane Group LOS	E	C	F	F	C	C	D	C	C	F	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.67	4.46	14.86	7.09	5.99	5.33	2.69	5.24	5.03	95.93	14.50	17.26
50th-Percentile Queue Length [ft/ln]	41.63	111.54	371.54	177.29	149.81	133.26	67.21	130.94	125.76	2398.32	362.42	431.40
95th-Percentile Queue Length [veh/ln]	3.00	7.93	21.62	12.41	10.01	9.12	4.84	8.99	8.71	151.60	20.74	24.07
95th-Percentile Queue Length [ft/ln]	74.93	198.14	540.57	310.29	250.18	227.92	120.98	224.77	217.72	3789.98	518.52	601.71

Movement, Approach, & Intersection Results

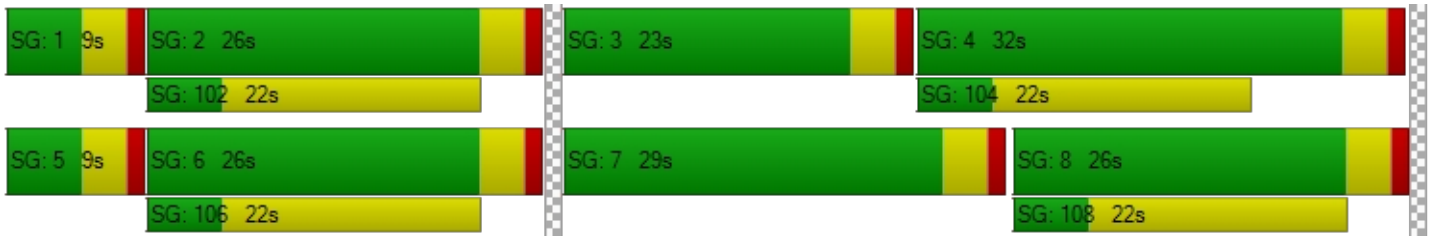
d_M, Delay for Movement [s/veh]	56.88	31.21	86.52	219.18	33.20	34.08	49.17	32.94	33.01	645.09	36.24	44.42
Movement LOS	E	C	F	F	C	C	D	C	C	F	D	D
d_A, Approach Delay [s/veh]	66.36			69.95			35.76			315.33		
Approach LOS	E			E			D			F		
d_I, Intersection Delay [s/veh]	200.53											
Intersection LOS	F											
Intersection V/C	1.143											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.902	2.668	2.884	3.125
Crosswalk LOS	C	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]	489	489	489	622
d_b, Bicycle Delay [s]	25.69	25.69	25.69	21.36
I_b,int, Bicycle LOS Score for Intersection	2.164	2.136	2.097	3.692
Bicycle LOS	B	B	B	D

Sequence

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



Beaumont Summit Station

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Scenario 3 OY 2024 CUM PM
2/4/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.046	537.9	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	NB Left	1.759	289.1	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	1.012	229.3	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.267	29.7	D
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.900	26.0	D
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.843	22.2	C
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.618	31.1	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.013	12.1	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.005	11.8	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.197	8.8	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	WB Right	0.826	54.8	D
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.590	115.2	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.135	1,007.7	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.985	544.6	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.159	96.9	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.835	384.8	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	537.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.046

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	288	4	542	0	393	125	24	270	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	202	0	481	0	376	373	125	481	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	507	4	1056	0	793	506	150	767	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	133	1	278	0	209	133	39	202	0
Total Analysis Volume [veh/h]	0	0	0	534	4	1112	0	835	533	158	807	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1650	1368	965
Degree of Utilization, x		3.05	1.69	1.26

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		142.87	76.60	35.44
95th-Percentile Queue Length [ft]		3571.67	1915.09	885.92
Approach Delay [s/veh]	0.00	940.08	329.16	146.10
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	537.89			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	289.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.759

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	181	4	22	0	0	0	304	378	0	0	119	255
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	481	0	202	0	0	0	373	202	0	0	125	60
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]	673	4	225	0	0	0	695	603	0	0	251	330
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	177	1	59	0	0	0	183	159	0	0	66	87
Total Analysis Volume [veh/h]	708	4	237	0	0	0	732	635	0	0	264	347
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	949		1367	829
Degree of Utilization, x	1.76		1.75	0.74

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	57.38		79.79	6.75
95th-Percentile Queue Length [ft]	1434.59		1994.66	168.73
Approach Delay [s/veh]	365.99	0.00	356.59	18.49
Approach LOS	F	A	F	C
Intersection Delay [s/veh]	289.06			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	229.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.012

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	74	49	41	382	307	62
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	66	113	290	185	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]	78	118	156	695	510	66
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	31	41	183	134	17
Total Analysis Volume [veh/h]	82	124	164	732	537	69
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	1.01	0.24	0.17	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	229.25	191.72	9.40	0.00	0.00	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	11.72	11.72	0.60	0.60	0.00	0.00
95th-Percentile Queue Length [ft/ln]	292.88	292.88	14.95	14.95	0.00	0.00
d_A, Approach Delay [s/veh]	206.66		1.72		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	25.83					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	29.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.267

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	39	1	416	38	0	312
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	9	0	212	15	0	156
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	1	653	55	0	487
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	0	172	14	0	128
Total Analysis Volume [veh/h]	53	1	687	58	0	513
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	0.27	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	29.66	19.81	0.00	0.00	9.13	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.05	1.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	26.18	26.18	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	29.48		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	1.21					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	26.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.900

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	18	3	1	2	4	31	61	341	15	3	261	2
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	216	0	0	163	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]	19	3	1	2	4	33	65	577	16	3	440	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	0	1	1	9	17	152	4	1	116	1
Total Analysis Volume [veh/h]	20	3	1	2	4	35	68	607	17	3	463	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	531	593	769	734
Degree of Utilization, x	0.05	0.07	0.90	0.64

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.14	0.22	12.00	4.63
95th-Percentile Queue Length [ft]	3.54	5.56	300.09	115.87
Approach Delay [s/veh]	10.11	9.53	34.19	16.13
Approach LOS	B	A	D	C
Intersection Delay [s/veh]	25.99			
Intersection LOS	D			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	22.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.843

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	33	19	6	12	17	18	21	303	25	10	217	8
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	35	0	0	0	0	0	0	181	35	0	128	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]	70	20	6	13	18	19	22	502	62	11	358	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	5	2	3	5	5	6	132	16	3	94	2
Total Analysis Volume [veh/h]	74	21	6	14	19	20	23	528	65	12	377	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	543	553	654	753	628	719
Degree of Utilization, x	0.19	0.10	0.84	0.09	0.62	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.68	0.32	9.33	0.28	4.27	0.03
95th-Percentile Queue Length [ft]	16.94	7.92	233.31	7.06	106.70	0.84
Approach Delay [s/veh]	11.14	10.21	28.28		17.10	
Approach LOS	B	B	D		C	
Intersection Delay [s/veh]	22.17					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.618

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	132	254	26	16	228	54	60	87	174	15	59	10
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	128	86	0	0	147	0	0	0	181	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]	268	355	28	17	389	57	64	92	365	16	63	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	93	7	4	102	15	17	24	96	4	17	3
Total Analysis Volume [veh/h]	282	374	29	18	409	60	67	97	384	17	66	12
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	21	35	0	9	23	0	22	37	0	9	24	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	47	47	2	33	33	4	24	24	2	21
g / C, Green / Cycle	0.18	0.52	0.52	0.02	0.36	0.36	0.05	0.26	0.26	0.02	0.23
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.02	0.01	0.22	0.04	0.04	0.05	0.24	0.01	0.04
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1850
c, Capacity [veh/h]	317	983	836	37	689	586	91	502	427	36	432
d1, Uniform Delay [s]	36.24	13.05	10.67	43.59	23.30	18.99	42.13	25.66	31.95	43.65	27.59
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.16	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.35	1.12	0.08	9.26	3.74	0.35	10.79	0.19	9.67	9.42	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	0.38	0.03	0.48	0.59	0.10	0.73	0.19	0.90	0.47	0.18
d, Delay for Lane Group [s/veh]	44.59	14.17	10.75	52.85	27.04	19.34	52.92	25.85	41.61	53.07	27.78
Lane Group LOS	D	B	B	D	C	B	D	C	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.36	4.15	0.26	0.48	7.39	0.86	1.69	1.56	8.73	0.46	1.31
50th-Percentile Queue Length [ft/ln]	158.90	103.77	6.54	12.12	184.86	21.39	42.37	39.12	218.27	11.43	32.77
95th-Percentile Queue Length [veh/ln]	10.49	7.47	0.47	0.87	11.85	1.54	3.05	2.82	13.58	0.82	2.36
95th-Percentile Queue Length [ft/ln]	262.26	186.78	11.78	21.82	296.35	38.50	76.26	70.42	339.42	20.57	58.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.59	14.17	10.75	52.85	27.04	19.34	52.92	25.85	41.61	53.07	27.78	27.78
Movement LOS	D	B	B	D	C	B	D	C	D	D	C	C
d_A, Approach Delay [s/veh]	26.55			27.04			40.21			32.31		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	31.11											
Intersection LOS	C											
Intersection V/C	0.618											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.740	2.400	2.443	2.045
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]	689	422	733	444
d_b, Bicycle Delay [s]	19.34	28.01	18.05	27.22
I_b,int, Bicycle LOS Score for Intersection	2.690	2.363	2.464	1.716
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	3	2	5	18	5	18	24	95	1	3	108	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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	3	2	5	19	5	19	25	101	1	3	114	22
Peak Hour Factor	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430
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]	1	1	2	6	2	6	8	34	0	1	38	7
Total Analysis Volume [veh/h]	4	3	7	26	7	26	34	136	1	4	153	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.04	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.17	11.89	8.75	11.45	12.13	9.24	7.63	0.00	0.00	7.47	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.27	0.27	0.27	0.07	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.49	1.49	1.49	6.81	6.81	6.81	1.86	0.00	0.00	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	10.11			10.55			1.52			0.16		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.44											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	1	9	13	2	7	4	113	2	5	125	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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	10	14	2	7	4	120	2	5	133	20
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
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	3	5	1	2	1	40	1	2	44	7
Total Analysis Volume [veh/h]	1	1	13	19	3	9	5	159	3	7	177	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.66	11.68	8.78	10.99	11.76	9.08	7.62	0.00	0.00	7.53	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.14	0.14	0.14	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.28	1.28	1.28	3.55	3.55	3.55	0.27	0.00	0.00	0.37	0.00	0.00
d_A, Approach Delay [s/veh]	9.10			10.51			0.23			0.25		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	1.30											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.197

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	63	27	67	72	71	129
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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]	67	29	71	76	75	137
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	8	19	20	20	36
Total Analysis Volume [veh/h]	71	31	75	80	79	144
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	611	768	793	664	732
Degree of Utilization, x	0.12	0.04	0.20	0.12	0.20

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.39	0.13	0.72	0.40	0.73
95th-Percentile Queue Length [ft]	9.80	3.15	18.03	10.07	18.19
Approach Delay [s/veh]	8.82		8.63	8.83	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.76				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	54.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	50	280	74	113	290	13	27	71	93	60	43	106
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	214	0	181	328	0	0	0	0	0	0	309
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]	53	511	78	301	635	14	29	75	99	64	46	421
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	134	21	79	167	4	8	20	26	17	12	111
Total Analysis Volume [veh/h]	56	538	82	317	668	15	31	79	104	67	48	443
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	12	33	0	20	41	0	9	23	0	14	28	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	29	16	41	3	25	25	4	26
g / C, Green / Cycle	0.04	0.32	0.18	0.46	0.03	0.27	0.27	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.03	0.33	0.18	0.36	0.02	0.04	0.06	0.04	0.30
s, saturation flow rate [veh/h]	1810	1857	1810	1893	1810	1900	1615	1810	1639
c, Capacity [veh/h]	76	601	322	869	55	517	440	88	476
d1, Uniform Delay [s]	42.60	30.44	36.88	20.59	43.06	24.86	25.47	42.31	31.92
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.38
I, 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]	12.64	45.15	20.10	7.08	8.96	0.14	0.27	12.77	43.87
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	0.73	1.03	0.99	0.79	0.57	0.15	0.24	0.76	1.03
d, Delay for Lane Group [s/veh]	55.24	75.58	56.99	27.68	52.02	25.00	25.74	55.07	75.79
Lane Group LOS	E	F	E	C	D	C	C	E	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.46	19.60	8.24	12.12	0.80	1.24	1.68	1.73	15.46
50th-Percentile Queue Length [ft/ln]	36.48	490.12	205.97	302.91	19.88	31.06	42.06	43.36	386.55
95th-Percentile Queue Length [veh/ln]	2.63	27.43	12.95	17.82	1.43	2.24	3.03	3.12	22.32
95th-Percentile Queue Length [ft/ln]	65.67	685.74	323.65	445.62	35.79	55.90	75.71	78.05	558.10

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.24	75.58	75.58	56.99	27.68	27.68	52.02	25.00	25.74	55.07	75.79	75.79
Movement LOS	E	E	E	E	C	C	D	C	C	E	E	E
d_A, Approach Delay [s/veh]	73.90			36.97			29.27			73.30		
Approach LOS	E			D			C			E		
d_I, Intersection Delay [s/veh]	54.78											
Intersection LOS	D											
Intersection V/C	0.826											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.625	3.032	2.241	2.469
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]	644	822	422	533
d_b, Bicycle Delay [s]	20.67	15.61	28.01	24.20
I_b,int, Bicycle LOS Score for Intersection	2.675	3.210	1.913	2.480
Bicycle LOS	B	C	A	B

Sequence

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

Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	115.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.590

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	200	42	50	311	255	245
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	357	454	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]	212	45	53	687	724	260
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	12	14	181	191	68
Total Analysis Volume [veh/h]	223	47	56	723	762	274
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	458	427	723	545	545	595
Degree of Utilization, x	0.59	0.13	1.59	0.63	0.63	0.58

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.72	0.45	40.28	4.42	4.42	3.71
95th-Percentile Queue Length [ft]	92.92	11.22	1006.88	110.47	110.47	92.87
Approach Delay [s/veh]	21.52	275.68		18.99		
Approach LOS	C	F		C		
Intersection Delay [s/veh]	115.22					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,007.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.135

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	520	8	142	0	265	223	158	377	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	853	0	324	0	328	122	579	436	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	1404	8	475	0	609	358	746	836	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	369	2	125	0	160	94	196	220	0
Total Analysis Volume [veh/h]	0	0	0	1478	8	500	0	641	377	785	880	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	46	0	0	24	0	20	44	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.13	0.57	0.43	0.46
s, saturation flow rate [veh/h]		1757	1783	1810	1900
c, Capacity [veh/h]		355	594	600	1347
d1, Uniform Delay [s]		35.91	30.01	30.08	7.10
k, delay calibration		0.50	0.50	0.50	0.49
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2073.85	328.31	150.59	2.45
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		5.59	1.71	1.31	0.65
d, Delay for Lane Group [s/veh]		2109.76	358.32	180.67	9.55
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		211.38	65.64	36.87	6.95
50th-Percentile Queue Length [ft/ln]		5284.50	1641.04	921.79	173.84
95th-Percentile Queue Length [veh/ln]		319.33	102.39	54.81	11.28
95th-Percentile Queue Length [ft/ln]		7983.19	2559.63	1370.17	281.96

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2109.76	2109.76	2109.76	0.00	358.32	358.32	180.67	9.55	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			2109.76			358.32			90.23		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1007.71											
Intersection LOS	F											
Intersection V/C	2.135											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	933	444	889
d_b, Bicycle Delay [s]	45.00	12.80	27.22	13.89
I_b,int, Bicycle LOS Score for Intersection	4.132	4.837	3.239	4.307
Bicycle LOS	D	E	C	E

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	544.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.985

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	241	7	246	0	0	0	116	668	0	0	294	333
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	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	324	0	853	0	0	0	213	950	0	0	691	590
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]	579	7	1114	0	0	0	336	1658	0	0	1003	943
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	152	2	293	0	0	0	88	436	0	0	264	248
Total Analysis Volume [veh/h]	609	7	1173	0	0	0	354	1745	0	0	1056	993
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.07		0.20	0.92	0.56	0.61
s, saturation flow rate [veh/h]	1677		1810	1900	1900	1615
c, Capacity [veh/h]	529		395	1132	633	538
d1, Uniform Delay [s]	30.81		34.20	18.19	30.00	30.00
k, delay calibration	0.50		0.15	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1077.31		9.66	248.03	307.41	387.40
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	3.38		0.90	1.54	1.67	1.84
d, Delay for Lane Group [s/veh]	1108.12		43.86	266.22	337.41	417.40
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	168.01		8.38	98.17	67.16	69.05
50th-Percentile Queue Length [ft/ln]	4200.34		209.59	2454.21	1679.01	1726.13
95th-Percentile Queue Length [veh/ln]	266.10		13.13	151.41	103.87	109.14
95th-Percentile Queue Length [ft/ln]	6652.46		328.30	3785.18	2596.76	2728.61

Movement, Approach, & Intersection Results

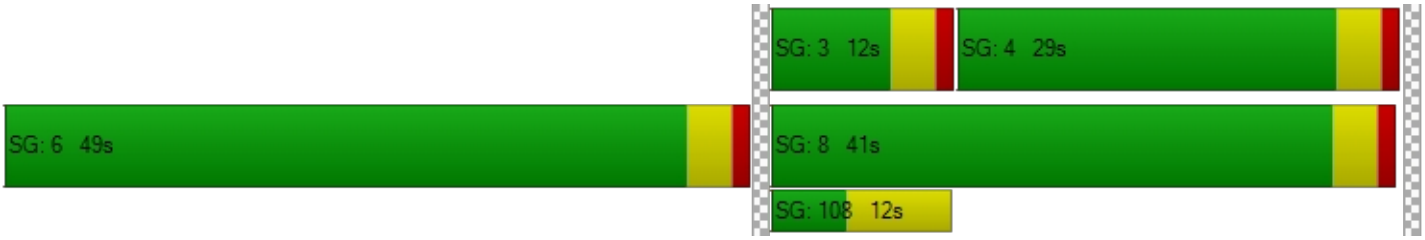
d_M, Delay for Movement [s/veh]	1108.12	1108.12	1108.12	0.00	0.00	0.00	43.86	266.22	0.00	0.00	337.41	417.40
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1108.12			0.00			228.72			376.18		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	544.60											
Intersection LOS	F											
Intersection V/C	1.985											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.606	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.511	4.132	5.023	4.940
Bicycle LOS	E	D	F	E

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	96.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.159

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	100	141	193	662	457	133
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	1214	712	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]	106	149	205	1916	1196	141
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	39	54	504	315	37
Total Analysis Volume [veh/h]	112	157	216	2017	1259	148
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	34	67	33	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	11	11	13	71	54	54
g / C, Green / Cycle	0.12	0.12	0.14	0.79	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.06	0.10	0.12	1.06	0.35	0.09
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	220	197	259	1500	2177	972
d1, Uniform Delay [s]	37.00	38.44	37.53	9.48	10.94	7.85
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.81	7.25	6.94	159.76	1.13	0.33
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	0.51	0.80	0.83	1.34	0.58	0.15
d, Delay for Lane Group [s/veh]	38.81	45.69	44.47	169.24	12.07	8.18
Lane Group LOS	D	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.36	3.67	4.88	78.64	6.50	1.13
50th-Percentile Queue Length [ft/ln]	59.03	91.85	122.04	1965.91	162.42	28.21
95th-Percentile Queue Length [veh/ln]	4.25	6.61	8.51	117.67	10.68	2.03
95th-Percentile Queue Length [ft/ln]	106.25	165.32	212.63	2941.73	266.92	50.78

Movement, Approach, & Intersection Results

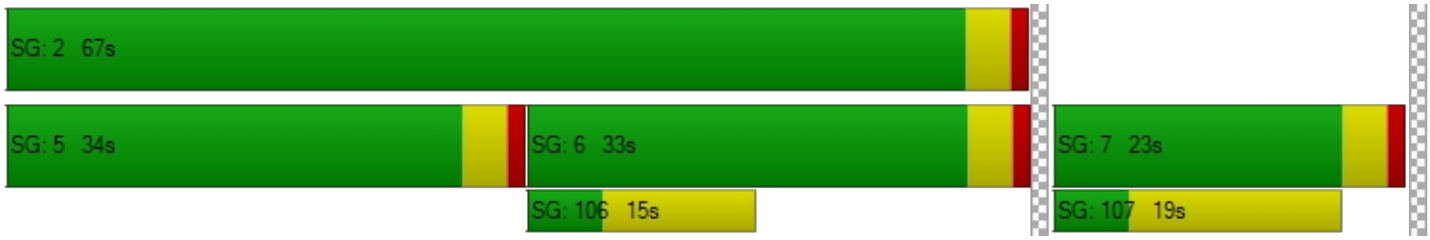
d_M, Delay for Movement [s/veh]	38.81	45.69	44.47	169.24	12.07	8.18
Movement LOS	D	D	D	F	B	A
d_A, Approach Delay [s/veh]	42.82		157.17		11.66	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	96.93					
Intersection LOS	F					
Intersection V/C	1.159					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.182	3.467	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	644
d_b, Bicycle Delay [s]	28.01	4.05	20.67
I_b,int, Bicycle LOS Score for Intersection	1.560	5.244	2.720
Bicycle LOS	A	F	B

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	384.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.835

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	85	338	59	89	229	171	227	391	77	93	382	85
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	51	1177	336	30	22	37	633	0	690	418	204
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]	90	409	1240	430	273	203	278	1047	82	789	823	294
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	108	326	113	72	53	73	276	22	208	217	77
Total Analysis Volume [veh/h]	95	431	1305	453	287	214	293	1102	86	831	866	309
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	13	31	0	13	31	0	15	26	0	20	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	27	27	9	30	30	11	22	22	16	27	27
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.33	0.33	0.12	0.24	0.24	0.18	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.05	0.23	0.81	0.25	0.14	0.14	0.16	0.32	0.32	0.46	0.31	0.34
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1634	1810	1900	1852	1810	1900	1739
c, Capacity [veh/h]	125	570	485	181	629	541	221	464	453	322	570	522
d1, Uniform Delay [s]	41.16	28.52	31.50	40.50	23.47	23.47	39.50	34.00	34.00	37.00	31.50	31.50
k, delay calibration	0.11	0.50	0.50	0.27	0.50	0.50	0.11	0.41	0.42	0.50	0.40	0.46
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.13	9.05	767.94	685.30	2.13	2.47	153.02	143.77	147.97	721.46	41.74	77.64
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.76	2.69	2.50	0.43	0.43	1.32	1.29	1.30	2.58	1.03	1.13
d, Delay for Lane Group [s/veh]	50.29	37.57	799.44	725.80	25.60	25.94	192.52	177.77	181.97	758.46	73.24	109.14
Lane Group LOS	D	D	F	F	C	C	F	F	F	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.32	9.33	113.15	38.30	4.57	3.98	14.03	27.97	27.79	71.29	18.33	21.97
50th-Percentile Queue Length [ft/ln]	57.95	233.18	2828.85	957.48	114.17	99.46	350.78	699.19	694.84	1782.36	458.13	549.27
95th-Percentile Queue Length [veh/ln]	4.17	14.34	180.25	59.95	8.07	7.16	22.44	41.88	41.76	111.23	25.84	31.89
95th-Percentile Queue Length [ft/ln]	104.30	358.39	4506.17	1498.84	201.78	179.03	560.95	1046.90	1043.96	2780.87	646.04	797.16

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.29	37.57	799.44	725.80	25.62	25.94	192.52	179.69	181.97	758.46	84.78	109.14
Movement LOS	D	D	F	F	C	C	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	581.23			358.17			182.36			367.61		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	384.79											
Intersection LOS	F											
Intersection V/C	1.835											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.090	2.818	3.078	3.408
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	489	600
d_b, Bicycle Delay [s]	22.05	22.05	25.69	22.05
I_b,int, Bicycle LOS Score for Intersection	3.070	2.347	2.781	3.215
Bicycle LOS	C	B	C	C

Sequence

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

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.975	350.4	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	2.123	306.2	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.578	132.3	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.430	31.7	D
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.822	19.9	C
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.805	19.0	C
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.432	26.5	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.002	11.2	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.010	10.3	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.255	8.8	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.693	34.2	C
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.201	62.9	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.565	361.6	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.554	392.6	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.794	25.4	C
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.145	200.3	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.488	3.6	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.484	4.1	A
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.008	9.4	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	350.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.975

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	137	0	315	0	696	211	24	149	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	68	0	150	0	300	299	176	150	0
Site-Generated Trips [veh/h]	0	0	0	232	0	0	0	8	0	16	3	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	445	0	484	0	1046	523	217	311	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	117	0	127	0	275	138	57	82	0
Total Analysis Volume [veh/h]	0	0	0	468	0	509	0	1101	551	228	327	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		977	1652	755
Degree of Utilization, x		1.75	1.98	0.73

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		58.64	107.70	6.58
95th-Percentile Queue Length [ft]		1466.03	2692.39	164.55
Approach Delay [s/veh]	0.00	361.99	454.61	19.77
Approach LOS	A	F	F	C
Intersection Delay [s/veh]	350.39			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	306.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.123

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	91	1	22	0	0	0	692	156	0	0	55	442
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	150	0	68	0	0	0	299	68	0	0	176	92
Site-Generated Trips [veh/h]	0	0	176	0	0	0	0	240	0	0	19	27
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]	246	1	267	0	0	0	1033	473	0	0	253	588
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	0	70	0	0	0	272	124	0	0	67	155
Total Analysis Volume [veh/h]	259	1	281	0	0	0	1087	498	0	0	266	619
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	541		1585	885
Degree of Utilization, x	1.02		2.12	1.05

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	14.83		110.18	20.97
95th-Percentile Queue Length [ft]	370.70		2754.47	524.22
Approach Delay [s/veh]	69.45	0.00	521.95	64.42
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	306.17			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	132.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.578

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	42	25	30	166	478	58
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	101	34	101	251	0
Site-Generated Trips [veh/h]	0	0	0	416	46	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]	45	128	66	693	804	61
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	34	17	182	212	16
Total Analysis Volume [veh/h]	47	135	69	729	846	64
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	0.58	0.39	0.09	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	132.33	98.35	10.23	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	7.84	7.84	0.30	0.30	0.00	0.00
95th-Percentile Queue Length [ft/ln]	196.05	196.05	7.50	7.50	0.00	0.00
d_A, Approach Delay [s/veh]	107.13		0.88		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	10.69					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	31.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	70	0	176	13	0	470
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	13	0	97	4	0	176
Site-Generated Trips [veh/h]	8	0	21	3	0	69
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]	95	0	305	21	0	743
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	0	80	6	0	196
Total Analysis Volume [veh/h]	100	0	321	22	0	782
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	0.43	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	31.69	21.25	0.00	0.00	7.93	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.02	2.02	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	50.48	50.48	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	31.69		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.59					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	19.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.822

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	50	1	1	0	3	96	24	139	12	1	315	1
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	104	0	0	178	0
Site-Generated Trips [veh/h]	16	0	0	0	0	0	0	15	6	0	53	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]	69	1	1	0	3	102	25	266	19	1	565	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	0	0	1	27	7	70	5	0	149	0
Total Analysis Volume [veh/h]	73	1	1	0	3	107	26	280	20	1	595	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	541	621	682	726
Degree of Utilization, x	0.14	0.18	0.48	0.82

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.48	0.64	2.59	8.93
95th-Percentile Queue Length [ft]	11.97	15.98	64.87	223.31
Approach Delay [s/veh]	10.72	10.04	13.01	26.57
Approach LOS	B	B	B	D
Intersection Delay [s/veh]	19.87			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	19.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.805

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	17	18	4	5	24	34	16	94	41	3	308	1
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	24	0	0	0	0	0	0	78	26	0	154	0
Site-Generated Trips [veh/h]	22	0	0	0	0	0	0	11	4	0	31	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]	64	19	4	5	25	36	17	189	73	3	511	1
Peak Hour Factor	0.9400	0.9400	0.9400	0.9500	0.9400	0.9500	0.9500	0.9500	0.9400	0.9400	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	5	1	1	7	9	4	50	19	1	134	0
Total Analysis Volume [veh/h]	68	20	4	5	27	38	18	199	78	3	538	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	572	607	637	734	673	775
Degree of Utilization, x	0.16	0.12	0.34	0.11	0.80	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.57	0.39	1.51	0.36	8.24	0.00
95th-Percentile Queue Length [ft]	14.24	9.72	37.68	8.88	205.90	0.10
Approach Delay [s/veh]	10.50	9.71	10.44		26.30	
Approach LOS	B	A	B		D	
Intersection Delay [s/veh]	19.00					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	26.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.432

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	111	198	8	8	224	50	41	50	74	8	81	7
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	154	131	0	0	44	0	0	0	78	0	0	0
Site-Generated Trips [veh/h]	15	0	0	0	0	8	3	3	5	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]	287	341	8	8	281	61	46	56	161	8	94	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	76	90	2	2	74	16	12	15	42	2	25	2
Total Analysis Volume [veh/h]	302	359	8	8	296	64	48	59	169	8	99	7
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	39	0	19	23	0	9	23	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	60	60	1	44	44	3	12	12	1	9
g / C, Green / Cycle	0.19	0.67	0.67	0.01	0.49	0.49	0.04	0.13	0.13	0.01	0.10
(v / s)_i Volume / Saturation Flow Rate	0.17	0.19	0.00	0.00	0.16	0.04	0.03	0.03	0.10	0.00	0.06
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1878
c, Capacity [veh/h]	346	1269	1079	20	927	788	70	252	214	19	196
d1, Uniform Delay [s]	35.35	6.12	4.99	44.18	13.96	12.28	42.70	34.94	37.81	44.26	38.28
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.94	0.56	0.01	11.74	0.91	0.20	10.94	0.47	6.36	14.38	2.33
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	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	0.87	0.28	0.01	0.39	0.32	0.08	0.68	0.23	0.79	0.42	0.54
d, Delay for Lane Group [s/veh]	42.29	6.68	5.00	55.92	14.87	12.48	53.64	35.41	44.17	58.64	40.61
Lane Group LOS	D	A	A	E	B	B	D	D	D	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.62	2.18	0.04	0.24	3.62	0.69	1.23	1.15	3.84	0.25	2.27
50th-Percentile Queue Length [ft/ln]	165.61	54.53	0.99	6.01	90.60	17.21	30.86	28.76	96.07	6.18	56.72
95th-Percentile Queue Length [veh/ln]	10.85	3.93	0.07	0.43	6.52	1.24	2.22	2.07	6.92	0.45	4.08
95th-Percentile Queue Length [ft/ln]	271.13	98.16	1.79	10.82	163.08	30.98	55.55	51.78	172.93	11.13	102.10

Movement, Approach, & Intersection Results

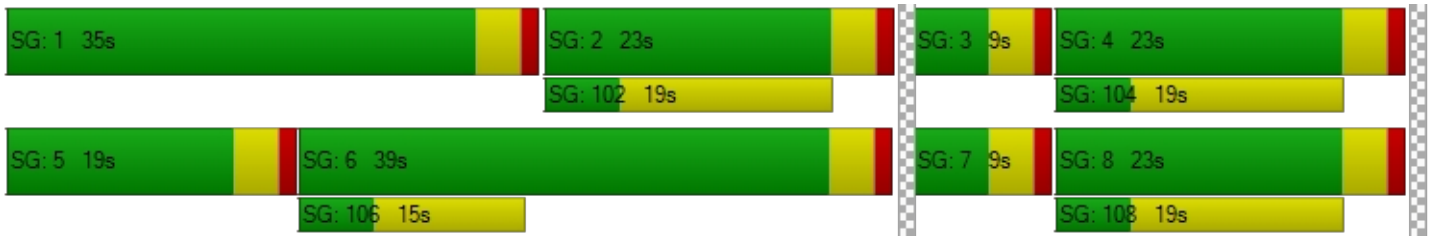
d_M, Delay for Movement [s/veh]	42.29	6.68	5.00	55.92	14.87	12.48	53.64	35.41	44.17	58.64	40.61	40.61
Movement LOS	D	A	A	E	B	B	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	22.73			15.35			43.95			41.87		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	26.46											
Intersection LOS	C											
Intersection V/C	0.432											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.597	2.355	2.373	2.024
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]	778	422	422	422
d_b, Bicycle Delay [s]	16.81	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.663	2.167	2.015	1.748
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	3	0	0	0	0	0	0	0	8
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	4	1	10	1	4	63	69	0	1	51	13
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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	1	0	3	0	1	18	20	0	0	15	4
Total Analysis Volume [veh/h]	0	5	1	12	1	5	73	80	0	1	59	15
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.61	11.21	8.55	10.66	11.23	8.61	7.46	0.00	0.00	7.35	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.08	0.08	0.08	0.15	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.72	0.72	0.72	1.92	1.92	1.92	3.73	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.77			10.12			3.56			0.10		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.17											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	6	0	0	0	3	0	0	8	16
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	7	4	22	0	3	1	80	0	1	61	52
Peak Hour Factor	0.9500	0.9500	0.9590	0.9590	0.9500	0.9500	0.9500	0.9590	0.9500	0.9590	0.9590	0.9590
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	2	1	6	0	1	0	21	0	0	16	14
Total Analysis Volume [veh/h]	0	7	4	23	0	3	1	83	0	1	64	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.33	10.25	8.57	9.58	10.15	8.74	7.43	0.00	0.00	7.36	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.04	0.10	0.10	0.10	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.06	1.06	1.06	2.42	2.42	2.42	0.05	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	9.64			9.48			0.09			0.06		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.53											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.255

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	41	66	88	59	26	40
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	30	0	6	7	0	16
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]	73	70	99	70	28	58
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	18	29	21	7	17
Total Analysis Volume [veh/h]	86	74	117	83	29	69
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	630	798	784	643	706
Degree of Utilization, x	0.14	0.09	0.26	0.05	0.10

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.47	0.31	1.01	0.14	0.32
95th-Percentile Queue Length [ft]	11.77	7.64	25.34	3.54	8.09
Approach Delay [s/veh]	8.56		9.16	8.41	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.79				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	34.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.693

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	69	197	24	62	234	26	3	37	46	53	69	131
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	285	0	275	122	0	0	0	0	0	0	92
Site-Generated Trips [veh/h]	8	15	0	0	5	0	0	3	3	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]	81	509	25	341	375	28	3	42	52	56	81	231
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	134	7	90	99	7	1	11	14	15	21	61
Total Analysis Volume [veh/h]	85	536	26	359	395	29	3	44	55	59	85	243
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	23	0	35	23	0	9	23	0	9	23	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	34	20	49	0	16	16	4	19
g / C, Green / Cycle	0.06	0.38	0.22	0.54	0.00	0.18	0.18	0.04	0.22
(v / s)_i Volume / Saturation Flow Rate	0.05	0.30	0.20	0.23	0.00	0.02	0.03	0.03	0.20
s, saturation flow rate [veh/h]	1810	1885	1810	1877	1810	1900	1615	1810	1680
c, Capacity [veh/h]	115	714	402	1010	8	338	287	78	364
d1, Uniform Delay [s]	41.42	24.72	33.95	12.40	44.68	31.14	31.49	42.61	34.34
k, delay calibration	0.11	0.50	0.14	0.50	0.11	0.11	0.11	0.11	0.15
I, 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]	9.02	8.53	8.80	1.28	26.70	0.17	0.32	13.98	10.75
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	0.74	0.79	0.89	0.42	0.38	0.13	0.19	0.76	0.90
d, Delay for Lane Group [s/veh]	50.44	33.25	42.75	13.69	71.38	31.31	31.81	56.59	45.09
Lane Group LOS	D	C	D	B	E	C	C	E	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.08	11.44	7.99	4.59	0.12	0.79	1.01	1.56	7.71
50th-Percentile Queue Length [ft/ln]	52.00	286.12	199.83	114.85	3.10	19.79	25.15	38.94	192.73
95th-Percentile Queue Length [veh/ln]	3.74	16.99	12.63	8.11	0.22	1.43	1.81	2.80	12.26
95th-Percentile Queue Length [ft/ln]	93.59	424.83	315.75	202.73	5.58	35.63	45.27	70.09	306.57

Movement, Approach, & Intersection Results

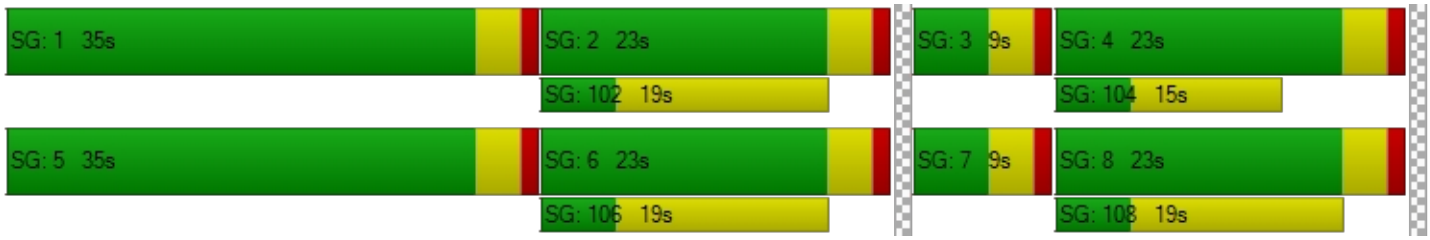
d_M, Delay for Movement [s/veh]	50.44	33.25	33.25	42.75	13.69	13.69	71.38	31.31	31.81	56.59	45.09	45.09
Movement LOS	D	C	C	D	B	B	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	35.50			27.01			32.76			46.84		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	34.18											
Intersection LOS	C											
Intersection V/C	0.693											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.508	2.789	2.230	2.398
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]	422	422	422	422
d_b, Bicycle Delay [s]	28.01	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.627	2.852	1.728	2.198
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	62.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.201

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	284	33	21	253	211	133
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	277	139	0
Site-Generated Trips [veh/h]	0	0	0	8	3	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]	301	35	22	553	366	141
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	79	9	6	146	96	37
Total Analysis Volume [veh/h]	317	37	23	582	385	148
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	493	453	582	522	522	570
Degree of Utilization, x	0.72	0.05	1.20	0.34	0.34	0.31

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.73	0.16	22.06	1.50	1.50	1.32
95th-Percentile Queue Length [ft]	143.15	4.00	551.40	37.44	37.44	33.07
Approach Delay [s/veh]	26.67	128.44		12.70		
Approach LOS	D	F		B		
Intersection Delay [s/veh]	62.95					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	361.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.565

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	252	7	83	0	290	305	240	236	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	258	0	97	0	293	119	619	137	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	8	0	4	3	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	525	7	185	0	608	442	877	390	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	138	2	49	0	160	116	231	103	0
Total Analysis Volume [veh/h]	0	0	0	553	7	195	0	640	465	923	411	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.43	0.62	0.51	0.22
s, saturation flow rate [veh/h]		1756	1769	1810	1900
c, Capacity [veh/h]		354	590	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	4.85
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		519.29	399.88	250.22	0.13
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		2.13	1.87	1.54	0.30
d, Delay for Lane Group [s/veh]		555.21	429.88	280.30	4.97
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		57.93	76.87	53.51	1.98
50th-Percentile Queue Length [ft/ln]		1448.21	1921.76	1337.74	49.40
95th-Percentile Queue Length [veh/ln]		91.06	121.10	82.07	3.56
95th-Percentile Queue Length [ft/ln]		2276.57	3027.56	2051.69	88.91

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	555.21	555.21	555.21	0.00	429.88	429.88	280.30	4.97	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			555.21			429.88			195.47		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	361.60											
Intersection LOS	F											
Intersection V/C	1.565											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.805	3.383	3.761
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	392.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.554

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	123	1	154	0	0	0	178	359	0	0	329	667
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	97	0	258	0	0	0	256	290	0	0	658	634
Site-Generated Trips [veh/h]	0	0	22	0	0	0	0	8	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]	227	1	443	0	0	0	445	679	0	0	1014	1341
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	60	0	117	0	0	0	117	179	0	0	267	353
Total Analysis Volume [veh/h]	239	1	466	0	0	0	468	715	0	0	1067	1412
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	14	0	0	0	0	18	76	0	0	58	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	23		25	59	30	30
g / C, Green / Cycle	0.25		0.28	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.42		0.26	0.38	0.56	0.87
s, saturation flow rate [veh/h]	1676		1810	1900	1900	1615
c, Capacity [veh/h]	425		505	1249	634	539
d1, Uniform Delay [s]	33.58		31.55	8.47	29.98	29.98
k, delay calibration	0.50		0.29	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	306.97		17.06	0.42	313.79	733.83
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	1.66		0.93	0.57	1.68	2.62
d, Delay for Lane Group [s/veh]	340.55		48.62	8.89	343.77	763.81
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	44.38		11.93	6.64	68.41	121.06
50th-Percentile Queue Length [ft/ln]	1109.39		298.37	165.97	1710.22	3026.41
95th-Percentile Queue Length [veh/ln]	69.26		17.60	10.86	105.92	193.80
95th-Percentile Queue Length [ft/ln]	1731.38		440.01	271.61	2648.07	4844.96

Movement, Approach, & Intersection Results

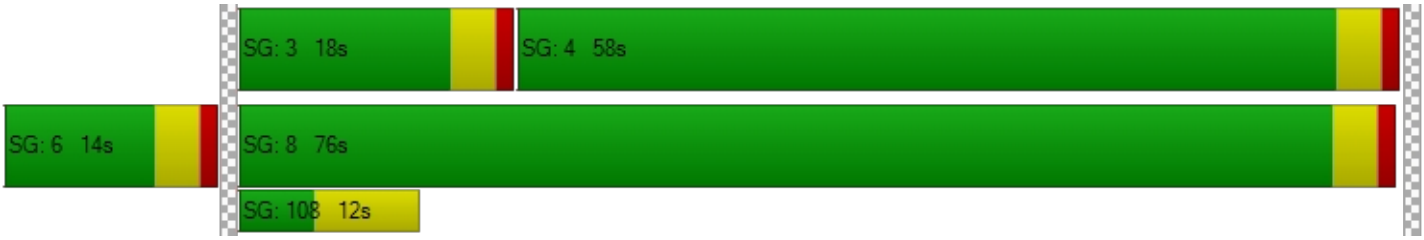
d_M, Delay for Movement [s/veh]	340.55	340.55	340.55	0.00	0.00	0.00	48.62	8.89	0.00	0.00	343.77	763.81
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	340.55			0.00			24.61			583.02		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	392.59											
Intersection LOS	F											
Intersection V/C	1.554											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.462	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	222	0	1600	1200
d_b, Bicycle Delay [s]	35.56	45.00	1.80	7.20
I_b,int, Bicycle LOS Score for Intersection	2.725	4.132	3.512	5.650
Bicycle LOS	B	D	D	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr 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):	0.794

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	119	240	139	290	672	58
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	360	1080	0
Site-Generated Trips [veh/h]	0	7	30	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]	126	261	177	667	1792	61
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	33	69	47	176	472	16
Total Analysis Volume [veh/h]	133	275	186	702	1886	64
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	17	17	9	65	52	52
g / C, Green / Cycle	0.19	0.19	0.10	0.72	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.07	0.17	0.10	0.37	0.52	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	348	311	181	1365	2077	927
d1, Uniform Delay [s]	31.67	35.36	40.50	5.65	17.05	8.50
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.69	8.26	38.42	1.39	7.28	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.88	1.03	0.51	0.91	0.07
d, Delay for Lane Group [s/veh]	32.36	43.62	78.92	7.04	24.33	8.64
Lane Group LOS	C	D	F	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.52	6.38	5.74	4.37	16.01	0.51
50th-Percentile Queue Length [ft/ln]	63.02	159.49	143.46	109.18	400.28	12.69
95th-Percentile Queue Length [veh/ln]	4.54	10.52	9.77	7.79	22.57	0.91
95th-Percentile Queue Length [ft/ln]	113.43	263.04	244.14	194.87	564.34	22.84

Movement, Approach, & Intersection Results

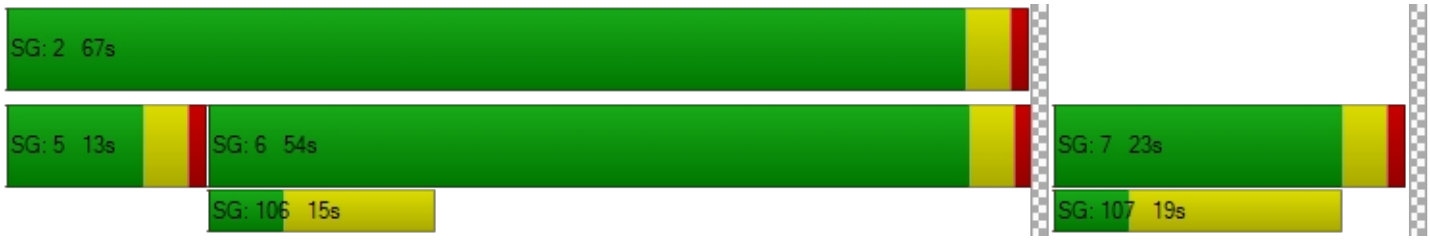
d_M, Delay for Movement [s/veh]	32.36	43.62	78.92	7.04	24.33	8.64
Movement LOS	C	D	F	A	C	A
d_A, Approach Delay [s/veh]	39.95		22.10		23.81	
Approach LOS	D		C		C	
d_I, Intersection Delay [s/veh]	25.37					
Intersection LOS	C					
Intersection V/C	0.794					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.191	3.247	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	3.025	3.168
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	200.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.145

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	57	194	61	28	246	183	91	238	66	70	459	54
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	15	349	100	46	33	11	189	0	1047	499	292
Site-Generated Trips [veh/h]	0	15	0	3	5	0	0	0	0	0	0	8
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]	60	236	414	133	312	227	107	441	70	1121	986	357
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	62	109	35	82	60	28	116	18	295	259	94
Total Analysis Volume [veh/h]	63	248	436	140	328	239	113	464	74	1180	1038	376
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	23	26	0	29	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	23	23	5	24	24	7	21	21	25	39	39
g / C, Green / Cycle	0.04	0.26	0.26	0.06	0.27	0.27	0.08	0.23	0.23	0.28	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.03	0.13	0.27	0.08	0.16	0.16	0.06	0.14	0.15	0.65	0.37	0.41
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1638	1810	1900	1810	1810	1900	1737
c, Capacity [veh/h]	81	491	418	101	512	441	145	437	417	503	813	743
d1, Uniform Delay [s]	42.52	28.45	33.36	42.50	28.59	28.65	40.59	31.17	31.20	32.50	23.48	24.86
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.35	0.40
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	14.35	3.67	55.92	189.48	4.98	5.89	8.58	1.49	1.58	612.59	8.89	20.08
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.50	1.04	1.39	0.59	0.60	0.78	0.63	0.63	2.35	0.87	0.95
d, Delay for Lane Group [s/veh]	56.88	32.12	89.28	231.98	33.57	34.54	49.17	32.66	32.78	645.09	32.37	44.94
Lane Group LOS	E	C	F	F	C	C	D	C	C	F	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.67	4.84	15.05	7.45	6.09	5.42	2.69	5.22	5.01	95.93	14.60	17.48
50th-Percentile Queue Length [ft/ln]	41.63	120.96	376.37	186.23	152.34	135.59	67.21	130.38	125.22	2398.32	365.02	436.97
95th-Percentile Queue Length [veh/ln]	3.00	8.45	21.96	12.98	10.14	9.24	4.84	8.96	8.68	151.60	20.87	24.34
95th-Percentile Queue Length [ft/ln]	74.93	211.14	549.10	324.50	253.55	231.07	120.98	224.01	216.98	3789.98	521.68	608.38

Movement, Approach, & Intersection Results

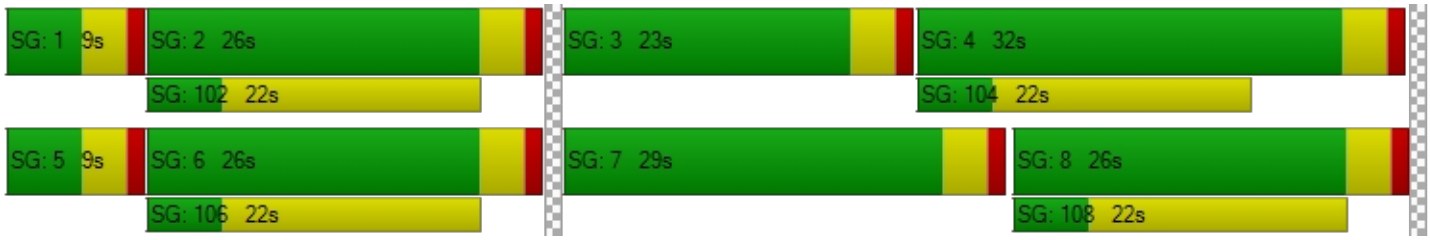
d_M, Delay for Movement [s/veh]	56.88	32.12	89.28	231.98	33.64	34.54	49.17	32.71	32.78	645.09	36.38	44.94
Movement LOS	E	C	F	F	C	C	D	C	C	F	D	D
d_A, Approach Delay [s/veh]	67.57			73.22			35.58			314.52		
Approach LOS	E			E			D			F		
d_I, Intersection Delay [s/veh]	200.31											
Intersection LOS	F											
Intersection V/C	1.145											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.907	2.677	2.884	3.128
Crosswalk LOS	C	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]	489	489	489	622
d_b, Bicycle Delay [s]	25.69	25.69	25.69	21.36
I_b,int, Bicycle LOS Score for Intersection	2.176	2.143	2.097	3.700
Bicycle LOS	B	B	B	D

