District 4 Arapahoe Urban Center (AUC4)

Traffic Impact Study

Prepared for:

City of Centennial

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DN21-0690

FEHR PEERS

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EXECUTIVE SUMMARY

This Transportation Impact Study (TIS) analyzes any potential transportation impacts resulting from a proposed District 4 Arapahoe Urban Center (AUC4) development concept in Centennial, Colorado, and outlines potential mitigation for those impacts. The proposed development concept is located in the southwest quadrant of the I-25 and Arapahoe Road (SH 88) interchange in Centennial, Colorado. The conceptual development area include apartments, retail, office space, and restaurants. This TIS was prepared in conformance with the Centennial Roadway Design and Construction Manual, described in section 2.5.1 and in discussions with the City of Centennial.

STUDY AREA

The study area is located in the southwest quadrant of the I-25 and Arapahoe Road (SH 88) interchange in western Centennial, Colorado. The site consists of 20 parcels with existing land uses that mainly include retail and services, offices, and restaurants. The existing land uses will be replaced with future development.

Transportation impacts on the study area intersections were assessed for two different years: Existing year (2021), and long-range build-out year (2040). Analysis included the evaluation of intersection and approach level of service (LOS).

The following intersections were identified by the City of Centennial and analyzed during the AM and PM peak hours under existing, background, and build conditions (see **Figure 1**):

1. S Quebec Street / E Arapahoe Road
2. S Syracuse Way / E Arapahoe Road
3. Greenwood Plaza Blvd / E Arapahoe Road
4. S Yosemite Street / E Arapahoe Road
5. S Yosemite Street / S Yosemite Court
6. S Yosemite Street / Briarwood Blvd
7. S Yosemite Street / S Xanthia Street
8. S Yosemite Street / Dry Creek Road

The following site access points were analyzed in the build conditions (see **Figure 1**):

9. E Arapahoe Road / S Xanthia Street
10. S Yosemite Street / S Xanthia Street
11. S Yosemite Street / West Access 1
12. S Yosemite Street / West Access 2

13. S Yosemite Street / Xeric Street
14. S Yosemite Street / West Access 3
15. S Yosemite Street / Yosemite Court

SCENARIOS

The study intersections were analyzed for the following scenarios:

Existing Conditions – 2021 existing traffic volumes for the AM and PM peak periods.

2040 Background Conditions – Existing traffic volumes were projected to 2040 by applying an annual growth rate of 1.077 percent, per the Denver Regional Council of Governments (DRCOG) forecast model. This scenario includes the trips generated by the existing land uses on the site.

2040 Build Conditions – Estimated development generated trips were added to the 2040 Background traffic volumes. In this scenario the estimated number of trips generated by the existing land uses on the site were removed from the model since the land uses of a future development will replace the currently existing land uses in this scenario.

FINDINGS

The study analyzed any potential transportation impacts resulting from the proposed District 4 Arapahoe Urban Center (AUC4) development concept in Centennial, Colorado. It is expected that the Project will generate a net total of 30,639 daily trips, 3,558 trips in the AM peak hour and 3,609 trips in the PM peak hour. According to the capacity analysis, it is concluded that the trips associated with the development concept would have some impact on operations of the study intersections. The impact of the project generated trips on the study intersection are detailed in **Section 4** of this report. Potential mitigation strategies are discussed in **Sections 4 & 5**.

RECOMMENDATIONS

It is recommended that Transportation Demand Management strategies are pursued for the project site to reduce vehicle traffic to the site and improve the operations of this intersection. It is also recommended that following improvements be made to accommodate trips generated by the full buildout of the project:

- Add a second southbound left turn lane at Yosemite Street/Dry Creek Road.
- Signalize and rebuild the intersection of Yosemite Street/Xanthia Street.
- The intersection of Yosemite Street/Xeric Street become a ¾ movement intersection (full movement in, right turn only out).

1.0 INTRODUCTION

This Transportation Impact Study (TIS) analyzes any potential transportation impacts resulting from the proposed District 4 Arapahoe Urban Center (AUC4) development in Centennial, Colorado. This TIS was prepared in conformance with the Centennial Roadway Design and Construction Manual, described in section 2.5.1 and in discussions with the City of Centennial. The study area is located in the southwest quadrant of the I-25 and Arapahoe Road (SH 88) interchange in western Centennial, Colorado. Refer to **Figure 1** for a map of the study area and

Figure 2 for the site plan. The existing site consists of 20 parcels and is anticipated to be redeveloped into apartments, retail, office space, and restaurants.

1.1 ANALYSIS OBJECTIVES

This report provides an assessment of potential transportation impacts and mitigation strategies to the roadway network and intersections within the study area associated with a future redevelopment of the site. It includes an evaluation of transportation operations for the following intersections (shown on the study area map in **Figure 1**):

1. S Quebec Street / E Arapahoe Road
2. S Syracuse Way / E Arapahoe Road
3. Greenwood Plaza Blvd / E Arapahoe Road
4. S Yosemite Street / E Arapahoe Road
5. S Yosemite Street / S Yosemite Court
6. S Yosemite Street / E Briarwood Blvd
7. S Yosemite Street / S Alton Way
8. S Yosemite Street / Dry Creek Road

The following site access points were analyzed in the build conditions:

9. E Arapahoe Road / S Xanthia Street
10. S Yosemite Street / S Xanthia Street
11. S Yosemite Street / West Access 1
12. S Yosemite Street / West Access 2
13. S Yosemite Street / Xeric Street
14. S Yosemite Street / West Access 3
15. S Yosemite Street / Yosemite Court

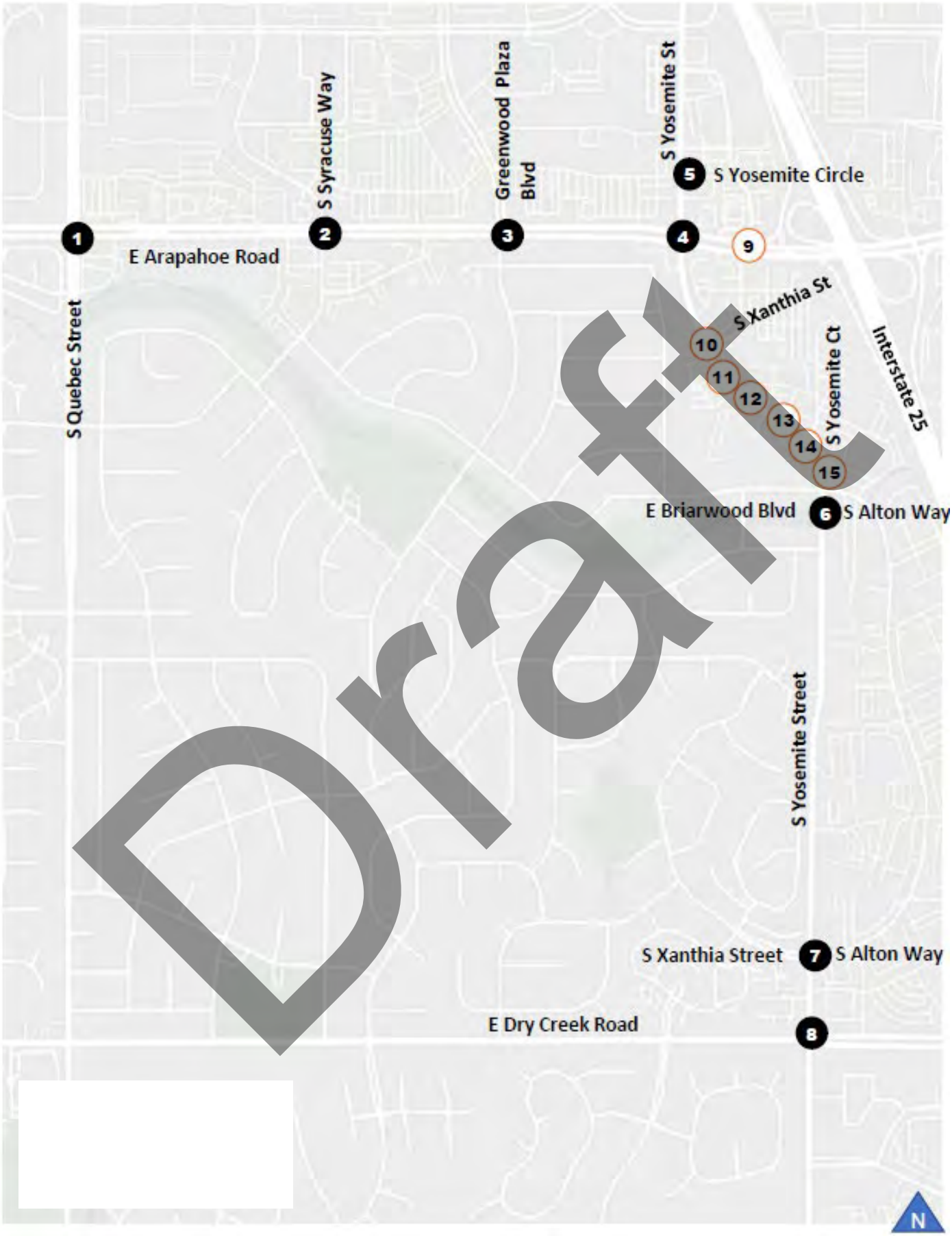


Figure 1: Study Area

Figure 2: Project Site Plan

2.0 ANALYSIS CONSIDERATIONS

2.1 ANALYSIS CONDITIONS

The weekday AM and PM peak hours were included in the transportation analysis to evaluate the potential impacts on the transportation infrastructure system. The following three scenarios were analyzed:

- Existing Conditions
- 2040 Background Conditions
- 2040 Build Conditions

2.2 DATA COLLECTION

Peak hour traffic counts were collected on Tuesday, July 20, 2021, for the following intersections:

- S Quebec Street / E Arapahoe Road
- S Yosemite Street / Briarwood Boulevard
- S Yosemite Street / Dry Creek Road
- S Yosemite Street / Xanthia Street

Historical traffic counts collected on Tuesday, September 17, 2019, were projected to 2021 by applying an annual growth rate of 1.01, per the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS) future traffic factor, for the following intersections:

- S Syracuse Way / E Arapahoe Road
- Greenwood Plaza Blvd / E Arapahoe Road
- S Yosemite Street / E Arapahoe Road
- S Yosemite Street / S Yosemite Court

Signal timings for the intersections were provided by the City of Centennial and Greenwood Village.

2.3 EVALUATION METHODOLOGY

The following evaluation methodology was completed as part of the transportation analysis:

Determine growth rate and volumes for the long-term future scenario. Existing traffic volumes were projected to 2040 by applying an annual growth rate of 1.077 percent per the Denver Regional Council of Governments (DRCOG) forecast model.

Evaluate the Background Scenarios. Determine the operational performance of the study intersections with estimated traffic, existing and planned geometry, and traffic control for 2021 and 2040.

Calculate the trip generation. Trip generation was calculated based on the number of dwelling units for the multifamily housing, the number of seats for restaurants, and square footage for the retail stores and offices that are proposed in the development concept. See **Section 5** for more details on the trip generation data sources and methodology.

Distribute and assign generated trips. The trip distribution was developed by utilizing the DRCOG Focus Travel Model. Trips were assigned through the study intersections using the distribution percentages.

Evaluate the Build Scenarios. Determine the operational performance of the study intersections with the proposed development concept for 2040. If intersections were below the operational performance criteria, then mitigation measures were recommended.

2.4 TRAFFIC MODEL DEVELOPMENT

Transportation operations for the study area were analyzed using the Synchro 11 software program. Synchro is based on procedures outlined in the 6th edition of the Highway Capacity Manual. Synchro models were developed for each scenario and include the following existing data:

- Lane configuration
- Traffic control
- Posted speed limit
- Peak Hour Factor (PHF)

2.5 TRANSPORTATION OPERATION ANALYSIS METHODOLOGY

The transportation operations analysis addressed signalized and unsignalized intersection operations using the procedures and methodologies contained in the Highway Capacity Manual 6th Edition (HCM) (Transportation Research Board) for the weekday AM and PM peak hour traffic operations. Study intersection operations were evaluated using level of service calculations as analyzed in the Synchro software.

2.5.1 LEVEL OF SERVICE CRITERIA

To measure and describe the operational status of the local roadway network and corresponding intersections, transportation engineers and planners commonly use a grading system called level of service (LOS) put forth by the Transportation Research Board's HCM 6th Edition. LOS characterizes the operational conditions of an intersection's traffic flow; ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed the design capacity, resulting in long queues and delays). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. Traffic conditions with LOS E or F are generally considered unacceptable and represent significant travel delay, increased accident potential, and inefficient motor vehicle operation. In busy urban and suburban areas, like the AUC4 site, it is unrealistic to attempt to achieve LOS A or B during peak hours for all intersections because this would likely require extensive roadway and intersection widening which would be expensive, require additional right-of-way, and these roadways would be designed to the peak hours of traffic and may have more capacity than needed for most of the day. Overdesigning roadways for the peak hours of traffic can also make the environment feel uncomfortable for people walking, biking, and taking transit. For these reasons many cities across the country aim for peak hour operations between LOS C and LOS E, depending on the context. According to the City of Centennial's *Roadway Design and Construction Manual* (page II-3):

"LOS C will be the design objective for peak hour intersection operations, with LOS D being the minimum acceptable operational condition for a site plus background traffic. If a development will cause a roadway or an intersection to drop below LOS D, the City may require on-site or off-site improvements to be installed by the Developer."

The LOS is determined differently depending on the type of control at the intersection. At signalized intersections, the operation analysis uses various intersection characteristics (such as traffic volumes, lane geometry, and signal phasing) to estimate the intersection's volume-to-capacity (v/c) ratio. For signalized intersections, the HCM defines the intersection LOS as the average delay per vehicle for the overall intersection, which includes all approaches. At unsignalized intersections, the operation analysis uses

various intersection characteristics (such as traffic volumes, lane geometry, and stop-controlled approaches) to estimate the intersection's volume-to-capacity (v/c) ratio. For unsignalized intersections the HCM defines the intersection LOS as either the average delay per vehicle for the worst approach or the whole intersection for side-street stop and all-way stop intersections, respectively. **Table 1** summarizes the relationship between delay and LOS for signalized intersections and **Table 2** summarizes the relationship between delay and LOS for unsignalized intersections.