Sequence

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



Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	3.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	208	0	0	536
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	101	0	0	251
Site-Generated Trips [veh/h]	17	0	360	57	9	29
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]	17	0	681	57	9	848
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	0	179	15	2	223
Total Analysis Volume [veh/h]	18	0	717	62	10	893
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	20	0	30	0	40	70
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	75	1	80
g / C, Green / Cycle	0.02	0.83	0.01	0.89
(v / s)_i Volume / Saturation Flow Rate	0.01	0.42	0.01	0.48
s, saturation flow rate [veh/h]	1781	1844	1781	1870
c, Capacity [veh/h]	37	1534	25	1665
d1, Uniform Delay [s]	43.59	2.20	44.01	1.04
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.60	1.20	10.44	1.24
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	0.49	0.51	0.41	0.54
d, Delay for Lane Group [s/veh]	53.19	3.40	54.45	2.28
Lane Group LOS	D	A	D	A
Critical Lane Group	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.49	2.25	0.29	0.57
50th-Percentile Queue Length [ft/ln]	12.28	56.19	7.26	14.37
95th-Percentile Queue Length [veh/ln]	0.88	4.05	0.52	1.03
95th-Percentile Queue Length [ft/ln]	22.11	101.15	13.07	25.87

Movement, Approach, & Intersection Results

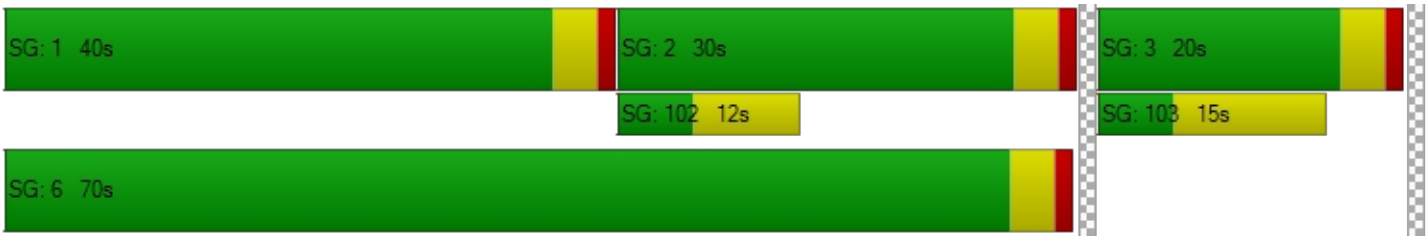
d_M, Delay for Movement [s/veh]	53.19	53.19	3.40	3.40	54.45	2.28
Movement LOS	D	D	A	A	D	A
d_A, Approach Delay [s/veh]	53.19		3.40		2.86	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	3.64					
Intersection LOS	A					
Intersection V/C	0.488					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.760	2.540	2.527
Crosswalk LOS	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	356	578	1467
d_b, Bicycle Delay [s]	30.42	22.76	3.20
I_b,int, Bicycle LOS Score for Intersection	1.589	2.845	3.050
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	4.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	208	0	0	536
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	101	0	0	251
Site-Generated Trips [veh/h]	29	18	5	355	69	9
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]	29	18	326	355	69	828
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	5	86	96	19	218
Total Analysis Volume [veh/h]	32	20	343	386	75	872
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	26	0	55	0	9	64
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	4	4	70	70	78	78
g / C, Green / Cycle	0.04	0.04	0.78	0.78	0.87	0.87
(v / s)_i Volume / Saturation Flow Rate	0.02	0.01	0.10	0.24	0.09	0.47
s, saturation flow rate [veh/h]	1781	1589	3560	1589	810	1870
c, Capacity [veh/h]	75	67	2768	1236	801	1625
d1, Uniform Delay [s]	42.05	41.82	2.46	2.94	0.85	1.44
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	3.83	2.47	0.09	0.66	0.05	1.27
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	0.43	0.30	0.12	0.31	0.09	0.54
d, Delay for Lane Group [s/veh]	45.88	44.30	2.56	3.60	0.90	2.72
Lane Group LOS	D	D	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.77	0.47	0.32	1.00	0.04	1.18
50th-Percentile Queue Length [ft/ln]	19.17	11.82	8.09	25.03	1.00	29.43
95th-Percentile Queue Length [veh/ln]	1.38	0.85	0.58	1.80	0.07	2.12
95th-Percentile Queue Length [ft/ln]	34.50	21.28	14.57	45.06	1.80	52.97

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.88	44.30	2.56	3.60	0.90	2.72
Movement LOS	D	D	A	A	A	A
d_A, Approach Delay [s/veh]	45.27		3.11		2.58	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	4.09					
Intersection LOS	A					
Intersection V/C	0.484					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.194	2.862	2.557
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]	489	1133	1333
d_b, Bicycle Delay [s]	25.69	8.45	5.00
I_b,int, Bicycle LOS Score for Intersection	1.560	2.161	3.122
Bicycle LOS	A	B	C

Sequence

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

Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	208	0	0	536	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	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	101	0	0	251	0
Site-Generated Trips [veh/h]	0	0	6	0	0	0	0	18	5	0	77	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	6	0	0	0	0	339	5	0	896	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9500	0.9200	0.9500	0.9500	0.9500	0.9200	0.9200	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	0	0	89	1	0	236	0
Total Analysis Volume [veh/h]	0	0	7	0	0	0	0	357	5	0	943	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	9.37	0.00	0.00	11.68	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			A			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.37			11.68			0.00			0.00		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	0.05											
Intersection LOS	A											

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.130	561.6	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	NB Left	1.880	322.9	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	1.615	548.9	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.329	36.2	E
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.010	39.7	E
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.911	27.2	D
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.633	31.9	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.013	12.3	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.006	12.2	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.259	9.1	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	NB Thru	0.832	56.2	E
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.600	116.7	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.150	1,008.0	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.993	551.3	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.178	104.8	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.840	384.9	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.510	5.8	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.384	7.8	A
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.025	11.5	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	561.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.130

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	288	4	542	0	393	125	24	270	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	202	0	481	0	376	373	125	481	0
Site-Generated Trips [veh/h]	0	0	0	40	0	0	0	3	0	64	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
Total Hourly Volume [veh/h]	0	0	0	547	4	1056	0	796	506	214	775	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	144	1	278	0	209	133	56	204	0
Total Analysis Volume [veh/h]	0	0	0	576	4	1112	0	838	533	225	816	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1692	1371	1041
Degree of Utilization, x		3.13	1.70	1.37

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		148.20	76.97	43.84
95th-Percentile Queue Length [ft]		3705.07	1924.32	1096.00
Approach Delay [s/veh]	0.00	977.71	330.89	188.93
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	561.55			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	322.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.880

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	181	4	22	0	0	0	304	378	0	0	119	255
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	481	0	202	0	0	0	373	202	0	0	125	60
Site-Generated Trips [veh/h]	0	0	27	0	0	0	0	43	0	0	72	101
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]	673	4	252	0	0	0	695	646	0	0	323	431
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	177	1	66	0	0	0	183	170	0	0	85	113
Total Analysis Volume [veh/h]	708	4	265	0	0	0	732	680	0	0	340	454
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	977		1412	829
Degree of Utilization, x	1.88		1.88	0.96

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	62.96		88.59	15.20
95th-Percentile Queue Length [ft]	1573.97		2214.70	380.10
Approach Delay [s/veh]	419.88	0.00	413.73	42.13
Approach LOS	F	A	F	E
Intersection Delay [s/veh]	322.92			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	548.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.615

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	74	49	41	382	307	62
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	66	113	290	185	0
Site-Generated Trips [veh/h]	0	0	0	70	173	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]	78	118	156	765	683	66
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	31	41	201	180	17
Total Analysis Volume [veh/h]	82	124	164	805	719	69
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	1.62	0.30	0.20	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	548.91	486.73	10.32	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	16.88	16.88	0.72	0.72	0.00	0.00
95th-Percentile Queue Length [ft/ln]	422.08	422.08	18.03	18.03	0.00	0.00
d_A, Approach Delay [s/veh]	511.48		1.75		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	54.54					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

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):	0.329

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	39	1	416	38	0	312
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	9	0	212	15	0	156
Site-Generated Trips [veh/h]	3	0	71	8	0	29
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]	53	1	724	63	0	516
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	191	17	0	136
Total Analysis Volume [veh/h]	56	1	762	66	0	543
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	0.33	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	36.15	24.24	0.00	0.00	9.43	0.00
Movement LOS	E	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.36	1.36	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	33.94	33.94	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	35.94		0.00		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	1.43					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	39.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.010

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	18	3	1	2	4	31	61	341	15	3	261	2
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	216	0	0	163	0
Site-Generated Trips [veh/h]	6	0	0	0	0	0	0	55	16	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]	25	3	1	2	4	33	65	632	32	3	463	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	1	0	1	1	9	17	166	8	1	122	1
Total Analysis Volume [veh/h]	26	3	1	2	4	35	68	665	34	3	487	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	522	579	767	722
Degree of Utilization, x	0.06	0.07	1.01	0.68

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.18	0.23	17.45	5.39
95th-Percentile Queue Length [ft]	4.56	5.70	436.20	134.79
Approach Delay [s/veh]	10.32	9.69	56.50	17.92
Approach LOS	B	A	F	C
Intersection Delay [s/veh]	39.75			
Intersection LOS	E			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	27.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.911

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	33	19	6	12	17	18	21	303	25	10	217	8
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	35	0	0	0	0	0	0	181	35	0	128	0
Site-Generated Trips [veh/h]	10	0	0	0	0	0	0	33	22	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]	80	20	6	13	18	19	22	535	84	11	371	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	5	2	3	5	5	6	141	22	3	98	2
Total Analysis Volume [veh/h]	84	21	6	14	19	20	23	563	88	12	391	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	529	534	643	739	613	699
Degree of Utilization, x	0.21	0.10	0.91	0.12	0.66	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.78	0.33	11.68	0.40	4.86	0.03
95th-Percentile Queue Length [ft]	19.62	8.21	292.11	10.09	121.53	0.87
Approach Delay [s/veh]	11.60	10.48	36.08		18.92	
Approach LOS	B	B	E		C	
Intersection Delay [s/veh]	27.17					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.633

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	132	254	26	16	228	54	60	87	174	15	59	10
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	128	86	0	0	147	0	0	0	181	0	0	0
Site-Generated Trips [veh/h]	7	0	0	0	0	3	8	8	17	0	3	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]	275	355	28	17	389	60	72	100	382	16	66	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	72	93	7	4	102	16	19	26	101	4	17	3
Total Analysis Volume [veh/h]	289	374	29	18	409	63	76	105	402	17	69	12
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	21	35	0	9	23	0	22	37	0	9	24	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	46	46	2	31	31	5	25	25	2	22
g / C, Green / Cycle	0.18	0.51	0.51	0.02	0.35	0.35	0.06	0.28	0.28	0.02	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.02	0.01	0.22	0.04	0.04	0.06	0.25	0.01	0.04
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1852
c, Capacity [veh/h]	324	962	818	37	661	562	103	523	445	36	442
d1, Uniform Delay [s]	36.09	13.66	11.17	43.59	24.38	19.91	41.79	25.01	31.45	43.65	27.29
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.18	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.45	1.19	0.08	9.26	4.31	0.40	9.93	0.19	10.73	9.42	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	0.39	0.04	0.48	0.62	0.11	0.74	0.20	0.90	0.47	0.18
d, Delay for Lane Group [s/veh]	44.55	14.84	11.25	52.85	28.69	20.31	51.72	25.19	42.18	53.07	27.49
Lane Group LOS	D	B	B	D	C	C	D	C	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.52	4.29	0.27	0.48	7.66	0.93	1.89	1.67	9.24	0.46	1.35
50th-Percentile Queue Length [ft/ln]	162.88	107.27	6.76	12.12	191.53	23.18	47.28	41.74	230.88	11.43	33.82
95th-Percentile Queue Length [veh/ln]	10.70	7.69	0.49	0.87	12.20	1.67	3.40	3.01	14.22	0.82	2.44
95th-Percentile Queue Length [ft/ln]	267.54	192.19	12.17	21.82	305.01	41.72	85.10	75.13	355.47	20.57	60.88

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.55	14.84	11.25	52.85	28.69	20.31	51.72	25.19	42.18	53.07	27.49	27.49
Movement LOS	D	B	B	D	C	C	D	C	D	D	C	C
d_A, Approach Delay [s/veh]	27.10			28.50			40.37			31.92		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	31.87											
Intersection LOS	C											
Intersection V/C	0.633											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.750	2.403	2.459	2.050
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]	689	422	733	444
d_b, Bicycle Delay [s]	19.34	28.01	18.05	27.22
I_b,int, Bicycle LOS Score for Intersection	2.701	2.368	2.522	1.721
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	3	2	5	18	5	18	24	95	1	3	108	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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	8	0	0	0	0	0	0	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
Total Hourly Volume [veh/h]	3	2	5	27	5	19	25	101	1	3	114	25
Peak Hour Factor	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430
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]	1	1	2	9	2	6	8	34	0	1	38	8
Total Analysis Volume [veh/h]	4	3	7	36	7	26	34	136	1	4	153	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.06	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.17	11.93	8.75	11.59	12.27	9.37	7.64	0.00	0.00	7.47	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.33	0.33	0.33	0.07	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.49	1.49	1.49	8.33	8.33	8.33	1.87	0.00	0.00	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	10.12			10.82			1.52			0.16		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.65											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	1	9	13	2	7	4	113	2	5	125	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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
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	16	0	0	0	8	0	0	3	6
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	10	30	2	7	4	128	2	5	136	26
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
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	3	10	1	2	1	42	1	2	45	9
Total Analysis Volume [veh/h]	1	1	13	40	3	9	5	170	3	7	181	35
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.07	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.79	11.88	8.82	11.36	12.15	9.35	7.65	0.00	0.00	7.55	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.26	0.26	0.26	0.01	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	1.30	6.54	6.54	6.54	0.28	0.00	0.00	0.37	0.00	0.00
d_A, Approach Delay [s/veh]	9.15			11.06			0.21			0.24		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	1.72											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.259

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	63	27	67	72	71	129
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	13	0	16	30	0	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]	80	29	87	106	75	143
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	21	8	23	28	20	38
Total Analysis Volume [veh/h]	84	31	92	112	79	151
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	598	747	787	653	718
Degree of Utilization, x	0.14	0.04	0.26	0.12	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.49	0.13	1.04	0.41	0.79
95th-Percentile Queue Length [ft]	12.17	3.24	25.89	10.26	19.74
Approach Delay [s/veh]	9.17		9.17	9.01	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	9.11				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	56.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.832

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	50	280	74	113	290	13	27	71	93	60	43	106
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	214	0	181	328	0	0	0	0	0	0	309
Site-Generated Trips [veh/h]	3	7	0	0	17	0	0	8	8	0	3	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]	56	518	78	301	652	14	29	83	107	64	49	421
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	136	21	79	172	4	8	22	28	17	13	111
Total Analysis Volume [veh/h]	59	545	82	317	686	15	31	87	113	67	52	443
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	12	33	0	20	41	0	9	23	0	14	28	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	29	16	41	3	25	25	4	26
g / C, Green / Cycle	0.04	0.32	0.18	0.46	0.03	0.27	0.27	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.03	0.34	0.18	0.37	0.02	0.05	0.07	0.04	0.30
s, saturation flow rate [veh/h]	1810	1857	1810	1893	1810	1900	1615	1810	1641
c, Capacity [veh/h]	78	601	322	867	55	517	440	88	477
d1, Uniform Delay [s]	42.58	30.44	36.88	20.98	43.06	24.97	25.62	42.31	31.92
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.38
I, 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]	13.62	48.47	20.10	8.01	8.96	0.15	0.31	12.77	46.16
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	0.75	1.04	0.99	0.81	0.57	0.17	0.26	0.76	1.04
d, Delay for Lane Group [s/veh]	56.20	78.91	56.99	28.99	52.02	25.12	25.93	55.07	78.08
Lane Group LOS	E	F	E	C	D	C	C	E	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.55	20.16	8.24	12.80	0.80	1.37	1.84	1.73	15.78
50th-Percentile Queue Length [ft/ln]	38.78	504.11	205.97	319.94	19.88	34.36	45.99	43.36	394.57
95th-Percentile Queue Length [veh/ln]	2.79	28.31	12.95	18.66	1.43	2.47	3.31	3.12	22.82
95th-Percentile Queue Length [ft/ln]	69.81	707.65	323.65	466.62	35.79	61.85	82.79	78.05	570.40

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.20	78.91	78.91	56.99	28.99	28.99	52.02	25.12	25.93	55.07	78.08	78.08
Movement LOS	E	E	E	E	C	C	D	C	C	E	E	E
d_A, Approach Delay [s/veh]	76.95			37.70			29.13			75.34		
Approach LOS	E			D			C			E		
d_I, Intersection Delay [s/veh]	56.16											
Intersection LOS	E											
Intersection V/C	0.832											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.637	3.045	2.249	2.473
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]	644	822	422	533
d_b, Bicycle Delay [s]	20.67	15.61	28.01	24.20
I_b,int, Bicycle LOS Score for Intersection	2.692	3.239	1.941	2.487
Bicycle LOS	B	C	A	B

Sequence

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

Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	116.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.600

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	200	42	50	311	255	245
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	357	454	0
Site-Generated Trips [veh/h]	0	0	0	3	8	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]	212	45	53	690	732	260
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	12	14	182	193	68
Total Analysis Volume [veh/h]	223	47	56	726	771	274
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	426	726	544	544	594
Degree of Utilization, x	0.59	0.13	1.60	0.64	0.64	0.59

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	3.73	0.45	40.72	4.51	4.51	3.79
95th-Percentile Queue Length [ft]	93.18	11.24	1018.04	112.63	112.63	94.73
Approach Delay [s/veh]	21.58	279.79		19.22		
Approach LOS	C	F		C		
Intersection Delay [s/veh]	116.69					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,008.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.150

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	520	8	142	0	265	223	158	377	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	1.0600	1.0600	1.0600	1.0000	1.0600	1.0600	1.0600	1.0600	1.0000
In-Process Volume [veh/h]	0	0	0	853	0	324	0	328	122	579	436	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	22	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	0	1404	8	475	0	612	358	768	844	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	369	2	125	0	161	94	202	222	0
Total Analysis Volume [veh/h]	0	0	0	1478	8	500	0	644	377	808	888	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	24	0	21	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.13	0.57	0.45	0.47
s, saturation flow rate [veh/h]		1757	1784	1810	1900
c, Capacity [veh/h]		354	594	601	1348
d1, Uniform Delay [s]		35.94	30.01	30.05	7.12
k, delay calibration		0.50	0.50	0.50	0.48
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2081.85	330.41	165.87	2.45
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		5.61	1.72	1.34	0.66
d, Delay for Lane Group [s/veh]		2117.78	360.42	195.93	9.57
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		211.50	66.00	39.50	7.04
50th-Percentile Queue Length [ft/ln]		5287.40	1650.02	987.44	176.10
95th-Percentile Queue Length [veh/ln]		319.45	102.98	59.04	11.40
95th-Percentile Queue Length [ft/ln]		7986.31	2574.48	1476.08	284.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2117.78	2117.78	2117.78	0.00	360.42	360.42	195.93	9.57	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			2117.78			360.42			98.35		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1008.02											
Intersection LOS	F											
Intersection V/C	2.150											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	911	444	911
d_b, Bicycle Delay [s]	45.00	13.34	27.22	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.837	3.244	4.358
Bicycle LOS	D	E	C	E

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	551.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.993

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	241	7	246	0	0	0	116	668	0	0	294	333
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	2.00	2.00	0.00	0.00
Growth Factor	1.0600	1.0600	1.0600	1.0000	1.0000	1.0000	1.0600	1.0600	1.0000	1.0000	1.0600	1.0600
In-Process Volume [veh/h]	324	0	853	0	0	0	213	950	0	0	691	590
Site-Generated Trips [veh/h]	0	0	10	0	0	0	0	3	0	0	30	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]	579	7	1124	0	0	0	336	1661	0	0	1033	943
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	152	2	296	0	0	0	88	437	0	0	272	248
Total Analysis Volume [veh/h]	609	7	1183	0	0	0	354	1748	0	0	1087	993
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.07		0.20	0.92	0.57	0.61
s, saturation flow rate [veh/h]	1677		1810	1900	1900	1615
c, Capacity [veh/h]	529		395	1132	633	538
d1, Uniform Delay [s]	30.81		34.20	18.19	30.00	30.00
k, delay calibration	0.50		0.15	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1086.14		9.66	249.21	329.17	387.40
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	3.40		0.90	1.54	1.72	1.84
d, Delay for Lane Group [s/veh]	1116.95		43.86	267.40	359.17	417.40
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	169.27		8.38	98.54	70.99	69.05
50th-Percentile Queue Length [ft/ln]	4231.85		209.59	2463.48	1774.70	1726.13
95th-Percentile Queue Length [veh/ln]	268.04		13.13	152.05	110.22	109.14
95th-Percentile Queue Length [ft/ln]	6701.01		328.30	3801.21	2755.52	2728.61

Movement, Approach, & Intersection Results

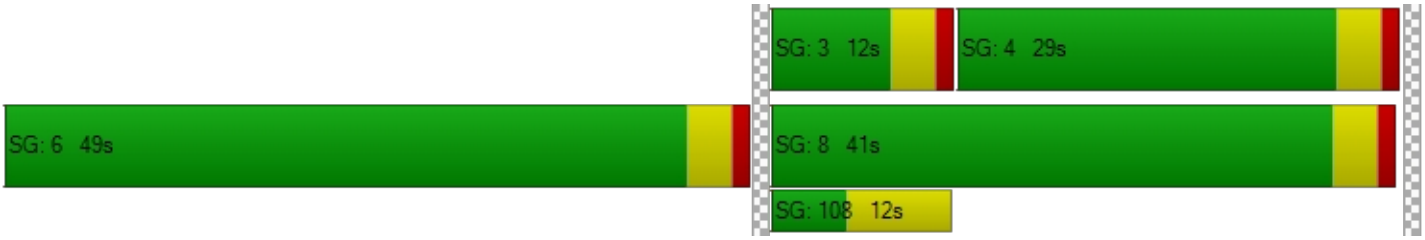
d_M, Delay for Movement [s/veh]	1116.95	1116.95	1116.95	0.00	0.00	0.00	43.86	267.40	0.00	0.00	359.17	417.40
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1116.95			0.00			229.75			386.97		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	551.28											
Intersection LOS	F											
Intersection V/C	1.993											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.617	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.528	4.132	5.028	4.992
Bicycle LOS	E	D	F	E

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	104.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.178

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	100	141	193	662	457	133
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	1214	712	0
Site-Generated Trips [veh/h]	0	30	13	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]	106	179	218	1916	1196	141
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	47	57	504	315	37
Total Analysis Volume [veh/h]	112	188	229	2017	1259	148
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	34	67	33	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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	14	69	52	52
g / C, Green / Cycle	0.14	0.14	0.15	0.77	0.58	0.58
(v / s)_i Volume / Saturation Flow Rate	0.06	0.12	0.13	1.06	0.35	0.09
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	255	227	273	1464	2080	929
d1, Uniform Delay [s]	35.42	37.60	37.14	10.33	12.47	8.95
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.19	7.46	6.75	174.49	1.32	0.37
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	0.44	0.83	0.84	1.38	0.61	0.16
d, Delay for Lane Group [s/veh]	36.61	45.06	43.89	184.83	13.79	9.32
Lane Group LOS	D	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.28	4.38	5.15	84.77	7.18	1.24
50th-Percentile Queue Length [ft/ln]	56.96	109.53	128.67	2119.23	179.41	31.04
95th-Percentile Queue Length [veh/ln]	4.10	7.81	8.87	127.75	11.57	2.23
95th-Percentile Queue Length [ft/ln]	102.53	195.35	221.68	3193.73	289.24	55.87

Movement, Approach, & Intersection Results

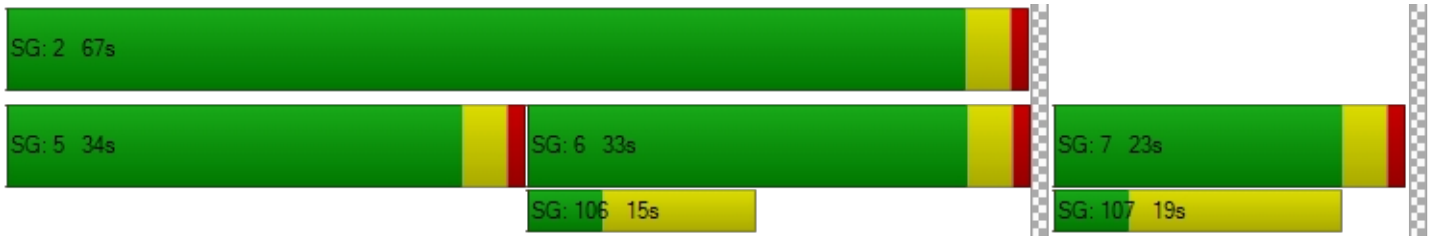
d_M, Delay for Movement [s/veh]	36.61	45.06	43.89	184.83	13.79	9.32
Movement LOS	D	D	D	F	B	A
d_A, Approach Delay [s/veh]	41.91		170.46		13.32	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	104.77					
Intersection LOS	F					
Intersection V/C	1.178					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.198	3.483	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	644
d_b, Bicycle Delay [s]	28.01	4.05	20.67
I_b,int, Bicycle LOS Score for Intersection	1.560	5.266	2.720
Bicycle LOS	A	F	B

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	384.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.840

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	85	338	59	89	229	171	227	391	77	93	382	85
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	51	1177	336	30	22	37	633	0	690	418	204
Site-Generated Trips [veh/h]	0	7	0	8	17	0	0	0	0	0	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]	90	416	1240	438	290	203	278	1047	82	789	823	297
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	109	326	115	76	53	73	276	22	208	217	78
Total Analysis Volume [veh/h]	95	438	1305	461	305	214	293	1102	86	831	866	313
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	13	31	0	13	31	0	14	26	0	20	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	27	27	9	30	30	10	22	22	16	28	28
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.33	0.33	0.11	0.24	0.24	0.18	0.31	0.31
(v / s)_i Volume / Saturation Flow Rate	0.05	0.12	0.81	0.25	0.15	0.15	0.16	0.32	0.32	0.46	0.31	0.34
s, saturation flow rate [veh/h]	1810	3618	1615	1810	1900	1642	1810	1900	1852	1810	1900	1737
c, Capacity [veh/h]	125	1085	485	181	629	544	201	464	453	322	591	540
d1, Uniform Delay [s]	41.16	25.09	31.50	40.50	23.60	23.60	40.00	34.00	34.00	37.00	30.96	31.00
k, delay calibration	0.11	0.50	0.50	0.28	0.50	0.50	0.11	0.41	0.42	0.50	0.40	0.46
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.13	1.12	767.94	705.42	2.25	2.60	211.77	143.77	147.97	721.46	32.46	64.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.40	2.69	2.55	0.44	0.44	1.46	1.29	1.30	2.58	1.00	1.09
d, Delay for Lane Group [s/veh]	50.29	26.21	799.44	745.92	25.85	26.20	251.77	177.77	181.97	758.46	63.42	95.39
Lane Group LOS	D	C	F	F	C	C	F	F	F	F	E	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.32	3.70	113.15	39.31	4.75	4.16	16.05	27.97	27.79	71.29	17.39	20.74
50th-Percentile Queue Length [ft/ln]	57.95	92.43	2828.85	982.75	118.83	104.03	401.18	699.19	694.84	1782.36	434.77	518.46
95th-Percentile Queue Length [veh/ln]	4.17	6.66	180.25	61.45	8.33	7.49	25.76	41.88	41.76	111.23	24.23	29.79
95th-Percentile Queue Length [ft/ln]	104.30	166.38	4506.17	1536.33	208.21	187.25	644.10	1046.90	1043.96	2780.87	605.75	744.71

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.29	26.21	799.44	745.92	25.88	26.20	251.77	179.69	181.97	758.46	73.63	95.39
Movement LOS	D	C	F	F	C	C	F	F	F	F	E	F
d_A, Approach Delay [s/veh]	576.45			364.66			194.08			360.15		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	384.88											
Intersection LOS	F											
Intersection V/C	1.840											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.117	2.828	3.078	3.411
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	600	489	622
d_b, Bicycle Delay [s]	22.05	22.05	25.69	21.36
I_b,int, Bicycle LOS Score for Intersection	3.076	2.368	2.781	3.218
Bicycle LOS	C	B	C	C

Sequence

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

Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	5.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	456	0	0	369
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	290	0	0	185
Site-Generated Trips [veh/h]	66	0	44	26	4	107
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]	66	0	817	26	4	683
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	215	7	1	180
Total Analysis Volume [veh/h]	69	0	860	27	4	719
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	19	0	62	0	9	71
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	73	0	77
g / C, Green / Cycle	0.05	0.81	0.01	0.86
(v / s)_i Volume / Saturation Flow Rate	0.04	0.47	0.00	0.38
s, saturation flow rate [veh/h]	1810	1890	1810	1900
c, Capacity [veh/h]	91	1532	10	1635
d1, Uniform Delay [s]	42.17	3.05	44.59	1.41
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.81	1.60	22.30	0.86
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	0.75	0.58	0.39	0.44
d, Delay for Lane Group [s/veh]	53.99	4.65	66.89	2.27
Lane Group LOS	D	A	E	A
Critical Lane Group	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.80	3.76	0.15	1.08
50th-Percentile Queue Length [ft/ln]	44.91	93.96	3.79	26.90
95th-Percentile Queue Length [veh/ln]	3.23	6.76	0.27	1.94
95th-Percentile Queue Length [ft/ln]	80.84	169.12	6.83	48.42

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.99	53.99	4.65	4.65	66.89	2.27
Movement LOS	D	D	A	A	E	A
d_A, Approach Delay [s/veh]	53.99		4.65		2.63	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	5.81					
Intersection LOS	A					
Intersection V/C	0.510					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.765	2.533	2.518
Crosswalk LOS	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	1289	1489
d_b, Bicycle Delay [s]	31.25	5.69	2.94
I_b,int, Bicycle LOS Score for Intersection	1.673	3.023	2.753
Bicycle LOS	A	C	C

Sequence

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

Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.384

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	456	0	0	369
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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	290	0	0	185
Site-Generated Trips [veh/h]	107	66	2	42	28	4
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]	107	66	775	42	28	580
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	17	204	11	7	153
Total Analysis Volume [veh/h]	113	69	816	44	29	611
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	26	0	55	0	9	64
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	8	8	68	68	74	74
g / C, Green / Cycle	0.09	0.09	0.75	0.75	0.82	0.82
(v / s)_i Volume / Saturation Flow Rate	0.06	0.04	0.23	0.03	0.04	0.32
s, saturation flow rate [veh/h]	1810	1615	3618	1615	725	1900
c, Capacity [veh/h]	158	141	2713	1211	661	1565
d1, Uniform Delay [s]	39.96	39.13	3.63	2.89	1.77	2.07
k, delay calibration	0.11	0.11	0.50	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.83	2.59	0.29	0.06	0.03	0.74
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	0.71	0.49	0.30	0.04	0.04	0.39
d, Delay for Lane Group [s/veh]	45.79	41.72	3.92	2.95	1.79	2.80
Lane Group LOS	D	D	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.66	1.54	1.27	0.12	0.05	1.68
50th-Percentile Queue Length [ft/ln]	66.53	38.49	31.68	2.96	1.23	41.88
95th-Percentile Queue Length [veh/ln]	4.79	2.77	2.28	0.21	0.09	3.02
95th-Percentile Queue Length [ft/ln]	119.75	69.28	57.03	5.33	2.22	75.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.79	41.72	3.92	2.95	1.79	2.80
Movement LOS	D	D	A	A	A	A
d_A, Approach Delay [s/veh]	44.25		3.87		2.76	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	7.81					
Intersection LOS	A					
Intersection V/C	0.384					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.056	2.840	2.599
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]	489	1133	1333
d_b, Bicycle Delay [s]	25.69	8.45	5.00
I_b,int, Bicycle LOS Score for Intersection	1.560	2.269	2.616
Bicycle LOS	A	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	11.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	456	0	0	369	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	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600	1.0600
In-Process Volume [veh/h]	0	0	0	0	0	0	0	290	0	0	185	0
Site-Generated Trips [veh/h]	0	0	13	0	0	0	0	66	2	0	32	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	13	0	0	0	0	839	2	0	608	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	3	0	0	0	0	221	1	0	160	0
Total Analysis Volume [veh/h]	0	0	14	0	0	0	0	883	2	0	640	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.49	0.00	0.00	10.28	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			B			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	1.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.49			10.28			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.10											
Intersection LOS	B											

Beaumont Summit Station

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Scenario 7 OY 2027 CUM AM
2/4/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.029	319.9	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	1.867	239.0	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.310	53.1	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.382	28.0	D
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.762	17.0	C
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.773	17.4	C
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.435	26.2	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.002	11.3	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.011	10.1	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.244	8.5	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.698	34.7	C
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.242	69.5	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.602	379.3	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.583	409.9	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.799	25.6	C
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.153	200.4	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	319.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.029

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	137	0	315	0	696	211	24	149	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	68	0	150	0	300	299	176	150	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	221	0	503	0	1080	535	203	317	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	58	0	132	0	284	141	53	83	0
Total Analysis Volume [veh/h]	0	0	0	233	0	529	0	1137	563	214	334	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		762	1700	756
Degree of Utilization, x		1.33	2.03	0.72

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		32.62	113.40	6.35
95th-Percentile Queue Length [ft]		815.39	2835.04	158.82
Approach Delay [s/veh]	0.00	181.61	478.77	19.25
Approach LOS	A	F	F	C
Intersection Delay [s/veh]	319.88			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	239.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.867

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	91	1	22	0	0	0	692	156	0	0	55	442
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	150	0	68	0	0	0	299	68	0	0	176	92
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]	252	1	93	0	0	0	1074	243	0	0	238	587
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	0	24	0	0	0	283	64	0	0	63	154
Total Analysis Volume [veh/h]	265	1	98	0	0	0	1131	256	0	0	251	618
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	517		1387	869
Degree of Utilization, x	0.70		1.87	1.03

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	5.54		86.54	19.60
95th-Percentile Queue Length [ft]	138.61		2163.54	489.92
Approach Delay [s/veh]	24.91	0.00	408.34	58.42
Approach LOS	C	A	F	F
Intersection Delay [s/veh]	239.01			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	53.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.310

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	42	25	30	166	478	58
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	101	34	101	251	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]	47	129	68	287	786	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	34	18	76	207	17
Total Analysis Volume [veh/h]	49	136	72	302	827	68
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	0.31	0.38	0.09	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	53.14	40.38	10.18	0.00	0.00	0.00
Movement LOS	F	E	B	A	A	A
95th-Percentile Queue Length [veh/ln]	4.62	4.62	0.31	0.31	0.00	0.00
95th-Percentile Queue Length [ft/ln]	115.61	115.61	7.75	7.75	0.00	0.00
d_A, Approach Delay [s/veh]	43.76		1.96		0.00	
Approach LOS	E		A		A	
d_I, Intersection Delay [s/veh]	6.07					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.382

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	70	0	176	13	0	470
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	13	0	97	4	0	176
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]	91	0	294	19	0	702
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	24	0	77	5	0	185
Total Analysis Volume [veh/h]	96	0	309	20	0	739
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	0.38	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	27.95	18.57	0.00	0.00	7.90	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.71	1.71	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	42.68	42.68	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	27.95		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	2.31					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	17.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.762

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	50	1	1	0	3	96	24	139	12	1	315	1
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	104	0	0	178	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]	56	1	1	0	3	108	27	260	13	1	531	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	0	0	0	1	28	7	68	3	0	140	0
Total Analysis Volume [veh/h]	59	1	1	0	3	114	28	274	14	1	559	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	553	642	695	737
Degree of Utilization, x	0.11	0.18	0.45	0.76

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.37	0.66	2.38	7.22
95th-Percentile Queue Length [ft]	9.25	16.55	59.53	180.51
Approach Delay [s/veh]	10.32	9.85	12.42	21.74
Approach LOS	B	A	B	C
Intersection Delay [s/veh]	16.97			
Intersection LOS	C			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	17.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.773

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	17	18	4	5	24	34	16	94	41	3	308	1
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	24	0	0	0	0	0	0	78	26	0	154	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]	43	20	4	6	27	38	18	183	72	3	499	1
Peak Hour Factor	0.9400	0.9400	0.9400	0.9500	0.9400	0.9500	0.9500	0.9500	0.9400	0.9400	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	5	1	2	7	10	5	48	19	1	131	0
Total Analysis Volume [veh/h]	46	21	4	6	29	40	19	193	77	3	525	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	580	620	649	750	683	789
Degree of Utilization, x	0.12	0.12	0.33	0.10	0.77	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.42	0.41	1.42	0.34	7.40	0.00
95th-Percentile Queue Length [ft]	10.38	10.25	35.50	8.54	185.01	0.10
Approach Delay [s/veh]	10.06	9.60	10.16		23.54	
Approach LOS	B	A	B		C	
Intersection Delay [s/veh]	17.45					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	26.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	111	198	8	8	224	50	41	50	74	8	81	7
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	154	131	0	0	44	0	0	0	78	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]	278	353	9	9	295	56	46	56	161	9	91	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	73	93	2	2	78	15	12	15	42	2	24	2
Total Analysis Volume [veh/h]	293	372	9	9	311	59	48	59	169	9	96	8
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	39	0	19	23	0	9	23	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	60	60	1	44	44	3	12	12	1	9
g / C, Green / Cycle	0.19	0.67	0.67	0.01	0.49	0.49	0.04	0.13	0.13	0.01	0.10
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.01	0.00	0.16	0.04	0.03	0.03	0.10	0.00	0.06
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1875
c, Capacity [veh/h]	337	1268	1077	22	938	797	70	249	212	21	194
d1, Uniform Delay [s]	35.57	6.20	5.01	44.11	13.80	11.98	42.70	35.06	37.94	44.19	38.27
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.93	0.59	0.01	11.13	0.95	0.18	10.94	0.48	6.76	13.40	2.28
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	0.87	0.29	0.01	0.40	0.33	0.07	0.68	0.24	0.80	0.43	0.53
d, Delay for Lane Group [s/veh]	42.51	6.79	5.03	55.24	14.75	12.16	53.64	35.55	44.70	57.59	40.55
Lane Group LOS	D	A	A	E	B	B	D	D	D	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.44	2.29	0.04	0.26	3.79	0.62	1.23	1.15	3.87	0.27	2.22
50th-Percentile Queue Length [ft/ln]	160.95	57.23	1.12	6.62	94.82	15.60	30.86	28.83	96.73	6.78	55.60
95th-Percentile Queue Length [veh/ln]	10.60	4.12	0.08	0.48	6.83	1.12	2.22	2.08	6.96	0.49	4.00
95th-Percentile Queue Length [ft/ln]	264.98	103.02	2.02	11.91	170.68	28.07	55.55	51.90	174.11	12.20	100.07

Movement, Approach, & Intersection Results

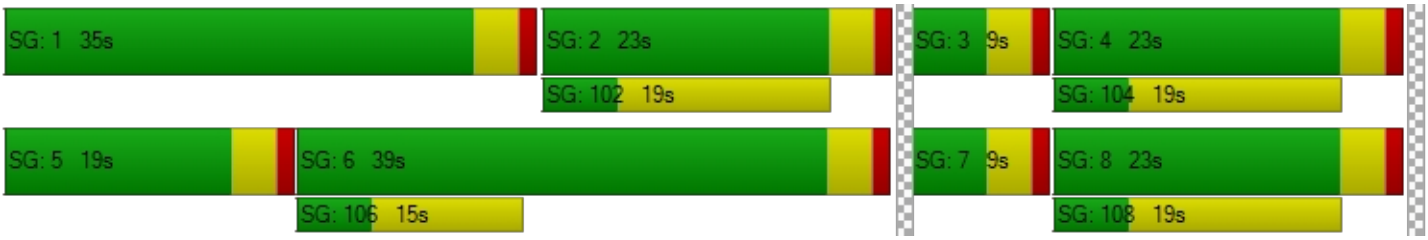
d_M, Delay for Movement [s/veh]	42.51	6.79	5.03	55.24	14.75	12.16	53.64	35.55	44.70	57.59	40.55	40.55
Movement LOS	D	A	A	E	B	B	D	D	D	E	D	D
d_A, Approach Delay [s/veh]	22.29			15.31			44.30			41.91		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	26.21											
Intersection LOS	C											
Intersection V/C	0.435											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.605	2.362	2.368	2.024
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]	778	422	422	422
d_b, Bicycle Delay [s]	16.81	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.672	2.185	2.015	1.746
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	4	1	8	1	4	66	73	0	1	54	6
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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	1	0	2	0	1	19	21	0	0	16	2
Total Analysis Volume [veh/h]	0	5	1	9	1	5	77	85	0	1	63	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.76	11.30	8.57	10.74	11.32	8.58	7.45	0.00	0.00	7.36	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.06	0.06	0.06	0.16	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.73	0.73	0.73	1.58	1.58	1.58	3.93	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.85			10.06			3.54			0.10		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.14											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	8	4	17	0	3	1	82	0	1	56	38
Peak Hour Factor	0.9500	0.9500	0.9590	0.9590	0.9500	0.9500	0.9500	0.9590	0.9500	0.9590	0.9590	0.9590
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	2	1	4	0	1	0	21	0	0	15	10
Total Analysis Volume [veh/h]	0	8	4	18	0	3	1	86	0	1	58	40
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.33	10.15	8.58	9.47	10.06	8.65	7.39	0.00	0.00	7.37	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.16	1.16	1.16	1.90	1.90	1.90	0.05	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	9.63			9.35			0.08			0.07		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.49											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.244

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	41	66	88	59	26	40
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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]	46	74	99	66	29	45
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	19	29	20	8	13
Total Analysis Volume [veh/h]	55	78	117	78	31	53
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	636	808	800	655	720
Degree of Utilization, x	0.09	0.10	0.24	0.05	0.07

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.28	0.32	0.95	0.15	0.24
95th-Percentile Queue Length [ft]	7.07	7.99	23.87	3.72	5.94
Approach Delay [s/veh]	8.15		8.94	8.24	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.54				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	34.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.698

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	69	197	24	62	234	26	3	37	46	53	69	131
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	285	0	275	122	0	0	0	0	0	0	92
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]	77	506	27	344	384	29	3	41	52	59	77	239
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	20	133	7	91	101	8	1	11	14	16	20	63
Total Analysis Volume [veh/h]	81	533	28	362	404	31	3	43	55	62	81	252
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	16	23	0	31	38	0	9	27	0	9	27	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	34	20	48	0	16	16	4	20
g / C, Green / Cycle	0.06	0.37	0.22	0.54	0.00	0.18	0.18	0.04	0.22
(v / s)_i Volume / Saturation Flow Rate	0.04	0.30	0.20	0.23	0.00	0.02	0.03	0.03	0.20
s, saturation flow rate [veh/h]	1810	1883	1810	1876	1810	1900	1615	1810	1676
c, Capacity [veh/h]	107	702	403	1007	9	346	294	80	371
d1, Uniform Delay [s]	41.71	25.21	33.97	12.57	44.64	30.80	31.17	42.55	34.03
k, delay calibration	0.11	0.50	0.16	0.50	0.11	0.11	0.11	0.11	0.15
I, 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]	10.40	9.24	10.07	1.35	21.78	0.16	0.30	14.40	10.55
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	0.76	0.80	0.90	0.43	0.34	0.12	0.19	0.77	0.90
d, Delay for Lane Group [s/veh]	52.11	34.44	44.04	13.92	66.42	30.96	31.47	56.96	44.57
Lane Group LOS	D	C	D	B	E	C	C	E	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.02	11.65	8.21	4.78	0.12	0.77	1.00	1.64	7.79
50th-Percentile Queue Length [ft/ln]	50.54	291.26	205.13	119.40	2.94	19.21	24.99	41.02	194.70
95th-Percentile Queue Length [veh/ln]	3.64	17.25	12.90	8.36	0.21	1.38	1.80	2.95	12.36
95th-Percentile Queue Length [ft/ln]	90.97	431.20	322.57	209.01	5.29	34.58	44.98	73.84	309.12

Movement, Approach, & Intersection Results

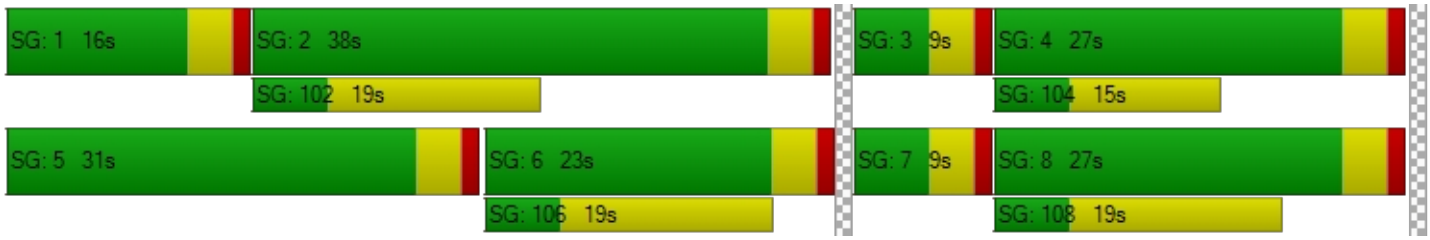
d_M, Delay for Movement [s/veh]	52.11	34.44	34.44	44.04	13.92	13.92	66.42	30.96	31.47	56.96	44.57	44.57
Movement LOS	D	C	C	D	B	B	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	36.67			27.60			32.29			46.52		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	34.72											
Intersection LOS	C											
Intersection V/C	0.698											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.511	2.800	2.228	2.402
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]	422	756	511	511
d_b, Bicycle Delay [s]	28.01	17.42	24.94	24.94
I_b,int, Bicycle LOS Score for Intersection	2.619	2.875	1.726	2.211
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	69.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.242

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	284	33	21	253	211	133
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	277	139	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]	318	37	24	560	375	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	10	6	147	99	39
Total Analysis Volume [veh/h]	335	39	25	589	395	157
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	491	444	589	512	512	561
Degree of Utilization, x	0.76	0.06	1.24	0.36	0.36	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.61	0.18	23.68	1.62	1.62	1.42
95th-Percentile Queue Length [ft]	165.19	4.46	592.01	40.39	40.39	35.56
Approach Delay [s/veh]	30.13	144.07		13.14		
Approach LOS	D	F		B		
Intersection Delay [s/veh]	69.47					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	379.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.602

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	252	7	83	0	290	305	240	236	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	258	0	97	0	293	119	619	137	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	540	8	190	0	618	461	888	401	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	142	2	50	0	163	121	234	106	0
Total Analysis Volume [veh/h]	0	0	0	568	8	200	0	651	485	935	422	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.44	0.64	0.52	0.22
s, saturation flow rate [veh/h]		1756	1767	1810	1900
c, Capacity [veh/h]		354	589	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	4.88
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		545.74	424.22	259.01	0.13
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		2.19	1.93	1.56	0.31
d, Delay for Lane Group [s/veh]		581.67	454.22	289.08	5.01
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		60.53	80.78	54.98	2.04
50th-Percentile Queue Length [ft/ln]		1513.29	2019.41	1374.43	51.10
95th-Percentile Queue Length [veh/ln]		95.15	127.57	84.50	3.68
95th-Percentile Queue Length [ft/ln]		2378.75	3189.23	2112.44	91.98

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	581.67	581.67	581.67	0.00	454.22	454.22	289.08	5.01	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			581.67			454.22			200.74		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	379.25											
Intersection LOS	F											
Intersection V/C	1.602											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.840	3.434	3.799
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	409.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.583