Table 1: Signalized Intersection Level of Service Definitions Using Average Control Vehicular Delay

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	< 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	>10 to 20
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	>20 to 35
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	>35 to 55
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	>55 to 80
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80

Source: *Highway Capacity Manual (Transportation Research Board).*

Table 2: Unsignalized Intersection Level of Service Definitions

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	<10
B	Short traffic delay.	>10 to 15
C	Average traffic delays.	>15 to 25
D	Long traffic delays.	>25 to 35
E	Very long traffic delays.	>35 to 50
F	Extreme traffic delays with intersection capacity exceeded.	>50

Source: *Highway Capacity Manual (Transportation Research Board).*

3.0 EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway facilities, pedestrian and bicycle facilities, and transit service surrounding the Project site.

3.1 ROADWAY NETWORK

E Arapahoe Road is a four-lane east-west arterial north of the Project Site. Its western terminus is located at South Broadway, and its eastern terminus is at S Powhatan Road. Within the study area, E Arapahoe Road has a posted speed limit of 45 MPH. I-25 has an interchange with Arapahoe Road at the northeast corner of the project site.

S Yosemite Street is a two-lane north-south collector running through the center of the Project site. It runs from Lincoln Avenue on the south to Cherry Creek S Drive at its northern terminus. Within the study area, S Yosemite Street has a posted speed limit of 35 MPH.

E Briarwood Blvd / S Alton Way is a one-lane east-west secondary collector located on the south side of the Project. E Briarwood Blvd begins at S Spruce Street on the west and turns into S Alton Way on the east of S Yosemite Street. The eastern terminus of S Alton Way is at S Yosemite Street. E Briarwood Blvd / S Alton Way has a posted speed limit of 25 MPH.

3.2 TRANSIT SERVICE

The closest transit service to the AUC4 site is the route 66 bus line, which runs mostly on Arapahoe Road from the Littleton Downtown light rail station to the Arapahoe at Village Center Station. Route 66 runs once and hour from 6:38 AM to 12:25 PM on weekdays, 6:40 AM to 12:00 AM on Saturdays, and 6:40 AM to 11:00 PM on Sundays. Route 66 used to extend east of I-25 on Arapahoe Road, but that segment of the route was replaced by an extension of Route 153 whose western terminus is now Arapahoe at Village Center light rail station. The closest bus stops for route 66 are on S Yosemite Street just north of Arapahoe road and about 800 feet north of the northern-most access point to the AUC4 site.

Additionally, the Arapahoe at Village Center light rail station is located approximately a quarter of a mile from the AUC4 site. This station is along the E and R Lines. The E line runs from Union Station to Ridgegate Parkway Station and the R Line runs from Lincoln Station to Peoria Street. Service operates every 30 minutes from 4:00 AM to 11:15 PM for the R Line, and every 15 minutes from 5:51 AM to 10:45 PM for the E Line.

Before the COVID-19 Pandemic, the F line used to also serve this station. However, since RTD has experienced staffing shortages through the pandemic the F line has been suspended.

In addition to the light rail lines and bus route 66, Arapahoe at village Center Station also has bus stops for the following bus routes:

- **Route 153** – Arapahoe at Village Center Station to Peoria Station via Arapahoe Road and Chambers Road.
- **Bustang Route DTC** - Bustang service between Colorado Springs and the Denver Tech Center.
- **Route AT** - Arapahoe at Village Center Station to the Denver Airport.

3.3 BICYCLE FACILITIES

There currently is only one bicycle facility near the AUC4 Site. This bicycle facility is the Little Dry Creek Trail, a paved bicycle and pedestrian trail which is slightly over a mile long and stretches between S Quebec Street (about 600 feet south of Arapahoe Road) and S Yosemite Street (about 150 feet south of S Alton Way). The Little Dry Creek Trail could provide a comfortable biking and walking connection between residents on the AUC4 site and the Walnut Hills Elementary School. Similarly the trail can connect the existing residences north and south of the trail to future employment or shopping opportunities on the AUC4 site. There are currently no on-street bicycle facilities near the AUC4 site. The future redevelopment of the site provides a unique opportunity to create new bicycle facilities throughout the site, as well as connecting to the Little Dry Creek trail to the south and the Arapahoe at Village Center Light Rail Station to the north.

3.4 PEDESTRIAN FACILITIES

Sidewalks – There are currently sidewalks surrounding the Project site. There are currently sidewalks on both the north and south sides of Arapahoe Street, east and west of S Yosemite Street and west of I -25.

Pedestrian Crossings – There are currently two signalized intersections with pedestrian crossings on each end of the Project site, E Arapahoe Road / S Yosemite Street on the north end and E Briarwood Blvd / S Alton Way on the south end.

3.5 LAND USE CONTEXT

The land use for the Project site has been classified as an Urban Center (UC) District, which allows for urban redevelopment in the AUC area, and provides standards for other future transit influenced planning areas.

3.6 EXISTING TRANSPORTATION AND INTERSECTION OPERATIONS

Peak hour traffic counts were collected on Tuesday, July 20, 2021, for the following intersections:

- S Quebec Street / E Arapahoe Road
- S Yosemite Street / Briarwood Boulevard
- S Yosemite Street / Dry Creek Road
- S Yosemite Street / Xanthia Street

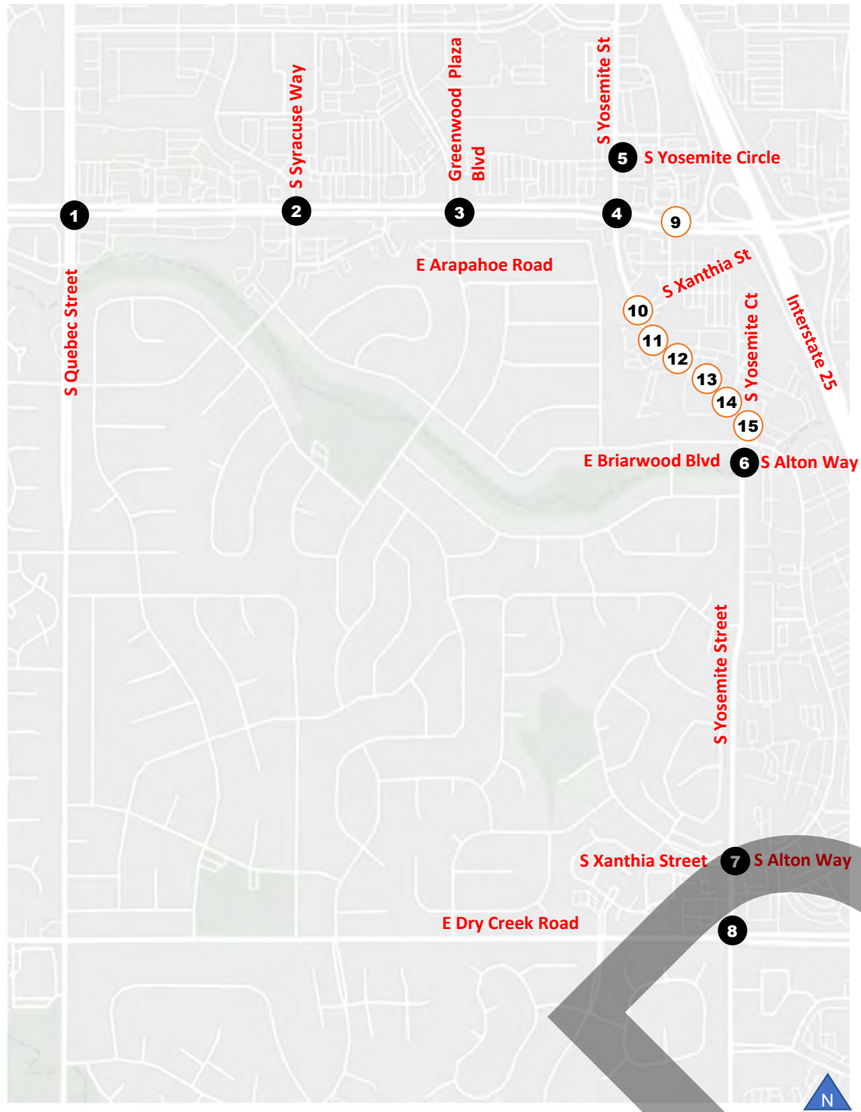
Historical traffic counts collected on Tuesday, September 17, 2019, were projected to 2021 by applying an annual growth rate of 1.01, per the Colorado Department of Transportation (CDOT) Online Transportation Information System (OTIS) future traffic factor, for the following intersections:

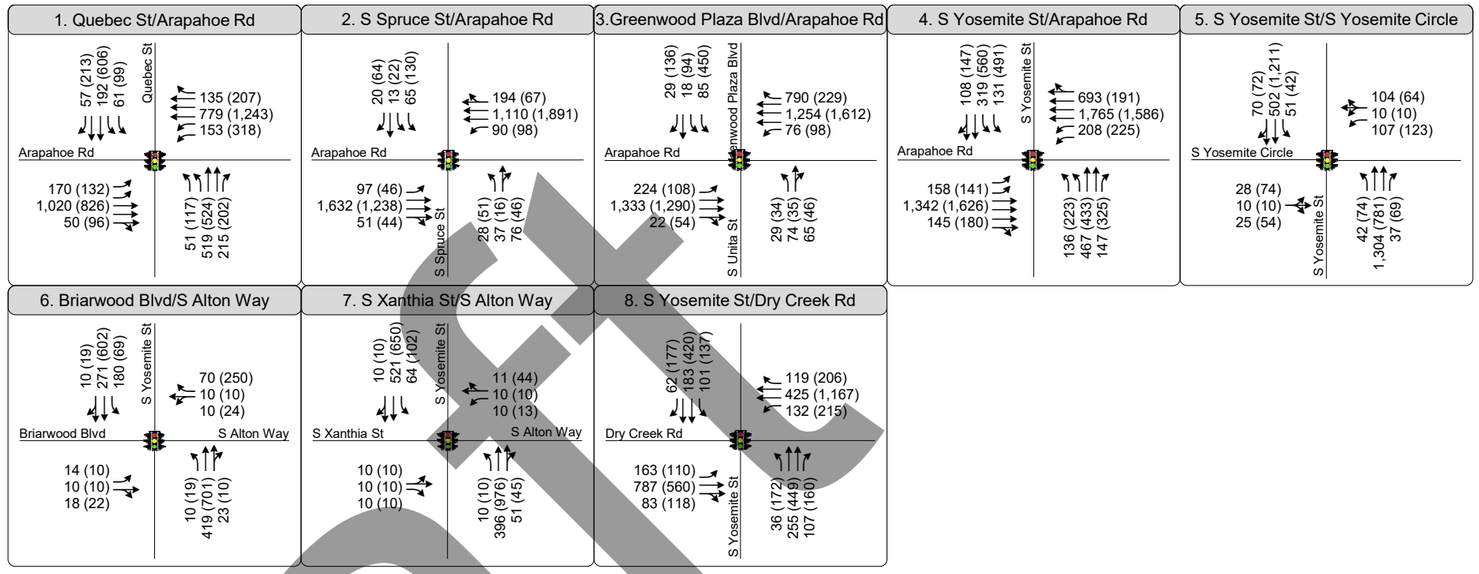
- S Syracuse Way / E Arapahoe Road
- Greenwood Plaza Blvd / E Arapahoe Road
- S Yosemite Street / E Arapahoe Road
- S Yosemite Street / S Yosemite Circle

Figure 3 shows the Existing Conditions peak hour volumes at the study intersections, as well as the lane configurations. Error! Reference source not found.

Table 3 presents the delay and LOS results for the study intersections under Existing Conditions. **Appendix B** provides the LOS calculations for the Existing Conditions.

All intersections except for one operate acceptably under Existing Conditions. The results indicate that S Yosemite Street / E Arapahoe Road operates acceptably during the AM peak hour but operates at LOS E with an overall delay of 67 seconds/vehicle during the PM peak hour under Existing Conditions. This is due to the northbound left movement in the PM peak hour which operates at LOS F. The other intersections operate acceptably under Existing Conditions.





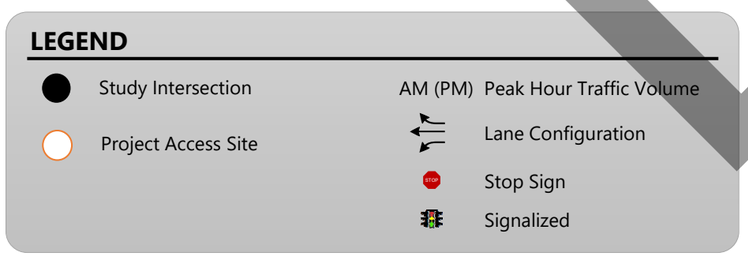


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Figure 3
Existing Traffic Counts
Peak Hour Traffic Volumes and Lane Configurations

TABLE 3: EXISTING CONDITIONS INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Control[1]	Approach	Existing Conditions			
				AM		PM	
				Delay[2]	LOS	Delay[2]	LOS
1	S Quebec Street / E Arapahoe Road	Signal	Overall	47	D	46	D
			EB	55	E	58	E
			WB	58	E	53	D
			NB	25	C	30	C
			SB	30	C	31	C
2	S Syracuse Way / E Arapahoe Road	Signal	Overall	4	A	5	A
			EB	1	A	1	A
			WB	1	A	2	A
			NB	65	E	61	E
			SB	59	E	60	E
3	Greenwood Plaza Blvd / E Arapahoe Road	Signal	Overall	6	A	10	B
			EB	2	A	2	A
			WB	2	A	1	A
			NB	65	E	64	E
			SB	54	D	52	D
4	S Yosemite Street / E Arapahoe Road	Signal	Overall	36	D	67	E
			EB	17	B	51	D
			WB	33	C	41	D
			NB	70	C	143	F
			SB	60	E	74	E
5	S Yosemite Street / S Yosemite Circle	Signal	Overall	24	C	43	D
			EB	66	E	68	E
			WB	79	E	66	E
			NB	18	B	52	D
			SB	15	B	31	C
6	S Yosemite Street / E Briarwood Blvd	Signal	Overall	10	A	13	B
			EB	50	D	43	D
			WB	50	D	48	D
			NB	2	A	3	A
			SB	2	A	5	A
7	S Yosemite Street / S Alton Way	Signal	Overall	6	A	3	A
			EB	53	D	52	D
			WB	49	D	51	D
			NB	4	A	1	A
			SB	1	A	1	A
8	S Yosemite Street / Dry Creek Road	Signal	Overall	44	D	28	C
			EB	63	E	22	C
			WB	34	C	24	C
			NB	20	C	42	D
			SB	18	B	30	C

Notes:

1. Signal equals signalized intersection. SSSC indicates a side-street stop-controlled intersection.

2. Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.

Source: Fehr & Peers, December 2021

4.0 BACKGROUND CONDITIONS

This section presents the 2040 Background Conditions. The Background Conditions provide the baseline conditions for comparative purposes with the Build Conditions.

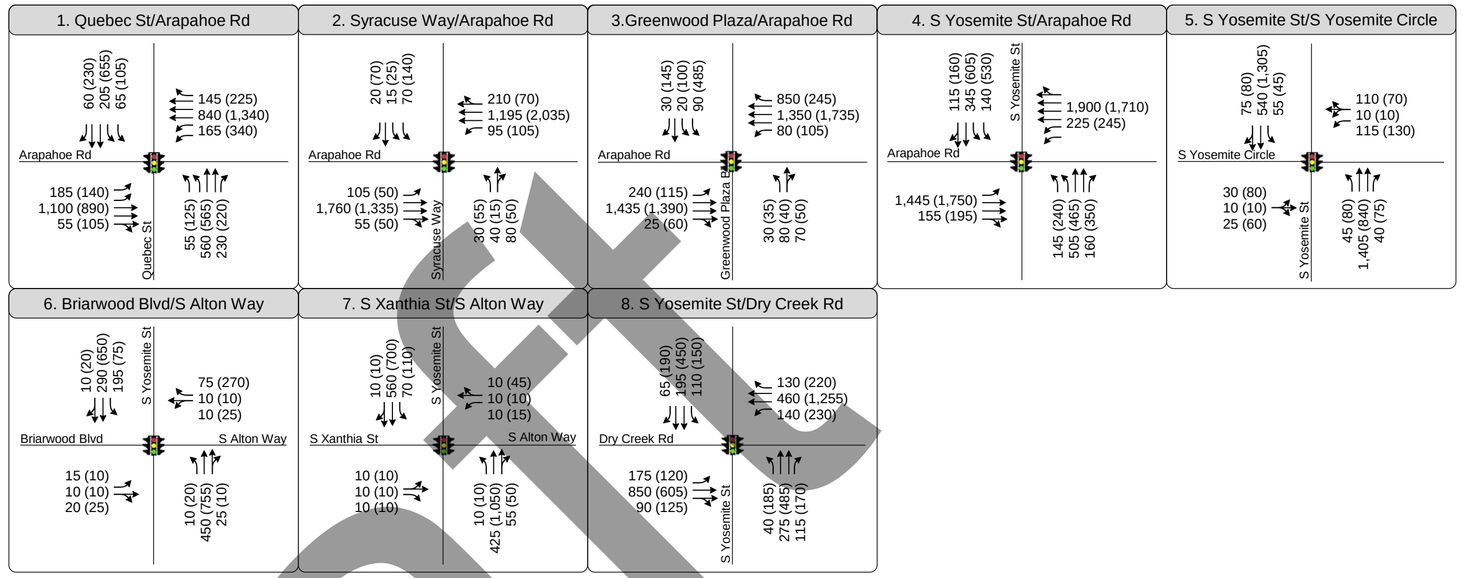
4.1 2040 BACKGROUND TRANSPORTATION AND INTERSECTION OPERATIONS

To determine the 2040 Background Conditions peak hour turning movement volumes, 2019 Background traffic volumes were increased by an annual growth rate of 1.077 percent in the AM and PM peak hour per the Denver Regional Council of Governments (DRCOG) forecast model. This background analysis used existing signal timings to analyze the existing intersections under future conditions.

Figure 4 shows the projected 2040 Background peak hour volumes at the study intersections, as well as the lane configuration. The lane configurations and intersection controls will remain the same as Existing Conditions.

Table 4 provides the results of the capacity analysis of the 2040 Background Conditions for the AM and PM peak hours.

All intersections except for one operate acceptably under 2040 Background Conditions. This background analysis used existing signal timings. The results indicate that S Yosemite Street / E Arapahoe Road operates acceptably during the AM peak hour but operates at LOS F with an overall delay of 104 seconds/vehicle during the PM peak hour under 2040 Background Conditions. This is due to the northbound left movement in the PM peak hour which operates at LOS F.



LEGEND

- Study Intersection
- Project Access Site
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Source: path:

Figure 4
2040 Background Traffic Counts
Peak Hour Traffic Volumes and Lane Configurations

TABLE 4: 2040 BACKGROUND CONDITIONS INTERSECTION LEVEL OF SERVICE RESULTS

ID	Intersection	Control[1]	Approach	2040 Background			
				AM		PM	
				Delay[2]	LOS	Delay[2]	LOS
1	S Quebec Street / E Arapahoe Road	Signal	Overall	40	D	47	D
			EB	56	E	59	E
			WB	32	C	54	D
			NB	27	C	31	C
			SB	33	C	33	C
2	S Syracuse Way / E Arapahoe Road	Signal	Overall	5	A	5	A
			EB	2	A	1	A
			WB	1	A	2	A
			NB	64	E	61	E
			SB	58	E	61	E
3	Greenwood Plaza Blvd / E Arapahoe Road	Signal	Overall	7	A	10	B
			EB	4	A	2	A
			WB	2	A	2	A
			NB	68	E	64	E
			SB	53	D	52	D
4	S Yosemite Street / E Arapahoe Road	Signal	Overall	49	D	**104**	**F**
			EB	34	C	156	F
			WB	46	D	44	D
			NB	76	E	155	F
			SB	65	E	77	E
5	S Yosemite Street / S Yosemite Circle	Signal	Overall	22	C	47	D
			EB	67	E	69	E
			WB	80	E	67	E
			NB	14	B	53	D
			SB	16	B	37	D
6	S Yosemite Street / E Briarwood Blvd	Signal	Overall	10	A	15	B
			EB	50	D	41	D
			WB	50	D	50	D
			NB	3	A	4	A
			SB	2	A	6	A
7	S Yosemite Street / S Alton Way	Signal	Overall	4	A	3	A
			EB	53	D	52	D
			WB	49	D	51	D
			NB	1	A	1	A
			SB	1	A	1	A
8	S Yosemite Street / Dry Creek Road	Signal	Overall	53	D	30	C
			EB	79	E	25	C
			WB	35	C	28	C
			NB	21	C	43	D
			SB	26	C	28	C

Notes:

1. *Signal equals signalized intersection. SSSC indicates side-street stop-controlled intersection.*
2. *Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections.*

Source: Fehr & Peers, December 2021

5.0 PROJECT TRIPS

5.1 TRIP GENERATION

The vehicle trips associated with the conceptual AUC4 development were calculated with the proposed land uses. Trips were generated utilizing the MainStreet tool powered by MXD+. MainStreet is a web-based application developed by Fehr & Peers for estimating trip generation for mixed-use developments. Current accepted methodologies, such as the Institute of Transportation Engineers (ITE) Trip Generation methodology, are primarily based on data collected at suburban, single-use, freestanding sites. These defining characteristics limit their applicability to mixed-use or multi-use development projects, such as the AUC4 site development concept. Traditional data and methodologies, such as ITE, while appropriate for many sites within Centennial, would likely over-estimate the trips generated by the AUC4 site due to the site's conceptual future mix of land uses and density. For this reason the City of Centennial approved the use of the MainStreet tool to estimate trip generation more accurately for this particular development concept. Further explanation of the tool and its validation can be found in **Appendix C**.