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	123	1	154	0	0	0	178	359	0	0	329	667
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	97	0	258	0	0	0	256	290	0	0	658	634
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]	235	1	430	0	0	0	455	692	0	0	1026	1381
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	0	113	0	0	0	120	182	0	0	270	363
Total Analysis Volume [veh/h]	247	1	453	0	0	0	479	728	0	0	1080	1454
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	23	0	0	0	0	17	67	0	0	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	22		26	60	30	30
g / C, Green / Cycle	0.25		0.29	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.42		0.26	0.38	0.57	0.90
s, saturation flow rate [veh/h]	1679		1810	1900	1900	1615
c, Capacity [veh/h]	417		515	1259	634	539
d1, Uniform Delay [s]	33.82		31.31	8.30	29.99	29.99
k, delay calibration	0.50		0.30	0.13	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	316.70		17.72	0.52	323.70	770.06
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	1.68		0.93	0.58	1.70	2.70
d, Delay for Lane Group [s/veh]	350.52		49.03	8.81	353.69	800.05
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	44.64		12.29	6.70	70.08	126.35
50th-Percentile Queue Length [ft/ln]	1116.06		307.27	167.56	1751.96	3158.71
95th-Percentile Queue Length [veh/ln]	69.75		18.04	10.95	108.70	202.21
95th-Percentile Queue Length [ft/ln]	1743.79		451.01	273.70	2717.61	5055.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	350.52	350.52	350.52	0.00	0.00	0.00	49.03	8.81	0.00	0.00	353.69	800.05
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	350.52			0.00			24.78			609.81		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	409.92											
Intersection LOS	F											
Intersection V/C	1.583											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.457	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	0	1400	1022
d_b, Bicycle Delay [s]	28.01	45.00	4.05	10.76
I_b,int, Bicycle LOS Score for Intersection	2.716	4.132	3.551	5.741
Bicycle LOS	B	D	D	F

Sequence

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

Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	25.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	119	240	139	290	672	58
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	360	1080	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]	133	269	156	685	1833	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	71	41	180	482	17
Total Analysis Volume [veh/h]	140	283	164	721	1929	68
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	18	18	9	64	51	51
g / C, Green / Cycle	0.20	0.20	0.10	0.72	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.08	0.18	0.09	0.38	0.53	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	356	318	181	1357	2062	921
d1, Uniform Delay [s]	31.47	35.21	40.08	5.91	17.83	8.69
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.71	8.52	15.26	1.49	9.53	0.16
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	0.39	0.89	0.91	0.53	0.94	0.07
d, Delay for Lane Group [s/veh]	32.18	43.73	55.35	7.41	27.36	8.84
Lane Group LOS	C	D	E	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.65	6.58	4.18	4.70	17.54	0.55
50th-Percentile Queue Length [ft/ln]	66.19	164.53	104.55	117.43	438.61	13.72
95th-Percentile Queue Length [veh/ln]	4.77	10.79	7.53	8.25	24.41	0.99
95th-Percentile Queue Length [ft/ln]	119.14	269.71	188.19	206.29	610.35	24.70

Movement, Approach, & Intersection Results

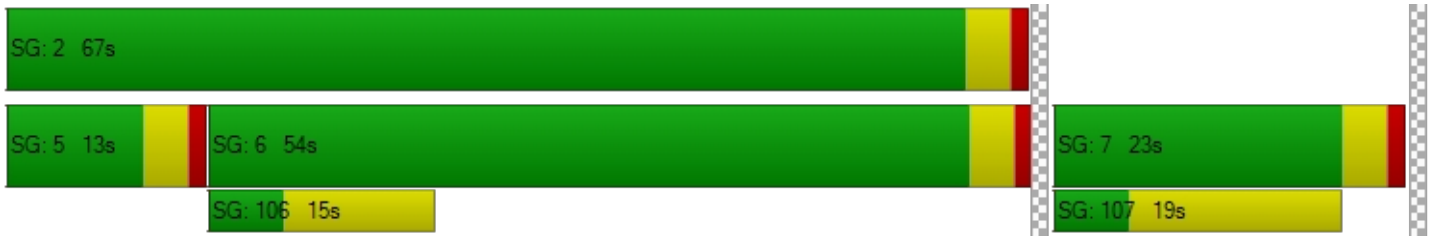
d_M, Delay for Movement [s/veh]	32.18	43.73	55.35	7.41	27.36	8.84
Movement LOS	C	D	E	A	C	A
d_A, Approach Delay [s/veh]	39.91		16.29		26.73	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	25.62					
Intersection LOS	C					
Intersection V/C	0.799					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.190	3.265	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	3.020	3.207
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	200.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.153

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	57	194	61	28	246	183	91	238	66	70	459	54
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	15	349	100	46	33	11	189	0	1047	499	292
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]	64	232	417	131	322	238	113	456	74	1125	1013	352
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	61	110	34	85	63	30	120	19	296	267	93
Total Analysis Volume [veh/h]	67	244	439	138	339	251	119	480	78	1184	1066	371
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Semi-actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	23	26	0	29	32	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	23	23	5	23	23	8	21	21	25	39	39
g / C, Green / Cycle	0.05	0.25	0.25	0.06	0.26	0.26	0.08	0.24	0.24	0.28	0.43	0.43
(v / s)_i Volume / Saturation Flow Rate	0.04	0.13	0.27	0.08	0.17	0.17	0.07	0.15	0.15	0.65	0.38	0.41
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1636	1810	1900	1809	1810	1900	1741
c, Capacity [veh/h]	87	480	408	101	495	426	152	448	427	503	816	748
d1, Uniform Delay [s]	42.37	28.82	33.62	42.50	29.51	29.56	40.40	30.90	30.93	32.50	23.54	24.92
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.36	0.42
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.58	3.80	66.07	180.94	6.17	7.29	8.39	1.50	1.60	616.15	9.88	21.94
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.51	1.08	1.37	0.64	0.64	0.78	0.64	0.64	2.36	0.88	0.96
d, Delay for Lane Group [s/veh]	55.94	32.62	99.69	223.44	35.68	36.85	48.79	32.40	32.52	648.65	33.42	46.86
Lane Group LOS	E	C	F	F	D	D	D	C	C	F	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.75	4.81	15.89	7.21	6.59	5.86	2.82	5.40	5.17	96.43	15.10	18.17
50th-Percentile Queue Length [ft/ln]	43.76	120.17	397.18	180.27	164.76	146.49	70.44	134.88	129.33	2410.77	377.44	454.29
95th-Percentile Queue Length [veh/ln]	3.15	8.40	23.37	12.60	10.80	9.83	5.07	9.20	8.90	152.39	21.47	25.16
95th-Percentile Queue Length [ft/ln]	78.77	210.06	584.34	315.02	270.02	245.74	126.80	230.11	222.58	3809.75	536.75	629.07

Movement, Approach, & Intersection Results

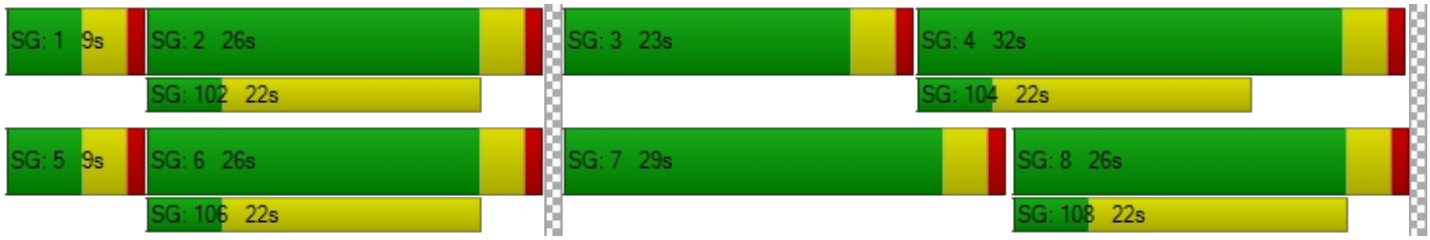
d_M, Delay for Movement [s/veh]	55.94	32.62	99.69	223.44	35.76	36.85	48.79	32.45	32.52	648.65	37.80	46.86
Movement LOS	E	C	F	F	D	D	D	C	C	F	D	D
d_A, Approach Delay [s/veh]	73.96			71.71			35.33			315.03		
Approach LOS	E			E			D			F		
d_I, Intersection Delay [s/veh]	200.44											
Intersection LOS	F											
Intersection V/C	1.153											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.913	2.681	2.904	3.138
Crosswalk LOS	C	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]	489	489	489	622
d_b, Bicycle Delay [s]	25.69	25.69	25.69	21.36
I_b,int, Bicycle LOS Score for Intersection	2.178	2.160	2.118	3.722
Bicycle LOS	B	B	B	D

Sequence

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



Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.142	566.0	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	1.816	306.7	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	1.185	310.2	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.302	32.6	D
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.943	30.6	D
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	0.885	25.2	D
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.639	31.8	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.015	12.4	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.006	12.0	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.209	8.9	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	SB Left	0.849	60.3	E
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.665	127.0	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.183	1,036.3	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	2.026	566.0	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.186	105.3	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.852	388.7	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	566.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.142

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	288	4	542	0	393	125	24	270	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	202	0	481	0	376	373	125	481	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	525	4	1088	0	816	513	152	783	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	138	1	286	0	215	135	40	206	0
Total Analysis Volume [veh/h]	0	0	0	553	4	1145	0	859	540	160	824	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1702	1399	984
Degree of Utilization, x		3.14	1.73	1.29

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		149.32	80.36	37.45
95th-Percentile Queue Length [ft]		3733.00	2008.99	936.22
Approach Delay [s/veh]	0.00	983.35	346.49	156.29
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	566.02			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	306.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.816

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	181	4	22	0	0	0	304	378	0	0	119	255
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	481	0	202	0	0	0	373	202	0	0	125	60
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]	684	4	227	0	0	0	713	625	0	0	258	346
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	180	1	60	0	0	0	188	164	0	0	68	91
Total Analysis Volume [veh/h]	720	4	239	0	0	0	751	658	0	0	272	364
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	963		1409	829
Degree of Utilization, x	1.79		1.82	0.77

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	59.39		85.31	7.53
95th-Percentile Queue Length [ft]	1484.75		2132.73	188.28
Approach Delay [s/veh]	381.97	0.00	384.69	20.09
Approach LOS	F	A	F	C
Intersection Delay [s/veh]	306.73			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	310.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.185

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	74	49	41	382	307	62
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	66	113	290	185	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]	83	121	159	718	529	69
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	32	42	189	139	18
Total Analysis Volume [veh/h]	87	127	167	756	557	73
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	1.18	0.25	0.17	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	310.16	268.21	9.53	0.00	0.00	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	13.88	13.88	0.63	0.63	0.00	0.00
95th-Percentile Queue Length [ft/ln]	346.99	346.99	15.66	15.66	0.00	0.00
d_A, Approach Delay [s/veh]	285.26		1.72		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	35.45					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	32.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.302

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	39	1	416	38	0	312
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	9	0	212	15	0	156
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]	53	1	678	58	0	505
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	0	178	15	0	133
Total Analysis Volume [veh/h]	56	1	714	61	0	532
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	0.30	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	32.57	21.80	0.00	0.00	9.24	0.00
Movement LOS	D	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.22	1.22	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	30.49	30.49	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	32.38		0.00		0.00	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	1.35					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	30.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.943

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	18	3	1	2	4	31	61	341	15	3	261	2
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	216	0	0	163	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]	20	3	1	2	4	35	68	598	17	3	455	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	0	1	1	9	18	157	4	1	120	1
Total Analysis Volume [veh/h]	21	3	1	2	4	37	72	629	18	3	479	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	521	583	762	726
Degree of Utilization, x	0.05	0.07	0.94	0.67

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.15	0.24	13.94	5.14
95th-Percentile Queue Length [ft]	3.77	5.96	348.62	128.39
Approach Delay [s/veh]	10.25	9.67	41.55	17.31
Approach LOS	B	A	E	C
Intersection Delay [s/veh]	30.63			
Intersection LOS	D			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	25.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.885

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	33	19	6	12	17	18	21	303	25	10	217	8
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	35	0	0	0	0	0	0	181	35	0	128	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]	72	21	7	13	19	20	24	520	63	11	371	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	6	2	3	5	5	6	137	17	3	98	2
Total Analysis Volume [veh/h]	76	22	7	14	20	21	25	547	66	12	391	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	534	541	646	743	621	709
Degree of Utilization, x	0.20	0.10	0.89	0.09	0.65	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.72	0.34	10.72	0.29	4.73	0.04
95th-Percentile Queue Length [ft]	18.12	8.43	268.03	7.28	118.34	0.96
Approach Delay [s/veh]	11.39	10.40	33.23		18.37	
Approach LOS	B	B	D		C	
Intersection Delay [s/veh]	25.24					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.639

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	132	254	26	16	228	54	60	87	174	15	59	10
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	128	86	0	0	147	0	0	0	181	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]	276	370	29	18	402	60	67	97	376	17	66	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	73	97	8	5	106	16	18	26	99	4	17	3
Total Analysis Volume [veh/h]	291	389	31	19	423	63	71	102	396	18	69	12
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	21	35	0	9	23	0	23	37	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	46	46	2	32	32	5	24	24	2	22
g / C, Green / Cycle	0.18	0.51	0.51	0.02	0.35	0.35	0.05	0.27	0.27	0.02	0.24
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.02	0.01	0.22	0.04	0.04	0.05	0.25	0.01	0.04
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1852
c, Capacity [veh/h]	326	966	821	39	665	565	97	516	439	37	442
d1, Uniform Delay [s]	36.05	13.68	11.09	43.54	24.48	19.80	41.97	25.22	31.62	43.59	27.25
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.17	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.48	1.25	0.09	9.12	4.61	0.40	10.24	0.19	10.43	9.26	0.20
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.89	0.40	0.04	0.49	0.64	0.11	0.73	0.20	0.90	0.48	0.18
d, Delay for Lane Group [s/veh]	44.54	14.93	11.18	52.66	29.09	20.20	52.20	25.41	42.05	52.85	27.45
Lane Group LOS	D	B	B	D	C	C	D	C	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.56	4.49	0.29	0.51	8.00	0.92	1.78	1.63	9.07	0.48	1.35
50th-Percentile Queue Length [ft/ln]	164.03	112.15	7.20	12.72	199.98	23.10	44.47	40.74	226.84	12.02	33.79
95th-Percentile Queue Length [veh/ln]	10.76	7.96	0.52	0.92	12.64	1.66	3.20	2.93	14.01	0.87	2.43
95th-Percentile Queue Length [ft/ln]	269.05	198.99	12.95	22.90	315.94	41.57	80.05	73.33	350.35	21.64	60.82

Movement, Approach, & Intersection Results

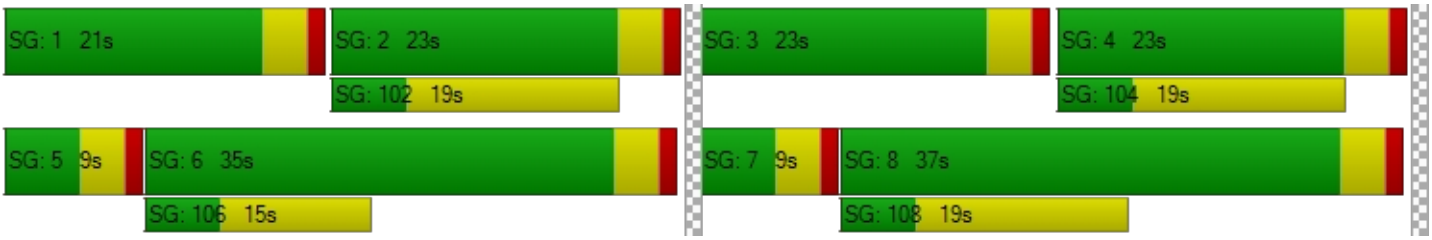
d_M, Delay for Movement [s/veh]	44.54	14.93	11.18	52.66	29.09	20.20	52.20	25.41	42.05	52.85	27.45	27.45
Movement LOS	D	B	B	D	C	C	D	C	D	D	C	C
d_A, Approach Delay [s/veh]	26.89			28.87			40.34			32.07		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	31.75											
Intersection LOS	C											
Intersection V/C	0.639											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.761	2.410	2.455	2.050
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]	689	422	733	422
d_b, Bicycle Delay [s]	19.34	28.01	18.05	28.01
I_b,int, Bicycle LOS Score for Intersection	2.733	2.393	2.498	1.723
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	3	2	5	18	5	18	24	95	1	3	108	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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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]	3	2	6	20	6	20	27	106	1	3	121	24
Peak Hour Factor	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430
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]	1	1	2	7	2	7	9	36	0	1	41	8
Total Analysis Volume [veh/h]	4	3	8	27	8	27	36	143	1	4	163	32
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.05	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.37	12.12	8.77	11.70	12.39	9.32	7.66	0.00	0.00	7.49	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.30	0.30	0.30	0.08	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.60	1.60	1.60	7.41	7.41	7.41	1.99	0.00	0.00	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	10.13			10.76			1.53			0.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.47											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	1	9	13	2	7	4	113	2	5	125	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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	10	15	2	8	4	127	2	6	140	21
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
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	3	5	1	3	1	42	1	2	46	7
Total Analysis Volume [veh/h]	1	1	13	20	3	11	5	169	3	8	186	28
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.03	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.84	11.87	8.81	11.18	11.97	9.14	7.64	0.00	0.00	7.55	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.16	0.16	0.16	0.01	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	1.30	3.95	3.95	3.95	0.28	0.00	0.00	0.43	0.00	0.00
d_A, Approach Delay [s/veh]	9.15			10.59			0.22			0.27		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	1.33											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.209

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	63	27	67	72	71	129
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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]	71	30	75	81	80	144
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	8	20	21	21	38
Total Analysis Volume [veh/h]	75	32	79	85	84	152
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	605	759	788	661	728
Degree of Utilization, x	0.12	0.04	0.21	0.13	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.42	0.13	0.78	0.43	0.78
95th-Percentile Queue Length [ft]	10.53	3.30	19.50	10.85	19.58
Approach Delay [s/veh]	8.94		8.76	8.94	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.88				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	60.3
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.849

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	50	280	74	113	290	13	27	71	93	60	43	106
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	214	0	181	328	0	0	0	0	0	0	309
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]	56	528	83	308	653	15	30	80	104	67	48	428
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	139	22	81	172	4	8	21	27	18	13	113
Total Analysis Volume [veh/h]	59	556	87	324	687	16	32	84	109	71	51	451
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	12	34	0	19	41	0	9	23	0	14	28	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	30	15	41	3	24	24	5	26
g / C, Green / Cycle	0.04	0.33	0.17	0.46	0.03	0.27	0.27	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.03	0.35	0.18	0.37	0.02	0.04	0.07	0.04	0.31
s, saturation flow rate [veh/h]	1810	1856	1810	1892	1810	1900	1615	1810	1640
c, Capacity [veh/h]	78	621	302	867	56	512	435	93	476
d1, Uniform Delay [s]	42.58	29.94	37.50	21.02	43.03	25.12	25.75	42.15	31.95
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.39
I, 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]	13.62	45.53	47.04	8.12	9.00	0.15	0.30	12.17	51.93
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	0.75	1.04	1.07	0.81	0.57	0.16	0.25	0.76	1.06
d, Delay for Lane Group [s/veh]	56.20	75.46	84.54	29.14	52.03	25.27	26.05	54.32	83.87
Lane Group LOS	E	F	F	C	D	C	C	D	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.55	20.28	10.11	12.88	0.82	1.33	1.78	1.82	16.51
50th-Percentile Queue Length [ft/ln]	38.78	506.99	252.69	321.92	20.50	33.28	44.46	45.51	412.66
95th-Percentile Queue Length [veh/ln]	2.79	28.31	15.84	18.76	1.48	2.40	3.20	3.28	23.95
95th-Percentile Queue Length [ft/ln]	69.81	707.87	396.10	469.04	36.90	59.90	80.02	81.92	598.64

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.20	75.46	75.46	84.54	29.14	29.14	52.03	25.27	26.05	54.32	83.87	83.87
Movement LOS	E	E	E	F	C	C	D	C	C	D	F	F
d_A, Approach Delay [s/veh]	73.85			46.62			29.45			80.21		
Approach LOS	E			D			C			F		
d_I, Intersection Delay [s/veh]	60.27											
Intersection LOS	E											
Intersection V/C	0.849											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.643	3.061	2.247	2.480
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]	667	822	422	533
d_b, Bicycle Delay [s]	20.00	15.61	28.01	24.20
I_b,int, Bicycle LOS Score for Intersection	2.718	3.254	1.931	2.505
Bicycle LOS	B	C	A	B

Sequence

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

Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	127.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.665

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	200	42	50	311	255	245
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	357	454	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]	224	47	56	705	740	274
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	12	15	186	195	72
Total Analysis Volume [veh/h]	236	49	59	742	779	288
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	419	742	536	536	586
Degree of Utilization, x	0.63	0.14	1.67	0.66	0.66	0.61

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	4.21	0.49	43.45	4.86	4.86	4.06
95th-Percentile Queue Length [ft]	105.23	12.17	1086.27	121.53	121.53	101.54
Approach Delay [s/veh]	23.33	305.78		20.39		
Approach LOS	C	F		C		
Intersection Delay [s/veh]	126.95					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,036.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.183

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	520	8	142	0	265	223	158	377	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	853	0	324	0	328	122	579	436	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	1435	9	483	0	625	372	756	858	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	378	2	127	0	164	98	199	226	0
Total Analysis Volume [veh/h]	0	0	0	1511	9	508	0	658	392	796	903	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	25	0	20	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.15	0.59	0.44	0.48
s, saturation flow rate [veh/h]		1757	1783	1810	1900
c, Capacity [veh/h]		355	594	600	1347
d1, Uniform Delay [s]		35.91	30.01	30.08	7.25
k, delay calibration		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2128.67	352.47	158.29	2.64
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		5.72	1.77	1.33	0.67
d, Delay for Lane Group [s/veh]		2164.59	382.47	188.37	9.90
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		216.65	69.61	38.16	7.32
50th-Percentile Queue Length [ft/ln]		5416.25	1740.29	954.09	183.11
95th-Percentile Queue Length [veh/ln]		326.98	108.98	56.89	11.76
95th-Percentile Queue Length [ft/ln]		8174.51	2724.46	1422.35	294.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2164.59	2164.59	2164.59	0.00	382.47	382.47	188.37	9.90	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			2164.59			382.47			93.51		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1036.27											
Intersection LOS	F											
Intersection V/C	2.183											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	911	467	911
d_b, Bicycle Delay [s]	45.00	13.34	26.45	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.906	3.292	4.363
Bicycle LOS	D	E	C	E

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	566.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.026

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	241	7	246	0	0	0	116	668	0	0	294	333
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	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	324	0	853	0	0	0	213	950	0	0	691	590
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]	594	8	1129	0	0	0	343	1698	0	0	1020	963
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	156	2	297	0	0	0	90	447	0	0	268	253
Total Analysis Volume [veh/h]	625	8	1188	0	0	0	361	1787	0	0	1074	1014
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.09		0.20	0.94	0.57	0.63
s, saturation flow rate [veh/h]	1678		1810	1900	1900	1615
c, Capacity [veh/h]	523		401	1139	633	538
d1, Uniform Delay [s]	30.97		34.06	18.03	30.00	30.00
k, delay calibration	0.50		0.16	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1121.06		10.28	260.48	320.04	404.79
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	3.48		0.90	1.57	1.70	1.88
d, Delay for Lane Group [s/veh]	1152.03		44.34	278.51	350.04	434.79
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	172.62		8.61	102.59	69.38	71.65
50th-Percentile Queue Length [ft/ln]	4315.53		215.20	2564.66	1734.55	1791.14
95th-Percentile Queue Length [veh/ln]	272.92		13.42	159.01	107.56	113.46
95th-Percentile Queue Length [ft/ln]	6822.88		335.50	3975.28	2688.91	2836.57

Movement, Approach, & Intersection Results

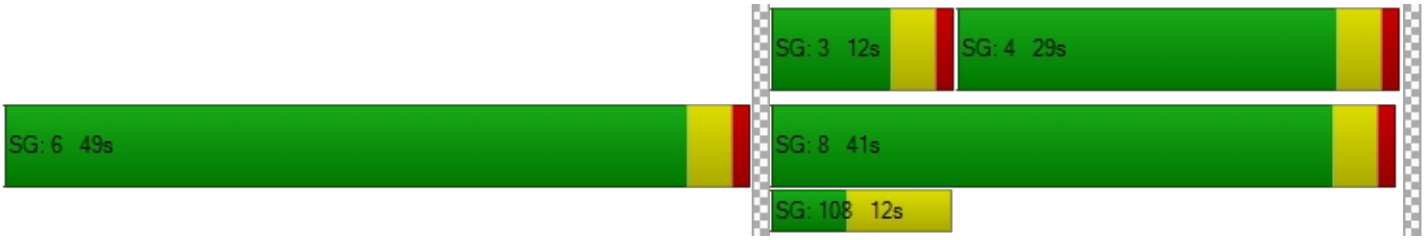
d_M, Delay for Movement [s/veh]	1152.03	1152.03	1152.03	0.00	0.00	0.00	44.34	278.51	0.00	0.00	350.04	434.79
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1152.03			0.00			239.15			391.20		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	566.02											
Intersection LOS	F											
Intersection V/C	2.026											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.640	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.564	4.132	5.104	5.005
Bicycle LOS	E	D	F	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	105.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.186

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	100	141	193	662	457	133
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	1214	712	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]	112	158	216	1955	1224	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	42	57	514	322	39
Total Analysis Volume [veh/h]	118	166	227	2058	1288	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	37	67	30	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	11	11	13	71	53	53
g / C, Green / Cycle	0.13	0.13	0.15	0.78	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.07	0.10	0.13	1.08	0.36	0.10
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	230	206	271	1489	2134	953
d1, Uniform Delay [s]	36.66	38.19	37.22	9.73	11.76	8.39
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.76	7.29	6.85	176.18	1.28	0.37
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	0.51	0.81	0.84	1.38	0.60	0.16
d, Delay for Lane Group [s/veh]	38.41	45.49	44.07	185.91	13.03	8.76
Lane Group LOS	D	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	3.88	5.11	85.53	7.06	1.26
50th-Percentile Queue Length [ft/ln]	61.85	96.96	127.76	2138.18	176.40	31.50
95th-Percentile Queue Length [veh/ln]	4.45	6.98	8.82	129.18	11.41	2.27
95th-Percentile Queue Length [ft/ln]	111.34	174.52	220.45	3229.53	285.31	56.69

Movement, Approach, & Intersection Results

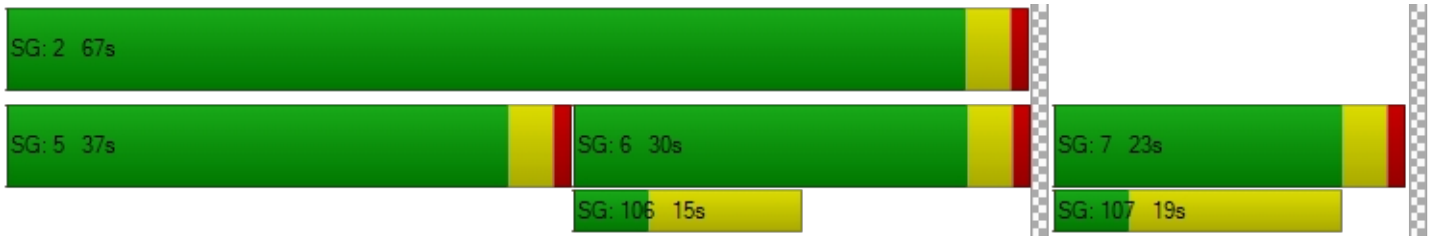
d_M, Delay for Movement [s/veh]	38.41	45.49	44.07	185.91	13.03	8.76
Movement LOS	D	D	D	F	B	A
d_A, Approach Delay [s/veh]	42.55		171.82		12.57	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	105.35					
Intersection LOS	F					
Intersection V/C	1.186					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.195	3.500	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	578
d_b, Bicycle Delay [s]	28.01	4.05	22.76
I_b,int, Bicycle LOS Score for Intersection	1.560	5.330	2.752
Bicycle LOS	A	F	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	388.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.852

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	85	338	59	89	229	171	227	391	77	93	382	85
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	51	1177	336	30	22	37	633	0	690	418	204
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]	95	430	1243	436	286	214	291	1071	86	794	846	299
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	113	327	115	75	56	77	282	23	209	223	79
Total Analysis Volume [veh/h]	100	453	1308	459	301	225	306	1127	91	836	891	315
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	14	31	0	13	30	0	15	26	0	20	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	27	27	9	30	30	11	22	22	16	27	27
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.33	0.33	0.12	0.24	0.24	0.18	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.06	0.24	0.81	0.25	0.15	0.15	0.17	0.32	0.33	0.46	0.32	0.35
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1633	1810	1900	1851	1810	1900	1740
c, Capacity [veh/h]	132	570	485	181	622	534	221	464	452	322	570	522
d1, Uniform Delay [s]	40.95	28.95	31.50	40.50	23.93	23.93	39.50	34.00	34.00	37.00	31.50	31.50
k, delay calibration	0.11	0.50	0.50	0.28	0.50	0.50	0.11	0.43	0.44	0.50	0.42	0.48
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.63	10.93	770.72	700.39	2.39	2.78	178.74	157.89	163.08	728.42	50.71	89.24
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	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.79	2.70	2.54	0.45	0.45	1.38	1.32	1.33	2.60	1.06	1.16
d, Delay for Lane Group [s/veh]	49.58	39.89	802.22	740.89	26.32	26.71	218.24	191.89	197.08	765.42	82.21	120.74
Lane Group LOS	D	D	F	F	C	C	F	F	F	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.42	10.15	113.53	39.06	4.88	4.26	15.61	29.79	29.67	71.92	19.75	23.67
50th-Percentile Queue Length [ft/ln]	60.47	253.87	2838.20	976.44	122.12	106.41	390.29	744.72	741.74	1797.91	493.64	591.63
95th-Percentile Queue Length [veh/ln]	4.35	15.38	180.83	61.08	8.51	7.64	24.92	44.76	44.74	112.18	28.01	34.51
95th-Percentile Queue Length [ft/ln]	108.85	384.53	4520.87	1526.96	212.73	191.00	622.88	1118.91	1118.49	2804.51	700.34	862.86

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.58	39.89	802.22	740.89	26.35	26.71	218.24	194.25	197.08	765.42	94.66	120.74
Movement LOS	D	D	F	F	C	C	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	576.21			359.40			199.23			373.30		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	388.68											
Intersection LOS	F											
Intersection V/C	1.852											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.105	2.837	3.103	3.424
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	578	489	600
d_b, Bicycle Delay [s]	22.05	22.76	25.69	22.05
I_b,int, Bicycle LOS Score for Intersection	3.095	2.372	2.817	3.244
Bicycle LOS	C	B	C	C

Sequence

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

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.095	410.8	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	2.333	376.4	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	1.044	385.3	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.773	81.0	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	1.092	52.5	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	1.003	36.7	E
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.480	28.2	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.002	11.6	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.013	10.7	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.402	10.3	B
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.735	37.8	D
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.299	79.0	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.658	404.8	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.625	429.1	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.886	44.6	D
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.162	200.5	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.575	4.4	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.577	8.6	A
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.190	11.1	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	410.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.095

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	137	0	315	0	696	211	24	149	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	68	0	150	0	300	299	176	150	0
Site-Generated Trips [veh/h]	0	0	0	318	0	0	0	22	0	53	15	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	539	0	503	0	1102	535	256	332	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	142	0	132	0	290	141	67	87	0
Total Analysis Volume [veh/h]	0	0	0	567	0	529	0	1160	563	269	349	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1096	1723	755
Degree of Utilization, x		2.01	2.09	0.82

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		74.22	118.04	8.92
95th-Percentile Queue Length [ft]		1855.50	2951.09	222.96
Approach Delay [s/veh]	0.00	474.77	508.36	25.50
Approach LOS	A	F	F	D
Intersection Delay [s/veh]	410.83			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	376.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.333

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	91	1	22	0	0	0	692	156	0	0	55	442
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	150	0	68	0	0	0	299	68	0	0	176	92
Site-Generated Trips [veh/h]	0	0	219	0	0	0	0	340	0	0	68	101
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]	252	1	312	0	0	0	1074	583	0	0	306	688
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	0	82	0	0	0	283	153	0	0	81	181
Total Analysis Volume [veh/h]	265	1	328	0	0	0	1131	614	0	0	322	724
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	594		1745	1046
Degree of Utilization, x	1.11		2.33	1.24

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	19.15		129.68	36.21
95th-Percentile Queue Length [ft]	478.67		3242.11	905.19
Approach Delay [s/veh]	98.46	0.00	616.07	134.39
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	376.40			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	385.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.044

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	42	25	30	166	478	58
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	101	34	101	251	0
Site-Generated Trips [veh/h]	0	0	0	559	169	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]	47	129	68	846	955	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	34	18	223	251	17
Total Analysis Volume [veh/h]	49	136	72	891	1005	68
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	1.04	0.48	0.11	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	385.31	321.33	11.15	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	13.22	13.22	0.37	0.37	0.00	0.00
95th-Percentile Queue Length [ft/ln]	330.39	330.39	9.18	9.18	0.00	0.00
d_A, Approach Delay [s/veh]	338.28		0.83		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	28.54					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	81.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.773

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	70	0	176	13	0	470
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	13	0	97	4	0	176
Site-Generated Trips [veh/h]	22	0	131	15	0	197
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]	113	0	425	34	0	899
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	0	112	9	0	237
Total Analysis Volume [veh/h]	119	0	447	36	0	946
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	0.77	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	81.04	63.63	0.00	0.00	8.30	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	4.85	4.85	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	121.17	121.17	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	81.04		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	6.23					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	52.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.092

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	50	1	1	0	3	96	24	139	12	1	315	1
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	104	0	0	178	0
Site-Generated Trips [veh/h]	44	0	0	0	0	0	0	101	30	0	153	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]	100	1	1	0	3	108	27	361	43	1	684	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	0	0	0	1	28	7	95	11	0	180	0
Total Analysis Volume [veh/h]	105	1	1	0	3	114	28	380	45	1	720	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	495	553	638	722
Degree of Utilization, x	0.22	0.21	0.71	1.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.81	0.79	5.85	20.68
95th-Percentile Queue Length [ft]	20.35	19.85	146.13	516.97
Approach Delay [s/veh]	12.27	11.25	21.18	84.78
Approach LOS	B	B	C	F
Intersection Delay [s/veh]	52.49			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	36.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.003

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	17	18	4	5	24	34	16	94	41	3	308	1
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	24	0	0	0	0	0	0	78	26	0	154	0
Site-Generated Trips [veh/h]	65	0	0	0	0	0	0	60	41	0	88	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]	108	20	4	6	27	38	18	243	113	3	587	1
Peak Hour Factor	0.9400	0.9400	0.9400	0.9500	0.9400	0.9500	0.9500	0.9500	0.9400	0.9400	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	5	1	2	7	10	5	64	30	1	154	0
Total Analysis Volume [veh/h]	115	21	4	6	29	40	19	256	120	3	618	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	515	531	584	665	621	705
Degree of Utilization, x	0.27	0.14	0.47	0.18	1.00	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.09	0.49	2.51	0.65	15.39	0.00
95th-Percentile Queue Length [ft]	27.33	12.24	62.68	16.37	384.86	0.11
Approach Delay [s/veh]	12.57	10.90	12.73		60.47	
Approach LOS	B	B	B		F	
Intersection Delay [s/veh]	36.70					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.480

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	111	198	8	8	224	50	41	50	74	8	81	7
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	154	131	0	0	44	0	0	0	78	0	0	0
Site-Generated Trips [veh/h]	44	0	0	0	0	22	15	15	30	0	22	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]	322	353	9	9	295	78	61	71	191	9	113	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	85	93	2	2	78	21	16	19	50	2	30	2
Total Analysis Volume [veh/h]	339	372	9	9	311	82	64	75	201	9	119	8
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	35	39	0	19	23	0	9	23	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	59	59	1	41	41	4	13	13	1	10
g / C, Green / Cycle	0.21	0.65	0.65	0.01	0.45	0.45	0.05	0.15	0.15	0.01	0.11
(v / s)_i Volume / Saturation Flow Rate	0.19	0.20	0.01	0.00	0.16	0.05	0.04	0.04	0.12	0.00	0.07
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1879
c, Capacity [veh/h]	382	1234	1049	22	856	728	83	283	240	21	215
d1, Uniform Delay [s]	34.44	6.87	5.56	44.11	16.24	14.31	42.48	33.95	37.25	44.19	37.84
k, delay calibration	0.12	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.47	0.63	0.01	11.13	1.19	0.31	14.10	0.50	7.54	13.40	2.57
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	0.89	0.30	0.01	0.40	0.36	0.11	0.77	0.27	0.84	0.43	0.59
d, Delay for Lane Group [s/veh]	41.90	7.50	5.57	55.24	17.43	14.62	56.58	34.45	44.79	57.59	40.41
Lane Group LOS	D	A	A	E	B	B	E	C	D	E	D
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	7.44	2.50	0.05	0.26	4.23	0.98	1.69	1.44	4.62	0.27	2.71
50th-Percentile Queue Length [ft/ln]	185.91	62.58	1.23	6.62	105.78	24.51	42.14	36.01	115.58	6.78	67.87
95th-Percentile Queue Length [veh/ln]	11.91	4.51	0.09	0.48	7.60	1.76	3.03	2.59	8.15	0.49	4.89
95th-Percentile Queue Length [ft/ln]	297.72	112.64	2.21	11.91	190.12	44.12	75.85	64.81	203.74	12.20	122.17

Movement, Approach, & Intersection Results

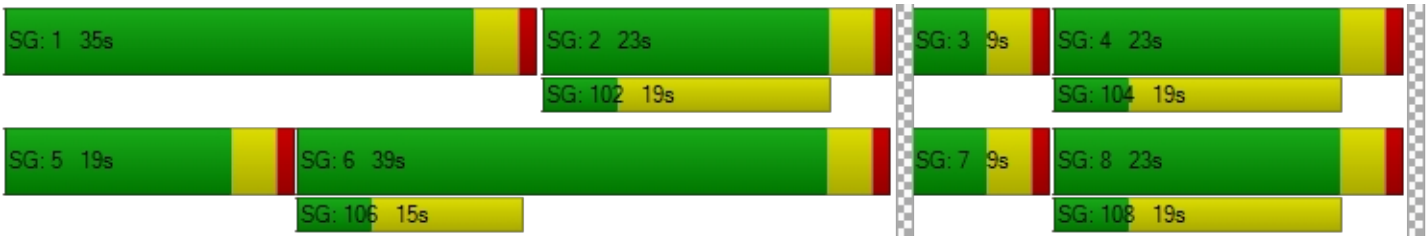
d_M, Delay for Movement [s/veh]	41.90	7.50	5.57	55.24	17.43	14.62	56.58	34.45	44.79	57.59	40.41	40.41
Movement LOS	D	A	A	E	B	B	E	C	D	E	D	D
d_A, Approach Delay [s/veh]	23.67			17.71			44.73			41.55		
Approach LOS	C			B			D			D		
d_I, Intersection Delay [s/veh]	28.17											
Intersection LOS	C											
Intersection V/C	0.480											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.637	2.373	2.419	2.041
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]	778	422	422	422
d_b, Bicycle Delay [s]	16.81	28.01	28.01	28.01
I_b,int, Bicycle LOS Score for Intersection	2.748	2.223	2.121	1.784
Bicycle LOS	B	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	4	1	7	1	4	59	65	0	1	48	5
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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	15	0	0	0	0	0	0	0	22
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	4	1	23	1	4	66	73	0	1	54	28
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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	1	0	7	0	1	19	21	0	0	16	8
Total Analysis Volume [veh/h]	0	5	1	27	1	5	77	85	0	1	63	33
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.04	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.77	11.52	8.57	11.05	11.62	8.83	7.51	0.00	0.00	7.36	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.03	0.16	0.16	0.16	0.16	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.75	0.75	0.75	3.93	3.93	3.93	4.03	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	11.03			10.73			3.57			0.08		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.38											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	7	4	15	0	3	1	73	0	1	50	34
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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	30	0	0	0	15	0	0	22	44
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	8	4	47	0	3	1	97	0	1	78	82
Peak Hour Factor	0.9500	0.9500	0.9590	0.9590	0.9500	0.9500	0.9500	0.9590	0.9500	0.9590	0.9590	0.9590
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	2	1	12	0	1	0	25	0	0	20	21
Total Analysis Volume [veh/h]	0	8	4	49	0	3	1	101	0	1	81	86
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.01	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.53	10.73	8.64	10.10	10.69	9.07	7.53	0.00	0.00	7.40	0.00	0.00
Movement LOS	A	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.22	0.22	0.22	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.26	1.26	1.26	5.45	5.45	5.45	0.05	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.03			10.04			0.07			0.04		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.97											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.402

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	41	66	88	59	26	40
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	87	0	30	56	0	44
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]	133	74	129	122	29	89
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	19	38	36	8	26
Total Analysis Volume [veh/h]	158	78	153	145	31	105
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	592	738	741	601	656
Degree of Utilization, x	0.27	0.11	0.40	0.05	0.16

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.07	0.35	1.95	0.16	0.57
95th-Percentile Queue Length [ft]	26.77	8.83	48.77	4.07	14.17
Approach Delay [s/veh]	10.05		11.09	9.18	
Approach LOS	B		B	A	
Intersection Delay [s/veh]	10.34				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	37.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.735

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	69	197	24	62	234	26	3	37	46	53	69	131
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	285	0	275	122	0	0	0	0	0	0	92
Site-Generated Trips [veh/h]	22	44	0	0	30	0	0	15	15	0	22	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]	99	550	27	344	414	29	3	56	67	59	99	239
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	145	7	91	109	8	1	15	18	16	26	63
Total Analysis Volume [veh/h]	104	579	28	362	436	31	3	59	71	62	104	252
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	16	23	0	31	38	0	9	27	0	9	27	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	33	20	46	0	17	17	4	21
g / C, Green / Cycle	0.07	0.36	0.22	0.51	0.00	0.19	0.19	0.04	0.23
(v / s)_i Volume / Saturation Flow Rate	0.06	0.32	0.20	0.25	0.00	0.03	0.04	0.03	0.21
s, saturation flow rate [veh/h]	1810	1885	1810	1878	1810	1900	1615	1810	1689
c, Capacity [veh/h]	134	681	403	957	9	368	313	80	394
d1, Uniform Delay [s]	40.92	27.09	33.97	14.39	44.64	30.19	30.60	42.55	33.52
k, delay calibration	0.11	0.50	0.16	0.50	0.11	0.11	0.11	0.11	0.18
I, 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]	9.10	16.32	10.07	1.78	21.78	0.20	0.36	14.40	12.08
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	0.77	0.89	0.90	0.49	0.34	0.16	0.23	0.77	0.90
d, Delay for Lane Group [s/veh]	50.02	43.41	44.04	16.17	66.42	30.39	30.96	56.96	45.60
Lane Group LOS	D	D	D	B	E	C	C	E	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.53	14.39	8.21	5.72	0.12	1.05	1.28	1.64	8.46
50th-Percentile Queue Length [ft/ln]	63.15	359.63	205.13	143.01	2.94	26.13	32.03	41.02	211.57
95th-Percentile Queue Length [veh/ln]	4.55	20.61	12.90	9.64	0.21	1.88	2.31	2.95	13.23
95th-Percentile Queue Length [ft/ln]	113.68	515.13	322.57	241.07	5.29	47.03	57.66	73.84	330.84

Movement, Approach, & Intersection Results

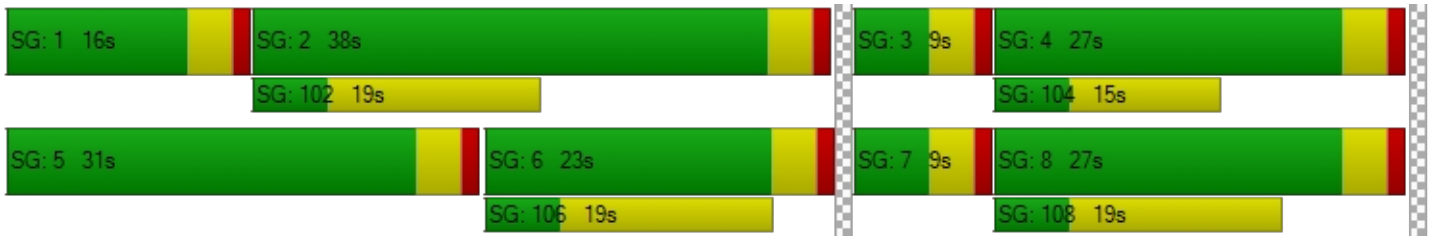
d_M, Delay for Movement [s/veh]	50.02	43.41	43.41	44.04	16.17	16.17	66.42	30.39	30.96	56.96	45.60	45.60
Movement LOS	D	D	D	D	B	B	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	44.38			28.34			31.51			47.28		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	37.78											
Intersection LOS	D											
Intersection V/C	0.735											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.549	2.842	2.253	2.414
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]	422	756	511	511
d_b, Bicycle Delay [s]	28.01	17.42	24.94	24.94
I_b,int, Bicycle LOS Score for Intersection	2.733	2.927	1.779	2.249
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	79.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.299

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	284	33	21	253	211	133
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	277	139	0
Site-Generated Trips [veh/h]	0	0	0	22	15	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]	318	37	24	582	390	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	10	6	153	103	39
Total Analysis Volume [veh/h]	335	39	25	613	411	157
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	490	442	613	513	513	559
Degree of Utilization, x	0.76	0.06	1.30	0.37	0.37	0.34

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	6.65	0.18	26.35	1.69	1.69	1.49
95th-Percentile Queue Length [ft]	166.22	4.48	658.80	42.18	42.18	37.22
Approach Delay [s/veh]	30.38	166.01		13.32		
Approach LOS	D	F		B		
Intersection Delay [s/veh]	79.01					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	404.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.658

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	252	7	83	0	290	305	240	236	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	258	0	97	0	293	119	619	137	0
Site-Generated Trips [veh/h]	0	0	0	0	37	0	0	22	0	41	15	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	540	45	190	0	640	461	929	416	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	142	12	50	0	168	121	244	109	0
Total Analysis Volume [veh/h]	0	0	0	568	47	200	0	674	485	978	438	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.46	0.66	0.54	0.23
s, saturation flow rate [veh/h]		1762	1769	1810	1900
c, Capacity [veh/h]		355	590	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	4.93
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		591.48	440.44	290.58	0.14
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		2.29	1.97	1.63	0.32
d, Delay for Lane Group [s/veh]		627.41	470.44	320.65	5.07
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		65.25	83.55	60.25	2.14
50th-Percentile Queue Length [ft/ln]		1631.22	2088.64	1506.28	53.62
95th-Percentile Queue Length [veh/ln]		102.50	132.12	93.24	3.86
95th-Percentile Queue Length [ft/ln]		2562.51	3302.93	2331.04	96.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	627.41	627.41	627.41	0.00	470.44	470.44	320.65	5.07	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			627.41			470.44			223.03		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	404.84											
Intersection LOS	F											
Intersection V/C	1.658											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.904	3.472	3.896
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	429.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.625

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	123	1	154	0	0	0	178	359	0	0	329	667
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	97	0	258	0	0	0	256	290	0	0	658	634
Site-Generated Trips [veh/h]	0	0	65	0	0	0	0	22	0	0	56	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]	235	1	495	0	0	0	455	714	0	0	1082	1381
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	62	0	130	0	0	0	120	188	0	0	285	363
Total Analysis Volume [veh/h]	247	1	521	0	0	0	479	752	0	0	1139	1454
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	23	0	0	0	0	17	67	0	0	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	22		26	60	30	30
g / C, Green / Cycle	0.25		0.29	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.46		0.26	0.40	0.60	0.90
s, saturation flow rate [veh/h]	1673		1810	1900	1900	1615
c, Capacity [veh/h]	416		515	1259	634	539
d1, Uniform Delay [s]	33.82		31.31	8.47	29.99	29.99
k, delay calibration	0.50		0.30	0.15	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	391.88		17.72	0.62	365.16	770.06
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	1.85		0.93	0.60	1.80	2.70
d, Delay for Lane Group [s/veh]	425.70		49.03	9.09	395.15	800.05
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	53.16		12.29	7.09	77.38	126.35
50th-Percentile Queue Length [ft/ln]	1329.12		307.27	177.33	1934.40	3158.71
95th-Percentile Queue Length [veh/ln]	83.64		18.04	11.46	120.80	202.21
95th-Percentile Queue Length [ft/ln]	2091.12		451.01	286.52	3020.08	5055.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	425.70	425.70	425.70	0.00	0.00	0.00	49.03	9.09	0.00	0.00	395.15	800.05
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	425.70			0.00			24.63			622.19		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	429.14											
Intersection LOS	F											
Intersection V/C	1.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.529	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	0	1400	1022
d_b, Bicycle Delay [s]	28.01	45.00	4.05	10.76
I_b,int, Bicycle LOS Score for Intersection	2.828	4.132	3.591	5.838
Bicycle LOS	C	D	D	F