It is expected that the Project will have a net total of 30,639 daily trips, 3,558 trips in the AM peak hour and 3,609 trips in the PM peak hour. **Table 5** provides the trip generation and assumed land uses.

TABLE 5: TRIP GENERATION

Land Use	ITE Code	Size	Units	Daily	AM Peak					PM Peak				
					In		Out		Total Trips	In		Out		Total Trips
					%	Trips	%	Trips		%	Trips	%	Trips	
Residential wrap – Assisted Living	254	100	Beds	260	63%	12	37%	7	19	38%	10	62%	16	26
Multifamily Housing Mid-Rise Apartments	221	905	DU	4923	26%	84	74%	242	326	61%	239	39%	153	392
Fast Casual Restaurant	930	3,000	SF	944	50%	4	50%	4	8	55%	24	45%	20	44
High turnover (Sit-down) Restaurant	932	450	Seats	1,968	51%	111	49%	105	216	57%	108	43%	81	189
General Office Building	710	1,246,768	SF	13,106	88%	1,768	12%	239	2,007	18%	459	82%	2,092	2,551
Retail – Shopping Center	820	114,803	SF	13,379	62%	976	38%	599	1,575	48%	512	52%	555	1,067
ITE Subtotal														
				34580		2955		1196	4151		1352		2917	4269
Main Street Trip Reductions														
				-3,941		-422		-171	-593		-209		-450	-659
Net New Project Trips														
				30,639		2,533		1,025	3,558		1,143		2,467	3,609

Notes:
DU = dwelling unit
SF = Square feet
Source: MainStreet, Fehr & Peers, September 2021

5.2 TRIP DISTRIBUTION

The external trip distribution values were determined directly from the DRCOG Focus Model. The external trip distribution is as follows:

- E Arapahoe Road (West of S Quebec Street) : 5%
- Greenwood Plaza Blvd (North of E Arapahoe Road) : 5%
- S Yosemite Street (North of E Arapahoe Road): 15%
- E Arapahoe Road (East of S Yosemite Street) : 35%
- Dry Creek Road (East of S Alton Way) : 20%
- Dry Creek Road (West of S Yosemite Street) : 5%
- S Yosemite Street (South of Dry Creek Road) : 15%

The same travel patterns were used for both peak hours. The trip distribution is illustrated in **Figure 5**.

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5.3 TRIP ASSIGNMENT

Vehicular traffic was assigned by applying the trip distribution to the estimated trip generation.

Figure 6 displays the Project trip assignment.

5.4 ACCESS

Trips generated by the Project were routed through the following site access points:

- E Arapahoe Road / S Xanthia Street
- S Yosemite Street / S Xanthia Street
- S Yosemite Street / West Access 1
- S Yosemite Street / West Access 2
- S Yosemite Street / Xeric Street
- S Yosemite Street / West Access 3
- S Yosemite Street / Yosemite Court

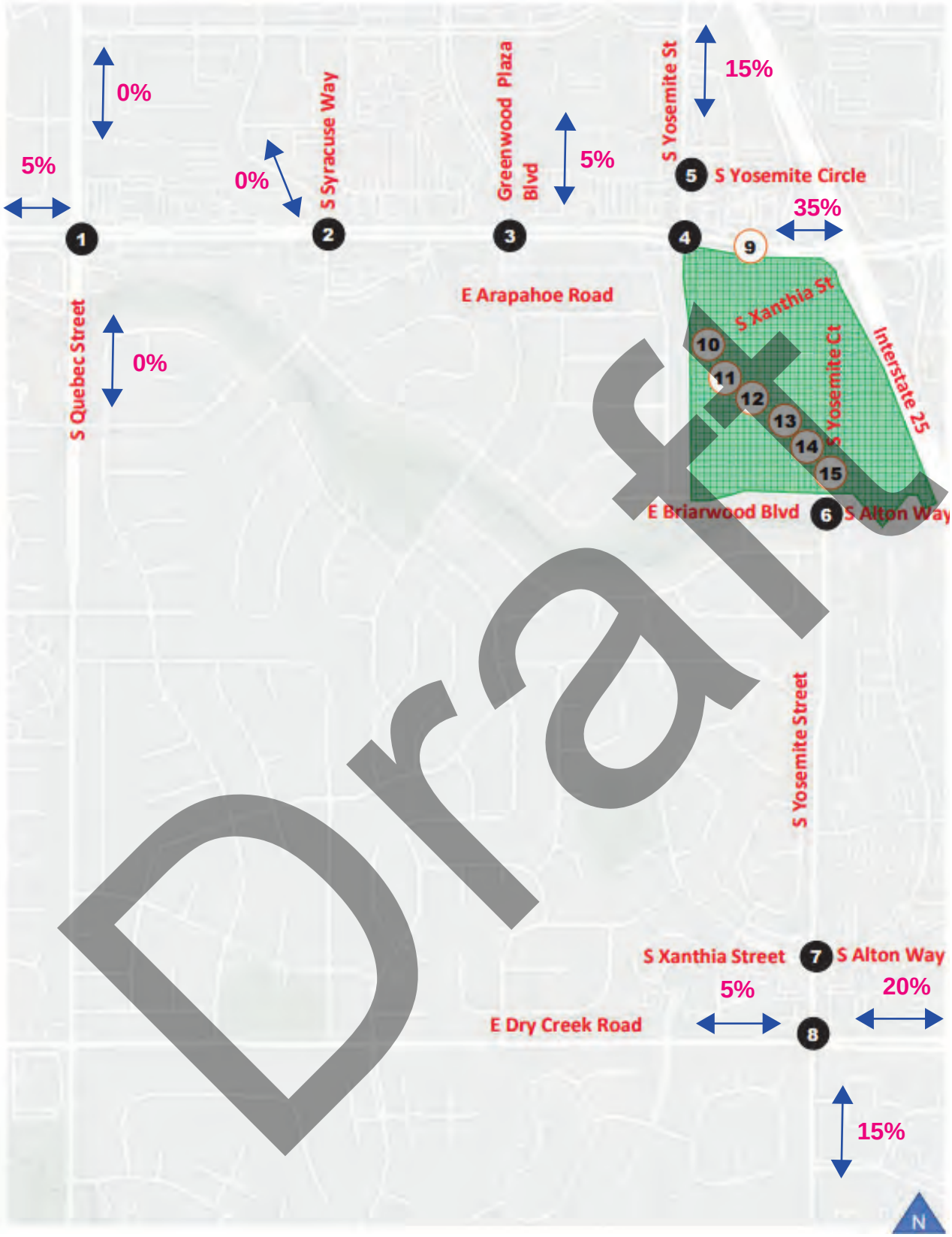
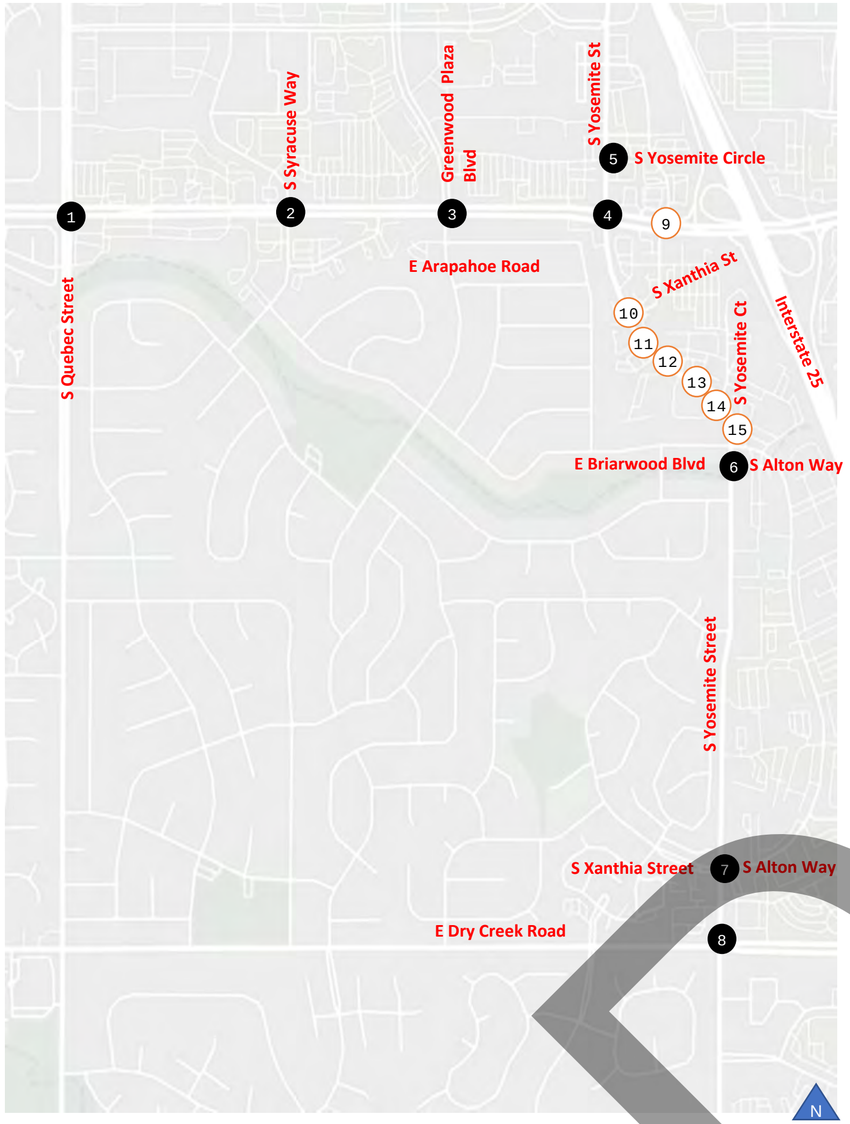
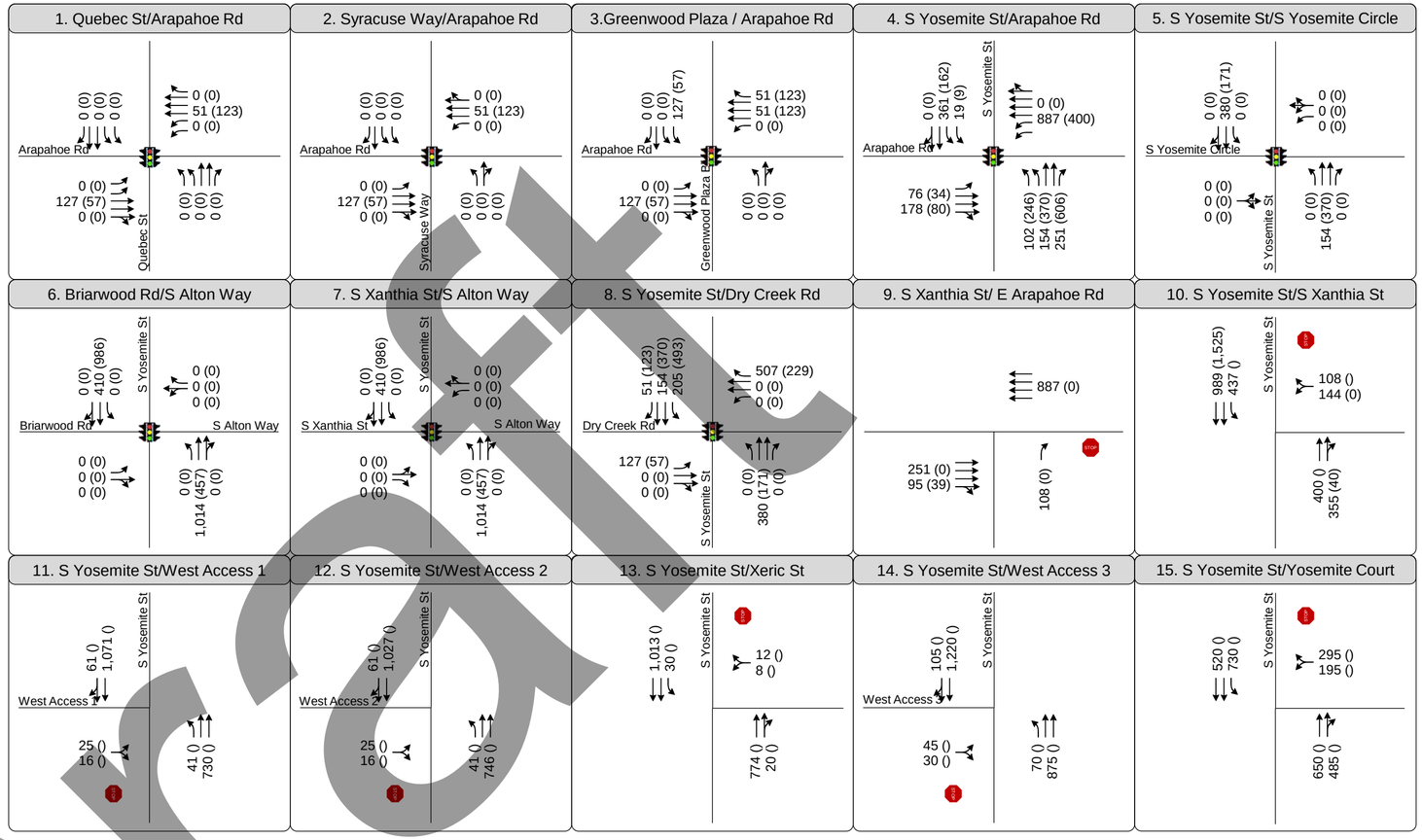


Figure 5: Trip Distribution





LEGEND

- Study Intersection
- Project Access Site
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Source: path:

Figure 6
Trip Assignment
Peak Hour Traffic Volumes and Lane Configurations

6.0 BUILD CONDITIONS

In the 2040 Build Conditions, the Project trips and proposed site accesses were added to the Background Scenarios. The estimated trips generated by the existing land uses were subtracted from the model, since the Project's proposed land uses would replace the existing land uses in this scenario.

Due to the placement of access points, some movements are expected to have very low peak hour volumes under Build Conditions. Analyzing movements with very low volumes (or volumes that are zero) can produce misleading results that may under-estimate the actual impact of traffic volumes on intersection operations. For this reason, movements in the project site that were assigned no or very few trips were assumed to have a minimum volume of ten vehicles per hour to not underestimate their impact to intersection operations.