Sequence

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

Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	44.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.886

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	119	240	139	290	672	58
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	360	1080	0
Site-Generated Trips [veh/h]	0	56	87	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]	133	325	243	685	1833	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	86	64	180	482	17
Total Analysis Volume [veh/h]	140	342	256	721	1929	68
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	19	19	9	63	50	50
g / C, Green / Cycle	0.21	0.21	0.10	0.70	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.08	0.21	0.14	0.38	0.53	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	382	341	181	1330	2010	897
d1, Uniform Delay [s]	30.35	35.50	40.50	6.53	19.04	9.28
k, delay calibration	0.11	0.18	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	30.24	193.70	1.59	12.60	0.16
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	0.37	1.00	1.41	0.54	0.96	0.08
d, Delay for Lane Group [s/veh]	30.94	65.74	234.20	8.12	31.65	9.44
Lane Group LOS	C	F	F	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.58	10.04	13.54	5.16	19.11	0.58
50th-Percentile Queue Length [ft/ln]	64.57	251.07	338.58	128.99	477.77	14.42
95th-Percentile Queue Length [veh/ln]	4.65	15.26	21.99	8.88	26.28	1.04
95th-Percentile Queue Length [ft/ln]	116.23	381.62	549.78	222.12	657.00	25.95

Movement, Approach, & Intersection Results

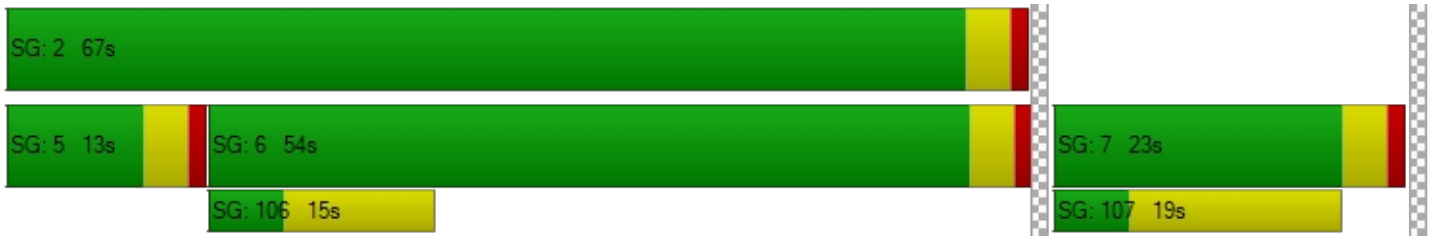
d_M, Delay for Movement [s/veh]	30.94	65.74	234.20	8.12	31.65	9.44
Movement LOS	C	F	F	A	C	A
d_A, Approach Delay [s/veh]	55.63		67.36		30.89	
Approach LOS	E		E		C	
d_I, Intersection Delay [s/veh]	44.65					
Intersection LOS	D					
Intersection V/C	0.886					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.247	3.320	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	3.172	3.207
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	200.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.162

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	57	194	61	28	246	183	91	238	66	70	459	54
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	15	349	100	46	33	11	189	0	1047	499	292
Site-Generated Trips [veh/h]	0	44	0	15	30	0	0	0	0	0	0	22
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]	64	276	417	146	352	238	113	456	74	1125	1013	374
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	73	110	38	93	63	30	120	19	296	267	98
Total Analysis Volume [veh/h]	67	291	439	154	371	251	119	480	78	1184	1066	394
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	15	26	0	29	40	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	22	22	5	23	23	7	22	22	25	39	39
g / C, Green / Cycle	0.05	0.25	0.25	0.06	0.26	0.26	0.08	0.24	0.24	0.28	0.44	0.44
(v / s)_i Volume / Saturation Flow Rate	0.04	0.15	0.27	0.09	0.17	0.18	0.07	0.15	0.15	0.65	0.38	0.42
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1648	1810	1900	1809	1810	1900	1735
c, Capacity [veh/h]	87	472	401	101	487	422	151	457	435	503	826	754
d1, Uniform Delay [s]	42.36	30.00	33.81	42.50	30.17	30.21	40.47	30.56	30.58	32.50	23.35	24.83
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.37	0.43
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.48	5.92	72.53	250.02	7.55	8.78	8.81	1.41	1.49	616.15	10.25	23.63
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77	0.62	1.09	1.53	0.68	0.69	0.79	0.62	0.63	2.36	0.88	0.97
d, Delay for Lane Group [s/veh]	55.84	35.92	106.34	292.52	37.72	38.98	49.28	31.96	32.08	648.65	33.61	48.46
Lane Group LOS	E	D	F	F	D	D	D	C	C	F	C	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.75	6.09	16.35	9.14	7.17	6.40	2.83	5.35	5.13	96.43	15.39	18.81
50th-Percentile Queue Length [ft/ln]	43.71	152.25	408.72	228.49	179.25	159.96	70.87	133.77	128.26	2410.77	384.82	470.35
95th-Percentile Queue Length [veh/ln]	3.15	10.14	24.17	15.66	11.56	10.55	5.10	9.14	8.84	152.39	21.83	25.93
95th-Percentile Queue Length [ft/ln]	78.68	253.43	604.24	391.39	289.03	263.68	127.56	228.61	221.12	3809.75	545.68	648.19

Movement, Approach, & Intersection Results

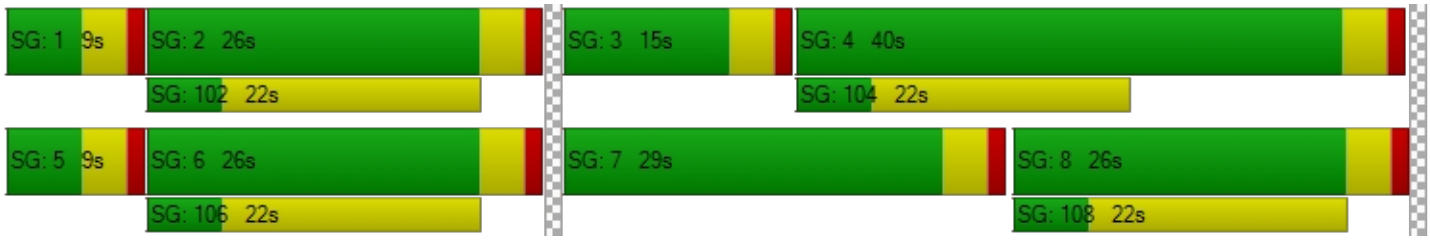
d_M, Delay for Movement [s/veh]	55.84	35.92	106.34	292.52	37.85	38.98	49.28	32.01	32.08	648.65	38.29	48.46
Movement LOS	E	D	F	F	D	D	D	C	C	F	D	D
d_A, Approach Delay [s/veh]	76.38			88.76			35.05			313.13		
Approach LOS	E			F			D			F		
d_I, Intersection Delay [s/veh]	200.53											
Intersection LOS	F											
Intersection V/C	1.162											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.933	2.712	2.904	3.147
Crosswalk LOS	C	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]	489	489	489	800
d_b, Bicycle Delay [s]	25.69	25.69	25.69	16.20
I_b,int, Bicycle LOS Score for Intersection	2.217	2.200	2.118	3.741
Bicycle LOS	B	B	B	D

Sequence

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



Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	4.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.575

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	208	0	0	536
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	101	0	0	251
Site-Generated Trips [veh/h]	17	0	503	57	9	152
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]	17	0	837	57	9	1003
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	0	220	15	2	264
Total Analysis Volume [veh/h]	18	0	881	62	10	1056
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	20	0	30	0	40	70
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	75	1	80
g / C, Green / Cycle	0.02	0.83	0.01	0.89
(v / s)_i Volume / Saturation Flow Rate	0.01	0.51	0.01	0.56
s, saturation flow rate [veh/h]	1781	1849	1781	1870
c, Capacity [veh/h]	37	1538	25	1665
d1, Uniform Delay [s]	43.59	2.59	44.01	1.24
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.60	1.83	10.44	1.85
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	0.49	0.61	0.41	0.63
d, Delay for Lane Group [s/veh]	53.19	4.42	54.45	3.10
Lane Group LOS	D	A	D	A
Critical Lane Group	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.49	3.26	0.29	0.86
50th-Percentile Queue Length [ft/ln]	12.28	81.50	7.26	21.43
95th-Percentile Queue Length [veh/ln]	0.88	5.87	0.52	1.54
95th-Percentile Queue Length [ft/ln]	22.11	146.70	13.07	38.58

Movement, Approach, & Intersection Results

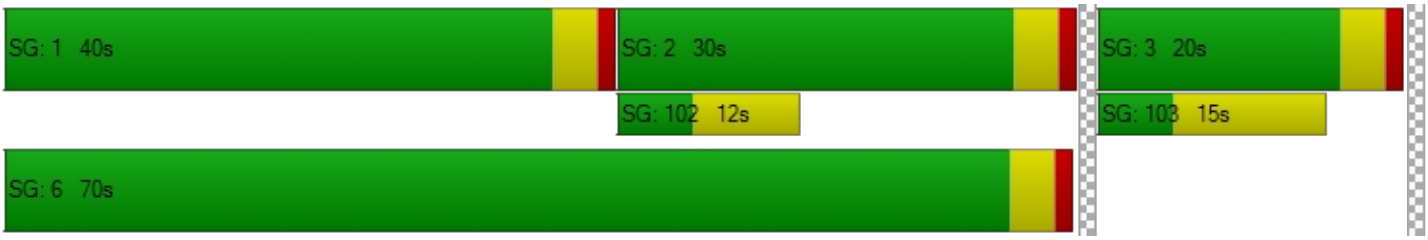
d_M, Delay for Movement [s/veh]	53.19	53.19	4.42	4.42	54.45	3.10
Movement LOS	D	D	A	A	D	A
d_A, Approach Delay [s/veh]	53.19		4.42		3.58	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	4.41					
Intersection LOS	A					
Intersection V/C	0.575					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.760	2.700	2.607
Crosswalk LOS	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	356	578	1467
d_b, Bicycle Delay [s]	30.42	22.76	3.20
I_b,int, Bicycle LOS Score for Intersection	1.589	3.116	3.319
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.577

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	208	0	0	536
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	101	0	0	251
Site-Generated Trips [veh/h]	152	18	148	355	211	9
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]	152	18	482	355	211	860
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	5	127	96	57	226
Total Analysis Volume [veh/h]	165	20	507	386	229	905
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	26	0	55	0	9	64
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	10	10	63	63	72	72
g / C, Green / Cycle	0.12	0.12	0.70	0.70	0.80	0.80
(v / s)_i Volume / Saturation Flow Rate	0.09	0.01	0.14	0.24	0.31	0.48
s, saturation flow rate [veh/h]	1781	1589	3560	1589	736	1870
c, Capacity [veh/h]	206	184	2476	1105	669	1487
d1, Uniform Delay [s]	38.76	35.62	4.87	5.52	2.40	3.66
k, delay calibration	0.11	0.11	0.50	0.50	0.40	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.96	0.26	0.19	0.87	1.12	1.86
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	0.80	0.11	0.20	0.35	0.34	0.61
d, Delay for Lane Group [s/veh]	45.72	35.88	5.06	6.39	3.52	5.52
Lane Group LOS	D	D	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.90	0.40	1.12	2.09	0.79	4.67
50th-Percentile Queue Length [ft/ln]	97.42	10.07	28.07	52.32	19.81	116.63
95th-Percentile Queue Length [veh/ln]	7.01	0.72	2.02	3.77	1.43	8.21
95th-Percentile Queue Length [ft/ln]	175.35	18.12	50.52	94.18	35.65	205.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	45.72	35.88	5.06	6.39	3.52	5.52
Movement LOS	D	D	A	A	A	A
d_A, Approach Delay [s/veh]	44.66		5.63		5.12	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	8.63					
Intersection LOS	A					
Intersection V/C	0.577					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.436	3.010	2.625
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]	489	1133	1333
d_b, Bicycle Delay [s]	25.69	8.45	5.00
I_b,int, Bicycle LOS Score for Intersection	1.560	2.296	3.431
Bicycle LOS	A	B	C

Sequence

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

Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.190

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	208	0	0	536	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	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	101	0	0	251	0
Site-Generated Trips [veh/h]	0	0	128	0	0	0	0	18	148	0	219	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	128	0	0	0	0	352	148	0	1070	0
Peak Hour Factor	0.9200	0.9200	0.9200	0.9500	0.9200	0.9500	0.9500	0.9500	0.9200	0.9200	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	35	0	0	0	0	93	40	0	282	0
Total Analysis Volume [veh/h]	0	0	139	0	0	0	0	371	161	0	1126	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	11.06	0.00	0.00	12.67	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			B			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	17.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	11.06			12.67			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.86											
Intersection LOS	B											

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.382	631.2	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.052	377.3	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	3.290	1,417.6	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.621	77.2	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.252	92.2	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.084	49.9	E
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.682	34.5	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.015	12.8	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.006	13.3	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	NB Left	0.379	10.3	B
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	WB Right	0.875	67.2	E
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.709	134.4	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.243	1,057.6	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	2.065	592.9	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.235	125.5	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.863	389.0	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.593	6.5	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.461	11.4	B
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.260	14.6	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	631.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.382

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	288	4	542	0	393	125	24	270	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	202	0	481	0	376	373	125	481	0
Site-Generated Trips [veh/h]	0	0	0	114	0	0	0	15	0	98	19	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	639	4	1088	0	831	513	250	802	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	168	1	286	0	219	135	66	211	0
Total Analysis Volume [veh/h]	0	0	0	673	4	1145	0	875	540	263	844	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1822	1415	1107
Degree of Utilization, x		3.38	1.75	1.45

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		164.56	82.34	51.36
95th-Percentile Queue Length [ft]		4113.91	2058.38	1283.88
Approach Delay [s/veh]	0.00	1090.90	355.72	226.63
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	631.18			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	377.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.052

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	181	4	22	0	0	0	304	378	0	0	119	255
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	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	481	0	202	0	0	0	373	202	0	0	125	60
Site-Generated Trips [veh/h]	0	0	64	0	0	0	0	129	0	0	117	168
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]	684	4	291	0	0	0	713	754	0	0	375	514
Peak Hour Factor	0.9500	0.9500	0.9500	1.0000	1.0000	1.0000	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	180	1	77	0	0	0	188	198	0	0	99	135
Total Analysis Volume [veh/h]	720	4	306	0	0	0	751	794	0	0	395	541
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	1030		1545	936
Degree of Utilization, x	1.99		2.05	1.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	69.52		104.55	26.52
95th-Percentile Queue Length [ft]	1738.03		2613.71	662.96
Approach Delay [s/veh]	467.82	0.00	490.31	91.22
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	377.32			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	1,417.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.290

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	74	49	41	382	307	62
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	66	113	290	185	0
Site-Generated Trips [veh/h]	0	0	0	193	285	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]	83	121	159	911	814	69
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	32	42	240	214	18
Total Analysis Volume [veh/h]	87	127	167	959	857	73
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	3.29	0.37	0.22	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	1417.60	1291.97	11.24	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	22.94	22.94	0.86	0.86	0.00	0.00
95th-Percentile Queue Length [ft/ln]	573.49	573.49	21.46	21.46	0.00	0.00
d_A, Approach Delay [s/veh]	1343.05		1.67		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	127.44					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	77.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.621

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	39	1	416	38	0	312
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	9	0	212	15	0	156
Site-Generated Trips [veh/h]	15	0	171	19	0	139
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]	68	1	849	77	0	644
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	0	223	20	0	169
Total Analysis Volume [veh/h]	72	1	894	81	0	678
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	0.62	0.00	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	77.21	57.23	0.00	0.00	10.03	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	3.16	3.16	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	79.08	79.08	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	76.93		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	3.25					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	92.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.252

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	18	3	1	2	4	31	61	341	15	3	261	2
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	216	0	0	163	0
Site-Generated Trips [veh/h]	30	0	0	0	0	0	0	133	38	0	109	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]	50	3	1	2	4	35	68	731	55	3	564	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	1	0	1	1	9	18	192	14	1	148	1
Total Analysis Volume [veh/h]	53	3	1	2	4	37	72	769	58	3	594	2
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	503	549	899	703
Degree of Utilization, x	0.11	0.08	1.25	0.85

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.38	0.25	32.88	9.85
95th-Percentile Queue Length [ft]	9.51	6.34	822.04	246.25
Approach Delay [s/veh]	11.06	10.11	142.49	30.32
Approach LOS	B	B	F	D
Intersection Delay [s/veh]	92.19			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	49.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.084

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	33	19	6	12	17	18	21	303	25	10	217	8
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	35	0	0	0	0	0	0	181	35	0	128	0
Site-Generated Trips [veh/h]	47	0	0	0	0	0	0	77	56	0	62	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]	119	21	7	13	19	20	24	597	119	11	433	9
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	6	2	3	5	5	6	157	31	3	114	2
Total Analysis Volume [veh/h]	125	22	7	14	20	21	25	628	125	12	456	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	510	500	653	686	582	657
Degree of Utilization, x	0.30	0.11	1.08	0.18	0.80	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.26	0.37	19.12	0.66	7.93	0.04
95th-Percentile Queue Length [ft]	31.58	9.20	478.08	16.55	198.32	1.04
Approach Delay [s/veh]	13.09	11.08	72.59		29.15	
Approach LOS	B	B	F		D	
Intersection Delay [s/veh]	49.87					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.682

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	132	254	26	16	228	54	60	87	174	15	59	10
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	128	86	0	0	147	0	0	0	181	0	0	0
Site-Generated Trips [veh/h]	32	0	0	0	0	15	19	19	39	0	15	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]	308	370	29	18	402	75	86	116	415	17	81	11
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	81	97	8	5	106	20	23	31	109	4	21	3
Total Analysis Volume [veh/h]	324	389	31	19	423	79	91	122	437	18	85	12
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	21	35	0	9	23	0	23	37	0	9	23	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	44	44	2	28	28	6	27	27	2	23
g / C, Green / Cycle	0.19	0.48	0.48	0.02	0.32	0.32	0.07	0.30	0.30	0.02	0.25
(v / s)_i Volume / Saturation Flow Rate	0.18	0.20	0.02	0.01	0.22	0.05	0.05	0.06	0.27	0.01	0.05
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1859
c, Capacity [veh/h]	342	918	780	39	600	510	122	564	479	37	465
d1, Uniform Delay [s]	36.06	15.11	12.25	43.54	27.09	22.15	41.23	23.78	30.51	43.59	26.69
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.22	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	13.49	1.43	0.10	9.12	6.81	0.65	8.83	0.19	12.76	9.26	0.22
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	0.95	0.42	0.04	0.49	0.70	0.15	0.75	0.22	0.91	0.48	0.21
d, Delay for Lane Group [s/veh]	49.55	16.55	12.35	52.66	33.91	22.79	50.06	23.97	43.27	52.85	26.91
Lane Group LOS	D	B	B	D	C	C	D	C	D	D	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	7.79	4.82	0.31	0.51	8.75	1.25	2.22	1.89	10.23	0.48	1.60
50th-Percentile Queue Length [ft/ln]	194.67	120.58	7.72	12.72	218.64	31.33	55.38	47.17	255.81	12.02	40.09
95th-Percentile Queue Length [veh/ln]	12.36	8.42	0.56	0.92	13.60	2.26	3.99	3.40	15.48	0.87	2.89
95th-Percentile Queue Length [ft/ln]	309.08	210.62	13.89	22.90	339.89	56.39	99.68	84.90	386.96	21.64	72.16

Movement, Approach, & Intersection Results

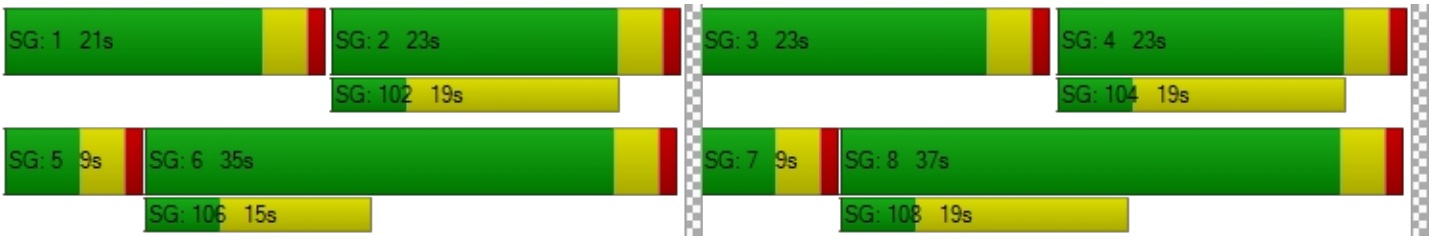
d_M, Delay for Movement [s/veh]	49.55	16.55	12.35	52.66	33.91	22.79	50.06	23.97	43.27	52.85	26.91	26.91
Movement LOS	D	B	B	D	C	C	D	C	D	D	C	C
d_A, Approach Delay [s/veh]	30.74			32.90			40.60			30.97		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	34.47											
Intersection LOS	C											
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 [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.792	2.421	2.502	2.066
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]	689	422	733	422
d_b, Bicycle Delay [s]	19.34	28.01	18.05	28.01
I_b,int, Bicycle LOS Score for Intersection	2.787	2.419	2.632	1.749
Bicycle LOS	C	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.015

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	3	2	5	18	5	18	24	95	1	3	108	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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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	19	0	0	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	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]	3	2	6	39	6	20	27	106	1	3	121	39
Peak Hour Factor	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430	0.7430
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]	1	1	2	13	2	7	9	36	0	1	41	13
Total Analysis Volume [veh/h]	4	3	8	52	8	27	36	143	1	4	163	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.01	0.01	0.09	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.38	12.31	8.78	12.16	12.84	9.74	7.70	0.00	0.00	7.49	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.47	0.47	0.47	0.08	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.62	1.62	1.62	11.65	11.65	11.65	2.03	0.00	0.00	0.21	0.00	0.00
d_A, Approach Delay [s/veh]	10.18			11.47			1.54			0.14		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.91											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	1	9	13	2	7	4	113	2	5	125	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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
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	38	0	0	0	19	0	0	15	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	1	10	53	2	8	4	146	2	6	155	51
Peak Hour Factor	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530	0.7530
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	3	18	1	3	1	48	1	2	51	17
Total Analysis Volume [veh/h]	1	1	13	70	3	11	5	194	3	8	206	68
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.13	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.19	12.67	8.89	12.46	13.31	10.06	7.78	0.00	0.00	7.61	0.00	0.00
Movement LOS	B	B	A	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.50	0.50	0.50	0.01	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.34	1.34	1.34	12.46	12.46	12.46	0.29	0.00	0.00	0.43	0.00	0.00
d_A, Approach Delay [s/veh]	9.29			12.18			0.19			0.22		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	2.16											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.379

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	63	27	67	72	71	129
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	62	0	38	75	0	30
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]	133	30	113	156	80	174
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	8	30	41	21	46
Total Analysis Volume [veh/h]	140	32	119	164	84	183
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	568	702	746	619	677
Degree of Utilization, x	0.25	0.05	0.38	0.14	0.27

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.96	0.14	1.78	0.47	1.09
95th-Percentile Queue Length [ft]	24.07	3.58	44.50	11.71	27.30
Approach Delay [s/veh]	10.53		10.75	9.81	
Approach LOS	B		B	A	
Intersection Delay [s/veh]	10.35				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	67.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.875

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	50	280	74	113	290	13	27	71	93	60	43	106
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	214	0	181	328	0	0	0	0	0	0	309
Site-Generated Trips [veh/h]	15	32	0	0	39	0	0	19	19	0	15	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]	71	560	83	308	692	15	30	99	123	67	63	428
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	147	22	81	182	4	8	26	32	18	17	113
Total Analysis Volume [veh/h]	75	589	87	324	728	16	32	104	129	71	66	451
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	12	34	0	19	41	0	9	23	0	14	28	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	30	15	40	3	24	24	5	26
g / C, Green / Cycle	0.05	0.33	0.17	0.45	0.03	0.27	0.27	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.04	0.36	0.18	0.39	0.02	0.05	0.08	0.04	0.31
s, saturation flow rate [veh/h]	1810	1858	1810	1893	1810	1900	1615	1810	1647
c, Capacity [veh/h]	97	622	302	847	56	512	435	93	478
d1, Uniform Delay [s]	42.02	29.94	37.50	22.63	43.03	25.40	26.10	42.15	31.95
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.41
I, 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]	11.94	62.05	47.04	12.49	9.00	0.19	0.38	12.17	61.50
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	0.77	1.09	1.07	0.88	0.57	0.20	0.30	0.76	1.08
d, Delay for Lane Group [s/veh]	53.96	91.98	84.54	35.13	52.03	25.60	26.47	54.32	93.44
Lane Group LOS	D	F	F	D	D	C	C	D	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.91	23.16	10.11	15.24	0.82	1.67	2.14	1.82	17.84
50th-Percentile Queue Length [ft/ln]	47.82	578.90	252.69	380.92	20.50	41.69	53.38	45.51	446.05
95th-Percentile Queue Length [veh/ln]	3.44	32.79	15.84	21.64	1.48	3.00	3.84	3.28	25.99
95th-Percentile Queue Length [ft/ln]	86.08	819.77	396.10	540.96	36.90	75.03	96.08	81.92	649.72

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.96	91.98	91.98	84.54	35.13	35.13	52.03	25.60	26.47	54.32	93.44	93.44
Movement LOS	D	F	F	F	D	D	D	C	C	D	F	F
d_A, Approach Delay [s/veh]	88.19			50.12			29.22			88.72		
Approach LOS	F			D			C			F		
d_I, Intersection Delay [s/veh]	67.24											
Intersection LOS	E											
Intersection V/C	0.875											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.678	3.101	2.270	2.491
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]	667	822	422	533
d_b, Bicycle Delay [s]	20.00	15.61	28.01	24.20
I_b,int, Bicycle LOS Score for Intersection	2.799	3.322	1.997	2.530
Bicycle LOS	C	C	A	B

Sequence

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

Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	134.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.709

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	200	42	50	311	255	245
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	357	454	0
Site-Generated Trips [veh/h]	0	0	0	15	19	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]	224	47	56	720	759	274
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	12	15	189	200	72
Total Analysis Volume [veh/h]	236	49	59	758	799	288
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	453	417	758	536	536	584
Degree of Utilization, x	0.63	0.14	1.71	0.68	0.68	0.62

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	4.24	0.49	45.54	5.08	5.08	4.25
95th-Percentile Queue Length [ft]	105.94	12.23	1138.58	126.93	126.93	106.16
Approach Delay [s/veh]	23.50	324.04		21.00		
Approach LOS	C	F		C		
Intersection Delay [s/veh]	134.43					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,057.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.243

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	520	8	142	0	265	223	158	377	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	1.1200	1.1200	1.1200	1.0000	1.1200	1.1200	1.1200	1.1200	1.0000
In-Process Volume [veh/h]	0	0	0	853	0	324	0	328	122	579	436	0
Site-Generated Trips [veh/h]	0	0	0	0	34	0	0	15	0	56	19	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	1435	43	483	0	640	372	812	877	0
Peak Hour Factor	1.0000	1.0000	1.0000	0.9500	0.9500	0.9500	1.0000	0.9500	0.9500	0.9500	0.9500	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	378	11	127	0	168	98	214	231	0
Total Analysis Volume [veh/h]	0	0	0	1511	45	508	0	674	392	855	923	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	25	0	20	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.17	0.60	0.47	0.49
s, saturation flow rate [veh/h]		1759	1784	1810	1900
c, Capacity [veh/h]		355	594	601	1348
d1, Uniform Delay [s]		35.93	30.01	30.06	7.38
k, delay calibration		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2175.67	363.71	200.11	2.84
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		5.82	1.79	1.42	0.68
d, Delay for Lane Group [s/veh]		2211.60	393.71	230.17	10.22
Lane Group LOS		F	F	F	B
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		221.17	71.53	45.19	7.66
50th-Percentile Queue Length [ft/ln]		5529.15	1788.33	1129.65	191.58
95th-Percentile Queue Length [veh/ln]		333.52	112.15	68.34	12.20
95th-Percentile Queue Length [ft/ln]		8337.95	2803.83	1708.43	305.08

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2211.60	2211.60	2211.60	0.00	393.71	393.71	230.17	10.22	0.00
Movement LOS				F	F	F		F	F	F	B	
d_A, Approach Delay [s/veh]	0.00			2211.60			393.71			115.99		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1057.60											
Intersection LOS	F											
Intersection V/C	2.243											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	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	911	467	911
d_b, Bicycle Delay [s]	45.00	13.34	26.45	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.965	3.319	4.493
Bicycle LOS	D	E	C	E

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	592.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.065

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	241	7	246	0	0	0	116	668	0	0	294	333
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	2.00	2.00	0.00	0.00
Growth Factor	1.1200	1.1200	1.1200	1.0000	1.0000	1.0000	1.1200	1.1200	1.0000	1.0000	1.1200	1.1200
In-Process Volume [veh/h]	324	0	853	0	0	0	213	950	0	0	691	590
Site-Generated Trips [veh/h]	0	0	47	0	0	0	0	15	0	0	75	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]	594	8	1176	0	0	0	343	1713	0	0	1095	963
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	1.0000	1.0000	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	156	2	309	0	0	0	90	451	0	0	288	253
Total Analysis Volume [veh/h]	625	8	1238	0	0	0	361	1803	0	0	1153	1014
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	Lead Green - Beginning of First Green
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	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.12		0.20	0.95	0.61	0.63
s, saturation flow rate [veh/h]	1676		1810	1900	1900	1615
c, Capacity [veh/h]	523		401	1139	633	538
d1, Uniform Delay [s]	30.97		34.06	18.03	30.00	30.00
k, delay calibration	0.50		0.16	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1165.71		10.28	266.74	375.60	404.79
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	3.58		0.90	1.58	1.82	1.88
d, Delay for Lane Group [s/veh]	1196.68		44.34	284.77	405.60	434.79
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	178.92		8.61	104.57	79.15	71.65
50th-Percentile Queue Length [ft/ln]	4473.05		215.20	2614.16	1978.87	1791.14
95th-Percentile Queue Length [veh/ln]	282.58		13.42	162.45	123.76	113.46
95th-Percentile Queue Length [ft/ln]	7064.59		335.50	4061.21	3093.88	2836.57

Movement, Approach, & Intersection Results

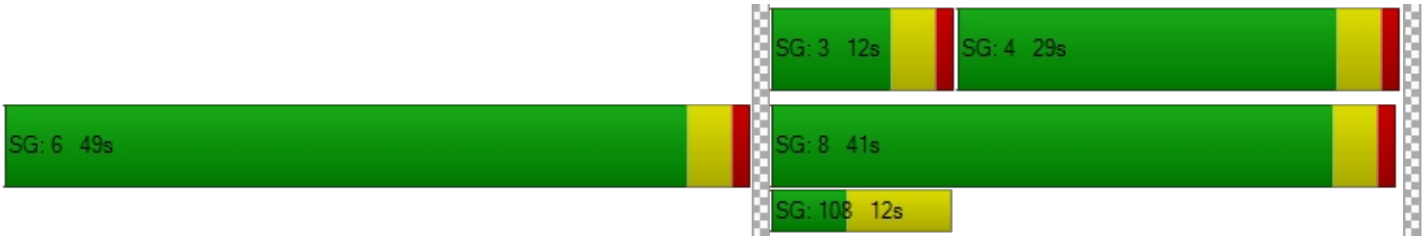
d_M, Delay for Movement [s/veh]	1196.68	1196.68	1196.68	0.00	0.00	0.00	44.34	284.77	0.00	0.00	405.60	434.79
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1196.68			0.00			244.66			419.26		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	592.87											
Intersection LOS	F											
Intersection V/C	2.065											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.693	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.647	4.132	5.130	5.135
Bicycle LOS	E	D	F	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	125.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.235

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	100	141	193	662	457	133
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	1214	712	0
Site-Generated Trips [veh/h]	0	75	62	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]	112	233	278	1955	1224	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	61	73	514	322	39
Total Analysis Volume [veh/h]	118	245	293	2058	1288	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	37	67	30	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	16	16	17	66	46	46
g / C, Green / Cycle	0.17	0.17	0.19	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.07	0.15	0.16	1.08	0.36	0.10
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	315	281	338	1400	1829	817
d1, Uniform Delay [s]	32.83	36.17	35.51	11.84	17.08	12.18
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.74	8.17	6.73	215.40	2.30	0.52
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	0.37	0.87	0.87	1.47	0.70	0.19
d, Delay for Lane Group [s/veh]	33.56	44.34	42.24	227.24	19.38	12.71
Lane Group LOS	C	D	D	F	B	B
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.28	5.70	6.50	99.79	9.36	1.65
50th-Percentile Queue Length [ft/ln]	56.95	142.58	162.43	2494.73	234.11	41.14
95th-Percentile Queue Length [veh/ln]	4.10	9.62	10.68	153.32	14.38	2.96
95th-Percentile Queue Length [ft/ln]	102.52	240.49	266.94	3832.90	359.58	74.05

Movement, Approach, & Intersection Results

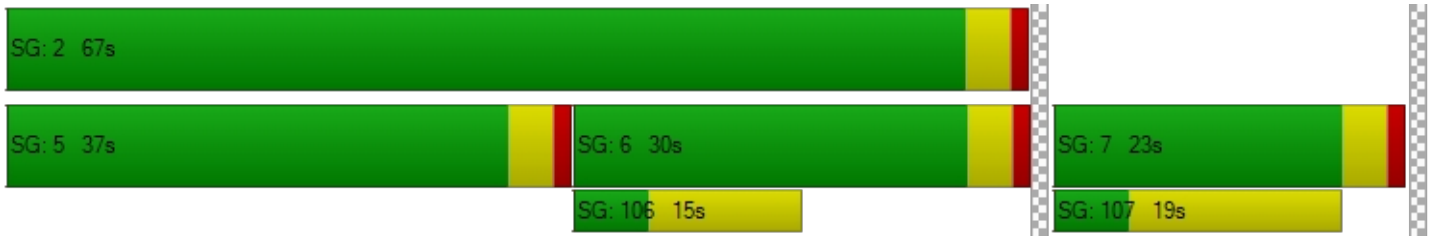
d_M, Delay for Movement [s/veh]	33.56	44.34	42.24	227.24	19.38	12.71
Movement LOS	C	D	D	F	B	B
d_A, Approach Delay [s/veh]	40.84		204.19		18.65	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	125.47					
Intersection LOS	F					
Intersection V/C	1.235					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.250	3.553	0.000
Crosswalk LOS	B	D	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	578
d_b, Bicycle Delay [s]	28.01	4.05	22.76
I_b,int, Bicycle LOS Score for Intersection	1.560	5.439	2.752
Bicycle LOS	A	F	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	389.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.863

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	85	338	59	89	229	171	227	391	77	93	382	85
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	51	1177	336	30	22	37	633	0	690	418	204
Site-Generated Trips [veh/h]	0	32	0	19	39	0	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	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]	95	462	1243	455	325	214	291	1071	86	794	846	314
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	122	327	120	86	56	77	282	23	209	223	83
Total Analysis Volume [veh/h]	100	486	1308	479	342	225	306	1127	91	836	891	331
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	14	31	0	13	30	0	15	26	0	20	31	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	6	27	27	9	30	30	11	22	22	16	27	27
g / C, Green / Cycle	0.07	0.30	0.30	0.10	0.33	0.33	0.12	0.24	0.24	0.18	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.06	0.13	0.81	0.26	0.16	0.16	0.17	0.32	0.33	0.46	0.32	0.35
s, saturation flow rate [veh/h]	1810	3618	1615	1810	1900	1651	1810	1900	1851	1810	1900	1734
c, Capacity [veh/h]	132	1085	485	181	622	540	221	464	452	322	570	520
d1, Uniform Delay [s]	40.95	25.47	31.50	40.50	24.24	24.24	39.50	34.00	34.00	37.00	31.50	31.50
k, delay calibration	0.11	0.50	0.50	0.30	0.50	0.50	0.11	0.43	0.44	0.50	0.43	0.49
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.63	1.34	770.72	750.66	2.72	3.13	178.74	157.89	163.08	728.42	55.64	97.05
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76	0.45	2.70	2.65	0.49	0.49	1.38	1.32	1.33	2.60	1.07	1.17
d, Delay for Lane Group [s/veh]	49.58	26.81	802.22	791.16	26.96	27.37	218.24	191.89	197.08	765.42	87.14	128.55
Lane Group LOS	D	C	F	F	C	C	F	F	F	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.42	4.18	113.53	41.58	5.33	4.69	15.61	29.79	29.67	71.92	20.53	24.72
50th-Percentile Queue Length [ft/ln]	60.47	104.43	2838.20	1039.61	133.14	117.34	390.29	744.72	741.74	1797.91	513.18	618.01
95th-Percentile Queue Length [veh/ln]	4.35	7.52	180.83	64.81	9.11	8.25	24.92	44.76	44.74	112.18	29.21	36.18
95th-Percentile Queue Length [ft/ln]	108.85	187.97	4520.87	1620.35	227.75	206.17	622.88	1118.91	1118.49	2804.51	730.16	904.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.58	26.81	802.22	791.16	27.01	27.37	218.24	194.25	197.08	765.42	100.16	128.55
Movement LOS	D	C	F	F	C	C	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	563.51			377.02			199.23			374.97		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	388.99											
Intersection LOS	F											
Intersection V/C	1.863											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.140	2.865	3.103	3.432
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	578	489	600
d_b, Bicycle Delay [s]	22.05	22.76	25.69	22.05
I_b,int, Bicycle LOS Score for Intersection	3.122	2.423	2.817	3.257
Bicycle LOS	C	B	C	C

Sequence

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

Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	6.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.593

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	456	0	0	369
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	290	0	0	185
Site-Generated Trips [veh/h]	66	0	167	26	4	219
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]	66	0	968	26	4	817
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	255	7	1	215
Total Analysis Volume [veh/h]	69	0	1019	27	4	860
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	19	0	62	0	9	71
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	73	0	77
g / C, Green / Cycle	0.05	0.81	0.01	0.86
(v / s)_i Volume / Saturation Flow Rate	0.04	0.55	0.00	0.45
s, saturation flow rate [veh/h]	1810	1891	1810	1900
c, Capacity [veh/h]	91	1533	10	1635
d1, Uniform Delay [s]	42.17	3.62	44.59	1.60
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.81	2.48	22.30	1.21
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	0.75	0.68	0.39	0.53
d, Delay for Lane Group [s/veh]	53.99	6.10	66.89	2.81
Lane Group LOS	D	A	E	A
Critical Lane Group	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.80	5.36	0.15	1.48
50th-Percentile Queue Length [ft/ln]	44.91	134.06	3.79	37.05
95th-Percentile Queue Length [veh/ln]	3.23	9.16	0.27	2.67
95th-Percentile Queue Length [ft/ln]	80.84	229.01	6.83	66.68

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.99	53.99	6.10	6.10	66.89	2.81
Movement LOS	D	D	A	A	E	A
d_A, Approach Delay [s/veh]	53.99		6.10		3.11	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	6.46					
Intersection LOS	A					
Intersection V/C	0.593					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.765	2.679	2.592
Crosswalk LOS	A	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	1289	1489
d_b, Bicycle Delay [s]	31.25	5.69	2.94
I_b,int, Bicycle LOS Score for Intersection	1.673	3.286	2.985
Bicycle LOS	A	C	C

Sequence

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

Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.461

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	456	0	0	369
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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	290	0	0	185
Site-Generated Trips [veh/h]	219	66	125	42	150	4
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]	219	66	926	42	150	602
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	17	244	11	39	158
Total Analysis Volume [veh/h]	231	69	975	44	158	634
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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	26	0	55	0	9	64
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	14	14	59	59	68	68
g / C, Green / Cycle	0.15	0.15	0.66	0.66	0.76	0.76
(v / s)_i Volume / Saturation Flow Rate	0.13	0.04	0.27	0.03	0.23	0.33
s, saturation flow rate [veh/h]	1810	1615	3618	1615	688	1900
c, Capacity [veh/h]	277	247	2384	1064	565	1440
d1, Uniform Delay [s]	37.00	33.72	7.16	5.38	4.05	3.95
k, delay calibration	0.11	0.11	0.50	0.50	0.22	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.49	0.61	0.52	0.07	0.55	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	0.83	0.28	0.41	0.04	0.28	0.44
d, Delay for Lane Group [s/veh]	43.49	34.33	7.68	5.45	4.60	4.93
Lane Group LOS	D	C	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.35	1.36	3.16	0.22	0.63	3.38
50th-Percentile Queue Length [ft/ln]	133.69	34.04	79.10	5.61	15.76	84.62
95th-Percentile Queue Length [veh/ln]	9.14	2.45	5.70	0.40	1.14	6.09
95th-Percentile Queue Length [ft/ln]	228.50	61.26	142.39	10.09	28.38	152.31

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.49	34.33	7.68	5.45	4.60	4.93
Movement LOS	D	C	A	A	A	A
d_A, Approach Delay [s/veh]	41.38		7.58		4.87	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	11.37					
Intersection LOS	B					
Intersection V/C	0.461					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.258	2.975	2.659
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]	489	1133	1333
d_b, Bicycle Delay [s]	25.69	8.45	5.00
I_b,int, Bicycle LOS Score for Intersection	1.560	2.400	2.866
Bicycle LOS	A	B	C

Sequence

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

Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.260

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	456	0	0	369	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	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200	1.1200
In-Process Volume [veh/h]	0	0	0	0	0	0	0	290	0	0	185	0
Site-Generated Trips [veh/h]	0	0	124	0	0	0	0	66	125	0	154	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	124	0	0	0	0	867	125	0	752	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	33	0	0	0	0	228	33	0	198	0
Total Analysis Volume [veh/h]	0	0	131	0	0	0	0	913	132	0	792	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	14.62	0.00	0.00	10.91	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			B			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	25.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	14.62			10.91			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.97											
Intersection LOS	B											

Beaumont Summit Station

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Report File: \...\7 HY AM.pdf

Scenario 5 HY AM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.029	319.9	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	1.982	275.3	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	0.682	172.0	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.908	84.0	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	1.094	53.4	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	0.961	32.2	D
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	EB Left	0.509	29.4	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Left	0.020	13.3	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.017	10.7	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.278	8.8	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.719	36.8	D
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.429	92.9	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.631	376.6	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.583	409.9	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.799	25.6	C
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.172	203.6	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	319.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.029

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	221	0	503	0	1080	535	203	317	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	221	0	503	0	1080	535	203	317	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	58	0	132	0	284	141	53	83	0
Total Analysis Volume [veh/h]	0	0	0	233	0	529	0	1137	563	214	334	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		762	1700	756
Degree of Utilization, x		1.33	2.03	0.72

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		32.62	113.40	6.35
95th-Percentile Queue Length [ft]		815.39	2835.04	158.82
Approach Delay [s/veh]	0.00	181.61	478.77	19.25
Approach LOS	A	F	F	C
Intersection Delay [s/veh]	319.88			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	275.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.982

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	252	5	224	0	0	0	1074	327	0	0	238	733
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	252	5	224	0	0	0	1074	327	0	0	238	733
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	66	1	59	0	0	0	283	86	0	0	63	193
Total Analysis Volume [veh/h]	265	5	236	0	0	0	1131	344	0	0	251	772
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	528		1475	1023
Degree of Utilization, x	0.96		1.98	1.20

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	12.43		97.05	33.14
95th-Percentile Queue Length [ft]	310.79		2426.13	828.59
Approach Delay [s/veh]	55.18	0.00	459.25	119.03
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	275.33			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	172.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.682

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	53	129	123	451	786	173
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]	53	129	123	451	786	173
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	34	32	119	207	46
Total Analysis Volume [veh/h]	56	136	129	475	827	182
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	0.68	0.41	0.19	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	171.97	138.95	11.36	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	9.56	9.56	0.68	0.68	0.00	0.00
95th-Percentile Queue Length [ft/ln]	238.89	238.89	16.94	16.94	0.00	0.00
d_A, Approach Delay [s/veh]	148.58		2.43		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	16.62					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	84.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.908

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	194	0	304	42	0	757
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]	194	0	304	42	0	757
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	51	0	80	11	0	199
Total Analysis Volume [veh/h]	204	0	320	44	0	797
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	0.91	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	83.97	73.04	0.00	0.00	7.99	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	7.56	7.56	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	188.88	188.88	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	83.97		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	12.55					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	53.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.094

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	65	2	4	0	5	110	31	366	13	3	707	4
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	65	2	4	0	5	110	31	366	13	3	707	4
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	17	1	1	0	1	29	8	96	3	1	186	1
Total Analysis Volume [veh/h]	68	2	4	0	5	116	33	385	14	3	744	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	502	571	653	751
Degree of Utilization, x	0.15	0.21	0.66	1.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.51	0.80	4.98	21.28
95th-Percentile Queue Length [ft]	12.84	19.90	124.55	532.09
Approach Delay [s/veh]	11.41	11.00	18.67	84.36
Approach LOS	B	B	C	F
Intersection Delay [s/veh]	53.41			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.961

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	43	20	4	6	27	58	26	210	72	3	600	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	43	20	4	6	27	58	26	210	72	3	600	1
Peak Hour Factor	0.940	0.940	0.940	0.950	0.940	0.950	0.950	0.950	0.940	0.940	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	11	5	1	2	7	15	7	55	19	1	158	0
Total Analysis Volume [veh/h]	46	21	4	6	29	61	27	221	77	3	632	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	535	582	618	710	662	760
Degree of Utilization, x	0.13	0.16	0.40	0.11	0.96	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.45	0.59	1.93	0.36	13.89	0.00
95th-Percentile Queue Length [ft]	11.37	14.67	48.35	9.08	347.16	0.10
Approach Delay [s/veh]	10.74	10.40	11.44		48.52	
Approach LOS	B	B	B		E	
Intersection Delay [s/veh]	32.22					
Intersection LOS	D					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.509

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	278	353	33	13	295	56	46	118	161	38	268	13
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	278	353	33	13	295	56	46	118	161	38	268	13
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	73	93	9	3	78	15	12	31	42	10	71	3
Total Analysis Volume [veh/h]	293	372	35	14	311	59	48	124	169	40	282	14
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	29	40	0	12	23	0	11	27	0	11	27	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	53	53	2	38	38	4	17	17	3	16
g / C, Green / Cycle	0.18	0.59	0.59	0.02	0.42	0.42	0.04	0.18	0.18	0.04	0.18
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.02	0.01	0.16	0.04	0.03	0.07	0.10	0.02	0.16
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1884
c, Capacity [veh/h]	335	1111	944	32	792	674	71	350	298	65	340
d1, Uniform Delay [s]	35.66	9.65	7.94	43.77	18.28	15.87	42.65	32.03	33.44	42.78	35.84
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.20	0.81	0.07	9.33	1.46	0.26	10.46	0.61	1.70	9.21	6.83
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	0.87	0.33	0.04	0.44	0.39	0.09	0.67	0.35	0.57	0.62	0.87
d, Delay for Lane Group [s/veh]	42.85	10.47	8.01	53.10	19.74	16.13	53.11	32.64	35.14	52.00	42.67
Lane Group LOS	D	B	A	D	B	B	D	C	D	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	6.47	3.29	0.25	0.39	4.58	0.75	1.23	2.32	3.36	1.02	6.67
50th-Percentile Queue Length [ft/ln]	161.7	82.20	6.35	9.63	114.4	18.72	30.68	58.05	84.02	25.39	166.71
95th-Percentile Queue Length [veh/ln]	10.64	5.92	0.46	0.69	8.09	1.35	2.21	4.18	6.05	1.83	10.90
95th-Percentile Queue Length [ft/ln]	265.9	147.9	11.44	17.33	202.1	33.69	55.23	104.5	151.2	45.70	272.59

Movement, Approach, & Intersection Results

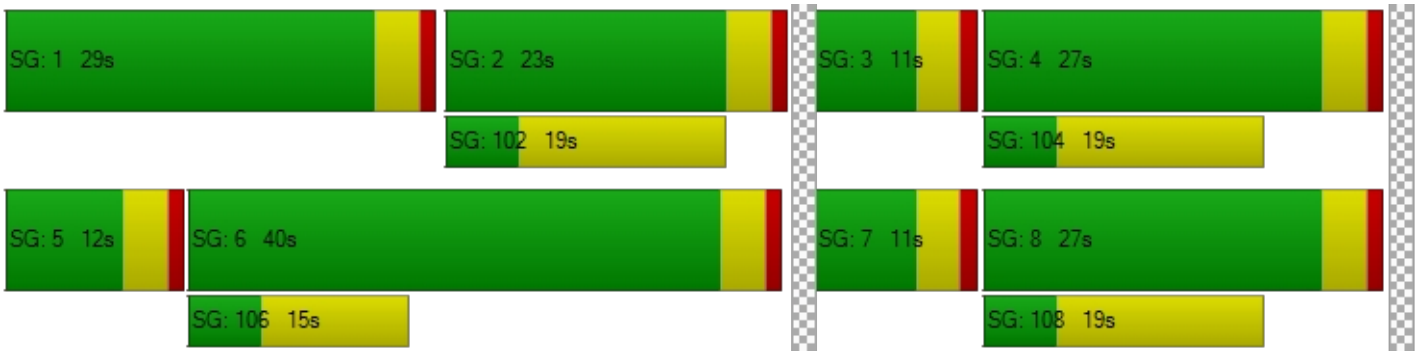
d_M, Delay for Movement [s/veh]	42.85	10.47	8.01	53.10	19.74	16.13	53.11	32.64	35.14	52.00	42.67	42.67
Movement LOS	D	B	A	D	B	B	D	C	D	D	D	D
d_A, Approach Delay [s/veh]	23.90			20.40			36.76			43.78		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	29.42											
Intersection LOS	C											
Intersection V/C	0.509											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.628	2.365	2.449	2.162
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	422	511	511
d_b, Bicycle Delay [s]	16.20	28.01	24.94	24.94
I_b,int, Bicycle LOS Score for Intersection	2.715	2.193	2.122	2.114
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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	135	27	9	24	9	66	73	0	12	54	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	135	27	9	24	9	66	73	0	12	54	6
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	36	7	2	6	2	17	19	0	3	14	2
Total Analysis Volume [veh/h]	0	142	28	9	25	9	69	77	0	13	57	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.24	0.03	0.02	0.04	0.01	0.04	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	13.16	13.34	10.63	13.35	11.64	8.91	7.43	0.00	0.00	7.37	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.10	1.10	1.10	0.23	0.23	0.23	0.14	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	27.47	27.47	27.47	5.74	5.74	5.74	3.49	0.00	0.00	0.64	0.00	0.00
d_A, Approach Delay [s/veh]	12.89			11.42			3.51			1.26		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	7.57											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	10.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.017

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	10	4	17	0	8	5	119	0	1	71	49
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	10	4	17	0	8	5	119	0	1	71	49
Peak Hour Factor	0.950	0.950	0.959	0.959	0.950	0.950	0.950	0.959	0.950	0.959	0.959	0.959
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	3	1	4	0	2	1	31	0	0	19	13
Total Analysis Volume [veh/h]	0	11	4	18	0	8	5	124	0	1	74	51
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.81	10.69	8.72	9.90	10.55	8.76	7.45	0.00	0.00	7.44	0.00	0.00
Movement LOS	A	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.06	0.10	0.10	0.10	0.01	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.61	1.61	1.61	2.46	2.46	2.46	0.26	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.17			9.55			0.29			0.06		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.51											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

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):	0.278

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	46	74	119	66	29	71
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]	46	74	119	66	29	71
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	19	35	20	8	21
Total Analysis Volume [veh/h]	55	78	141	78	31	84
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	622	785	788	651	716
Degree of Utilization, x	0.09	0.10	0.28	0.05	0.12

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.29	0.33	1.14	0.15	0.40
95th-Percentile Queue Length [ft]	7.25	8.25	28.44	3.75	9.93
Approach Delay [s/veh]	8.32		9.32	8.43	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	8.82				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	36.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.719

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	77	506	28	344	384	35	4	47	55	80	103	247
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	77	506	28	344	384	35	4	47	55	80	103	247
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	20	133	7	91	101	9	1	12	14	21	27	65
Total Analysis Volume [veh/h]	81	533	29	362	404	37	4	49	58	84	108	260
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	19	23	0	28	32	0	9	23	0	16	30	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	32	20	46	1	17	17	5	22
g / C, Green / Cycle	0.06	0.35	0.22	0.52	0.01	0.19	0.19	0.06	0.24
(v / s)_i Volume / Saturation Flow Rate	0.04	0.30	0.20	0.24	0.00	0.03	0.04	0.05	0.22
s, saturation flow rate [veh/h]	1810	1883	1810	1872	1810	1900	1615	1810	1689
c, Capacity [veh/h]	108	665	401	964	11	354	301	111	408
d1, Uniform Delay [s]	41.66	26.82	34.10	13.84	44.55	30.58	30.90	41.60	33.11
k, delay calibration	0.11	0.50	0.16	0.50	0.11	0.11	0.11	0.11	0.19
I, 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]	9.95	12.49	10.62	1.56	19.00	0.18	0.31	10.17	12.20
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	0.75	0.84	0.90	0.46	0.36	0.14	0.19	0.76	0.90
d, Delay for Lane Group [s/veh]	51.60	39.31	44.71	15.40	63.55	30.76	31.21	51.77	45.31
Lane Group LOS	D	D	D	B	E	C	C	D	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.01	12.57	8.27	5.21	0.14	0.87	1.05	2.09	8.73
50th-Percentile Queue Length [ft/ln]	50.25	314.36	206.86	130.18	3.61	21.81	26.22	52.18	218.37
95th-Percentile Queue Length [veh/ln]	3.62	18.39	12.99	8.95	0.26	1.57	1.89	3.76	13.58
95th-Percentile Queue Length [ft/ln]	90.46	459.74	324.79	223.74	6.49	39.26	47.19	93.92	339.54

Movement, Approach, & Intersection Results

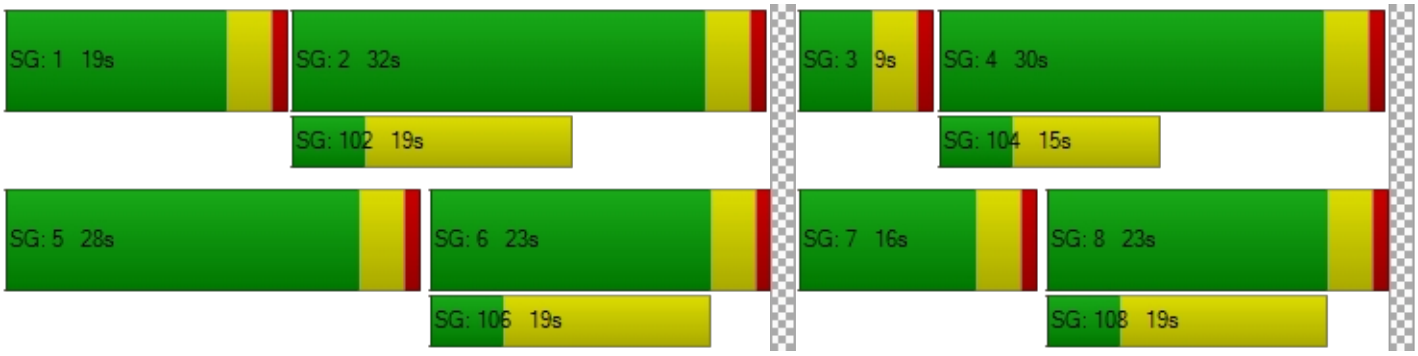
d_M, Delay for Movement [s/veh]	51.60	39.31	39.31	44.71	15.40	15.40	63.55	30.76	31.21	51.77	45.31	45.31
Movement LOS	D	D	D	D	B	B	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	40.86			28.62			32.18			46.51		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	36.76											
Intersection LOS	D											
Intersection V/C	0.719											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.519	2.808	2.242	2.422
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	622	422	578
d_b, Bicycle Delay [s]	28.01	21.36	28.01	22.76
I_b,int, Bicycle LOS Score for Intersection	2.621	2.885	1.743	2.305
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	92.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.429

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	318	105	53	560	625	178
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]	318	105	53	560	625	178
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	28	14	147	164	47
Total Analysis Volume [veh/h]	335	111	56	589	658	187
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	466	389	589	476	476	508
Degree of Utilization, x	0.96	0.14	1.43	0.59	0.59	0.55

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	11.78	0.50	29.57	3.76	3.76	3.34
95th-Percentile Queue Length [ft]	294.45	12.48	739.29	94.04	94.04	83.57
Approach Delay [s/veh]	59.88	211.35		19.84		
Approach LOS	F	F		C		
Intersection Delay [s/veh]	92.87					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	376.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.631

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	540	8	236	0	618	461	888	589	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	540	8	236	0	618	461	888	589	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	142	2	62	0	163	121	234	155	0
Total Analysis Volume [veh/h]	0	0	0	568	8	248	0	651	485	935	620	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.47	0.64	0.52	0.33
s, saturation flow rate [veh/h]		1747	1767	1810	1900
c, Capacity [veh/h]		352	589	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	5.64
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		611.69	424.22	259.01	0.25
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		2.34	1.93	1.56	0.46
d, Delay for Lane Group [s/veh]		647.62	454.22	289.08	5.88
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		66.68	80.78	54.98	3.48
50th-Percentile Queue Length [ft/ln]		1666.93	2019.41	1374.43	86.90
95th-Percentile Queue Length [veh/ln]		104.77	127.57	84.50	6.26
95th-Percentile Queue Length [ft/ln]		2619.27	3189.23	2112.44	156.41

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	647.6	647.6	647.6	0.00	454.2	454.2	289.0	5.88	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			647.62			454.22			176.17		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	376.55											
Intersection LOS	F											
Intersection V/C	1.631											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.919	3.434	4.125
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	409.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.583

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	235	1	430	0	0	0	455	692	0	0	1026	1381
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	235	1	430	0	0	0	455	692	0	0	1026	1381
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	62	0	113	0	0	0	120	182	0	0	270	363
Total Analysis Volume [veh/h]	247	1	453	0	0	0	479	728	0	0	1080	1454
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	23	0	0	0	0	17	67	0	0	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	22		26	60	30	30
g / C, Green / Cycle	0.25		0.29	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.42		0.26	0.38	0.57	0.90
s, saturation flow rate [veh/h]	1679		1810	1900	1900	1615
c, Capacity [veh/h]	417		515	1259	634	539
d1, Uniform Delay [s]	33.82		31.31	8.30	29.99	29.99
k, delay calibration	0.50		0.30	0.13	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	316.70		17.72	0.52	323.70	770.06
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	1.68		0.93	0.58	1.70	2.70
d, Delay for Lane Group [s/veh]	350.52		49.03	8.81	353.69	800.05
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	44.64		12.29	6.70	70.08	126.35
50th-Percentile Queue Length [ft/ln]	1116.06		307.27	167.56	1751.96	3158.71
95th-Percentile Queue Length [veh/ln]	69.75		18.04	10.95	108.70	202.21
95th-Percentile Queue Length [ft/ln]	1743.79		451.01	273.70	2717.61	5055.24

Movement, Approach, & Intersection Results

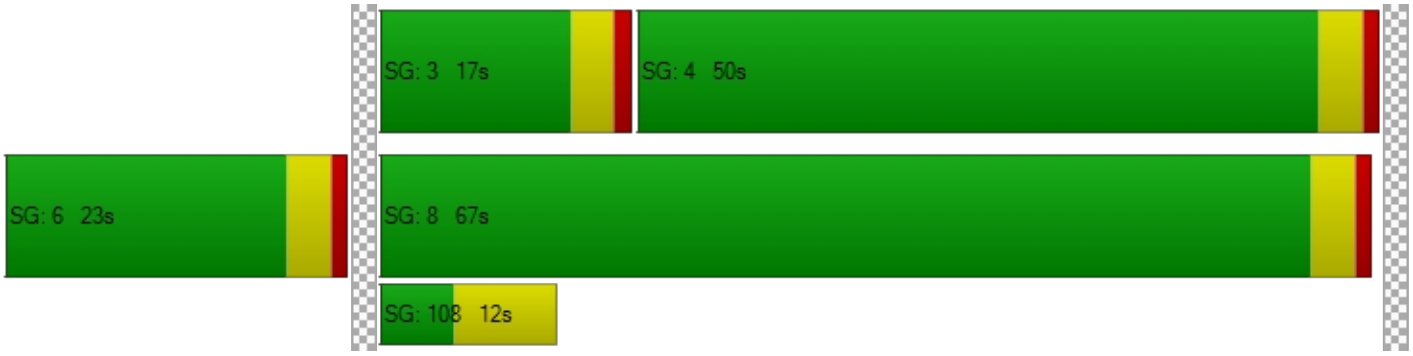
d_M, Delay for Movement [s/veh]	350.5	350.5	350.5	0.00	0.00	0.00	49.03	8.81	0.00	0.00	353.6	800.0
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	350.52			0.00			24.78			609.81		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	409.92											
Intersection LOS	F											
Intersection V/C	1.583											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.457	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	0	1400	1022
d_b, Bicycle Delay [s]	28.01	45.00	4.05	10.76
I_b,int, Bicycle LOS Score for Intersection	2.716	4.132	3.551	5.741
Bicycle LOS	B	D	D	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	25.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.799

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	133	269	156	685	1833	65
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]	133	269	156	685	1833	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	71	41	180	482	17
Total Analysis Volume [veh/h]	140	283	164	721	1929	68
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	18	18	9	64	51	51
g / C, Green / Cycle	0.20	0.20	0.10	0.72	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.08	0.18	0.09	0.38	0.53	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	356	318	181	1357	2062	921
d1, Uniform Delay [s]	31.47	35.21	40.08	5.91	17.83	8.69
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.71	8.52	15.26	1.49	9.53	0.16
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	0.39	0.89	0.91	0.53	0.94	0.07
d, Delay for Lane Group [s/veh]	32.18	43.73	55.35	7.41	27.36	8.84
Lane Group LOS	C	D	E	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.65	6.58	4.18	4.70	17.54	0.55
50th-Percentile Queue Length [ft/ln]	66.19	164.53	104.55	117.43	438.61	13.72
95th-Percentile Queue Length [veh/ln]	4.77	10.79	7.53	8.25	24.41	0.99
95th-Percentile Queue Length [ft/ln]	119.14	269.71	188.19	206.29	610.35	24.70

Movement, Approach, & Intersection Results

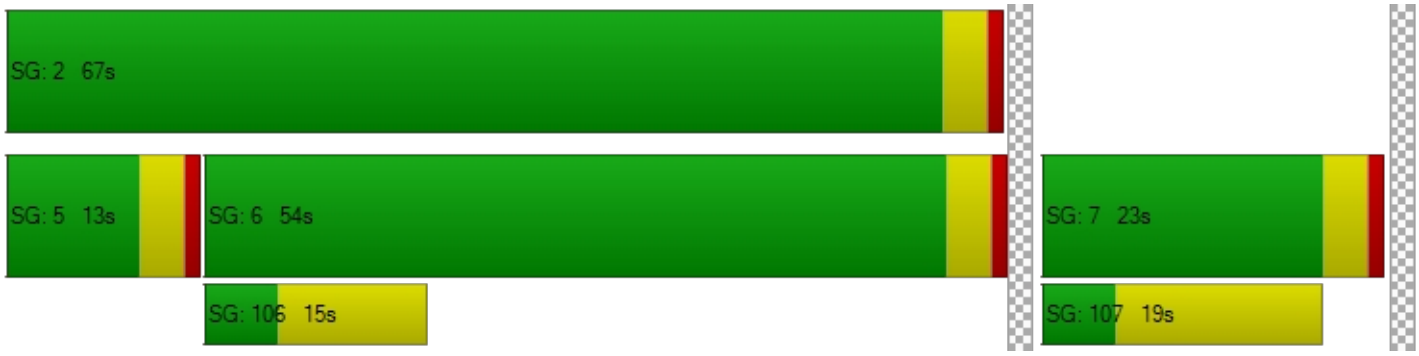
d_M, Delay for Movement [s/veh]	32.18	43.73	55.35	7.41	27.36	8.84
Movement LOS	C	D	E	A	C	A
d_A, Approach Delay [s/veh]	39.91		16.29		26.73	
Approach LOS	D		B		C	
d_I, Intersection Delay [s/veh]	25.62					
Intersection LOS	C					
Intersection V/C	0.799					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.190	3.265	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	3.020	3.207
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	203.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.172

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	105	286	417	131	349	384	215	456	131	1125	1013	352
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	105	286	417	131	349	384	215	456	131	1125	1013	352
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	28	75	110	34	92	101	57	120	34	296	267	93
Total Analysis Volume [veh/h]	111	301	439	138	367	404	226	480	138	1184	1066	371
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	19	26	0	29	36	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	22	22	5	22	22	13	22	22	25	34	34
g / C, Green / Cycle	0.06	0.25	0.25	0.06	0.25	0.25	0.14	0.24	0.24	0.28	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.06	0.16	0.27	0.08	0.19	0.25	0.12	0.17	0.17	0.65	0.38	0.41
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1756	1810	1900	1741
c, Capacity [veh/h]	101	468	397	101	468	397	262	461	426	503	713	654
d1, Uniform Delay [s]	42.50	30.39	33.93	42.50	31.70	33.93	37.59	31.05	31.05	32.50	28.10	28.10
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.46	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	73.15	6.68	76.47	180.9	12.44	49.37	8.12	1.90	2.06	616.1	34.01	65.31
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.10	0.64	1.10	1.37	0.78	1.02	0.86	0.70	0.70	2.36	1.01	1.10
d, Delay for Lane Group [s/veh]	115.6	37.07	110.4	223.4	44.14	83.29	45.71	32.95	33.12	648.6	62.11	93.41
Lane Group LOS	F	D	F	F	D	F	D	C	C	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.20	6.42	16.63	7.21	8.68	13.64	5.19	6.17	5.73	96.43	21.00	24.93
50th-Percentile Queue Length [ft/ln]	105.0	160.5	415.7	180.2	216.9	340.9	129.8	154.2	143.2	2410.	524.9	623.2
95th-Percentile Queue Length [veh/ln]	7.56	10.58	24.65	12.60	13.51	19.88	8.93	10.24	9.66	152.3	28.66	35.31
95th-Percentile Queue Length [ft/ln]	189.0	264.4	616.2	315.0	337.7	497.0	223.2	256.1	241.4	3809.	716.4	882.6

Movement, Approach, & Intersection Results

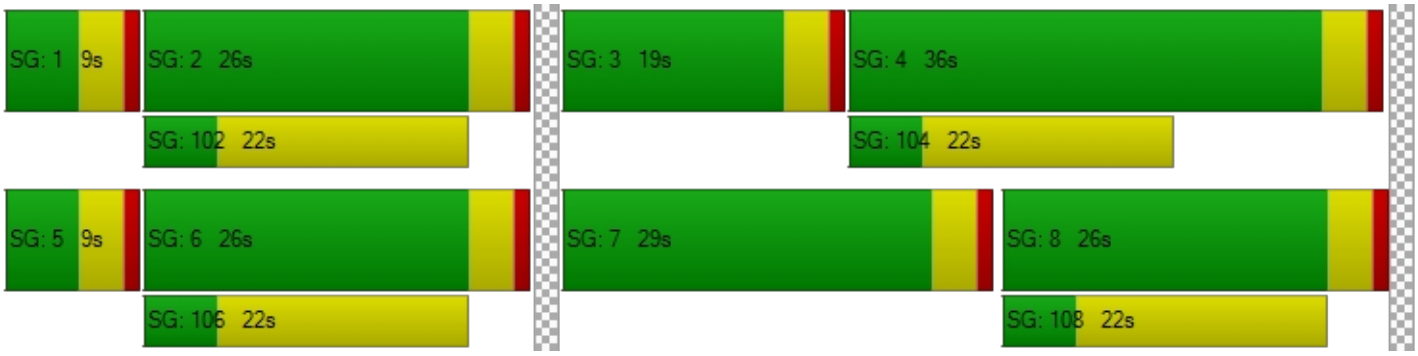
d_M, Delay for Movement [s/veh]	115.6	37.07	110.4	223.4	44.14	83.29	45.71	33.00	33.12	648.6	72.32	93.41
Movement LOS	F	D	F	F	D	F	D	C	C	F	E	F
d_A, Approach Delay [s/veh]	85.14			88.76			36.43			335.65		
Approach LOS	F			F			D			F		
d_I, Intersection Delay [s/veh]	203.57											
Intersection LOS	F											
Intersection V/C	1.172											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.962	2.771	3.011	3.138
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	489	711
d_b, Bicycle Delay [s]	25.69	25.69	25.69	18.69
I_b,int, Bicycle LOS Score for Intersection	2.262	2.310	2.256	3.722
Bicycle LOS	B	B	B	D

Sequence

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



Beaumont Summit Station

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Scenario 5 HY PM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.192	577.9	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.028	354.5	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	2.150	759.7	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	0.764	87.6	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.423	138.6	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.210	78.0	F
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.661	32.9	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	NB Left	0.082	15.2	C
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.006	12.1	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.322	9.5	A
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	NB Thru	0.887	71.0	E
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.906	158.5	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.203	1,037.2	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	2.026	566.0	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.186	105.3	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.878	393.8	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	577.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.192

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	546	7	1088	0	816	513	152	783	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	546	7	1088	0	816	513	152	783	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	144	2	286	0	215	135	40	206	0
Total Analysis Volume [veh/h]	0	0	0	575	7	1145	0	859	540	160	824	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1727	1399	984
Degree of Utilization, x		3.19	1.73	1.29

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		152.49	80.36	37.45
95th-Percentile Queue Length [ft]		3812.33	2008.99	936.22
Approach Delay [s/veh]	0.00	1005.68	346.49	156.29
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	577.94			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	354.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.028

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	684	9	227	0	0	0	713	752	0	0	258	448
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	684	9	227	0	0	0	713	752	0	0	258	448
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	180	2	60	0	0	0	188	198	0	0	68	118
Total Analysis Volume [veh/h]	720	9	239	0	0	0	751	792	0	0	272	472
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	968		1543	836
Degree of Utilization, x	1.84		2.03	0.89

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	61.32		103.35	11.90
95th-Percentile Queue Length [ft]	1533.01		2583.63	297.62
Approach Delay [s/veh]	404.33	0.00	479.27	30.85
Approach LOS	F	A	F	D
Intersection Delay [s/veh]	354.49			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	759.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.150

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	114	121	159	818	529	132
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]	114	121	159	818	529	132
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	32	42	215	139	35
Total Analysis Volume [veh/h]	120	127	167	861	557	139
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	2.15	0.26	0.18	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	759.71	702.58	9.85	0.00	0.00	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	22.23	22.23	0.67	0.67	0.00	0.00
95th-Percentile Queue Length [ft/ln]	555.87	555.87	16.75	16.75	0.00	0.00
d_A, Approach Delay [s/veh]	730.33		1.60		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	92.36					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	87.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.764

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	100	3	795	86	0	579
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]	100	3	795	86	0	579
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	1	209	23	0	152
Total Analysis Volume [veh/h]	105	3	837	91	0	609
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	0.76	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	87.58	71.73	0.00	0.00	9.83	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	4.68	4.68	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	116.99	116.99	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	87.14		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	5.72					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	138.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.423

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	30	6	4	6	9	37	77	852	28	13	600	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	30	6	4	6	9	37	77	852	28	13	600	6
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	8	2	1	2	2	10	20	224	7	3	158	2
Total Analysis Volume [veh/h]	32	6	4	6	9	39	81	897	29	14	632	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	498	539	1007	705
Degree of Utilization, x	0.08	0.10	1.42	0.93

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.27	0.33	45.70	12.68
95th-Percentile Queue Length [ft]	6.87	8.30	1142.38	317.08
Approach Delay [s/veh]	10.89	10.42	214.34	40.36
Approach LOS	B	B	F	E
Intersection Delay [s/veh]	138.56			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	78.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.210

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	72	21	8	13	19	21	24	690	63	11	498	9
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	72	21	8	13	19	21	24	690	63	11	498	9
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	19	6	2	3	5	6	6	182	17	3	131	2
Total Analysis Volume [veh/h]	76	22	8	14	20	22	25	726	66	12	524	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	504	508	751	709	611	695
Degree of Utilization, x	0.21	0.11	1.21	0.09	0.88	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.37	26.78	0.31	10.23	0.04
95th-Percentile Queue Length [ft]	19.65	9.25	669.46	7.66	255.81	0.98
Approach Delay [s/veh]	12.03	10.98	119.23		36.01	
Approach LOS	B	B	F		E	
Intersection Delay [s/veh]	78.03					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

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):	0.661

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	276	370	73	26	402	60	75	272	376	55	213	22
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	276	370	73	26	402	60	75	272	376	55	213	22
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	73	97	19	7	106	16	20	72	99	14	56	6
Total Analysis Volume [veh/h]	291	389	77	27	423	63	79	286	396	58	224	23
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	22	36	0	9	23	0	19	36	0	9	26	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	43	43	2	29	29	5	25	25	4	23
g / C, Green / Cycle	0.18	0.48	0.48	0.03	0.33	0.33	0.06	0.27	0.27	0.04	0.26
(v / s)_i Volume / Saturation Flow Rate	0.16	0.20	0.05	0.01	0.22	0.04	0.04	0.15	0.25	0.03	0.13
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1869
c, Capacity [veh/h]	327	908	772	50	617	525	105	521	442	77	483
d1, Uniform Delay [s]	35.99	15.43	12.88	43.18	26.39	21.35	41.73	27.92	31.43	42.60	28.52
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.21	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.22	1.48	0.26	8.68	6.10	0.47	10.10	0.91	11.61	13.49	0.84
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	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	0.89	0.43	0.10	0.54	0.69	0.12	0.75	0.55	0.90	0.75	0.51
d, Delay for Lane Group [s/veh]	44.21	16.91	13.14	51.87	32.49	21.82	51.83	28.83	43.04	56.09	29.36
Lane Group LOS	D	B	B	D	C	C	D	C	D	E	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.53	4.90	0.80	0.70	8.53	0.97	1.97	5.12	9.20	1.52	4.44
50th-Percentile Queue Length [ft/ln]	163.3	122.4	20.09	17.55	213.3	24.26	49.16	127.9	229.9	38.09	110.89
95th-Percentile Queue Length [veh/ln]	10.73	8.53	1.45	1.26	13.33	1.75	3.54	8.83	14.17	2.74	7.89
95th-Percentile Queue Length [ft/ln]	268.1	213.1	36.15	31.59	333.1	43.67	88.49	220.7	354.3	68.57	197.24

Movement, Approach, & Intersection Results

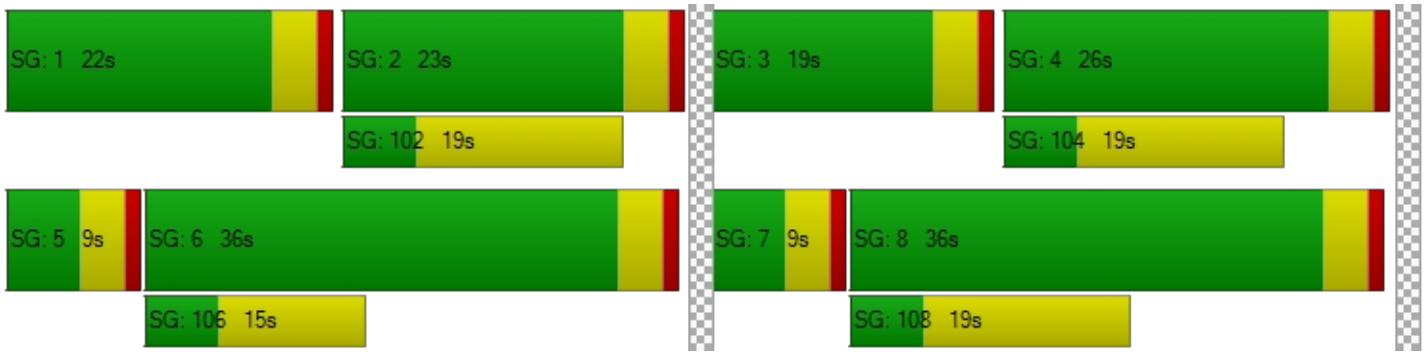
d_M, Delay for Movement [s/veh]	44.21	16.91	13.14	51.87	32.49	21.82	51.83	28.83	43.04	56.09	29.36	29.36
Movement LOS	D	B	B	D	C	C	D	C	D	E	C	C
d_A, Approach Delay [s/veh]	27.02			32.20			38.61			34.44		
Approach LOS	C			C			D			C		
d_I, Intersection Delay [s/veh]	32.90											
Intersection LOS	C											
Intersection V/C	0.661											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.796	2.418	2.568	2.243
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	711	422	711	489
d_b, Bicycle Delay [s]	18.69	28.01	18.69	25.69
I_b,int, Bicycle LOS Score for Intersection	2.809	2.406	2.815	2.063
Bicycle LOS	C	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.082

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			Yes		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	32	30	35	20	65	20	55	106	25	42	121	26
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	32	30	35	20	65	20	55	106	25	42	121	26
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	8	8	9	5	17	5	14	28	7	11	32	7
Total Analysis Volume [veh/h]	34	32	37	21	68	21	58	112	26	44	127	27
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.07	0.04	0.05	0.15	0.02	0.04	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	15.18	14.50	10.20	14.92	14.93	10.67	7.61	0.00	0.00	7.55	0.00	0.00
Movement LOS	C	B	B	B	B	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.69	0.69	0.69	0.82	0.82	0.82	0.13	0.00	0.00	0.09	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.34	17.34	17.34	20.57	20.57	20.57	3.15	0.00	0.00	2.33	0.00	0.00
d_A, Approach Delay [s/veh]	13.18			14.11			2.25			1.68		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	6.07											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	12.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			Yes			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	2	10	24	3	22	11	153	2	6	169	32
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	10	24	3	22	11	153	2	6	169	32
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	3	6	1	6	3	40	1	2	44	8
Total Analysis Volume [veh/h]	1	2	11	25	3	23	12	161	2	6	178	34
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.04	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.97	11.90	8.79	11.32	12.07	9.24	7.65	0.00	0.00	7.53	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.23	0.23	0.23	0.03	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.28	1.28	1.28	5.75	5.75	5.75	0.66	0.00	0.00	0.32	0.00	0.00
d_A, Approach Delay [s/veh]	9.39			10.42			0.52			0.21		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	1.75											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.322

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	71	30	153	81	80	169
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]	71	30	153	81	80	169
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	19	8	40	21	21	44
Total Analysis Volume [veh/h]	75	32	161	85	84	178
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	581	720	763	651	715
Degree of Utilization, x	0.13	0.04	0.32	0.13	0.25

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.44	0.14	1.40	0.44	0.98
95th-Percentile Queue Length [ft]	11.05	3.48	34.90	11.06	24.49
Approach Delay [s/veh]	9.25		9.94	9.29	
Approach LOS	A		A	A	
Intersection Delay [s/veh]	9.54				
Intersection LOS	A				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	71.0
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.887

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	62	528	114	308	653	23	43	129	104	70	67	428
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	528	114	308	653	23	43	129	104	70	67	428
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	16	139	30	81	172	6	11	34	27	18	18	113
Total Analysis Volume [veh/h]	65	556	120	324	687	24	45	136	109	74	71	451
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	18	33	0	19	34	0	9	24	0	14	29	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	4	29	15	40	3	25	25	5	27
g / C, Green / Cycle	0.05	0.32	0.17	0.44	0.04	0.28	0.28	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.04	0.37	0.18	0.38	0.02	0.07	0.07	0.04	0.32
s, saturation flow rate [veh/h]	1810	1842	1810	1889	1810	1900	1615	1810	1649
c, Capacity [veh/h]	87	597	302	835	68	528	449	97	484
d1, Uniform Delay [s]	42.28	30.42	37.50	22.45	42.72	25.28	25.17	42.00	31.78
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.41
I, 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]	11.74	79.19	47.04	10.63	10.25	0.26	0.28	11.42	59.83
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	0.74	1.13	1.07	0.85	0.66	0.26	0.24	0.76	1.08
d, Delay for Lane Group [s/veh]	54.02	109.61	84.54	33.08	52.98	25.53	25.45	53.42	91.61
Lane Group LOS	D	F	F	C	D	C	C	D	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.67	25.11	10.11	14.04	1.15	2.19	1.75	1.88	17.86
50th-Percentile Queue Length [ft/ln]	41.63	627.85	252.69	350.97	28.77	54.73	43.79	46.93	446.46
95th-Percentile Queue Length [veh/ln]	3.00	36.06	15.84	20.18	2.07	3.94	3.15	3.38	25.95
95th-Percentile Queue Length [ft/ln]	74.94	901.49	396.10	504.59	51.79	98.52	78.83	84.47	648.68

Movement, Approach, & Intersection Results

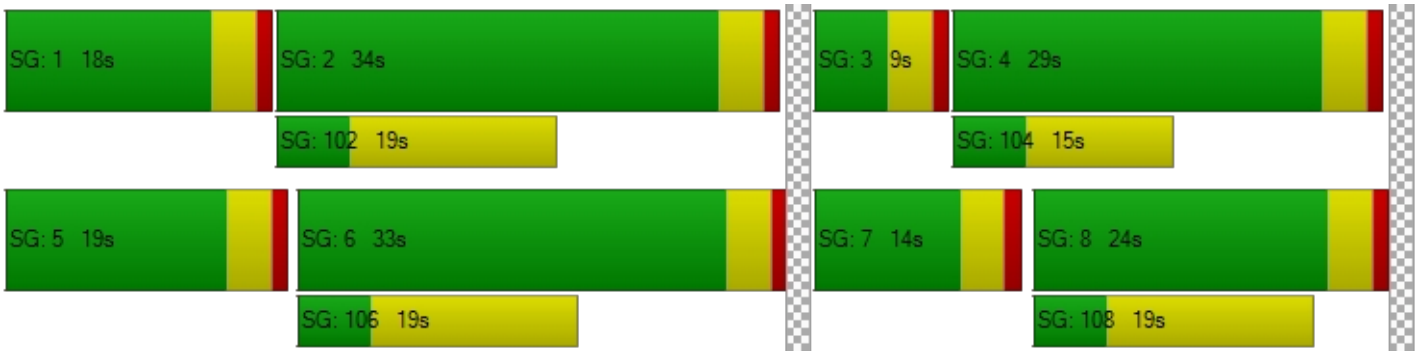
d_M, Delay for Movement [s/veh]	54.02	109.6	109.6	84.54	33.08	33.08	52.98	25.53	25.45	53.42	91.61	91.61
Movement LOS	D	F	F	F	C	C	D	C	C	D	F	F
d_A, Approach Delay [s/veh]	104.73			49.19			29.76			86.87		
Approach LOS	F			D			C			F		
d_I, Intersection Delay [s/veh]	70.97											
Intersection LOS	E											
Intersection V/C	0.887											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.656	3.072	2.279	2.515
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	667	444	556
d_b, Bicycle Delay [s]	20.67	20.00	27.22	23.47
I_b,int, Bicycle LOS Score for Intersection	2.782	3.267	2.038	2.543
Bicycle LOS	C	C	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 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	158.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.906

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	224	188	219	705	740	283
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]	224	188	219	705	740	283
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	49	58	186	195	74
Total Analysis Volume [veh/h]	236	198	231	742	779	298
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	439	369	742	465	465	503
Degree of Utilization, x	0.99	0.63	1.91	0.77	0.77	0.71

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	12.47	4.08	49.68	6.73	6.73	5.68
95th-Percentile Queue Length [ft]	311.81	101.98	1241.95	168.21	168.21	141.88
Approach Delay [s/veh]	69.34	340.60		29.93		
Approach LOS	F	F		D		
Intersection Delay [s/veh]	158.51					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,037.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.203

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	1435	9	483	0	661	372	756	858	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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	1435	9	483	0	661	372	756	858	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	378	2	127	0	174	98	199	226	0
Total Analysis Volume [veh/h]	0	0	0	1511	9	508	0	696	392	796	903	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	25	0	20	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.15	0.61	0.44	0.48
s, saturation flow rate [veh/h]		1757	1786	1810	1900
c, Capacity [veh/h]		355	595	600	1347
d1, Uniform Delay [s]		35.91	30.01	30.08	7.25
k, delay calibration		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2128.79	379.18	158.29	2.64
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		5.72	1.83	1.33	0.67
d, Delay for Lane Group [s/veh]		2164.71	409.18	188.37	9.90
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		216.65	74.18	38.16	7.32
50th-Percentile Queue Length [ft/ln]		5416.29	1854.50	954.09	183.11
95th-Percentile Queue Length [veh/ln]		326.98	116.52	56.89	11.76
95th-Percentile Queue Length [ft/ln]		8174.56	2913.07	1422.35	294.07

Movement, Approach, & Intersection Results

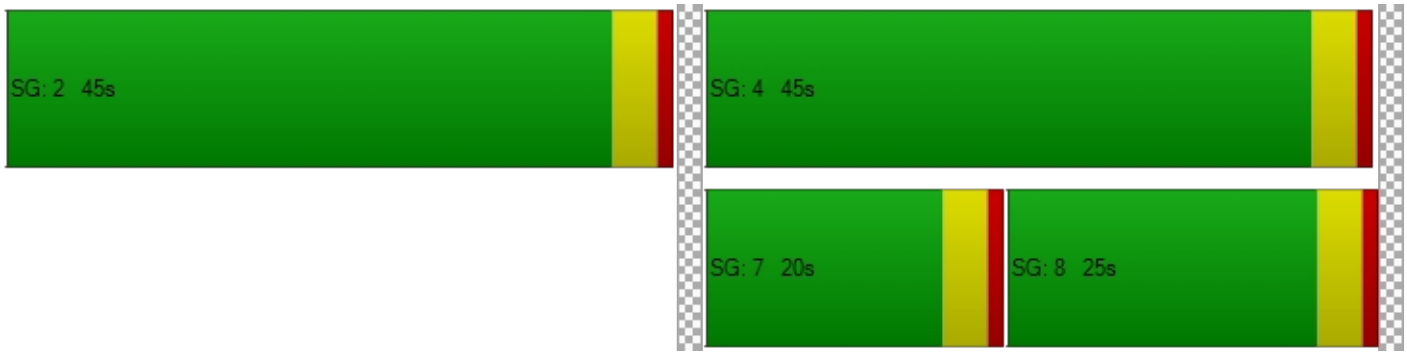
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2164.	2164.	2164.	0.00	409.1	409.1	188.3	9.90	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			2164.71			409.18			93.51		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1037.19											
Intersection LOS	F											
Intersection V/C	2.203											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	911	467	911
d_b, Bicycle Delay [s]	45.00	13.34	26.45	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.906	3.355	4.363
Bicycle LOS	D	E	C	E

Sequence

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



Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	566.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.026

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	594	8	1129	0	0	0	343	1698	0	0	1020	963
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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]	594	8	1129	0	0	0	343	1698	0	0	1020	963
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	156	2	297	0	0	0	90	447	0	0	268	253
Total Analysis Volume [veh/h]	625	8	1188	0	0	0	361	1787	0	0	1074	1014
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.09		0.20	0.94	0.57	0.63
s, saturation flow rate [veh/h]	1678		1810	1900	1900	1615
c, Capacity [veh/h]	523		401	1139	633	538
d1, Uniform Delay [s]	30.97		34.06	18.03	30.00	30.00
k, delay calibration	0.50		0.16	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1121.06		10.28	260.48	320.04	404.79
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	3.48		0.90	1.57	1.70	1.88
d, Delay for Lane Group [s/veh]	1152.03		44.34	278.51	350.04	434.79
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	172.62		8.61	102.59	69.38	71.65
50th-Percentile Queue Length [ft/ln]	4315.53		215.20	2564.66	1734.55	1791.14
95th-Percentile Queue Length [veh/ln]	272.92		13.42	159.01	107.56	113.46
95th-Percentile Queue Length [ft/ln]	6822.88		335.50	3975.28	2688.91	2836.57

Movement, Approach, & Intersection Results

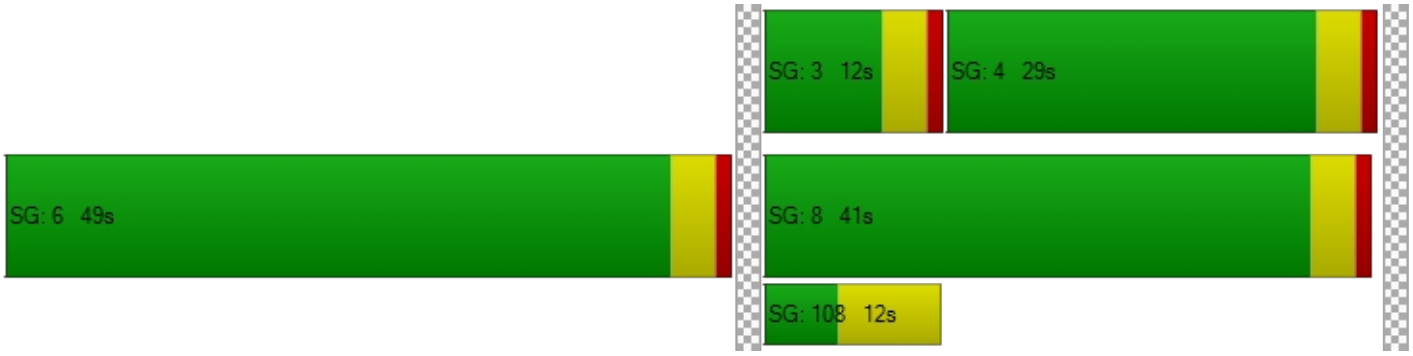
d_M, Delay for Movement [s/veh]	1152.	1152.	1152.	0.00	0.00	0.00	44.34	278.5	0.00	0.00	350.0	434.7
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1152.03			0.00			239.15			391.20		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	566.02											
Intersection LOS	F											
Intersection V/C	2.026											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.640	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.564	4.132	5.104	5.005
Bicycle LOS	E	D	F	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	105.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.186

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	112	158	216	1955	1224	149
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]	112	158	216	1955	1224	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	42	57	514	322	39
Total Analysis Volume [veh/h]	118	166	227	2058	1288	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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	37	67	30	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	11	11	13	71	53	53
g / C, Green / Cycle	0.13	0.13	0.15	0.78	0.59	0.59
(v / s)_i Volume / Saturation Flow Rate	0.07	0.10	0.13	1.08	0.36	0.10
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	230	206	271	1489	2134	953
d1, Uniform Delay [s]	36.66	38.19	37.22	9.73	11.76	8.39
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.76	7.29	6.85	176.18	1.28	0.37
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	0.51	0.81	0.84	1.38	0.60	0.16
d, Delay for Lane Group [s/veh]	38.41	45.49	44.07	185.91	13.03	8.76
Lane Group LOS	D	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.47	3.88	5.11	85.53	7.06	1.26
50th-Percentile Queue Length [ft/ln]	61.85	96.96	127.76	2138.18	176.40	31.50
95th-Percentile Queue Length [veh/ln]	4.45	6.98	8.82	129.18	11.41	2.27
95th-Percentile Queue Length [ft/ln]	111.34	174.52	220.45	3229.53	285.31	56.69

Movement, Approach, & Intersection Results

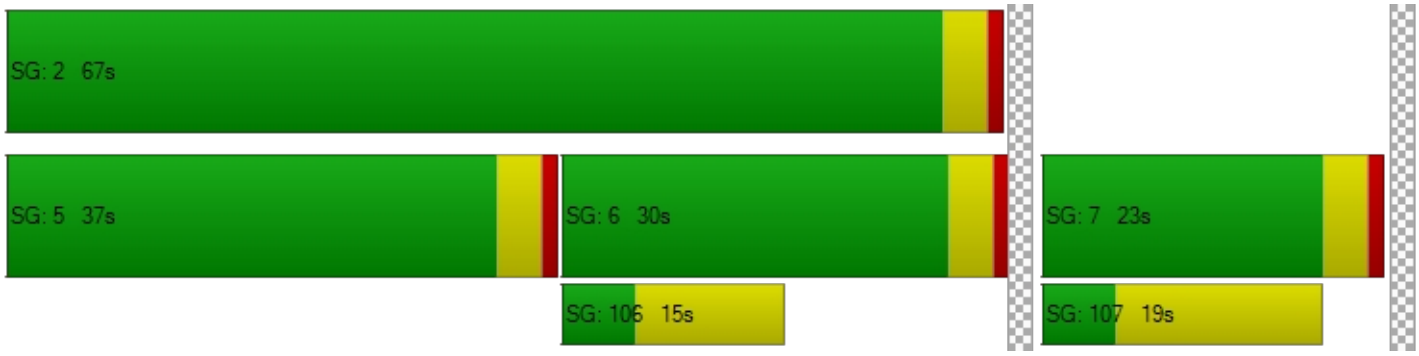
d_M, Delay for Movement [s/veh]	38.41	45.49	44.07	185.91	13.03	8.76
Movement LOS	D	D	D	F	B	A
d_A, Approach Delay [s/veh]	42.55		171.82		12.57	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	105.35					
Intersection LOS	F					
Intersection V/C	1.186					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.195	3.500	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	578
d_b, Bicycle Delay [s]	28.01	4.05	22.76
I_b,int, Bicycle LOS Score for Intersection	1.560	5.330	2.752
Bicycle LOS	A	F	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	393.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.878

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	172	452	1243	436	318	319	412	1071	157	794	846	299
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
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]	172	452	1243	436	318	319	412	1071	157	794	846	299
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	45	119	327	115	84	84	108	282	41	209	223	79
Total Analysis Volume [veh/h]	181	476	1308	459	335	336	434	1127	165	836	891	315
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	15	31	0	13	29	0	17	26	0	20	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	27	27	9	25	25	13	22	22	16	25	25
g / C, Green / Cycle	0.12	0.30	0.30	0.10	0.28	0.28	0.14	0.24	0.24	0.18	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.10	0.25	0.81	0.25	0.18	0.21	0.24	0.34	0.35	0.46	0.32	0.35
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1817	1810	1900	1740
c, Capacity [veh/h]	216	570	485	181	533	453	261	464	444	322	528	483
d1, Uniform Delay [s]	38.76	29.42	31.50	40.50	28.29	29.42	38.50	34.00	34.00	37.00	32.50	32.50
k, delay calibration	0.11	0.50	0.50	0.28	0.50	0.50	0.24	0.47	0.49	0.50	0.42	0.48
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.26	13.53	770.7	700.3	5.54	10.48	305.4	193.5	210.7	728.4	81.93	127.3
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.84	2.70	2.54	0.63	0.74	1.66	1.40	1.44	2.60	1.14	1.25
d, Delay for Lane Group [s/veh]	47.02	42.95	802.2	740.8	33.83	39.90	343.9	227.5	244.7	765.4	114.4	159.8
Lane Group LOS	D	D	F	F	C	D	F	F	F	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.25	11.14	113.5	39.06	6.78	7.53	27.62	34.39	35.02	71.92	22.93	27.09
50th-Percentile Queue Length [ft/ln]	106.3	278.4	2838.	976.4	169.3	188.2	690.5	859.6	875.4	1797.	573.3	677.2
95th-Percentile Queue Length [veh/ln]	7.64	16.61	180.8	61.08	11.04	12.03	43.47	52.09	53.43	112.1	33.31	40.31
95th-Percentile Queue Length [ft/ln]	190.9	415.2	4520.	1526.	276.1	300.7	1086.	1302.	1335.	2804.	832.6	1007.

Movement, Approach, & Intersection Results

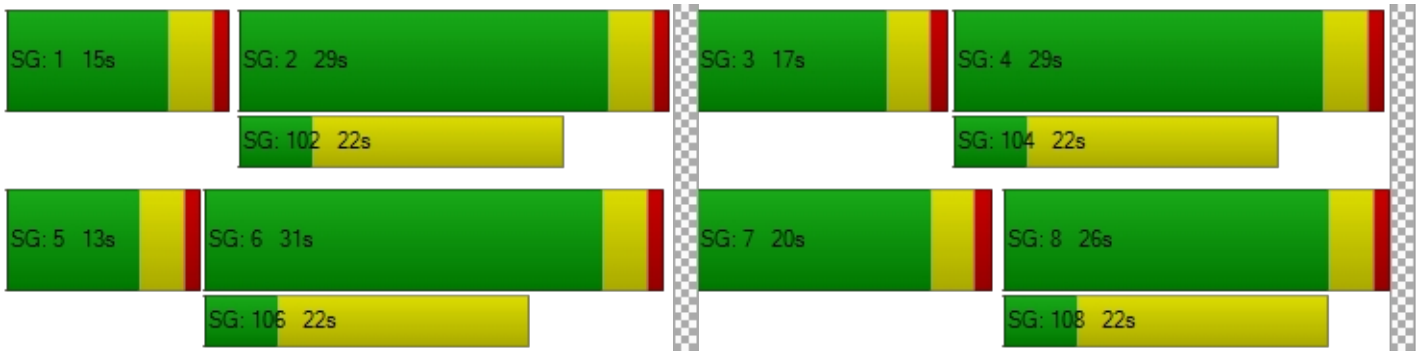
d_M, Delay for Movement [s/veh]	47.02	42.95	802.2	740.8	33.83	39.90	343.9	234.7	244.7	765.4	129.1	159.8
Movement LOS	D	D	F	F	C	D	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	548.73			322.84			263.19			394.35		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	393.79											
Intersection LOS	F											
Intersection V/C	1.878											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.160	2.914	3.218	3.424
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	556	489	556
d_b, Bicycle Delay [s]	22.05	23.47	25.69	23.47
I_b,int, Bicycle LOS Score for Intersection	3.181	2.492	2.984	3.244
Bicycle LOS	C	B	C	C

Sequence

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



Beaumont Summit Station

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Scenario 6 HY WP AM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.095	410.8	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Left	2.448	429.0	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	3.271	1,560.8	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	1.653	380.7	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	1.471	141.4	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	WB Thru	1.202	72.5	F
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	EB Left	0.556	30.9	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Left	0.056	13.9	B
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	NB Thru	0.019	11.4	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.442	10.8	B
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	EB Left	0.755	41.2	D
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.494	102.8	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	1.688	401.8	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Right	1.625	429.1	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Left	0.886	44.6	D
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	WB Left	1.180	205.1	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.635	5.7	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.638	8.9	A
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.217	12.2	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	410.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.095

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	221	0	503	0	1080	535	203	317	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	318	0	0	0	22	0	53	15	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	539	0	503	0	1102	535	256	332	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	142	0	132	0	290	141	67	87	0
Total Analysis Volume [veh/h]	0	0	0	567	0	529	0	1160	563	269	349	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1096	1723	755
Degree of Utilization, x		2.01	2.09	0.82

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		74.22	118.04	8.92
95th-Percentile Queue Length [ft]		1855.50	2951.09	222.96
Approach Delay [s/veh]	0.00	474.77	508.36	25.50
Approach LOS	A	F	F	D
Intersection Delay [s/veh]	410.83			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	429.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.448

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	252	5	224	0	0	0	1074	327	0	0	238	733
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	219	0	0	0	0	340	0	0	68	101
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]	252	5	443	0	0	0	1074	667	0	0	306	834
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	66	1	117	0	0	0	283	176	0	0	81	219
Total Analysis Volume [veh/h]	265	5	466	0	0	0	1131	702	0	0	322	878
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	736		1833	1200
Degree of Utilization, x	1.37		2.45	1.42

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	32.98		140.41	52.59
95th-Percentile Queue Length [ft]	824.41		3510.33	1314.85
Approach Delay [s/veh]	196.00	0.00	667.31	207.76
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	428.96			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	1,560.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.271

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	53	129	123	451	786	173
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	559	169	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]	53	129	123	1010	955	173
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	34	32	266	251	46
Total Analysis Volume [veh/h]	56	136	129	1063	1005	182
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	3.27	0.52	0.22	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	1560.75	1364.25	12.71	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	21.08	21.08	0.82	0.82	0.00	0.00
95th-Percentile Queue Length [ft/ln]	527.06	527.06	20.46	20.46	0.00	0.00
d_A, Approach Delay [s/veh]	1421.57		1.38		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	106.80					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	380.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.653

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	194	0	304	42	0	757
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]	22	0	131	15	0	197
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]	216	0	435	57	0	954
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	0	114	15	0	251
Total Analysis Volume [veh/h]	227	0	458	60	0	1004
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	1.65	0.00	0.00	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	380.67	360.63	0.00	0.00	8.40	0.00
Movement LOS	F	F	A	A	A	A
95th-Percentile Queue Length [veh/ln]	16.40	16.40	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	409.92	409.92	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	380.67		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	49.41					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	141.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.471

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	65	2	4	0	5	110	31	366	13	3	707	4
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	44	0	0	0	0	0	0	101	30	0	153	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]	109	2	4	0	5	110	31	467	43	3	860	4
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	29	1	1	0	1	29	8	123	11	1	226	1
Total Analysis Volume [veh/h]	115	2	4	0	5	116	33	492	45	3	905	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	473	519	622	912
Degree of Utilization, x	0.26	0.23	0.92	1.47

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.01	0.89	11.74	44.22
95th-Percentile Queue Length [ft]	25.23	22.37	293.56	1105.45
Approach Delay [s/veh]	13.22	12.02	42.42	237.41
Approach LOS	B	B	E	F
Intersection Delay [s/veh]	141.39			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	72.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.202

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	43	20	4	6	27	58	26	210	72	3	600	1
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	65	0	0	0	0	0	0	60	41	0	88	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]	108	20	4	6	27	58	26	270	113	3	688	1
Peak Hour Factor	0.940	0.940	0.940	0.950	0.940	0.950	0.950	0.950	0.940	0.940	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	29	5	1	2	7	15	7	71	30	1	181	0
Total Analysis Volume [veh/h]	115	21	4	6	29	61	27	284	120	3	724	1
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	515	539	583	663	727	687
Degree of Utilization, x	0.27	0.18	0.53	0.18	1.20	0.00

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.10	0.64	3.14	0.66	25.84	0.00
95th-Percentile Queue Length [ft]	27.38	16.05	78.54	16.43	645.90	0.11
Approach Delay [s/veh]	12.59	11.11	13.94		126.72	
Approach LOS	B	B	B		F	
Intersection Delay [s/veh]	72.46					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	30.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.556

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	278	353	33	13	295	56	46	118	161	38	268	13
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	44	0	0	0	0	22	15	15	30	0	22	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]	322	353	33	13	295	78	61	133	191	38	290	13
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	85	93	9	3	78	21	16	35	50	10	76	3
Total Analysis Volume [veh/h]	339	372	35	14	311	82	64	140	201	40	305	14
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	29	40	0	12	23	0	11	27	0	11	27	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	51	51	2	34	34	4	18	18	3	17
g / C, Green / Cycle	0.21	0.57	0.57	0.02	0.37	0.37	0.05	0.20	0.20	0.04	0.19
(v / s)_i Volume / Saturation Flow Rate	0.19	0.20	0.02	0.01	0.16	0.05	0.04	0.07	0.12	0.02	0.17
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1885
c, Capacity [veh/h]	380	1076	914	32	710	604	84	385	328	65	363
d1, Uniform Delay [s]	34.58	10.54	8.66	43.77	21.10	18.59	42.44	30.87	32.66	42.78	35.33
k, delay calibration	0.13	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.65	0.88	0.08	9.33	1.96	0.47	13.48	0.57	1.87	9.21	6.93
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	0.89	0.35	0.04	0.44	0.44	0.14	0.77	0.36	0.61	0.62	0.88
d, Delay for Lane Group [s/veh]	43.23	11.42	8.74	53.10	23.06	19.06	55.92	31.45	34.53	52.00	42.25
Lane Group LOS	D	B	A	D	C	B	E	C	C	D	D
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.57	3.52	0.27	0.39	5.05	1.16	1.67	2.57	3.98	1.02	7.17
50th-Percentile Queue Length [ft/ln]	189.3	87.91	6.79	9.63	126.1	29.03	41.85	64.23	99.47	25.39	179.25
95th-Percentile Queue Length [veh/ln]	12.09	6.33	0.49	0.69	8.73	2.09	3.01	4.62	7.16	1.83	11.56
95th-Percentile Queue Length [ft/ln]	302.1	158.2	12.22	17.33	218.2	52.25	75.32	115.6	179.0	45.70	289.03

Movement, Approach, & Intersection Results

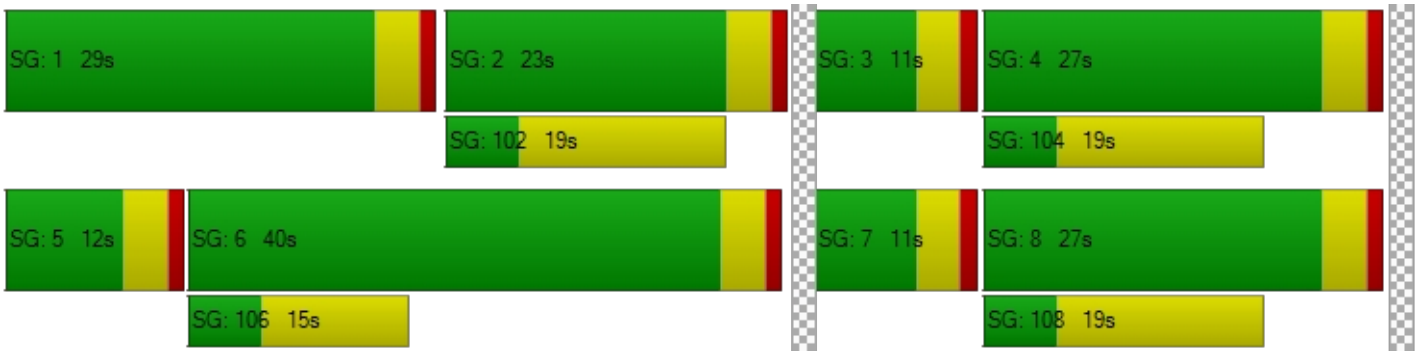
d_M, Delay for Movement [s/veh]	43.23	11.42	8.74	53.10	23.06	19.06	55.92	31.45	34.53	52.00	42.25	42.25
Movement LOS	D	B	A	D	C	B	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	25.75			23.29			36.84			43.34		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	30.86											
Intersection LOS	C											
Intersection V/C	0.556											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.660	2.376	2.500	2.179
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	800	422	511	511
d_b, Bicycle Delay [s]	16.20	28.01	24.94	24.94
I_b,int, Bicycle LOS Score for Intersection	2.791	2.231	2.228	2.152
Bicycle LOS	C	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	13.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.056

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	135	27	9	24	9	66	73	0	12	54	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	15	0	0	0	0	0	0	0	22
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	135	27	24	24	9	66	73	0	12	54	28
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	36	7	6	6	2	17	19	0	3	14	7
Total Analysis Volume [veh/h]	0	142	28	25	25	9	69	77	0	13	57	29
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.25	0.03	0.06	0.04	0.01	0.05	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	13.31	13.67	10.77	13.91	12.08	9.32	7.48	0.00	0.00	7.37	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.14	1.14	1.14	0.36	0.36	0.36	0.14	0.00	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	28.48	28.48	28.48	9.09	9.09	9.09	3.56	0.00	0.00	0.64	0.00	0.00
d_A, Approach Delay [s/veh]	13.19			12.44			3.53			0.97		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	7.57											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	0	10	4	17	0	8	5	119	0	1	71	49
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	30	0	0	0	15	0	0	22	44
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	10	4	47	0	8	5	134	0	1	93	93
Peak Hour Factor	0.950	0.950	0.959	0.959	0.950	0.950	0.950	0.959	0.950	0.959	0.959	0.959
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	3	1	12	0	2	1	35	0	0	24	24
Total Analysis Volume [veh/h]	0	11	4	49	0	8	5	140	0	1	97	97
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.02	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.05	11.36	8.79	10.63	11.28	9.23	7.60	0.00	0.00	7.47	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.07	0.26	0.26	0.26	0.01	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.77	1.77	1.77	6.44	6.44	6.44	0.27	0.00	0.00	0.05	0.00	0.00
d_A, Approach Delay [s/veh]	10.67			10.44			0.26			0.04		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.94											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.442

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	46	74	119	66	29	71
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]	87	0	30	56	0	44
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]	133	74	149	122	29	115
Peak Hour Factor	0.8440	0.9500	0.8440	0.8440	0.9500	0.8440
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	39	19	44	36	8	34
Total Analysis Volume [veh/h]	158	78	177	145	31	136
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	578	717	728	596	651
Degree of Utilization, x	0.27	0.11	0.44	0.05	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.10	0.36	2.27	0.16	0.78
95th-Percentile Queue Length [ft]	27.62	9.11	56.85	4.10	19.58
Approach Delay [s/veh]	10.29		11.80	9.57	
Approach LOS	B		B	A	
Intersection Delay [s/veh]	10.79				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	41.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.755

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	77	506	28	344	384	35	4	47	55	80	103	247
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	44	0	0	30	0	0	15	15	0	22	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]	99	550	28	344	414	35	4	62	70	80	125	247
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	26	145	7	91	109	9	1	16	18	21	33	65
Total Analysis Volume [veh/h]	104	579	29	362	436	37	4	65	74	84	132	260
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	19	23	0	28	32	0	9	23	0	16	30	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	31	20	44	1	18	18	5	23
g / C, Green / Cycle	0.07	0.34	0.22	0.49	0.01	0.20	0.20	0.06	0.25
(v / s)_i Volume / Saturation Flow Rate	0.06	0.32	0.20	0.25	0.00	0.03	0.05	0.05	0.23
s, saturation flow rate [veh/h]	1810	1884	1810	1874	1810	1900	1615	1810	1701
c, Capacity [veh/h]	136	643	401	914	11	377	321	111	431
d1, Uniform Delay [s]	40.86	28.85	34.10	15.80	44.55	29.92	30.29	41.60	32.58
k, delay calibration	0.11	0.50	0.16	0.50	0.11	0.11	0.11	0.11	0.22
I, 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]	8.72	24.46	10.62	2.09	19.00	0.21	0.36	10.17	13.61
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	0.77	0.95	0.90	0.52	0.36	0.17	0.23	0.76	0.91
d, Delay for Lane Group [s/veh]	49.58	53.31	44.71	17.90	63.55	30.14	30.65	51.77	46.19
Lane Group LOS	D	D	D	B	E	C	C	D	D
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.51	16.15	8.27	6.22	0.14	1.15	1.33	2.09	9.44
50th-Percentile Queue Length [ft/ln]	62.84	403.69	206.86	155.54	3.61	28.65	33.18	52.18	235.90
95th-Percentile Queue Length [veh/ln]	4.52	22.74	12.99	10.31	0.26	2.06	2.39	3.76	14.47
95th-Percentile Queue Length [ft/ln]	113.11	568.44	324.79	257.80	6.49	51.58	59.72	93.92	361.84

Movement, Approach, & Intersection Results

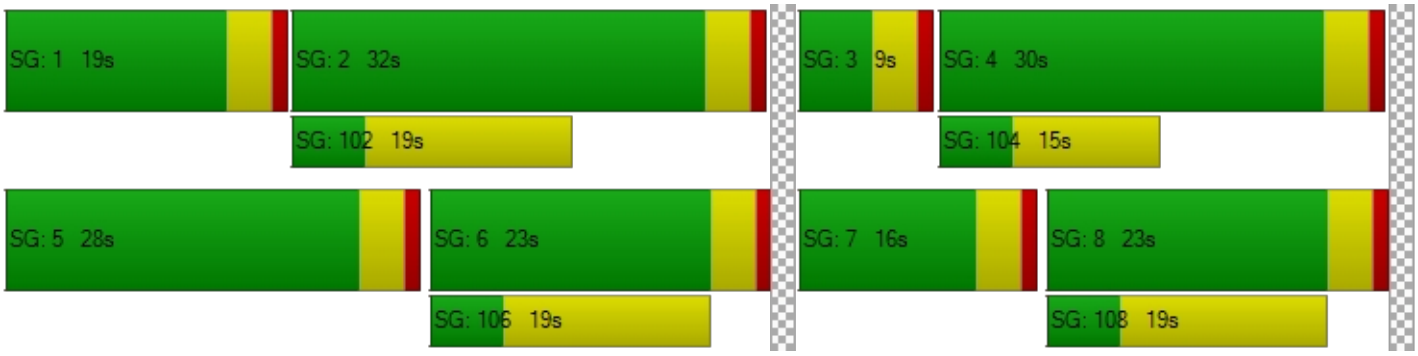
d_M, Delay for Movement [s/veh]	49.58	53.31	53.31	44.71	17.90	17.90	63.55	30.14	30.65	51.77	46.19	46.19
Movement LOS	D	D	D	D	B	B	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	52.76			29.52			31.34			47.17		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	41.16											
Intersection LOS	D											
Intersection V/C	0.755											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.557	2.851	2.268	2.435
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	622	422	578
d_b, Bicycle Delay [s]	28.01	21.36	28.01	22.76
I_b,int, Bicycle LOS Score for Intersection	2.734	2.937	1.796	2.345
Bicycle LOS	B	C	A	B

Sequence

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



Intersection Level Of Service Report
Intersection 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	102.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.494

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	318	105	53	560	625	178
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	22	15	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]	318	105	53	582	640	178
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	84	28	14	153	168	47
Total Analysis Volume [veh/h]	335	111	56	613	674	187
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	464	387	613	476	476	507
Degree of Utilization, x	0.96	0.14	1.49	0.60	0.60	0.57

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	11.86	0.50	32.42	3.91	3.91	3.48
95th-Percentile Queue Length [ft]	296.53	12.54	810.45	97.82	97.82	87.02
Approach Delay [s/veh]	60.66	237.18		20.31		
Approach LOS	F	F		C		
Intersection Delay [s/veh]	102.84					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	401.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.688

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	540	8	236	0	618	461	888	589	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	37	0	0	22	0	41	15	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	540	45	236	0	640	461	929	604	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	142	12	62	0	168	121	244	159	0
Total Analysis Volume [veh/h]	0	0	0	568	47	248	0	674	485	978	636	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	27	0	0	34	0	29	63	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		0.49	0.66	0.54	0.33
s, saturation flow rate [veh/h]		1753	1769	1810	1900
c, Capacity [veh/h]		353	590	600	1348
d1, Uniform Delay [s]		35.93	30.00	30.07	5.71
k, delay calibration		0.50	0.50	0.50	0.11
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		657.51	440.44	290.58	0.26
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		2.44	1.97	1.63	0.47
d, Delay for Lane Group [s/veh]		693.44	470.44	320.65	5.96
Lane Group LOS		F	F	F	A
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		71.40	83.55	60.25	3.61
50th-Percentile Queue Length [ft/ln]		1785.02	2088.64	1506.28	90.27
95th-Percentile Queue Length [veh/ln]		112.07	132.12	93.24	6.50
95th-Percentile Queue Length [ft/ln]		2801.76	3302.93	2331.04	162.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	693.4	693.4	693.4	0.00	470.4	470.4	320.6	5.96	0.00
Movement LOS				F	F	F		F	F	F	A	
d_A, Approach Delay [s/veh]	0.00			693.44			470.44			196.65		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	401.83											
Intersection LOS	F											
Intersection V/C	1.688											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	511	667	1311
d_b, Bicycle Delay [s]	45.00	24.94	20.00	5.34
I_b,int, Bicycle LOS Score for Intersection	4.132	2.984	3.472	4.223
Bicycle LOS	D	C	C	D

Sequence

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

Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	429.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.625

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	235	1	430	0	0	0	455	692	0	0	1026	1381
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	65	0	0	0	0	22	0	0	56	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]	235	1	495	0	0	0	455	714	0	0	1082	1381
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	62	0	130	0	0	0	120	188	0	0	285	363
Total Analysis Volume [veh/h]	247	1	521	0	0	0	479	752	0	0	1139	1454
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	23	0	0	0	0	17	67	0	0	50	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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]	22		26	60	30	30
g / C, Green / Cycle	0.25		0.29	0.66	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.46		0.26	0.40	0.60	0.90
s, saturation flow rate [veh/h]	1673		1810	1900	1900	1615
c, Capacity [veh/h]	416		515	1259	634	539
d1, Uniform Delay [s]	33.82		31.31	8.47	29.99	29.99
k, delay calibration	0.50		0.30	0.15	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	391.88		17.72	0.62	365.16	770.06
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	1.85		0.93	0.60	1.80	2.70
d, Delay for Lane Group [s/veh]	425.70		49.03	9.09	395.15	800.05
Lane Group LOS	F		D	A	F	F
Critical Lane Group	Yes		Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	53.16		12.29	7.09	77.38	126.35
50th-Percentile Queue Length [ft/ln]	1329.12		307.27	177.33	1934.40	3158.71
95th-Percentile Queue Length [veh/ln]	83.64		18.04	11.46	120.80	202.21
95th-Percentile Queue Length [ft/ln]	2091.12		451.01	286.52	3020.08	5055.24

Movement, Approach, & Intersection Results

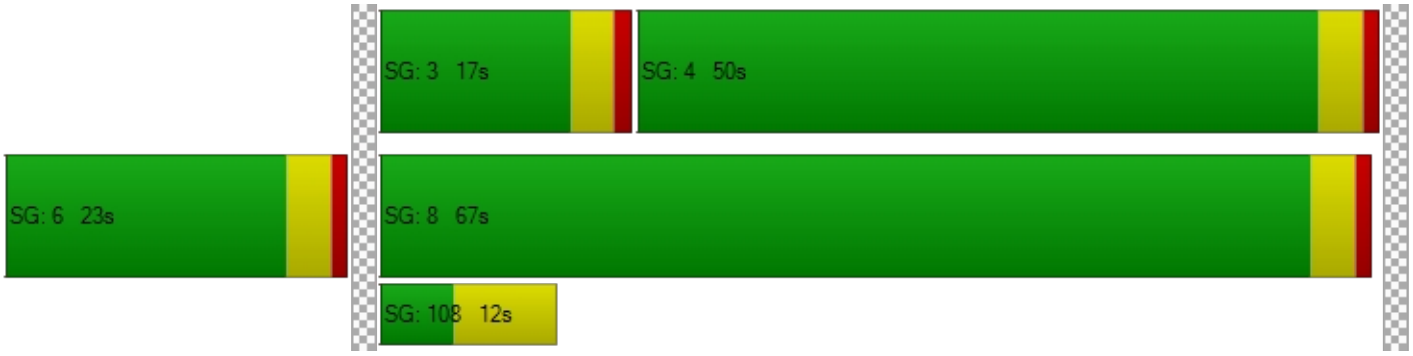
d_M, Delay for Movement [s/veh]	425.7	425.7	425.7	0.00	0.00	0.00	49.03	9.09	0.00	0.00	395.1	800.0
Movement LOS	F	F	F				D	A			F	F
d_A, Approach Delay [s/veh]	425.70			0.00			24.63			622.19		
Approach LOS	F			A			C			F		
d_I, Intersection Delay [s/veh]	429.14											
Intersection LOS	F											
Intersection V/C	1.625											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.529	0.000	0.000	0.000
Crosswalk LOS	B	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	0	1400	1022
d_b, Bicycle Delay [s]	28.01	45.00	4.05	10.76
I_b,int, Bicycle LOS Score for Intersection	2.828	4.132	3.591	5.838
Bicycle LOS	C	D	D	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	44.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.886

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	133	269	156	685	1833	65
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	56	87	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]	133	325	243	685	1833	65
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	86	64	180	482	17
Total Analysis Volume [veh/h]	140	342	256	721	1929	68
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	13	67	54	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	19	19	9	63	50	50
g / C, Green / Cycle	0.21	0.21	0.10	0.70	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.08	0.21	0.14	0.38	0.53	0.04
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	382	341	181	1330	2010	897
d1, Uniform Delay [s]	30.35	35.50	40.50	6.53	19.04	9.28
k, delay calibration	0.11	0.18	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.59	30.24	193.70	1.59	12.60	0.16
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	0.37	1.00	1.41	0.54	0.96	0.08
d, Delay for Lane Group [s/veh]	30.94	65.74	234.20	8.12	31.65	9.44
Lane Group LOS	C	F	F	A	C	A
Critical Lane Group	No	Yes	Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.58	10.04	13.54	5.16	19.11	0.58
50th-Percentile Queue Length [ft/ln]	64.57	251.07	338.58	128.99	477.77	14.42
95th-Percentile Queue Length [veh/ln]	4.65	15.26	21.99	8.88	26.28	1.04
95th-Percentile Queue Length [ft/ln]	116.23	381.62	549.78	222.12	657.00	25.95

Movement, Approach, & Intersection Results

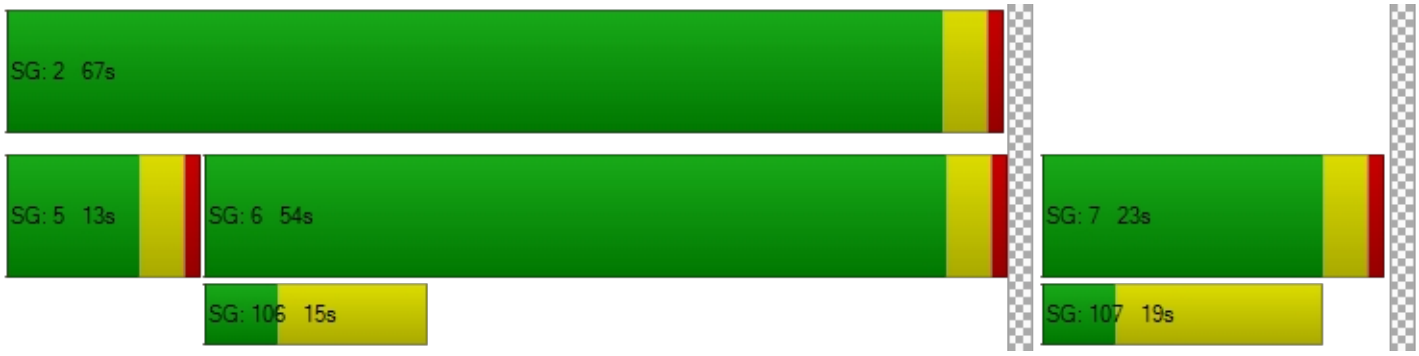
d_M, Delay for Movement [s/veh]	30.94	65.74	234.20	8.12	31.65	9.44
Movement LOS	C	F	F	A	C	A
d_A, Approach Delay [s/veh]	55.63		67.36		30.89	
Approach LOS	E		E		C	
d_I, Intersection Delay [s/veh]	44.65					
Intersection LOS	D					
Intersection V/C	0.886					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.247	3.320	0.000
Crosswalk LOS	B	C	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	1111
d_b, Bicycle Delay [s]	28.01	4.05	8.89
I_b,int, Bicycle LOS Score for Intersection	1.560	3.172	3.207
Bicycle LOS	A	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	205.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.180

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	105	286	417	131	349	384	215	456	131	1125	1013	352
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	44	0	15	30	0	0	0	0	0	0	22
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]	105	330	417	146	379	384	215	456	131	1125	1013	374
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	28	87	110	38	100	101	57	120	34	296	267	98
Total Analysis Volume [veh/h]	111	347	439	154	399	404	226	480	138	1184	1066	394
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	26	0	9	26	0	19	26	0	29	36	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	22	22	5	22	22	13	22	22	25	34	34
g / C, Green / Cycle	0.06	0.25	0.25	0.06	0.25	0.25	0.14	0.24	0.24	0.28	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.06	0.18	0.27	0.09	0.21	0.25	0.12	0.17	0.17	0.65	0.38	0.42
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1756	1810	1900	1735
c, Capacity [veh/h]	101	468	397	101	468	397	262	461	426	503	713	651
d1, Uniform Delay [s]	42.50	31.29	33.93	42.50	32.37	33.93	37.59	31.05	31.05	32.50	28.10	28.10
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.11	0.50	0.47	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	73.15	10.18	76.47	250.0	17.66	49.37	8.12	1.90	2.06	616.1	38.69	73.29
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	1.10	0.74	1.10	1.53	0.85	1.02	0.86	0.70	0.70	2.36	1.02	1.12
d, Delay for Lane Group [s/veh]	115.6	41.47	110.4	292.5	50.04	83.29	45.71	32.95	33.12	648.6	66.79	101.3
Lane Group LOS	F	D	F	F	D	F	D	C	C	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.20	7.91	16.63	9.14	10.14	13.64	5.19	6.17	5.73	96.43	21.93	26.28
50th-Percentile Queue Length [ft/ln]	105.0	197.8	415.7	228.4	253.4	340.9	129.8	154.2	143.2	2410.	548.1	657.0
95th-Percentile Queue Length [veh/ln]	7.56	12.53	24.65	15.66	15.36	19.88	8.93	10.24	9.66	152.3	30.09	37.45
95th-Percentile Queue Length [ft/ln]	189.0	313.2	616.2	391.3	383.9	497.0	223.2	256.1	241.4	3809.	752.2	936.1

Movement, Approach, & Intersection Results

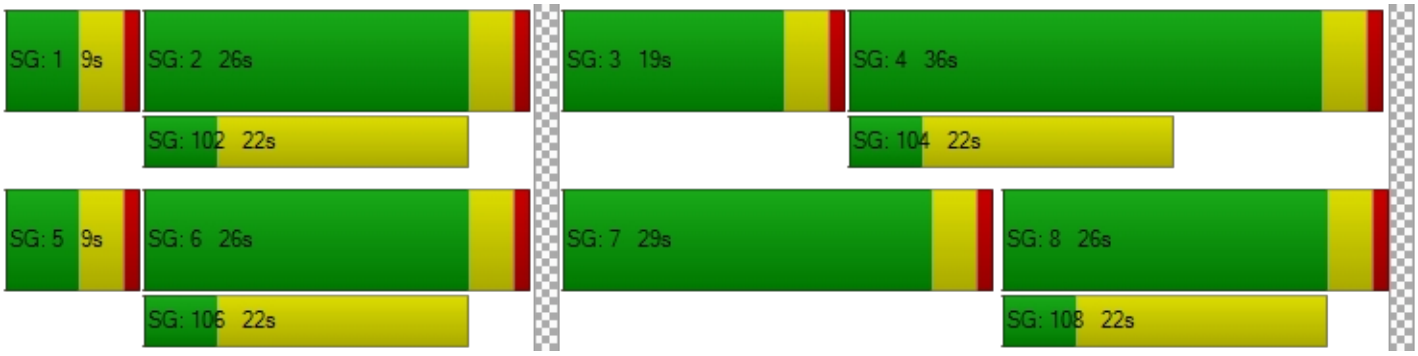
d_M, Delay for Movement [s/veh]	115.6	41.47	110.4	292.5	50.04	83.29	45.71	33.00	33.12	648.6	77.70	101.3
Movement LOS	F	D	F	F	D	F	D	C	C	F	E	F
d_A, Approach Delay [s/veh]	84.38			103.10			36.43			336.90		
Approach LOS	F			F			D			F		
d_I, Intersection Delay [s/veh]	205.14											
Intersection LOS	F											
Intersection V/C	1.180											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.982	2.802	3.011	3.147
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	489	489	711
d_b, Bicycle Delay [s]	25.69	25.69	25.69	18.69
I_b,int, Bicycle LOS Score for Intersection	2.300	2.349	2.256	3.741
Bicycle LOS	B	B	B	D

Sequence

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



Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	5.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	504	0	0	959
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	17	0	503	57	9	152
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]	17	0	1007	57	9	1111
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	0	265	15	2	292
Total Analysis Volume [veh/h]	18	0	1060	62	10	1169
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	20	0	39	0	31	70
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	2	75	1	80
g / C, Green / Cycle	0.02	0.83	0.01	0.89
(v / s)_i Volume / Saturation Flow Rate	0.01	0.61	0.01	0.63
s, saturation flow rate [veh/h]	1781	1852	1781	1870
c, Capacity [veh/h]	37	1542	24	1665
d1, Uniform Delay [s]	43.59	3.20	44.05	1.44
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	9.60	3.05	11.24	2.50
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	0.49	0.73	0.42	0.70
d, Delay for Lane Group [s/veh]	53.19	6.25	55.29	3.94
Lane Group LOS	D	A	E	A
Critical Lane Group	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.49	4.95	0.29	1.16
50th-Percentile Queue Length [ft/ln]	12.28	123.80	7.34	28.92
95th-Percentile Queue Length [veh/ln]	0.88	8.60	0.53	2.08
95th-Percentile Queue Length [ft/ln]	22.11	215.03	13.22	52.06

Movement, Approach, & Intersection Results

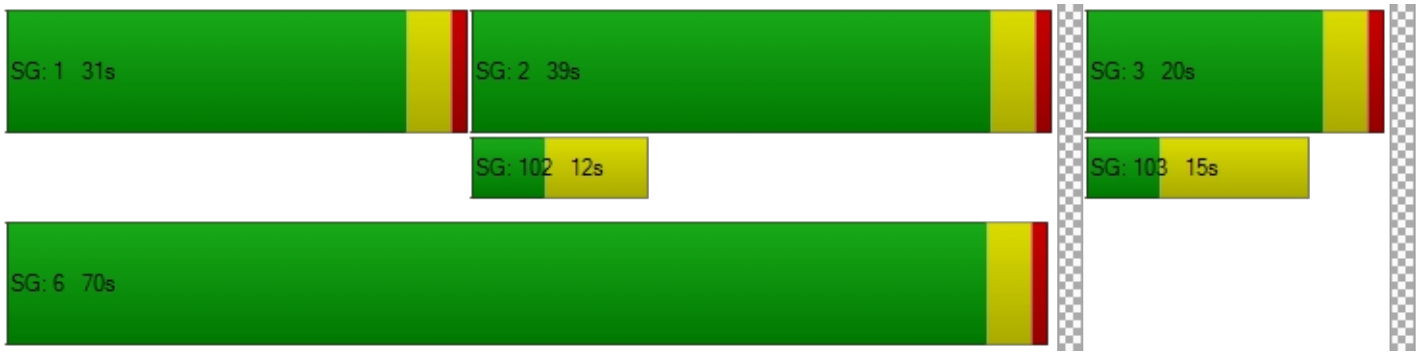
d_M, Delay for Movement [s/veh]	53.19	53.19	6.25	6.25	55.29	3.94
Movement LOS	D	D	A	A	E	A
d_A, Approach Delay [s/veh]	53.19		6.25		4.38	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	5.66					
Intersection LOS	A					
Intersection V/C	0.635					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.760	2.842	2.678
Crosswalk LOS	A	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	356	778	1467
d_b, Bicycle Delay [s]	30.42	16.81	3.20
I_b,int, Bicycle LOS Score for Intersection	1.589	3.411	3.505
Bicycle LOS	A	C	D

Sequence

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



Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.638

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	504	0	0	959
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	152	18	148	355	211	9
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]	152	18	652	355	211	968
Peak Hour Factor	0.9200	0.9200	0.9500	0.9200	0.9200	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	41	5	172	96	57	255
Total Analysis Volume [veh/h]	165	20	686	386	229	1019
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	27	0	21	0	42	63
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	10	10	62	62	72	72
g / C, Green / Cycle	0.12	0.12	0.69	0.69	0.80	0.80
(v / s)_i Volume / Saturation Flow Rate	0.09	0.01	0.19	0.24	0.35	0.54
s, saturation flow rate [veh/h]	1781	1589	3560	1589	656	1870
c, Capacity [veh/h]	205	183	2462	1099	596	1488
d1, Uniform Delay [s]	38.83	35.68	5.30	5.65	2.73	4.12
k, delay calibration	0.11	0.11	0.50	0.50	0.33	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	7.20	0.26	0.28	0.88	1.24	2.58
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	0.80	0.11	0.28	0.35	0.38	0.68
d, Delay for Lane Group [s/veh]	46.02	35.94	5.58	6.54	3.98	6.70
Lane Group LOS	D	D	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.91	0.40	1.65	2.14	0.79	6.03
50th-Percentile Queue Length [ft/ln]	97.72	10.07	41.32	53.43	19.71	150.65
95th-Percentile Queue Length [veh/ln]	7.04	0.73	2.97	3.85	1.42	10.05
95th-Percentile Queue Length [ft/ln]	175.89	18.13	74.37	96.17	35.47	251.30

Movement, Approach, & Intersection Results

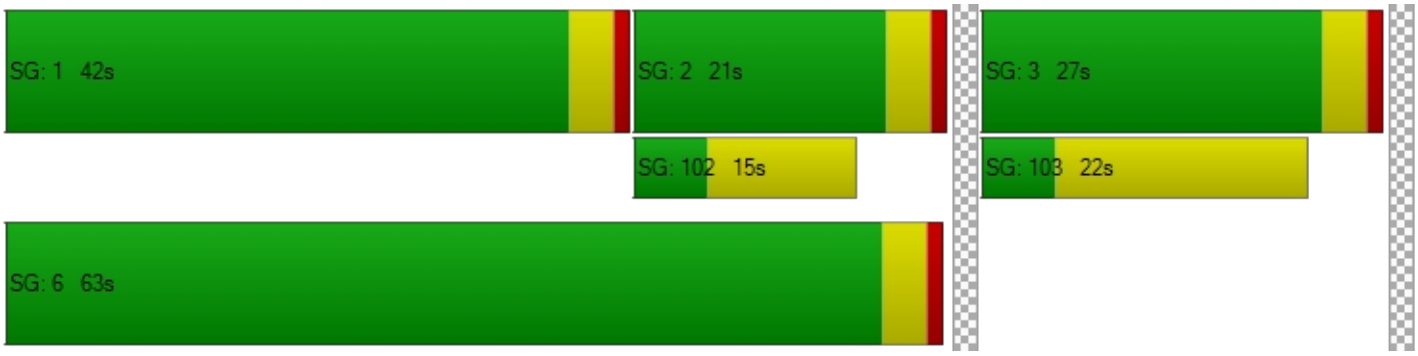
d_M, Delay for Movement [s/veh]	46.02	35.94	5.58	6.54	3.98	6.70
Movement LOS	D	D	A	A	A	A
d_A, Approach Delay [s/veh]	44.93		5.93		6.20	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	8.94					
Intersection LOS	A					
Intersection V/C	0.638					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.435	3.141	2.682
Crosswalk LOS	B	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	511	378	1311
d_b, Bicycle Delay [s]	24.94	29.61	5.34
I_b,int, Bicycle LOS Score for Intersection	1.560	2.444	3.619
Bicycle LOS	A	B	D

Sequence

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



Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	12.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.217

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	504	0	0	959	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	128	0	0	0	0	18	148	0	219	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	128	0	0	0	0	522	148	0	1178	0
Peak Hour Factor	0.920	0.920	0.920	0.950	0.920	0.950	0.950	0.950	0.920	0.920	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	35	0	0	0	0	137	40	0	310	0
Total Analysis Volume [veh/h]	0	0	139	0	0	0	0	549	161	0	1240	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	12.16	0.00	0.00	13.36	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			B			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	20.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.16			13.36			0.00			0.00		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.81											
Intersection LOS	B											

Beaumont Summit Station

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Report File: \...\8 HY WP PM.pdf

Scenario 6 HY WP PM
1/31/2022

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	I-10 EB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	SB Right	3.432	643.3	F
2	I-10 WB Ramps at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	2.225	422.0	F
3	Calimesa Blvd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	SB Left	6.883	3,150.6	F
4	Hannon Rd at Cherry Valley Blvd	Two-way stop	HCM 6th Edition	NB Left	1.419	334.0	F
5	Union St at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.733	235.1	F
6	Nancy Ave at Cherry Valley Blvd	All-way stop	HCM 6th Edition	EB Thru	1.414	127.3	F
7	Beaumont Ave at Cherry Valley Blvd	Signalized	HCM 6th Edition	WB Left	0.704	35.0	C
8	Hannon Rd at Brookside Ave	Two-way stop	HCM 6th Edition	SB Left	0.092	15.7	C
9	Union St at Brookside Ave	Two-way stop	HCM 6th Edition	SB Thru	0.006	13.1	B
10	Oak View Dr at Brookside Ave	All-way stop	HCM 6th Edition	EB Thru	0.505	11.6	B
11	Beaumont Ave at Brookside Ave	Signalized	HCM 6th Edition	NB Thru	0.913	79.7	E
12	Desert Lawn Dr at Oak Valley Pkwy	All-way stop	HCM 6th Edition	EB Thru	1.956	166.8	F
13	I-10 SB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	SB Left	2.263	1,058.5	F
14	I-10 NB Ramps at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	2.065	592.9	F
15	Oak View Dr at Oak Valley Pkwy	Signalized	HCM 6th Edition	EB Thru	1.235	125.5	F
16	Beaumont Ave at Oak Valley Pkwy	Signalized	HCM 6th Edition	NB Right	1.889	395.8	F
101	Cherry Valley Blvd at West Project Dwy	Signalized	HCM 6th Edition	WB Left	0.666	7.6	A
	Cherry Valley Blvd at Middle		HCM 6th				

102	Cherry Valley Blvd at Middle Project Dwy	Signalized	HCM 6th Edition	NB Left	0.496	11.4	B
103	Cherry Valley Blvd at East Project Dwy	Two-way stop	HCM 6th Edition	NB Right	0.288	16.1	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: I-10 EB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	643.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.432

Intersection Setup

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	1	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 EB Ramps			I-10 EB Ramps			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	546	7	1088	0	816	513	152	783	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	114	0	0	0	15	0	98	19	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	660	7	1088	0	831	513	250	802	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	174	2	286	0	219	135	66	211	0
Total Analysis Volume [veh/h]	0	0	0	695	7	1145	0	875	540	263	844	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]		1847	1415	1107
Degree of Utilization, x		3.43	1.75	1.45

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]		167.72	82.34	51.36
95th-Percentile Queue Length [ft]		4193.10	2058.38	1283.88
Approach Delay [s/veh]	0.00	1113.23	355.72	226.63
Approach LOS	A	F	F	F
Intersection Delay [s/veh]	643.25			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 2: I-10 WB Ramps at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	422.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.225

Intersection Setup

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			35.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	I-10 WB Ramps						Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	684	9	227	0	0	0	713	752	0	0	258	448
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	2.00	2.00	2.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	64	0	0	0	0	129	0	0	117	168
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]	684	9	291	0	0	0	713	881	0	0	375	616
Peak Hour Factor	0.950	0.950	0.950	1.000	1.000	1.000	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	180	2	77	0	0	0	188	232	0	0	99	162
Total Analysis Volume [veh/h]	720	9	306	0	0	0	751	927	0	0	395	648
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	1035		1678	1043
Degree of Utilization, x	2.00		2.23	1.25

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	70.13		120.69	36.69
95th-Percentile Queue Length [ft]	1753.17		3017.35	917.34
Approach Delay [s/veh]	472.13	0.00	567.56	138.13
Approach LOS	F	A	F	F
Intersection Delay [s/veh]	422.02			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 3: Calimesa Blvd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	3,150.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	6.883

Intersection Setup

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Calimesa Blvd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	114	121	159	818	529	132
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	193	285	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]	114	121	159	1011	814	132
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	32	42	266	214	35
Total Analysis Volume [veh/h]	120	127	167	1064	857	139
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	6.88	0.39	0.24	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	3150.65	2955.14	11.71	0.00	0.00	0.00
Movement LOS	F	F	B	A	A	A
95th-Percentile Queue Length [veh/ln]	29.74	29.74	0.92	0.92	0.00	0.00
95th-Percentile Queue Length [ft/ln]	743.55	743.55	23.07	23.07	0.00	0.00
d_A, Approach Delay [s/veh]	3050.12		1.59		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	305.31					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 4: Hannon Rd at Cherry Valley Blvd

Control Type:	Two-way stop	Delay (sec / veh):	334.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.419

Intersection Setup

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		55.00		55.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Hannon Rd		Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	100	3	795	86	0	579
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]	15	0	171	19	0	139
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]	115	3	966	105	0	718
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	30	1	254	28	0	189
Total Analysis Volume [veh/h]	121	3	1017	111	0	756
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	1.42	0.01	0.01	0.00	0.00	0.01
d_M, Delay for Movement [s/veh]	334.01	305.11	0.00	0.00	10.74	0.00
Movement LOS	F	F	A	A	B	A
95th-Percentile Queue Length [veh/ln]	9.54	9.54	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	238.45	238.45	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	333.32		0.00		0.00	
Approach LOS	F		A		A	
d_I, Intersection Delay [s/veh]	20.58					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 5: Union St at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	235.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.733

Intersection Setup

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			55.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	30	6	4	6	9	37	77	852	28	13	600	6
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	30	0	0	0	0	0	0	133	38	0	109	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]	60	6	4	6	9	37	77	985	66	13	709	6
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	16	2	1	2	2	10	20	259	17	3	187	2
Total Analysis Volume [veh/h]	63	6	4	6	9	39	81	1037	69	14	746	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	487	517	1187	766
Degree of Utilization, x	0.15	0.10	1.73	1.12

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.52	0.35	69.17	22.95
95th-Percentile Queue Length [ft]	13.09	8.69	1729.30	573.84
Approach Delay [s/veh]	11.69	10.77	349.91	94.31
Approach LOS	B	B	F	F
Intersection Delay [s/veh]	235.10			
Intersection LOS	F			

Intersection Level Of Service Report
Intersection 6: Nancy Ave at Cherry Valley Blvd

Control Type:	All-way stop	Delay (sec / veh):	127.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.414

Intersection Setup

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name				Nancy Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	72	21	8	13	19	21	24	690	63	11	498	9
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	47	0	0	0	0	0	0	77	56	0	62	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]	119	21	8	13	19	21	24	767	119	11	560	9
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	31	6	2	3	5	6	6	202	31	3	147	2
Total Analysis Volume [veh/h]	125	22	8	14	20	22	25	807	125	12	589	9
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	489	476	832	666	601	650
Degree of Utilization, x	0.32	0.12	1.41	0.19	1.04	0.01

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.35	0.40	38.54	0.69	16.66	0.04
95th-Percentile Queue Length [ft]	33.74	9.92	963.40	17.15	416.39	1.05
Approach Delay [s/veh]	13.75	11.56	187.27		72.79	
Approach LOS	B	B	F		F	
Intersection Delay [s/veh]	127.33					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 7: Beaumont Ave at Cherry Valley Blvd

Control Type:	Signalized	Delay (sec / veh):	35.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.704

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	1	1	0	1	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	50.00			35.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	276	370	73	26	402	60	75	272	376	55	213	22
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	32	0	0	0	0	15	19	19	39	0	15	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]	308	370	73	26	402	75	94	291	415	55	228	22
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	81	97	19	7	106	20	25	77	109	14	60	6
Total Analysis Volume [veh/h]	324	389	77	27	423	79	99	306	437	58	240	23
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	22	36	0	9	23	0	19	36	0	9	26	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	10	0	0	14	0	0	14	0	0	14	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	L	C	R	L	C	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	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	41	41	2	26	26	6	27	27	4	24
g / C, Green / Cycle	0.20	0.45	0.45	0.03	0.28	0.28	0.07	0.30	0.30	0.04	0.27
(v / s)_i Volume / Saturation Flow Rate	0.18	0.20	0.05	0.01	0.22	0.05	0.05	0.16	0.27	0.03	0.14
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1615	1810	1871
c, Capacity [veh/h]	357	862	733	50	539	458	130	567	482	77	504
d1, Uniform Delay [s]	35.30	16.89	14.11	43.18	29.69	24.27	41.02	26.42	30.39	42.60	27.96
k, delay calibration	0.11	0.50	0.50	0.11	0.50	0.50	0.11	0.11	0.26	0.11	0.11
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.95	1.71	0.29	8.68	10.91	0.82	8.92	0.80	14.19	13.49	0.84
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	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	0.91	0.45	0.11	0.54	0.78	0.17	0.76	0.54	0.91	0.75	0.52
d, Delay for Lane Group [s/veh]	44.25	18.60	14.40	51.87	40.60	25.08	49.94	27.22	44.58	56.09	28.80
Lane Group LOS	D	B	B	D	D	C	D	C	D	E	C
Critical Lane Group	Yes	No	No	No	Yes	No	No	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	7.31	5.23	0.86	0.70	9.68	1.33	2.40	5.31	10.41	1.52	4.68
50th-Percentile Queue Length [ft/ln]	182.7	130.7	21.39	17.55	242.0	33.31	60.10	132.7	260.2	38.09	117.09
95th-Percentile Queue Length [veh/ln]	11.74	8.98	1.54	1.26	14.79	2.40	4.33	9.09	15.70	2.74	8.23
95th-Percentile Queue Length [ft/ln]	293.5	224.5	38.51	31.59	369.6	59.96	108.1	227.1	392.5	68.57	205.82

Movement, Approach, & Intersection Results

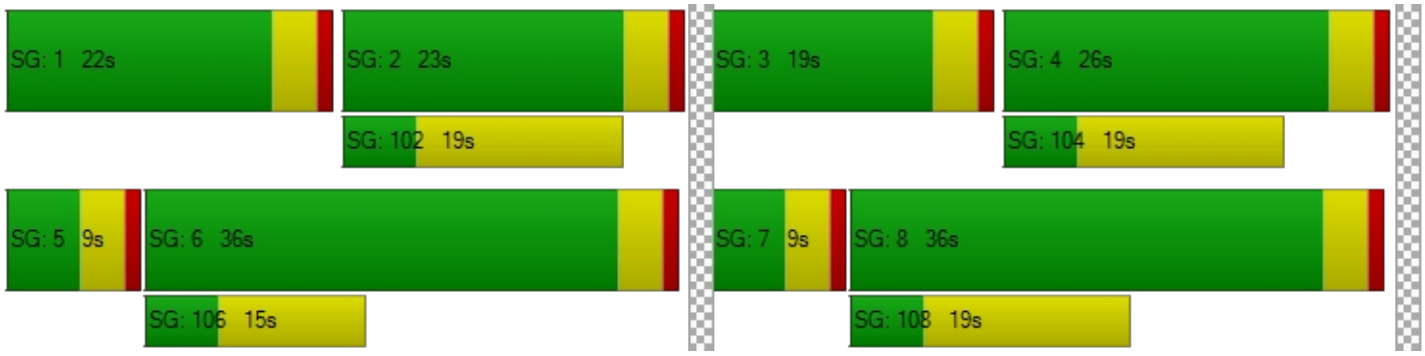
d_M, Delay for Movement [s/veh]	44.25	18.60	14.40	51.87	40.60	25.08	49.94	27.22	44.58	56.09	28.80	28.80
Movement LOS	D	B	B	D	D	C	D	C	D	E	C	C
d_A, Approach Delay [s/veh]	28.71			38.86			38.90			33.73		
Approach LOS	C			D			D			C		
d_I, Intersection Delay [s/veh]	34.98											
Intersection LOS	C											
Intersection V/C	0.704											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.826	2.428	2.615	2.258
Crosswalk LOS	C	B	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	711	422	711	489
d_b, Bicycle Delay [s]	18.69	28.01	18.69	25.69
I_b,int, Bicycle LOS Score for Intersection	2.863	2.432	2.949	2.089
Bicycle LOS	C	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 8: Hannon Rd at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.092

Intersection Setup

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Hannon Rd			Hannon Rd			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	32	30	35	20	65	20	55	106	25	42	121	26
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	19	0	0	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	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]	32	30	35	39	65	20	55	106	25	42	121	41
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	8	8	9	10	17	5	14	28	7	11	32	11
Total Analysis Volume [veh/h]	34	32	37	41	68	21	58	112	26	44	127	43
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.07	0.04	0.09	0.15	0.02	0.04	0.00	0.00	0.03	0.00	0.00
d_M, Delay for Movement [s/veh]	15.23	14.70	10.23	15.70	15.67	11.37	7.64	0.00	0.00	7.55	0.00	0.00
Movement LOS	C	B	B	C	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.70	0.70	0.70	1.06	1.06	1.06	0.13	0.00	0.00	0.09	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.53	17.53	17.53	26.48	26.48	26.48	3.19	0.00	0.00	2.33	0.00	0.00
d_A, Approach Delay [s/veh]	13.27			14.99			2.26			1.55		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	6.36											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 9: Union St at Brookside Ave

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.21
Speed [mph]	35.00			35.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Union St			Union St			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	1	2	10	24	3	22	11	153	2	6	169	32
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	38	0	0	0	19	0	0	15	30
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	2	10	62	3	22	11	172	2	6	184	62
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	1	3	16	1	6	3	45	1	2	48	16
Total Analysis Volume [veh/h]	1	2	11	65	3	23	12	181	2	6	194	65
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.11	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.26	12.52	8.85	12.33	13.13	9.97	7.76	0.00	0.00	7.57	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.05	0.51	0.51	0.51	0.03	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.33	1.33	1.33	12.73	12.73	12.73	0.69	0.00	0.00	0.32	0.00	0.00
d_A, Approach Delay [s/veh]	9.55			11.76			0.48			0.17		
Approach LOS	A			B			A			A		
d_I, Intersection Delay [s/veh]	2.38											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 10: Oak View Dr at Brookside Ave

Control Type:	All-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	Oak View Dr		Brookside Ave		Brookside Ave	
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 Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		45.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		Yes		Yes	

Volumes

Name	Oak View Dr		Brookside Ave		Brookside Ave	
Base Volume Input [veh/h]	71	30	153	81	80	169
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]	62	0	38	75	0	30
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]	133	30	191	156	80	199
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	35	8	50	41	21	52
Total Analysis Volume [veh/h]	140	32	201	164	84	209
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	544	665	723	605	661
Degree of Utilization, x	0.26	0.05	0.50	0.14	0.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.02	0.15	2.87	0.48	1.36
95th-Percentile Queue Length [ft]	25.50	3.78	71.85	12.01	33.90
Approach Delay [s/veh]	11.00		12.95	10.35	
Approach LOS	B		B	B	
Intersection Delay [s/veh]	11.63				
Intersection LOS	B				

Intersection Level Of Service Report
Intersection 11: Beaumont Ave at Brookside Ave

Control Type:	Signalized	Delay (sec / veh):	79.7
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.913

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	1	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			50.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Brookside Ave			Brookside Ave		
Base Volume Input [veh/h]	62	528	114	308	653	23	43	129	104	70	67	428
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	32	0	0	39	0	0	19	19	0	15	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]	77	560	114	308	692	23	43	148	123	70	82	428
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	20	147	30	81	182	6	11	39	32	18	22	113
Total Analysis Volume [veh/h]	81	589	120	324	728	24	45	156	129	74	86	451
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	18	33	0	19	34	0	9	24	0	14	29	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	14	0	0	14	0	0	14	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	R	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	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	29	15	39	3	25	25	5	27
g / C, Green / Cycle	0.06	0.32	0.17	0.43	0.04	0.28	0.28	0.05	0.29
(v / s)_i Volume / Saturation Flow Rate	0.04	0.38	0.18	0.40	0.02	0.08	0.08	0.04	0.32
s, saturation flow rate [veh/h]	1810	1845	1810	1889	1810	1900	1615	1810	1655
c, Capacity [veh/h]	108	598	302	815	68	528	449	97	486
d1, Uniform Delay [s]	41.67	30.42	37.50	24.19	42.72	25.57	25.51	42.00	31.78
k, delay calibration	0.11	0.50	0.11	0.50	0.11	0.11	0.11	0.11	0.43
I, 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]	10.09	99.98	47.04	17.60	10.25	0.31	0.35	11.42	69.75
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	0.75	1.19	1.07	0.92	0.66	0.30	0.29	0.76	1.10
d, Delay for Lane Group [s/veh]	51.77	130.41	84.54	41.80	52.98	25.88	25.86	53.42	101.53
Lane Group LOS	D	F	F	D	D	C	C	D	F
Critical Lane Group	No	Yes	Yes	No	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.01	28.60	10.11	17.01	1.15	2.54	2.10	1.88	19.26
50th-Percentile Queue Length [ft/ln]	50.34	715.04	252.69	425.35	28.77	63.55	52.58	46.93	481.60
95th-Percentile Queue Length [veh/ln]	3.62	41.52	15.84	23.78	2.07	4.58	3.79	3.38	28.10
95th-Percentile Queue Length [ft/ln]	90.62	1037.90	396.10	594.46	51.79	114.3	94.64	84.47	702.52

Movement, Approach, & Intersection Results

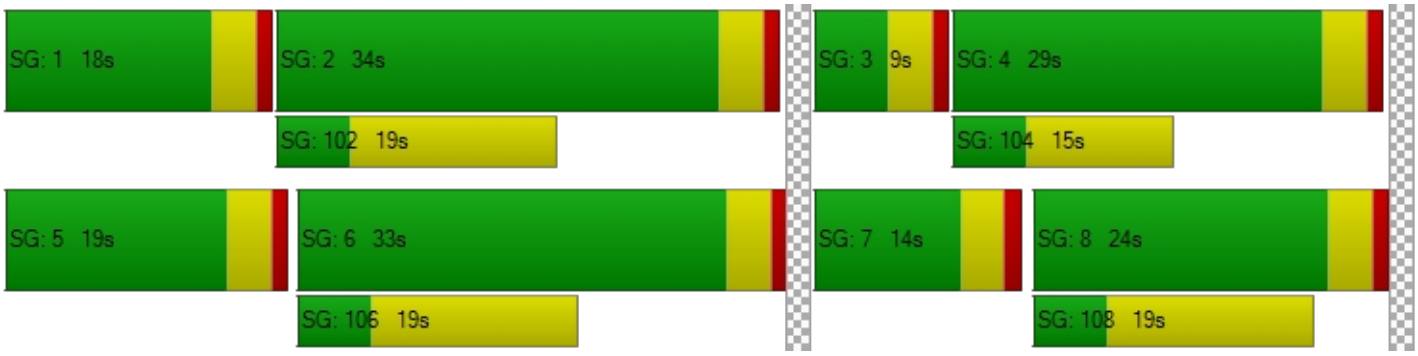
d_M, Delay for Movement [s/veh]	51.77	130.4	130.4	84.54	41.80	41.80	52.98	25.88	25.86	53.42	101.5	101.5
Movement LOS	D	F	F	F	D	D	D	C	C	D	F	F
d_A, Approach Delay [s/veh]	122.34			54.67			29.56			95.70		
Approach LOS	F			D			C			F		
d_I, Intersection Delay [s/veh]	79.69											
Intersection LOS	E											
Intersection V/C	0.913											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	2.692	3.112	2.302	2.526
Crosswalk LOS	B	C	B	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	644	667	444	556
d_b, Bicycle Delay [s]	20.67	20.00	27.22	23.47
I_b,int, Bicycle LOS Score for Intersection	2.863	3.335	2.104	2.568
Bicycle LOS	C	C	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 12: Desert Lawn Dr at Oak Valley Pkwy

Control Type:	All-way stop	Delay (sec / veh):	166.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.956

Intersection Setup

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
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 Entry Pocket	0	0	1	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	45.00		50.00		50.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	Yes		No		No	

Volumes

Name	Desert Lawn Dr		Oak Valley Pkwy		Oak Valley Pkwy	
Base Volume Input [veh/h]	224	188	219	705	740	283
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	15	19	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]	224	188	219	720	759	283
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	49	58	189	200	74
Total Analysis Volume [veh/h]	236	198	231	758	799	298
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	437	367	758	465	465	503
Degree of Utilization, x	0.99	0.63	1.96	0.79	0.79	0.73

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	12.57	4.11	51.81	7.05	7.05	5.96
95th-Percentile Queue Length [ft]	314.16	102.86	1295.13	176.32	176.32	148.98
Approach Delay [s/veh]	70.34	359.52		31.24		
Approach LOS	F	F		D		
Intersection Delay [s/veh]	166.81					
Intersection LOS	F					

Intersection Level Of Service Report
Intersection 13: I-10 SB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	1,058.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.263

Intersection Setup

Name				I-10 SB Ramps			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 Entry Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			65.00			50.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present				No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name				I-10 SB Ramps			Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	0	0	0	1435	9	483	0	661	372	756	858	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	34	0	0	15	0	56	19	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	1435	43	483	0	676	372	812	877	0
Peak Hour Factor	1.000	1.000	1.000	0.950	0.950	0.950	1.000	0.950	0.950	0.950	0.950	1.000
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	0	378	11	127	0	178	98	214	231	0
Total Analysis Volume [veh/h]	0	0	0	1511	45	508	0	712	392	855	923	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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi
Signal Group	0	0	0	0	2	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	Lead	-	-
Minimum Green [s]	0	0	0	0	10	0	0	10	0	5	10	0
Maximum Green [s]	0	0	0	0	30	0	0	30	0	30	30	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	1.0	1.0	0.0
Split [s]	0	0	0	0	45	0	0	25	0	20	45	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	3.0	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	10	0	0	10	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	2.0	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	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		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	0.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		18	30	30	64
g / C, Green / Cycle		0.20	0.33	0.33	0.71
(v / s)_i Volume / Saturation Flow Rate		1.17	0.62	0.47	0.49
s, saturation flow rate [veh/h]		1759	1788	1810	1900
c, Capacity [veh/h]		355	596	601	1348
d1, Uniform Delay [s]		35.93	30.01	30.06	7.38
k, delay calibration		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		2175.79	390.43	200.11	2.84
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		5.82	1.85	1.42	0.68
d, Delay for Lane Group [s/veh]		2211.72	420.44	230.17	10.22
Lane Group LOS		F	F	F	B
Critical Lane Group		Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]		221.17	76.11	45.19	7.66
50th-Percentile Queue Length [ft/ln]		5529.19	1902.71	1129.65	191.58
95th-Percentile Queue Length [veh/ln]		333.52	119.70	68.34	12.20
95th-Percentile Queue Length [ft/ln]		8337.99	2992.58	1708.43	305.08

Movement, Approach, & Intersection Results

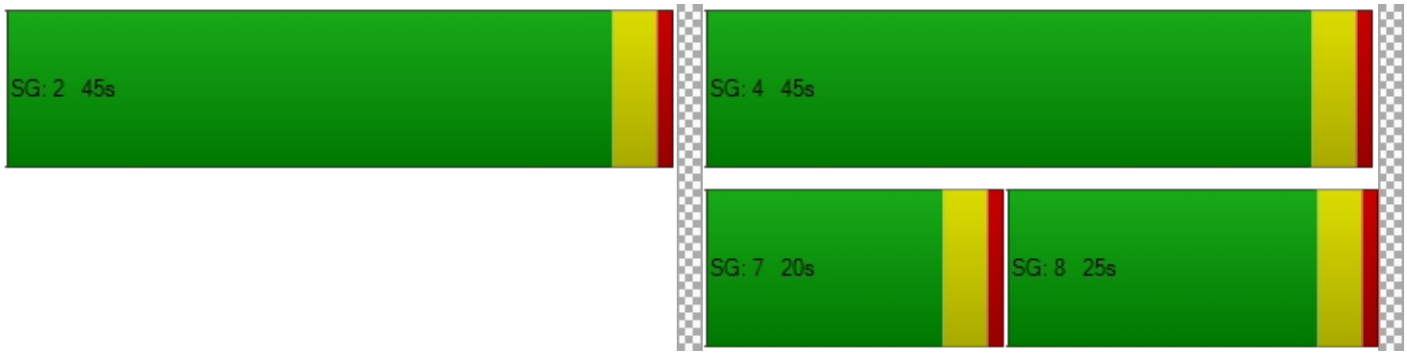
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2211.	2211.	2211.	0.00	420.4	420.4	230.1	10.22	0.00
Movement LOS				F	F	F		F	F	F	B	
d_A, Approach Delay [s/veh]	0.00			2211.72			420.44			115.99		
Approach LOS	A			F			F			F		
d_I, Intersection Delay [s/veh]	1058.51											
Intersection LOS	F											
Intersection V/C	2.263											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	911	467	911
d_b, Bicycle Delay [s]	45.00	13.34	26.45	13.34
I_b,int, Bicycle LOS Score for Intersection	4.132	4.965	3.381	4.493
Bicycle LOS	D	E	C	E

Sequence

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



Intersection Level Of Service Report
Intersection 14: I-10 NB Ramps at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	592.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.065

Intersection Setup

Name	I-10 NB Ramps						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 Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	65.00			30.00			30.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			No			No			No		

Volumes

Name	I-10 NB Ramps						Oak Valley Pkwy			Oak Valley Pkwy		
Base Volume Input [veh/h]	594	8	1129	0	0	0	343	1698	0	0	1020	963
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Heavy Vehicles Percentage [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00	0.00	0.00
Growth Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	47	0	0	0	0	15	0	0	75	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]	594	8	1176	0	0	0	343	1713	0	0	1095	963
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	1.000	1.000	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	156	2	309	0	0	0	90	451	0	0	288	253
Total Analysis Volume [veh/h]	625	8	1238	0	0	0	361	1803	0	0	1153	1014
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Permi	Permi	Permi	Permi	Permi	Permi	Protec	Permi	Permi	Permi	Permi	Permi
Signal Group	0	6	0	0	0	0	3	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	5	10	0	0	10	0
Maximum Green [s]	0	30	0	0	0	0	30	30	0	0	30	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	12	41	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	5	0	0	0	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	7	0	0	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	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]	0.0	2.0	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	C		L	C	C	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		20	54	30	30
g / C, Green / Cycle	0.31		0.22	0.60	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	1.12		0.20	0.95	0.61	0.63
s, saturation flow rate [veh/h]	1676		1810	1900	1900	1615
c, Capacity [veh/h]	523		401	1139	633	538
d1, Uniform Delay [s]	30.97		34.06	18.03	30.00	30.00
k, delay calibration	0.50		0.16	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1165.71		10.28	266.74	375.60	404.79
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	3.58		0.90	1.58	1.82	1.88
d, Delay for Lane Group [s/veh]	1196.68		44.34	284.77	405.60	434.79
Lane Group LOS	F		D	F	F	F
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	178.92		8.61	104.57	79.15	71.65
50th-Percentile Queue Length [ft/ln]	4473.05		215.20	2614.16	1978.87	1791.14
95th-Percentile Queue Length [veh/ln]	282.58		13.42	162.45	123.76	113.46
95th-Percentile Queue Length [ft/ln]	7064.59		335.50	4061.21	3093.88	2836.57

Movement, Approach, & Intersection Results

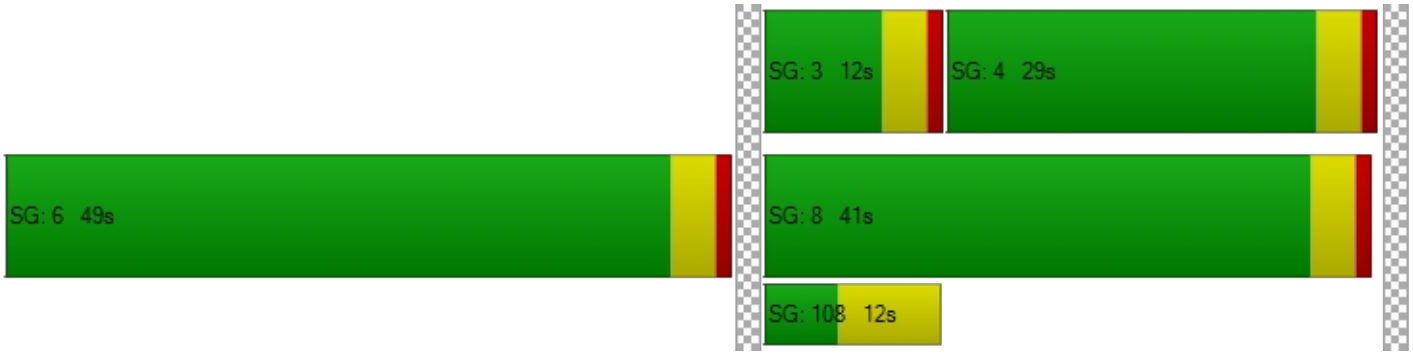
d_M, Delay for Movement [s/veh]	1196.	1196.	1196.	0.00	0.00	0.00	44.34	284.7	0.00	0.00	405.6	434.7
Movement LOS	F	F	F				D	F			F	F
d_A, Approach Delay [s/veh]	1196.68			0.00			244.66			419.26		
Approach LOS	F			A			F			F		
d_I, Intersection Delay [s/veh]	592.87											
Intersection LOS	F											
Intersection V/C	2.065											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	0.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersection	3.693	0.000	0.000	0.000
Crosswalk LOS	D	F	F	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	0	822	556
d_b, Bicycle Delay [s]	11.25	45.00	15.61	23.47
I_b,int, Bicycle LOS Score for Intersection	4.647	4.132	5.130	5.135
Bicycle LOS	E	D	F	F

Sequence

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



Intersection Level Of Service Report
Intersection 15: Oak View Dr at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	125.5
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.235

Intersection Setup

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
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 Entry Pocket	0	1	1	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	49.21	0.00	0.00
Speed [mph]	35.00		45.00		45.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		No	

Volumes

Name	Oak View Dr		Oak Valley Pkwy		Oak Valley Pwky	
Base Volume Input [veh/h]	112	158	216	1955	1224	149
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	75	62	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]	112	233	278	1955	1224	149
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	61	73	514	322	39
Total Analysis Volume [veh/h]	118	245	293	2058	1288	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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Protected	Permissive	Permissive	Permissive
Signal Group	7	0	5	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	Lead	-	-	-
Minimum Green [s]	5	0	5	10	10	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	23	0	37	67	30	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	5	0	0	5	5	0
Pedestrian Clearance [s]	14	0	0	10	10	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	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
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	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]	16	16	17	66	46	46
g / C, Green / Cycle	0.17	0.17	0.19	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.07	0.15	0.16	1.08	0.36	0.10
s, saturation flow rate [veh/h]	1810	1615	1810	1900	3618	1615
c, Capacity [veh/h]	315	281	338	1400	1829	817
d1, Uniform Delay [s]	32.83	36.17	35.51	11.84	17.08	12.18
k, delay calibration	0.11	0.11	0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.74	8.17	6.73	215.40	2.30	0.52
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	0.37	0.87	0.87	1.47	0.70	0.19
d, Delay for Lane Group [s/veh]	33.56	44.34	42.24	227.24	19.38	12.71
Lane Group LOS	C	D	D	F	B	B
Critical Lane Group	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	2.28	5.70	6.50	99.79	9.36	1.65
50th-Percentile Queue Length [ft/ln]	56.95	142.58	162.43	2494.73	234.11	41.14
95th-Percentile Queue Length [veh/ln]	4.10	9.62	10.68	153.32	14.38	2.96
95th-Percentile Queue Length [ft/ln]	102.52	240.49	266.94	3832.90	359.58	74.05

Movement, Approach, & Intersection Results

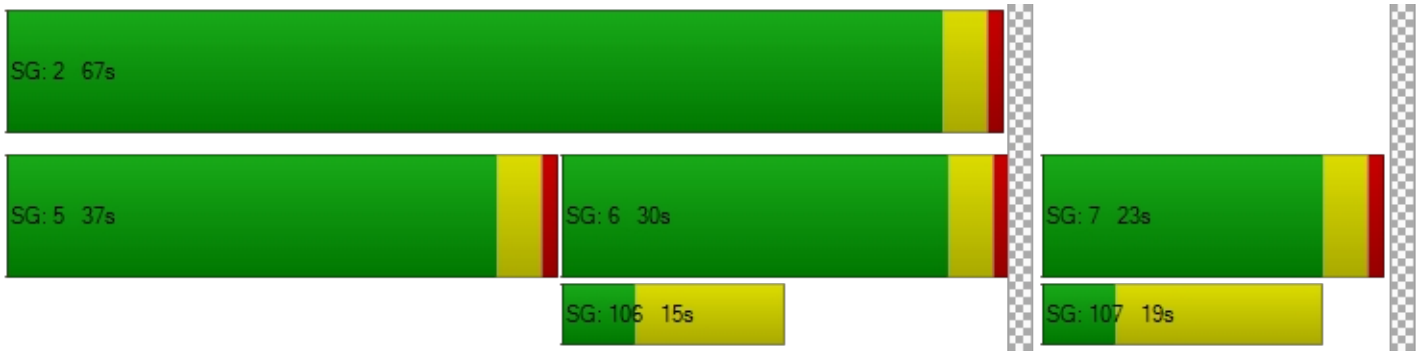
d_M, Delay for Movement [s/veh]	33.56	44.34	42.24	227.24	19.38	12.71
Movement LOS	C	D	D	F	B	B
d_A, Approach Delay [s/veh]	40.84		204.19		18.65	
Approach LOS	D		F		B	
d_I, Intersection Delay [s/veh]	125.47					
Intersection LOS	F					
Intersection V/C	1.235					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	0.00
I_p,int, Pedestrian LOS Score for Intersection	2.250	3.553	0.000
Crosswalk LOS	B	D	F
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	422	1400	578
d_b, Bicycle Delay [s]	28.01	4.05	22.76
I_b,int, Bicycle LOS Score for Intersection	1.560	5.439	2.752
Bicycle LOS	A	F	C

Sequence

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



Intersection Level Of Service Report
Intersection 16: Beaumont Ave at Oak Valley Pkwy

Control Type:	Signalized	Delay (sec / veh):	395.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.889

Intersection Setup

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	1	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	49.21	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	40.00			40.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Beaumont Ave			Beaumont Ave			Oak Valley Pwky			Oak Valley Pwky		
Base Volume Input [veh/h]	172	452	1243	436	318	319	412	1071	157	794	846	299
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	32	0	19	39	0	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	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]	172	484	1243	455	357	319	412	1071	157	794	846	314
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	45	127	327	120	94	84	108	282	41	209	223	83
Total Analysis Volume [veh/h]	181	509	1308	479	376	336	434	1127	165	836	891	331
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 major street [ped/h]	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi	Protec	Permi	Permi
Signal Group	1	6	0	5	2	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	5	10	0	5	10	0	5	10	0	5	10	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]	15	31	0	13	29	0	17	26	0	20	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	5	0	0	5	0	0	5	0	0	5	0
Pedestrian Clearance [s]	0	17	0	0	17	0	0	17	0	0	17	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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	C	L	C	C	L	C	C	L	C	C
C, Cycle Length [s]	90	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	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	11	27	27	9	25	25	13	22	22	16	25	25
g / C, Green / Cycle	0.12	0.30	0.30	0.10	0.28	0.28	0.14	0.24	0.24	0.18	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.10	0.27	0.81	0.26	0.20	0.21	0.24	0.34	0.35	0.46	0.32	0.35
s, saturation flow rate [veh/h]	1810	1900	1615	1810	1900	1615	1810	1900	1817	1810	1900	1734
c, Capacity [veh/h]	216	570	485	181	533	453	261	464	444	322	528	482
d1, Uniform Delay [s]	38.76	30.12	31.50	40.50	29.05	29.42	38.50	34.00	34.00	37.00	32.50	32.50
k, delay calibration	0.11	0.50	0.50	0.30	0.50	0.50	0.24	0.47	0.49	0.50	0.43	0.49
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	8.26	18.92	770.7	750.6	7.66	10.48	305.4	193.5	210.7	728.4	88.10	136.2
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84	0.89	2.70	2.65	0.71	0.74	1.66	1.40	1.44	2.60	1.16	1.27
d, Delay for Lane Group [s/veh]	47.02	49.04	802.2	791.1	36.71	39.90	343.9	227.5	244.7	765.4	120.6	168.7
Lane Group LOS	D	D	F	F	D	D	F	F	F	F	F	F
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.25	12.84	113.5	41.58	8.00	7.53	27.62	34.39	35.02	71.92	23.84	28.19
50th-Percentile Queue Length [ft/ln]	106.3	321.0	2838.	1039.	199.9	188.2	690.5	859.6	875.4	1797.	595.9	704.8
95th-Percentile Queue Length [veh/ln]	7.64	18.72	180.8	64.81	12.64	12.03	43.47	52.09	53.43	112.1	34.70	42.09
95th-Percentile Queue Length [ft/ln]	190.9	467.9	4520.	1620.	315.8	300.7	1086.	1302.	1335.	2804.	867.4	1052.

Movement, Approach, & Intersection Results

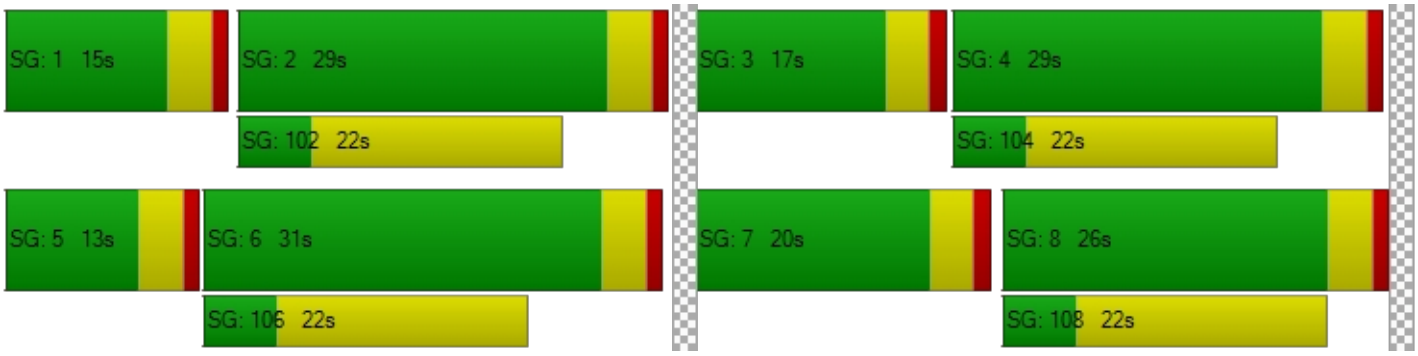
d_M, Delay for Movement [s/veh]	47.02	49.04	802.2	791.1	36.71	39.90	343.9	234.7	244.7	765.4	135.7	168.7
Movement LOS	D	D	F	F	D	D	F	F	F	F	F	F
d_A, Approach Delay [s/veh]	541.93			341.04			263.19			396.82		
Approach LOS	F			F			F			F		
d_I, Intersection Delay [s/veh]	395.79											
Intersection LOS	F											
Intersection V/C	1.889											

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	36.45	36.45	36.45	36.45
I_p,int, Pedestrian LOS Score for Intersection	3.179	2.942	3.218	3.432
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	600	556	489	556
d_b, Bicycle Delay [s]	22.05	23.47	25.69	23.47
I_b,int, Bicycle LOS Score for Intersection	3.208	2.542	2.984	3.257
Bicycle LOS	C	B	C	C

Sequence

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



Intersection Level Of Service Report
Intersection 101: Cherry Valley Blvd at West Project Dwy

Control Type:	Signalized	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.666

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	932	0	0	661
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]	66	0	167	26	4	219
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]	66	0	1099	26	4	880
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	289	7	1	232
Total Analysis Volume [veh/h]	69	0	1157	27	4	926
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Protected	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	19	0	62	0	9	71
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]	10	0	7	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	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	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	5	73	0	77
g / C, Green / Cycle	0.05	0.81	0.01	0.86
(v / s)_i Volume / Saturation Flow Rate	0.04	0.63	0.00	0.49
s, saturation flow rate [veh/h]	1810	1892	1810	1900
c, Capacity [veh/h]	91	1534	10	1635
d1, Uniform Delay [s]	42.17	4.32	44.59	1.71
k, delay calibration	0.11	0.50	0.11	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	11.81	3.83	22.30	1.43
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	0.75	0.77	0.39	0.57
d, Delay for Lane Group [s/veh]	53.99	8.15	66.89	3.13
Lane Group LOS	D	A	E	A
Critical Lane Group	Yes	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	1.80	7.45	0.15	1.72
50th-Percentile Queue Length [ft/ln]	44.91	186.32	3.79	42.94
95th-Percentile Queue Length [veh/ln]	3.23	11.93	0.27	3.09
95th-Percentile Queue Length [ft/ln]	80.84	298.24	6.83	77.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	53.99	53.99	8.15	8.15	66.89	3.13
Movement LOS	D	D	A	A	E	A
d_A, Approach Delay [s/veh]	53.99		8.15		3.41	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	7.58					
Intersection LOS	A					
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 [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	1.765	2.779	2.641
Crosswalk LOS	A	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	333	1289	1489
d_b, Bicycle Delay [s]	31.25	5.69	2.94
I_b,int, Bicycle LOS Score for Intersection	1.673	3.513	3.094
Bicycle LOS	A	D	C

Sequence

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

Intersection Level Of Service Report
Intersection 102: Cherry Valley Blvd at Middle Project Dwy

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.496

Intersection Setup

Name			Cherry Valley Blvd		Cherry Valley Blvd	
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 Entry Pocket	0	1	0	1	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	100.00
Speed [mph]	30.00		55.00		30.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		Yes		Yes	

Volumes

Name			Cherry Valley Blvd		Cherry Valley Blvd	
Base Volume Input [veh/h]	0	0	932	0	0	661
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]	219	66	125	42	150	4
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]	219	66	1057	42	150	665
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	58	17	278	11	39	175
Total Analysis Volume [veh/h]	231	69	1113	44	158	700
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 major street [ped/h]	0		0		0	
v_di, Inbound Pedestrian Volume crossing major street [ped/h]	0		0		0	
v_co, Outbound Pedestrian Volume crossing minor street [ped/h]	0		0		0	
v_ci, Inbound Pedestrian Volume crossing minor street [ped/h]	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	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	0.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	ProtPerm	Permissive
Signal Group	3	0	2	0	1	6
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	Lead	-
Minimum Green [s]	5	0	10	0	5	10
Maximum Green [s]	30	0	30	0	30	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]	26	0	55	0	9	64
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]	17	0	10	0	0	10
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No		No			No
I1, Start-Up Lost Time [s]	2.0	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		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
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	2.00	2.00	2.00	0.00	2.00
g_i, Effective Green Time [s]	14	14	59	59	68	68
g / C, Green / Cycle	0.15	0.15	0.66	0.66	0.76	0.76
(v / s)_i Volume / Saturation Flow Rate	0.13	0.04	0.31	0.03	0.25	0.37
s, saturation flow rate [veh/h]	1810	1615	3618	1615	627	1900
c, Capacity [veh/h]	277	247	2384	1064	515	1440
d1, Uniform Delay [s]	37.00	33.72	7.55	5.38	4.65	4.17
k, delay calibration	0.11	0.11	0.50	0.50	0.27	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.49	0.61	0.66	0.07	0.84	1.18
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	0.83	0.28	0.47	0.04	0.31	0.49
d, Delay for Lane Group [s/veh]	43.49	34.33	8.21	5.45	5.49	5.35
Lane Group LOS	D	C	A	A	A	A
Critical Lane Group	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.35	1.36	3.82	0.22	0.66	3.96
50th-Percentile Queue Length [ft/ln]	133.69	34.04	95.54	5.61	16.62	98.92
95th-Percentile Queue Length [veh/ln]	9.14	2.45	6.88	0.40	1.20	7.12
95th-Percentile Queue Length [ft/ln]	228.50	61.26	171.96	10.09	29.91	178.05

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	43.49	34.33	8.21	5.45	5.49	5.35
Movement LOS	D	C	A	A	A	A
d_A, Approach Delay [s/veh]	41.38		8.11		5.37	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	11.41					
Intersection LOS	B					
Intersection V/C	0.496					

Other Modes

g_Walk,mi, Effective Walk Time [s]	9.0	9.0	9.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/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	2.258	3.048	2.699
Crosswalk LOS	B	C	B
s_b, Saturation Flow Rate of the bicycle lane [bicycles/h]	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	489	1133	1333
d_b, Bicycle Delay [s]	25.69	8.45	5.00
I_b,int, Bicycle LOS Score for Intersection	1.560	2.514	2.975
Bicycle LOS	A	B	C

Sequence

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

Intersection Level Of Service Report
Intersection 103: Cherry Valley Blvd at East Project Dwy

Control Type:	Two-way stop	Delay (sec / veh):	16.1
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.288

Intersection Setup

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Entry Pocket Length [ft]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	1
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.0
Speed [mph]	30.00			30.00			55.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name							Cherry Valley Blvd			Cherry Valley Blvd		
Base Volume Input [veh/h]	0	0	0	0	0	0	0	932	0	0	661	0
Base Volume Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	124	0	0	0	0	66	125	0	154	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	124	0	0	0	0	998	125	0	815	0
Peak Hour Factor	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950	0.950
Other Adjustment Factor	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Total 15-Minute Volume [veh/h]	0	0	33	0	0	0	0	263	33	0	214	0
Total Analysis Volume [veh/h]	0	0	131	0	0	0	0	1051	132	0	858	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

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

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	16.09	0.00	0.00	11.21	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS			C			B		A	A		A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	1.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	29.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.09			11.21			0.00			0.00		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	0.97											
Intersection LOS	C											

APPENDIX E

SBTAM MODEL PLOTS AND B-TURNS WORKSHEETS

Intersection: I-10 EB Ramps Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	307
SOUTH BOUND	LEFT	137	NORTH LEG	
	THRU	0	IN ...	503
	RIGHT	315	OUT ...	0
EAST BOUND	LEFT	0	WEST LEG	
	THRU	696	IN ...	1,191
	RIGHT	211	OUT ...	544
WEST BOUND	LEFT	24	EAST LEG	
	THRU	149	IN ...	239
	RIGHT	0	OUT ...	1,082
		1,532		3,865

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	137	162
	THRU	0	0
	RIGHT	315	341
EAST BOUND	LEFT	0	0
	THRU	696	920
	RIGHT	211	272
WEST BOUND	LEFT	24	35
	THRU	149	203
	RIGHT	0	0
		1,532	1,933

Intersection: I-10 EB Ramps Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	177
SOUTH BOUND	LEFT	288	NORTH LEG	
	THRU	4	IN ...	1,423
	RIGHT	542	OUT ...	0
EAST BOUND	LEFT	0	WEST LEG	
	THRU	393	IN ...	605
	RIGHT	125	OUT ...	1,269
WEST BOUND	LEFT	24	EAST LEG	
	THRU	270	IN ...	437
	RIGHT	0	OUT ...	1,019
		1,646		4,930

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	288	546
	THRU	4	7
	RIGHT	542	870
EAST BOUND	LEFT	0	0
	THRU	393	473
	RIGHT	125	133
WEST BOUND	LEFT	24	37
	THRU	270	400
	RIGHT	0	0
		1,646	2,465

Intersection: I-10 WB Ramps Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	91	SOUTH LEG	
	THRU	1	IN ...	409
	RIGHT	22	OUT ...	0
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	1,508
EAST BOUND	LEFT	692	WEST LEG	
	THRU	156	IN ...	1,097
	RIGHT	0	OUT ...	212
WEST BOUND	LEFT	0	EAST LEG	
	THRU	55	IN ...	766
	RIGHT	442	OUT ...	551
		1,459		4,544

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	91	179
	THRU	1	5
	RIGHT	22	224
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	692	770
	THRU	156	327
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	55	33
	RIGHT	442	733
		1,459	2,272

Intersection: I-10 WB Ramps Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	181	SOUTH LEG	
	THRU	4	IN ...	418
	RIGHT	22	OUT ...	0
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	727
EAST BOUND	LEFT	304	WEST LEG	
	THRU	378	IN ...	1,020
	RIGHT	0	OUT ...	443
WEST BOUND	LEFT	0	EAST LEG	
	THRU	119	IN ...	597
	RIGHT	255	OUT ...	865
		1,263		4,069

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	181	295
	THRU	4	9
	RIGHT	22	113
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	304	270
	THRU	378	752
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	119	148
	RIGHT	255	448
		1,263	2,035

Intersection: Calimesa Bouleva Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	42	NORTH LEG	
	THRU	0	IN ...	77
	RIGHT	25	OUT ...	296
EAST BOUND	LEFT	30	WEST LEG	
	THRU	166	IN ...	569
	RIGHT	0	OUT ...	772
WEST BOUND	LEFT	0	EAST LEG	
	THRU	478	IN ...	924
	RIGHT	58	OUT ...	504
		799		3,142

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	42	53
	THRU	0	0
	RIGHT	25	25
EAST BOUND	LEFT	30	123
	THRU	166	451
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	478	747
	RIGHT	58	173
		799	1,572

Intersection: Calimesa Bouleva Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	0	SOUTH LEG	
BOUND	THRU	0	IN ...	0
	RIGHT	0	OUT ...	0
SOUTH	LEFT	74	NORTH LEG	
BOUND	THRU	0	IN ...	166
	RIGHT	49	OUT ...	208
EAST	LEFT	41	WEST LEG	
BOUND	THRU	382	IN ...	888
	RIGHT	0	OUT ...	579
WEST	LEFT	0	EAST LEG	
BOUND	THRU	307	IN ...	665
	RIGHT	62	OUT ...	932
		915		3,438

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	0	0
BOUND	THRU	0	0
	RIGHT	0	0
SOUTH	LEFT	74	114
BOUND	THRU	0	0
	RIGHT	49	53
EAST	LEFT	41	76
BOUND	THRU	382	818
	RIGHT	0	0
WEST	LEFT	0	0
BOUND	THRU	307	526
	RIGHT	62	132
		915	1,719

Intersection: Hannon Road Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	70	SOUTH LEG	
	THRU	0	IN ...	201
	RIGHT	0	OUT ...	42
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	(21)
	RIGHT	0	OUT ...	8
EAST BOUND	LEFT	0	WEST LEG	
	THRU	176	IN ...	339
	RIGHT	13	OUT ...	951
WEST BOUND	LEFT	0	EAST LEG	
	THRU	470	IN ...	785
	RIGHT	0	OUT ...	304
		729		2,608

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	70	194
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	0	0
	THRU	176	304
	RIGHT	13	42
WEST BOUND	LEFT	0	0
	THRU	470	757
	RIGHT	0	0
		729	1,296

Intersection: Hannon Road Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	39	SOUTH LEG	
	THRU	0	IN ...	104
	RIGHT	1	OUT ...	86
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	11
	RIGHT	0	OUT ...	6
EAST BOUND	LEFT	0	WEST LEG	
	THRU	416	IN ...	868
	RIGHT	38	OUT ...	679
WEST BOUND	LEFT	0	EAST LEG	
	THRU	312	IN ...	586
	RIGHT	0	OUT ...	799
		806		3,139

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	39	100
	THRU	0	0
	RIGHT	1	3
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	0	0
	THRU	416	795
	RIGHT	38	86
WEST BOUND	LEFT	0	0
	THRU	312	579
	RIGHT	0	0
		806	1,564

Intersection: Union Street Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	50	SOUTH LEG	
	THRU	1	IN ...	73
	RIGHT	1	OUT ...	20
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	3	IN ...	119
	RIGHT	96	OUT ...	37
EAST BOUND	LEFT	24	WEST LEG	
	THRU	139	IN ...	372
	RIGHT	12	OUT ...	882
WEST BOUND	LEFT	1	EAST LEG	
	THRU	315	IN ...	744
	RIGHT	1	OUT ...	371
		643		2,618

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	50	65
	THRU	1	2
	RIGHT	1	4
SOUTH BOUND	LEFT	0	0
	THRU	3	5
	RIGHT	96	110
EAST BOUND	LEFT	24	31
	THRU	139	366
	RIGHT	12	12
WEST BOUND	LEFT	1	3
	THRU	315	707
	RIGHT	1	4
		643	1,309

Intersection: Union Street Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	18	SOUTH LEG	
BOUND	THRU	3	IN ...	42
	RIGHT	1	OUT ...	49
SOUTH	LEFT	2	NORTH LEG	
BOUND	THRU	4	IN ...	54
	RIGHT	31	OUT ...	89
EAST	LEFT	61	WEST LEG	
BOUND	THRU	341	IN ...	919
	RIGHT	15	OUT ...	667
WEST	LEFT	3	EAST LEG	
BOUND	THRU	261	IN ...	652
	RIGHT	2	OUT ...	862
		742		3,333

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	18	30
BOUND	THRU	3	6
	RIGHT	1	4
SOUTH	LEFT	2	6
BOUND	THRU	4	9
	RIGHT	31	37
EAST	LEFT	61	77
BOUND	THRU	341	852
	RIGHT	15	28
WEST	LEFT	3	13
BOUND	THRU	261	600
	RIGHT	2	6
		742	1,667

Intersection: Nancy Avenue Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	17	SOUTH LEG	
	THRU	18	IN ...	40
	RIGHT	4	OUT ...	91
SOUTH BOUND	LEFT	5	NORTH LEG	
	THRU	24	IN ...	84
	RIGHT	34	OUT ...	40
EAST BOUND	LEFT	16	WEST LEG	
	THRU	94	IN ...	312
	RIGHT	41	OUT ...	681
WEST BOUND	LEFT	3	EAST LEG	
	THRU	308	IN ...	595
	RIGHT	1	OUT ...	220
		565		2,062

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	17	23
	THRU	18	13
	RIGHT	4	4
SOUTH BOUND	LEFT	5	6
	THRU	24	21
	RIGHT	34	58
EAST BOUND	LEFT	16	26
	THRU	94	210
	RIGHT	41	67
WEST BOUND	LEFT	3	3
	THRU	308	600
	RIGHT	1	1
		565	1,031

Intersection: Nancy Avenue Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	33	SOUTH LEG	
	THRU	19	IN ...	70
	RIGHT	6	OUT ...	53
SOUTH BOUND	LEFT	12	NORTH LEG	
	THRU	17	IN ...	43
	RIGHT	18	OUT ...	35
EAST BOUND	LEFT	21	WEST LEG	
	THRU	303	IN ...	747
	RIGHT	25	OUT ...	571
WEST BOUND	LEFT	10	EAST LEG	
	THRU	217	IN ...	510
	RIGHT	8	OUT ...	710
		689		2,739

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	33	52
	THRU	19	10
	RIGHT	6	8
SOUTH BOUND	LEFT	12	12
	THRU	17	10
	RIGHT	18	21
EAST BOUND	LEFT	21	19
	THRU	303	690
	RIGHT	25	32
WEST BOUND	LEFT	10	11
	THRU	217	498
	RIGHT	8	6
		689	1,369

Intersection: Beaumont Avenu Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	111	SOUTH LEG	
	THRU	198	IN ...	503
	RIGHT	8	OUT ...	435
SOUTH BOUND	LEFT	8	NORTH LEG	
	THRU	224	IN ...	319
	RIGHT	50	OUT ...	269
EAST BOUND	LEFT	41	WEST LEG	
	THRU	50	IN ...	272
	RIGHT	74	OUT ...	547
WEST BOUND	LEFT	8	EAST LEG	
	THRU	81	IN ...	320
	RIGHT	7	OUT ...	163
		860		2,830

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	111	238
	THRU	198	230
	RIGHT	8	33
SOUTH BOUND	LEFT	8	13
	THRU	224	268
	RIGHT	50	41
EAST BOUND	LEFT	41	27
	THRU	50	118
	RIGHT	74	130
WEST BOUND	LEFT	8	38
	THRU	81	268
	RIGHT	7	13
		860	1,415

Intersection: Beaumont Avenu Cherry Valley Boulevard

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	132	SOUTH LEG	
BOUND	THRU	254	IN ...	596
	RIGHT	26	OUT ...	658
SOUTH	LEFT	16	NORTH LEG	
BOUND	THRU	228	IN ...	324
	RIGHT	54	OUT ...	381
EAST	LEFT	60	WEST LEG	
BOUND	THRU	87	IN ...	707
	RIGHT	174	OUT ...	507
WEST	LEFT	15	EAST LEG	
BOUND	THRU	59	IN ...	291
	RIGHT	10	OUT ...	371
		1,115		3,835

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	132	239
BOUND	THRU	254	284
	RIGHT	26	73
SOUTH	LEFT	16	26
BOUND	THRU	228	242
	RIGHT	54	56
EAST	LEFT	60	75
BOUND	THRU	87	272
	RIGHT	174	360
WEST	LEFT	15	55
BOUND	THRU	59	213
	RIGHT	10	22
		1,115	1,918

Intersection: Hannon Road Brookside Avenue

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	4	IN ...	165
	RIGHT	1	OUT ...	37
SOUTH BOUND	LEFT	7	NORTH LEG	
	THRU	1	IN ...	41
	RIGHT	4	OUT ...	199
EAST BOUND	LEFT	59	WEST LEG	
	THRU	65	IN ...	115
	RIGHT	0	OUT ...	60
WEST BOUND	LEFT	1	EAST LEG	
	THRU	48	IN ...	65
	RIGHT	5	OUT ...	90
		195		771

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	4	135
	RIGHT	1	27
SOUTH BOUND	LEFT	7	9
	THRU	1	24
	RIGHT	4	9
EAST BOUND	LEFT	59	60
	THRU	65	54
	RIGHT	0	0
WEST BOUND	LEFT	1	12
	THRU	48	51
	RIGHT	5	4
		195	386

Intersection: Hannon Road Brookside Avenue

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	3	SOUTH LEG	
BOUND	THRU	2	IN ...	98
	RIGHT	5	OUT ...	132
SOUTH	LEFT	18	NORTH LEG	
BOUND	THRU	5	IN ...	89
	RIGHT	18	OUT ...	111
EAST	LEFT	24	WEST LEG	
BOUND	THRU	95	IN ...	180
	RIGHT	1	OUT ...	143
WEST	LEFT	3	EAST LEG	
BOUND	THRU	108	IN ...	164
	RIGHT	21	OUT ...	145
		303		1,062

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	3	32
BOUND	THRU	2	30
	RIGHT	5	35
SOUTH	LEFT	18	10
BOUND	THRU	5	65
	RIGHT	18	15
EAST	LEFT	24	55
BOUND	THRU	95	100
	RIGHT	1	25
WEST	LEFT	3	42
BOUND	THRU	108	96
	RIGHT	21	26
		303	531

Intersection: Union Street Brookside Avenue

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	7	IN ...	11
	RIGHT	4	OUT ...	1
SOUTH BOUND	LEFT	15	NORTH LEG	
	THRU	0	IN ...	22
	RIGHT	3	OUT ...	63
EAST BOUND	LEFT	1	WEST LEG	
	THRU	73	IN ...	130
	RIGHT	0	OUT ...	79
WEST BOUND	LEFT	1	EAST LEG	
	THRU	50	IN ...	115
	RIGHT	34	OUT ...	135
		188		557

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	7	10
	RIGHT	4	2
SOUTH BOUND	LEFT	15	14
	THRU	0	0
	RIGHT	3	8
EAST BOUND	LEFT	1	5
	THRU	73	119
	RIGHT	0	0
WEST BOUND	LEFT	1	1
	THRU	50	71
	RIGHT	34	49
		188	278

Intersection: Union Street Brookside Avenue

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	1	SOUTH LEG	
BOUND	THRU	1	IN ...	11
	RIGHT	9	OUT ...	9
SOUTH	LEFT	13	NORTH LEG	
BOUND	THRU	2	IN ...	49
	RIGHT	7	OUT ...	44
EAST	LEFT	4	WEST LEG	
BOUND	THRU	113	IN ...	169
	RIGHT	2	OUT ...	192
WEST	LEFT	5	EAST LEG	
BOUND	THRU	125	IN ...	201
	RIGHT	19	OUT ...	185
		301		861

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	1	1
BOUND	THRU	1	2
	RIGHT	9	8
SOUTH	LEFT	13	24
BOUND	THRU	2	3
	RIGHT	7	22
EAST	LEFT	4	11
BOUND	THRU	113	153
	RIGHT	2	2
WEST	LEFT	5	3
BOUND	THRU	125	169
	RIGHT	19	32
		301	430

Intersection: Oak View Drive Brookside Avenue

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	41	SOUTH LEG	
BOUND	THRU	0	IN ...	118
	RIGHT	66	OUT ...	128
SOUTH	LEFT	0	NORTH LEG	
BOUND	THRU	0	IN ...	15
	RIGHT	0	OUT ...	36
EAST	LEFT	0	WEST LEG	
BOUND	THRU	88	IN ...	189
	RIGHT	59	OUT ...	98
WEST	LEFT	26	EAST LEG	
BOUND	THRU	40	IN ...	114
	RIGHT	0	OUT ...	175
		320		873

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	41	39
BOUND	THRU	0	0
	RIGHT	66	73
SOUTH	LEFT	0	0
BOUND	THRU	0	0
	RIGHT	0	0
EAST	LEFT	0	0
BOUND	THRU	88	102
	RIGHT	59	78
WEST	LEFT	26	50
BOUND	THRU	40	59
	RIGHT	0	0
		320	401

Intersection: Oak View Drive Brookside Avenue

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	63	SOUTH LEG	
	THRU	0	IN ...	131
	RIGHT	27	OUT ...	164
SOUTH BOUND	LEFT	1	NORTH LEG	
	THRU	0	IN ...	69
	RIGHT	0	OUT ...	38
EAST BOUND	LEFT	1	WEST LEG	
	THRU	67	IN ...	173
	RIGHT	72	OUT ...	239
WEST BOUND	LEFT	71	EAST LEG	
	THRU	129	IN ...	245
	RIGHT	0	OUT ...	178
		431		1,238

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	63	88
	THRU	0	0
	RIGHT	27	43
SOUTH BOUND	LEFT	1	70
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	1	38
	THRU	67	65
	RIGHT	72	70
WEST BOUND	LEFT	71	94
	THRU	129	151
	RIGHT	0	0
		431	619

Intersection: Beaumont Avenu Brookside Avenue

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	50	SOUTH LEG	
BOUND	THRU	280	IN ...	551
	RIGHT	74	OUT ...	555
SOUTH	LEFT	113	NORTH LEG	
BOUND	THRU	290	IN ...	657
	RIGHT	13	OUT ...	597
EAST	LEFT	27	WEST LEG	
BOUND	THRU	71	IN ...	274
	RIGHT	93	OUT ...	151
WEST	LEFT	60	EAST LEG	
BOUND	THRU	43	IN ...	315
	RIGHT	106	OUT ...	493
		1,220		3,593

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	50	62
BOUND	THRU	280	376
	RIGHT	74	114
SOUTH	LEFT	113	250
BOUND	THRU	290	384
	RIGHT	13	23
EAST	LEFT	27	43
BOUND	THRU	71	129
	RIGHT	93	101
WEST	LEFT	60	70
BOUND	THRU	43	67
	RIGHT	106	179
		1,220	1,796

Intersection: Beaumont Avenu Brookside Avenue

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	69	SOUTH LEG	
BOUND	THRU	197	IN ...	366
	RIGHT	24	OUT ...	460
SOUTH	LEFT	62	NORTH LEG	
BOUND	THRU	234	IN ...	451
	RIGHT	26	OUT ...	517
EAST	LEFT	3	WEST LEG	
BOUND	THRU	37	IN ...	107
	RIGHT	46	OUT ...	212
WEST	LEFT	53	EAST LEG	
BOUND	THRU	69	IN ...	430
	RIGHT	131	OUT ...	166
		951		2,711

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	69	74
BOUND	THRU	197	266
	RIGHT	24	28
SOUTH	LEFT	62	91
BOUND	THRU	234	324
	RIGHT	26	35
EAST	LEFT	3	4
BOUND	THRU	37	47
	RIGHT	46	55
WEST	LEFT	53	80
BOUND	THRU	69	103
	RIGHT	131	247
		951	1,355

Intersection: Desert Lawn Driv Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	0	SOUTH LEG	
BOUND	THRU	0	IN ...	0
	RIGHT	0	OUT ...	1
SOUTH	LEFT	284	NORTH LEG	
BOUND	THRU	0	IN ...	387
	RIGHT	33	OUT ...	231
EAST	LEFT	21	WEST LEG	
BOUND	THRU	253	IN ...	503
	RIGHT	0	OUT ...	729
WEST	LEFT	1	EAST LEG	
BOUND	THRU	211	IN ...	786
	RIGHT	133	OUT ...	715
		936		3,352

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	0	0
BOUND	THRU	0	0
	RIGHT	0	0
SOUTH	LEFT	284	277
BOUND	THRU	0	0
	RIGHT	33	105
EAST	LEFT	21	53
BOUND	THRU	253	438
	RIGHT	0	0
WEST	LEFT	1	1
BOUND	THRU	211	625
	RIGHT	133	178
		936	1,676

Intersection: Desert Lawn Driv Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	200	NORTH LEG	
	THRU	0	IN ...	373
	RIGHT	42	OUT ...	502
EAST BOUND	LEFT	50	WEST LEG	
	THRU	311	IN ...	912
	RIGHT	0	OUT ...	902
WEST BOUND	LEFT	0	EAST LEG	
	THRU	255	IN ...	986
	RIGHT	245	OUT ...	868
		1,103		4,544

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	200	185
	THRU	0	0
	RIGHT	42	188
EAST BOUND	LEFT	50	219
	THRU	311	683
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	255	714
	RIGHT	245	283
		1,103	2,272

Intersection: I-10 SB Ramps Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	0	SOUTH LEG	
BOUND	THRU	0	IN ...	0
	RIGHT	0	OUT ...	613
SOUTH	LEFT	252	NORTH LEG	
BOUND	THRU	7	IN ...	576
	RIGHT	83	OUT ...	0
EAST	LEFT	0	WEST LEG	
BOUND	THRU	290	IN ...	936
	RIGHT	305	OUT ...	825
WEST	LEFT	240	EAST LEG	
BOUND	THRU	236	IN ...	790
	RIGHT	0	OUT ...	863
		1,413		4,601

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	0	0
BOUND	THRU	0	0
	RIGHT	0	0
SOUTH	LEFT	252	333
BOUND	THRU	7	7
	RIGHT	83	236
EAST	LEFT	0	0
BOUND	THRU	290	530
	RIGHT	305	405
WEST	LEFT	240	202
BOUND	THRU	236	589
	RIGHT	0	0
		1,413	2,301

Intersection: I-10 SB Ramps Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	349
SOUTH BOUND	LEFT	520	NORTH LEG	
	THRU	8	IN ...	1,092
	RIGHT	142	OUT ...	0
EAST BOUND	LEFT	0	WEST LEG	
	THRU	265	IN ...	953
	RIGHT	223	OUT ...	1,175
WEST BOUND	LEFT	158	EAST LEG	
	THRU	377	IN ...	763
	RIGHT	0	OUT ...	1,284
		1,693		5,615

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	520	623
	THRU	8	5
	RIGHT	142	464
EAST BOUND	LEFT	0	0
	THRU	265	661
	RIGHT	223	287
WEST BOUND	LEFT	158	56
	THRU	377	710
	RIGHT	0	0
		1,693	2,808

Intersection: I-10 NB Ramps Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	123	SOUTH LEG	
	THRU	1	IN ...	291
	RIGHT	154	OUT ...	0
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	890
EAST BOUND	LEFT	178	WEST LEG	
	THRU	359	IN ...	733
	RIGHT	0	OUT ...	766
WEST BOUND	LEFT	0	EAST LEG	
	THRU	329	IN ...	1,355
	RIGHT	667	OUT ...	723
		1,811		4,757

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	123	134
	THRU	1	1
	RIGHT	154	157
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	178	169
	THRU	359	566
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	329	632
	RIGHT	667	721
		1,811	2,379

Intersection: I-10 NB Ramps Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	241	SOUTH LEG	
	THRU	7	IN ...	487
	RIGHT	246	OUT ...	0
SOUTH BOUND	LEFT	0	NORTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	584
EAST BOUND	LEFT	116	WEST LEG	
	THRU	668	IN ...	1,240
	RIGHT	0	OUT ...	763
WEST BOUND	LEFT	0	EAST LEG	
	THRU	294	IN ...	945
	RIGHT	333	OUT ...	1,324
		1,905		5,343

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	241	248
	THRU	7	5
	RIGHT	246	234
SOUTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
EAST BOUND	LEFT	116	150
	THRU	668	1,090
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	294	515
	RIGHT	333	429
		1,905	2,671

Intersection: Oak View Drive Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	119	NORTH LEG	
	THRU	0	IN ...	359
	RIGHT	240	OUT ...	197
EAST BOUND	LEFT	139	WEST LEG	
	THRU	290	IN ...	429
	RIGHT	0	OUT ...	912
WEST BOUND	LEFT	0	EAST LEG	
	THRU	672	IN ...	730
	RIGHT	58	OUT ...	409
		1,518		3,036

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	119	119
	THRU	0	0
	RIGHT	240	240
EAST BOUND	LEFT	139	139
	THRU	290	290
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	672	672
	RIGHT	58	58
		1,518	1,518

Intersection: Oak View Drive Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH BOUND	LEFT	0	SOUTH LEG	
	THRU	0	IN ...	0
	RIGHT	0	OUT ...	0
SOUTH BOUND	LEFT	100	NORTH LEG	
	THRU	0	IN ...	241
	RIGHT	141	OUT ...	326
EAST BOUND	LEFT	193	WEST LEG	
	THRU	662	IN ...	855
	RIGHT	0	OUT ...	598
WEST BOUND	LEFT	0	EAST LEG	
	THRU	457	IN ...	590
	RIGHT	133	OUT ...	762
		1,686		3,372

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH BOUND	LEFT	0	0
	THRU	0	0
	RIGHT	0	0
SOUTH BOUND	LEFT	100	100
	THRU	0	0
	RIGHT	141	141
EAST BOUND	LEFT	193	193
	THRU	662	662
	RIGHT	0	0
WEST BOUND	LEFT	0	0
	THRU	457	457
	RIGHT	133	133
		1,686	1,686

Intersection: Beaumont Avenu Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: AM Peak Hour

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	57	SOUTH LEG	
BOUND	THRU	194	IN ...	430
	RIGHT	61	OUT ...	535
SOUTH	LEFT	28	NORTH LEG	
BOUND	THRU	246	IN ...	751
	RIGHT	183	OUT ...	552
EAST	LEFT	91	WEST LEG	
BOUND	THRU	238	IN ...	589
	RIGHT	66	OUT ...	1,023
WEST	LEFT	70	EAST LEG	
BOUND	THRU	459	IN ...	639
	RIGHT	54	OUT ...	298
		1,747		4,818

FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	57	105
BOUND	THRU	194	286
	RIGHT	61	38
SOUTH	LEFT	28	20
BOUND	THRU	246	349
	RIGHT	183	384
EAST	LEFT	91	215
BOUND	THRU	238	240
	RIGHT	66	131
WEST	LEFT	70	55
BOUND	THRU	459	535
	RIGHT	54	51
		1,747	2,409

Intersection: Beaumont Avenu Oak Valley Parkway

Condition: 2040 Build-out

Peak Hour: PM Peak Hour

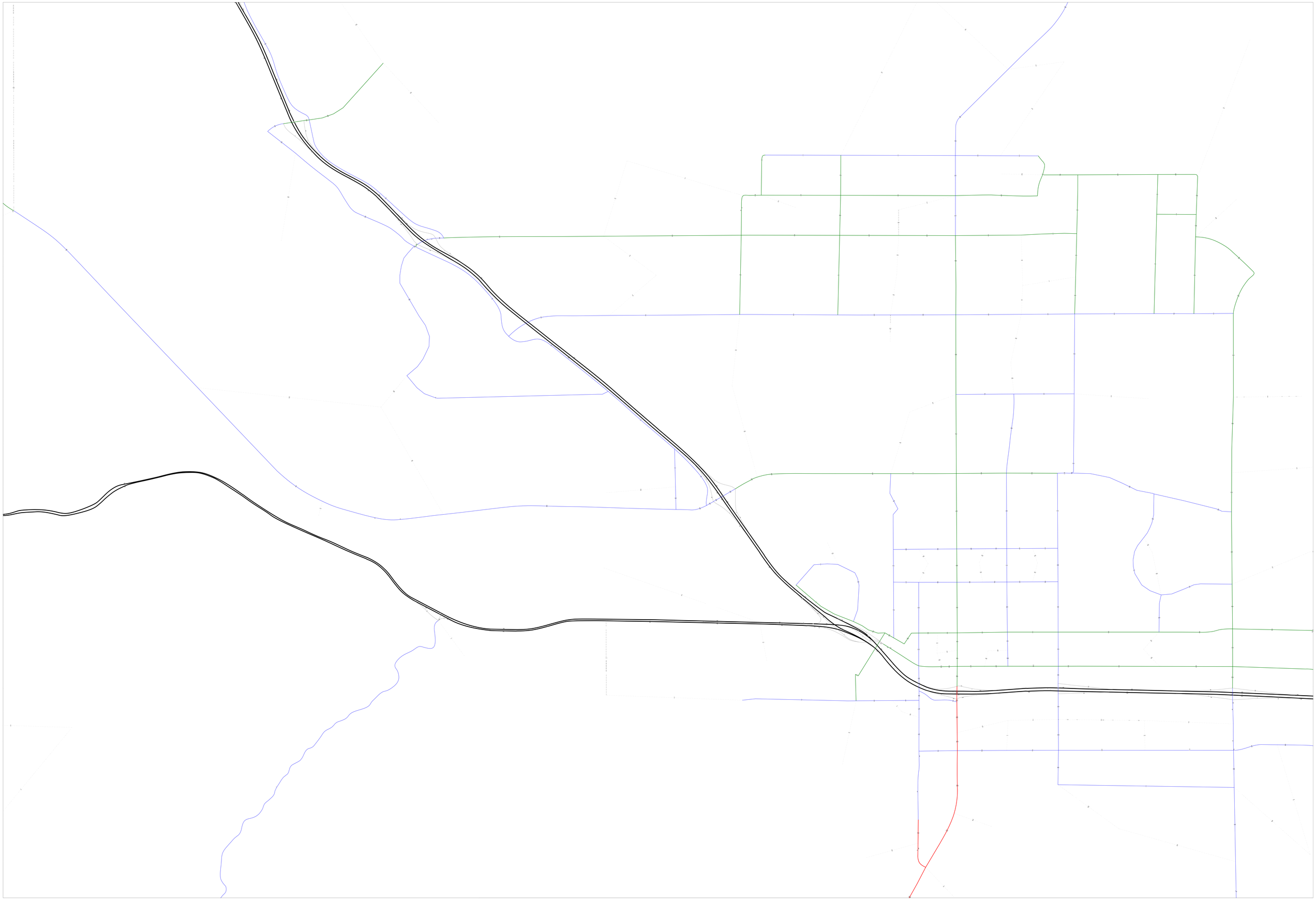
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** INPUT DATA *** Modified by: COMSIS Corp. (M. Roskin) 4/9/86
Modified by: FHWA 12/21/87

APPROACH	TURN MOVEMENT	BY COUNT	INTERSECTION LEG	FY TOTAL
NORTH	LEFT	85	SOUTH LEG	
BOUND	THRU	338	IN ...	681
	RIGHT	59	OUT ...	568
SOUTH	LEFT	89	NORTH LEG	
BOUND	THRU	229	IN ...	716
	RIGHT	171	OUT ...	939
EAST	LEFT	227	WEST LEG	
BOUND	THRU	391	IN ...	1,087
	RIGHT	77	OUT ...	1,004
WEST	LEFT	93	EAST LEG	
BOUND	THRU	382	IN ...	680
	RIGHT	85	OUT ...	653
		2,226		6,327

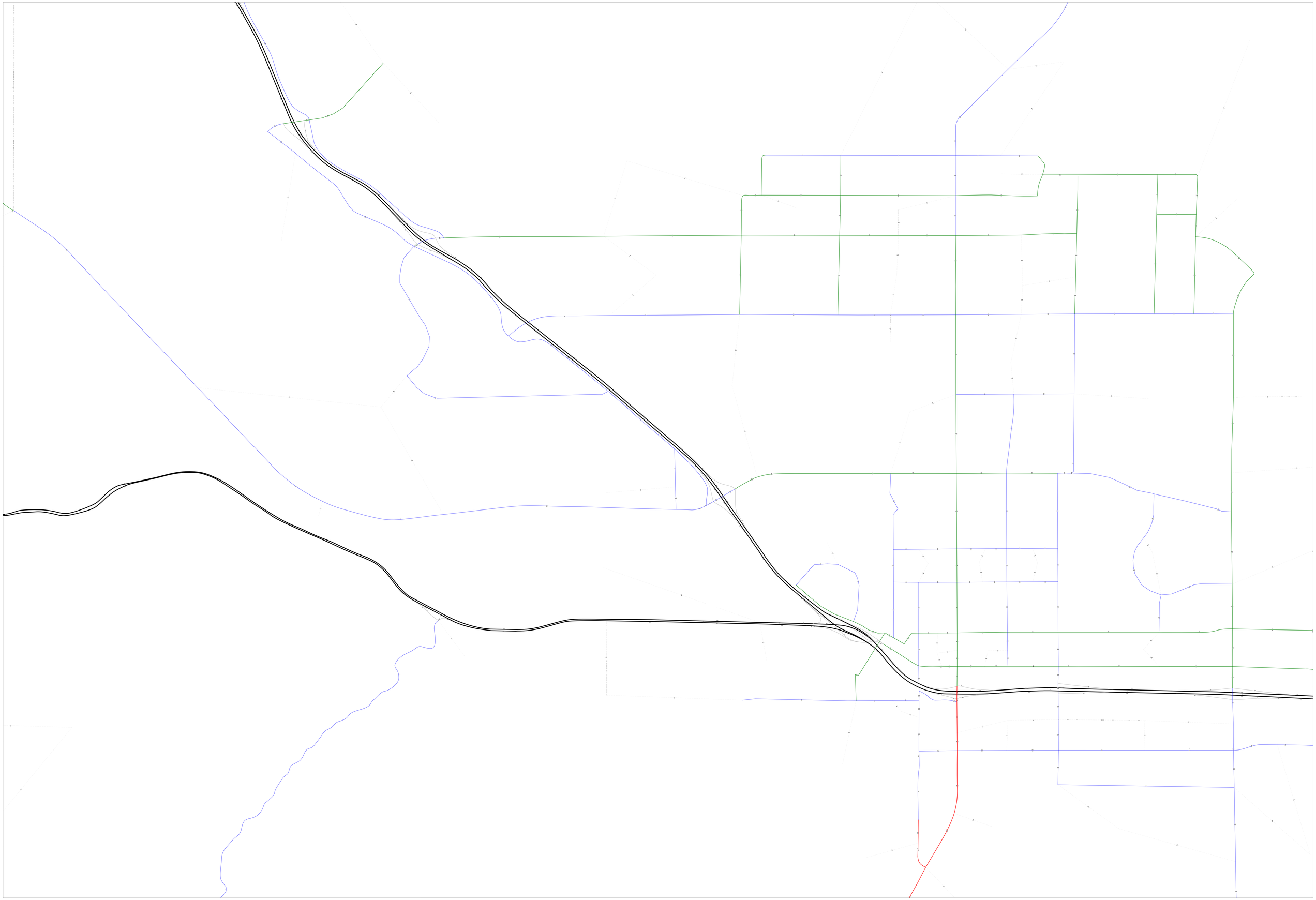
FUTURE DIRECTIONAL TURN VOLUMES FROM FUTURE DIRECTIONAL LINK VOLUMES
NCHRP 255, PAGE 105 Written by: FHWA (C. Fleet)
*** RESULTS *** Modified by: COMSIS Corp. (M. Roskin) 2/13/86

APPROACH	TURN MOVEMENT	BY COUNT	FY FORECAST
NORTH	LEFT	85	172
BOUND	THRU	338	452
	RIGHT	59	57
SOUTH	LEFT	89	80
BOUND	THRU	229	318
	RIGHT	171	319
EAST	LEFT	227	412
BOUND	THRU	391	516
	RIGHT	77	157
WEST	LEFT	93	93
BOUND	THRU	382	513
	RIGHT	85	75
		2,226	3,164

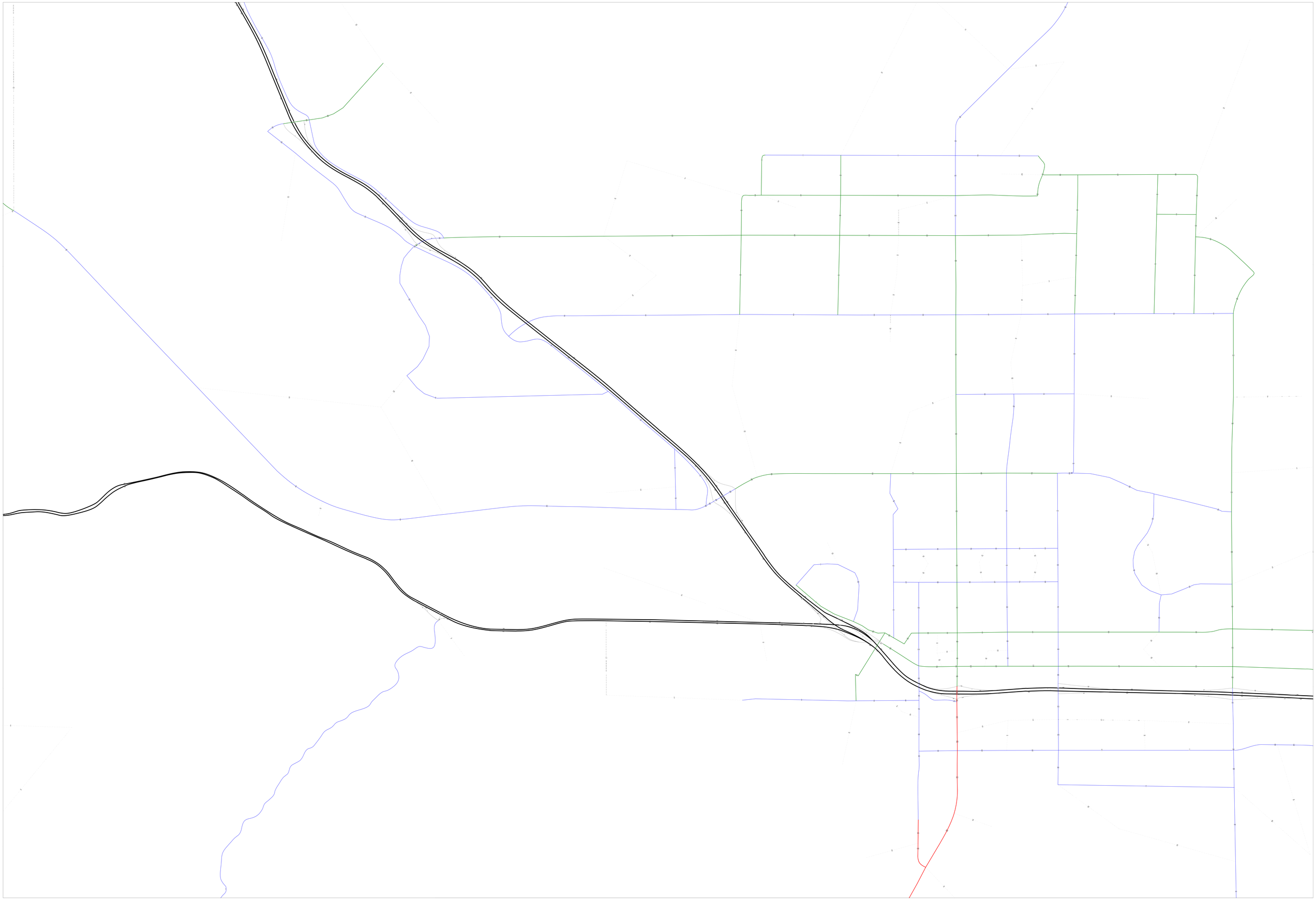
RivTAM 2012 A.M. Peak Period PCE Volumes



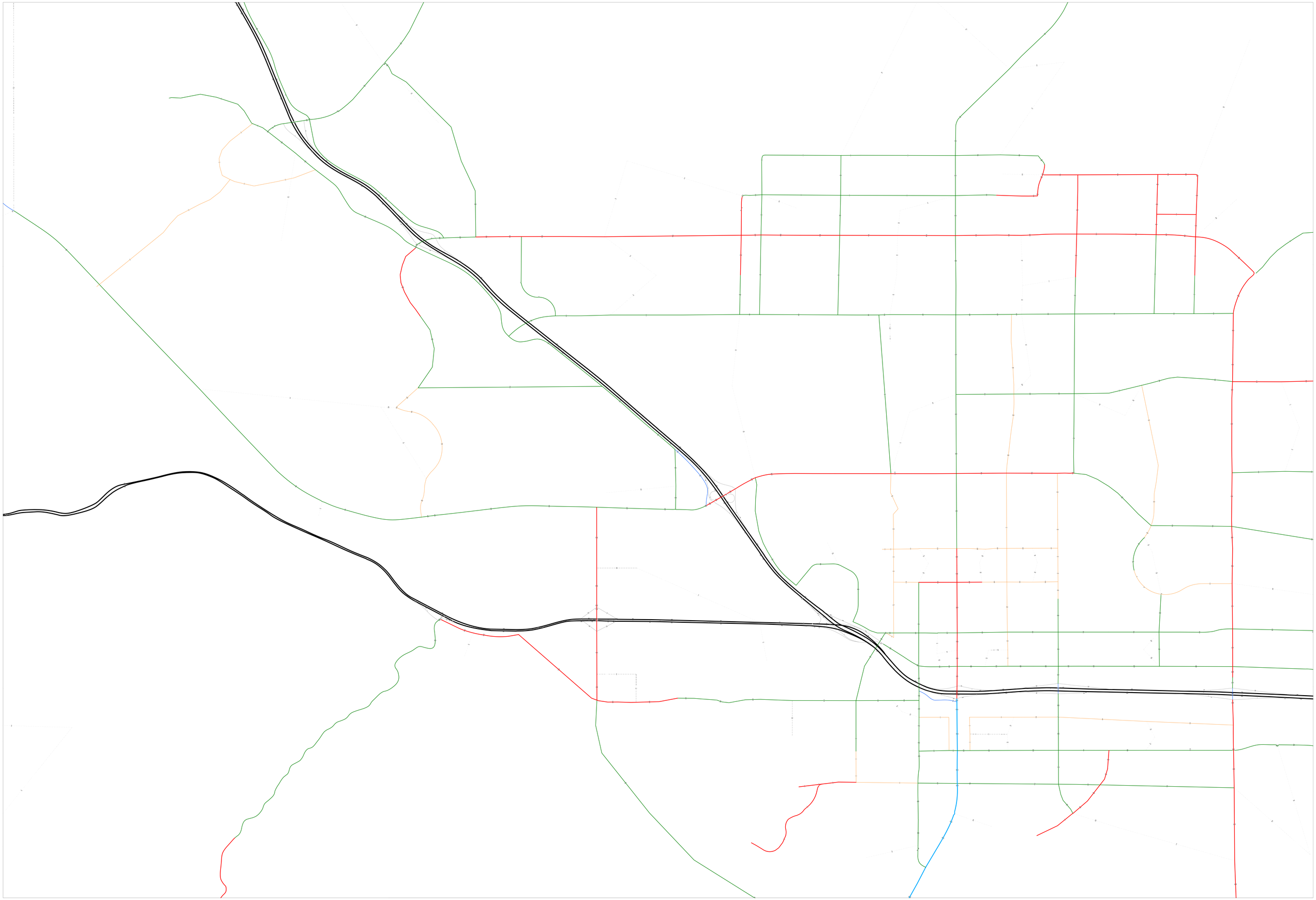
RivTAM 2012 P.M. Peak Period PCE Volumes



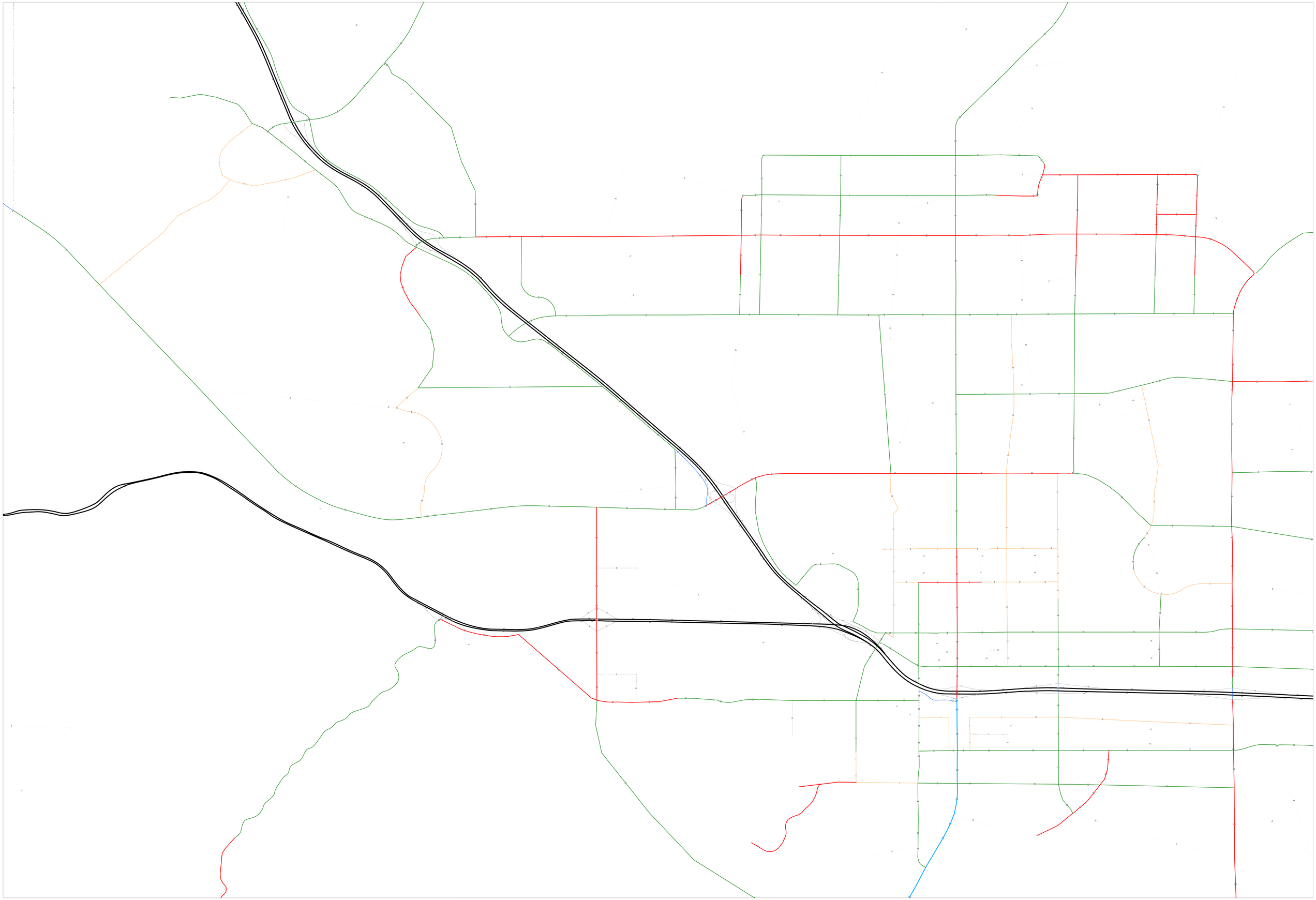
RivTAM 2012 Daily PCE Volumes



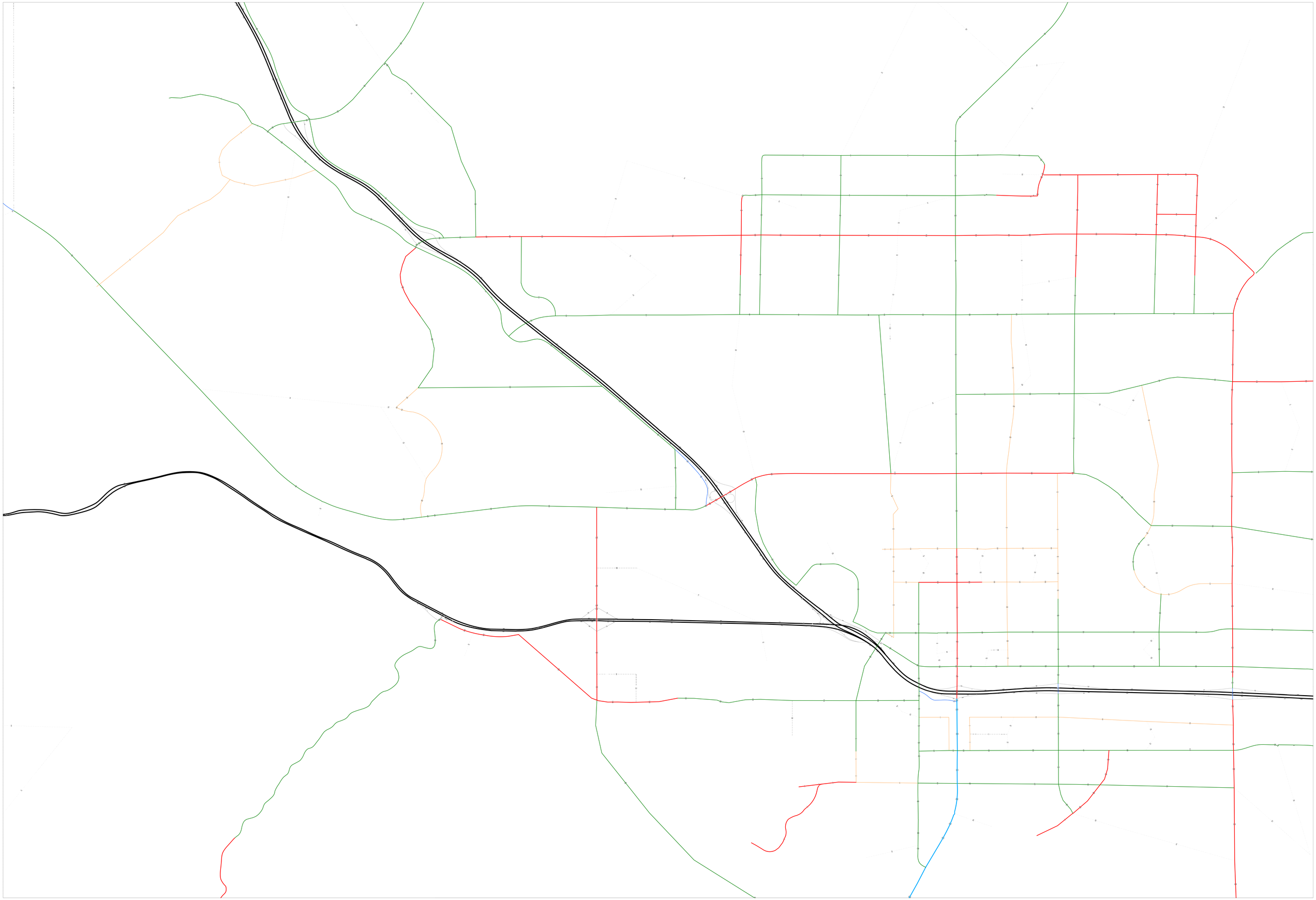
RivTAM 2040 A.M. Peak Period PCE Volumes



RivTAM 2040 P.M. Peak Period PCE Volumes



RivTAM 2040 Daily PCE Volumes



MEMORANDUM

To: Kari Cano

From: Pranesh Tarikere, PE
Mehul Champaneri

Date: February 1, 2022

Re: Beaumont Summit Station Project Vehicle Mile Traveled (VMT) Analysis

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The memorandum documents Vehicle Miles Traveled (VMT) Analysis for the proposed Beaumont Summit Station project (Project) in the City of Beaumont.

Project Description

The Project site is located in the northwestern area of the City of Beaumont, immediately east of the Interstate 10 (I-10) Freeway. A project vicinity map is provided on **Figure 1**. The site is bounded by Cherry Valley Boulevard to the north, the I-10 Freeway to the west, Brookside Avenue to the south and generally vacant land to the east. Based on the City of Beaumont General Plan, the project site is currently zoned as single-family residential, but is currently vacant. The Project site is comprised of nine vacant parcels.

The Project site is divided into five parcels and will be developed in two phases. Phase 1 will include Parcels 1, 2, and 3 designated for industrial uses. These parcels are proposed to be developed with three separate industrial warehouse buildings, as follows:

- Building 1: 985,860 square-foot (SF) high-cube short-term storage building
- Building 2: 1,213,235 SF high-cube short-term storage building
- Building 3: 358,370 SF general warehouse

The Project proposed to amend the existing zoning from Single-Family Residential to Light Industrial for Parcels 1, 2, and 3 to allow for industrial uses. Phase 1 of construction is anticipated to begin the second quarter of 2023 and conclude in the third quarter of 2024.

Parcel 4 will be developed as part of Phase 2 and would include the development of Commercial uses, as follows:

- Four-story hotel: 220 rooms
- Shopping center: 25,000 SF
- High-turnover (sit-down) restaurant: 15,000 SF
- Fast-food restaurant with drive-throughs: 10,000 SF

Phase 2 of the Project is anticipated to begin early 2026 and finish mid to late 2027. A copy of the project site plan is provided on **Figure 2**. Project access would consist of three driveways along Cherry Valley Boulevard. The west and middle project driveways would be signalized and the east project driveway would be an unsignalized right-in-right-out (RIRO) only driveway.

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 factors developed using ITE trip generation rates..

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 14.9.

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 55.9.

Heavy Truck VMT

Consistent with air quality and greenhouse gas analyses, the average trip length for heavy trucks were assumed to be 33.2 miles one way based on the data provided in California Air Resources Board, Appendix B: Emissions Estimation Methodology for On-Road Diesel-Fueled Heavy-Duty Drayage Trucks at California Ports and Intermodal Rail Yards, 2007. As a conservative measure, a trip length of 33.2 miles has been utilized for all trucks multiplied by the daily truck trips (659) estimated in the TIA based on Institute of Transportation Engineer (ITE) trip rates, resulting in a heavy truck daily VMT of 21,879.

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	14.9	+6.0	Yes
VMT per SP	30.4	55.9	+25.5	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.

Consistent with the mitigation measures recommended in the air quality and greenhouse gas analyses, the Project shall implement a TDM program to reduce single occupant vehicle trips and encourage transit. Prior to issuance of occupancy permits, the Project operator shall prepare and submit TDM program detailing strategies that would reduce the use of single occupant vehicles by employees by increasing the number of trips by walking, bicycle, carpool, vanpool and transit. The TDM shall include, but is not limited to the following:

- Provide a transportation information center and on-site TDM coordinator to educate residents, employers, employees, and visitors of surrounding transportation options.
- Promote bicycling and walking through design features such as showers for employees, self-service bicycle repair area, etc. around the project site.
- Each building shall provide secure bicycle storage space equivalent to two percent of the automobile parking spaces provided.
- Each building shall provide a minimum of two shower and changing facilities within 200 yards of a building entrance.
- Provide on-site car share amenities for employees who make only occasional use of a vehicle, as well as others who would like occasional access to a vehicle of a different type than they use day-to-day.
- Promote and support carpool/vanpool/rideshare use through parking incentives and administrative support, such as ride-matching service.
- Incorporate incentives for using alternative travel modes, such as preferential load/unload areas or convenient designated parking spaces for carpool/vanpool users.
- Provide meal options onsite or shuttles between the facility and nearby meal destinations.
- Each building shall provide preferred parking for electric, low-emitting and fuel-efficient vehicles equivalent to at least eight percent of the required number of parking spaces.

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 by WRCOG or City of Beaumont.

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.

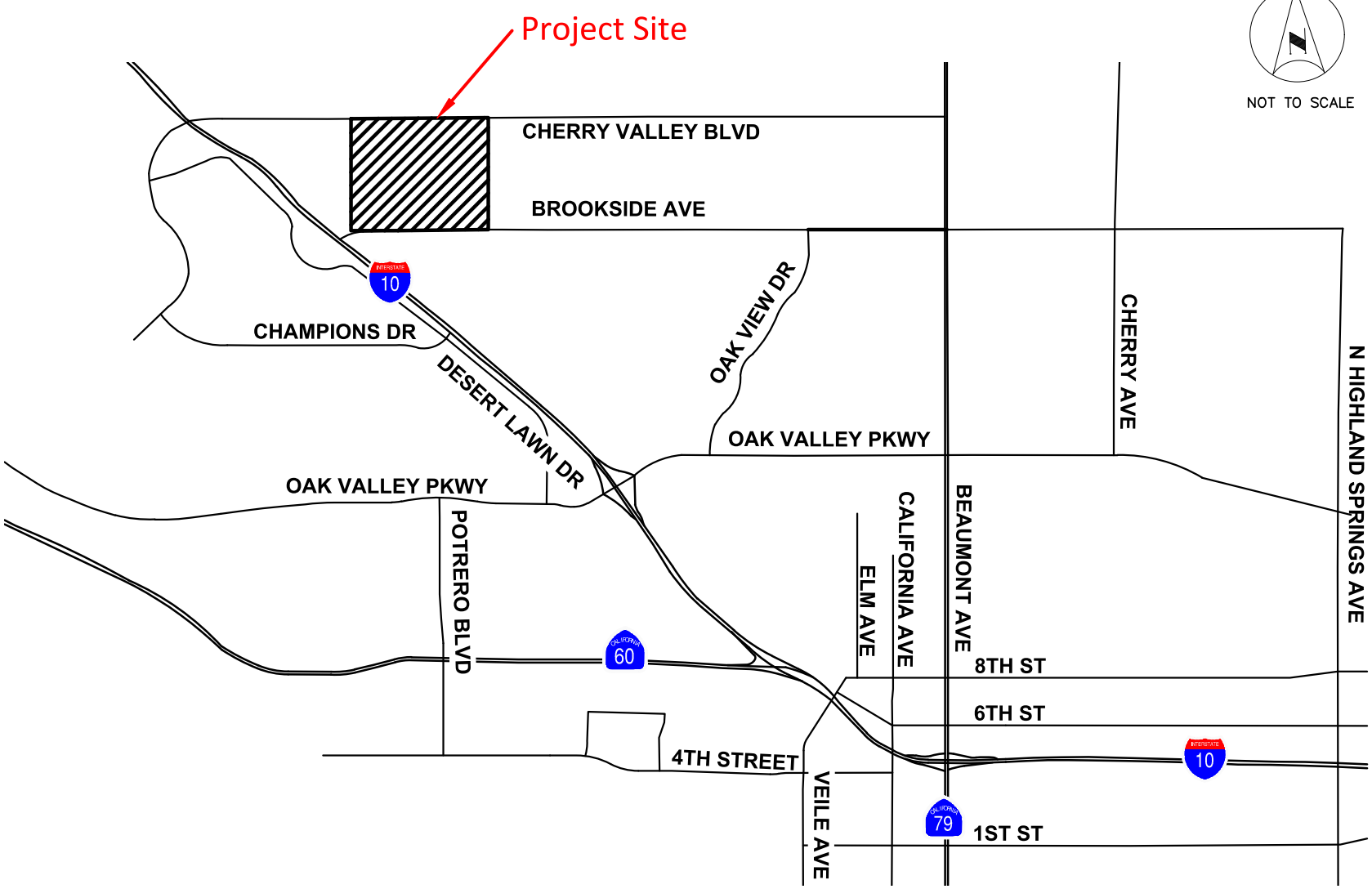

FIGURE 1
VICINITY MAP

LEGEND:
(X) = Study Intersection

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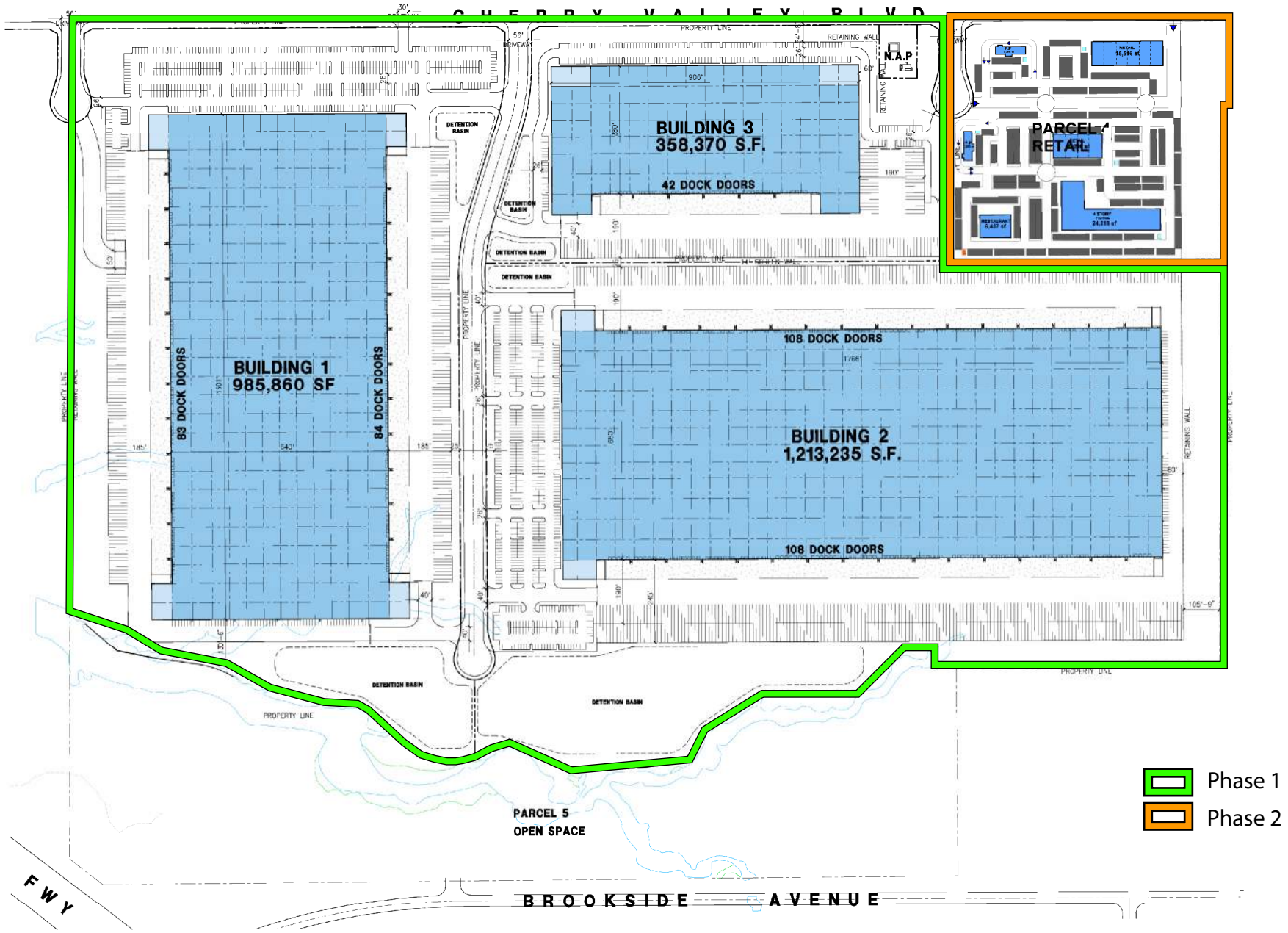

Source: HPA Architecture, Conceptual Site Plan, June 24,2021

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FIGURE 2: Conceptual Site Plan
Beaumont Summit Station

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Feet

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