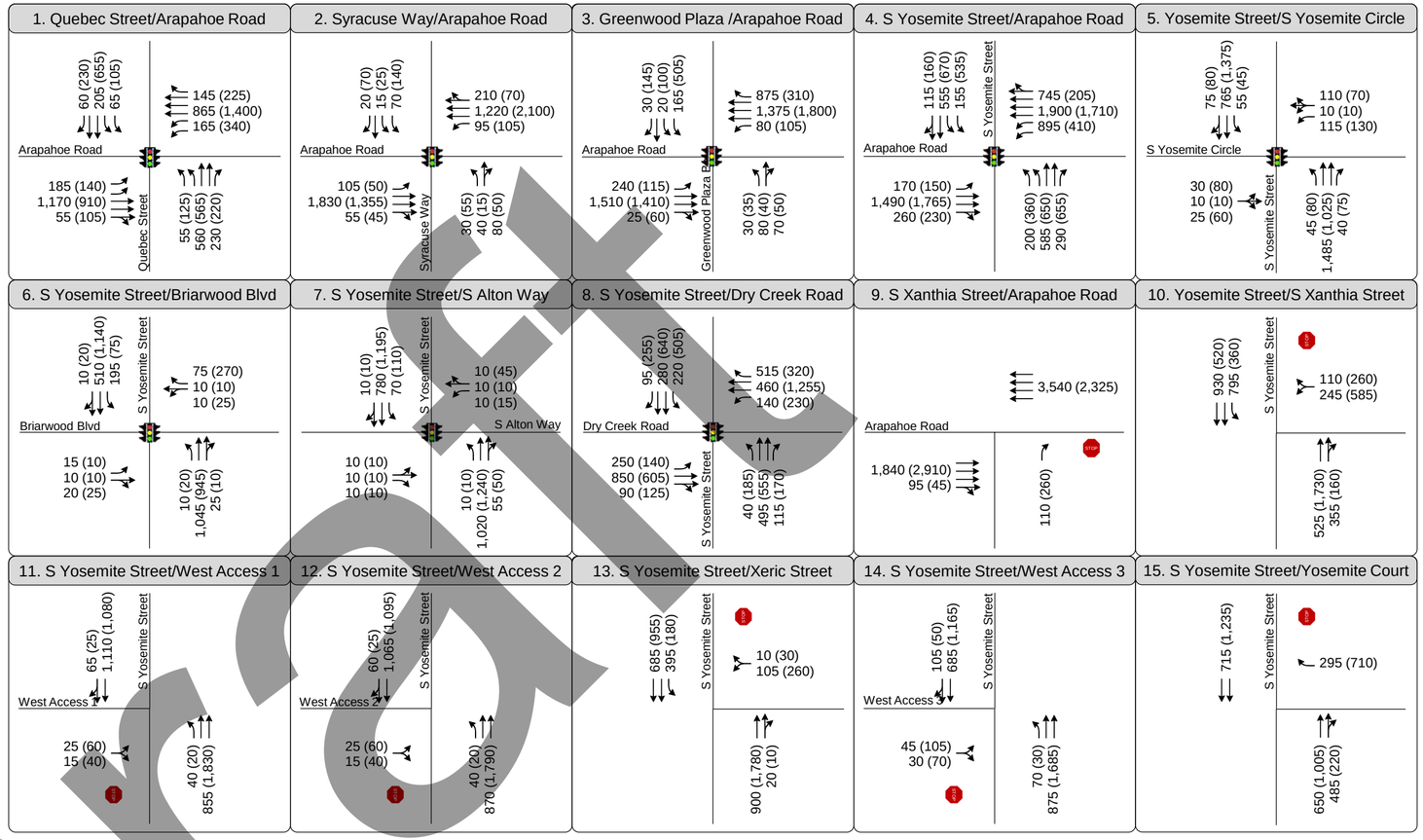
6.1 2040 BUILD TRANSPORTATION AND INTERSECTION OPERATIONS

An analysis was conducted to evaluate the impact on the study intersections as well as the site access points under 2040 Build Conditions.

Figure 7 shows the projected 2040 Build Conditions peak hour volumes at the study intersections, as well as the lane configurations. Intersection controls and lane configurations remain the same as the Existing and 2040 Background Conditions. This analysis used existing signal timings to analyze the existing intersections under build conditions. Optimized signal timings were considered under mitigation strategies at the end of **Section 6.**

Table 6 provides the results of the capacity analysis of the 2040 Build Conditions for the AM and PM peak hours. According to the analysis, **the project trips would have an impact on the study intersection operations.**

Appendix B provides the LOS calculations for the 2040 Build Conditions.



LEGEND

- Study Intersection
- Project Access Site
- AUC4 Site Area
- AM (PM) Peak Hour Traffic Volume
- Lane Configuration
- Stop Sign
- Signalized

Source: path:

Figure 7
2040 Build Traffic Counts
Peak Hour Traffic Volumes and Lane Configurations

Table 6: 2040 Build Conditions Intersection Level of Service Results

ID	Intersection	Control[1]	Approach	2040 Build			
				AM		PM	
				Delay[2]	LOS	Delay[2]	LOS
1	S Quebec Street / E Arapahoe Road	Signal	Overall	40	D	50	D
			EB	55	E	52	D
			WB	30	C	62	E
			NB	29	C	34	C
			SB	34	C	35	D
2	S Syracuse Way / E Arapahoe Road	Signal	Overall	5	A	6	A
			EB	2	A	1	A
			WB	1	A	3	A
			NB	64	E	61	E
			SB	58	E	61	E
3	Greenwood Plaza Blvd / E Arapahoe Road	Signal	Overall	8	A	11	B
			EB	4	A	2	A
			WB	3	A	2	A
			NB	68	E	64	E
			SB	54	D	52	D
4	S Yosemite Street / E Arapahoe Road	Signal	Overall	**123**	**F**	**183**	**F**
			EB	39	D	160	F
			WB	181	F	60	E
			NB	110	F	>200	F
			SB	84	F	82	F
5	S Yosemite Street / S Yosemite Circle	Signal	Overall	26	C	35	C
			EB	67	E	69	E
			WB	80	E	67	E
			NB	21	C	1	B
			SB	17	B	41	D
6	S Yosemite Street / E Briarwood Blvd	Signal	Overall	8	A	13	B
			EB	50	D	40	D
			WB	50	D	51	D
			NB	4	A	3	A
			SB	3	A	9	A
7	S Yosemite Street / S Alton Way	Signal	Overall	6	A	3	A
			EB	53	D	51	D
			WB	49	D	49	D
			NB	6	A	2	A
			SB	1	A	2	A
8	S Yosemite Street / Dry Creek Road	Signal	Overall	**59**	**E**	**76**	**E**
			EB	101	F	35	C
			WB	41	D	44	D
			NB	25	C	60	E
			SB	27	C	154	F
9	E Arapahoe Road / S Xanthia Street	SSSC	Overall	1	-	1	-
			NBR	11	B	13	B
10	S Yosemite Street / S Xanthia Street	SSSC	Overall	38	-	>200	-
			WBL	28	D	**>200**	**F**
			SBL	**128**	**F**	**>200**	**F**
11	S Yosemite Street / West Access 1	SSSC	Overall	2	-	19	-
			EBL	**70**	**F**	**>200**	**F**
			NBL	12	B	12	B

ID	Intersection	Control[1]	Approach	2040 Build			
				AM		PM	
				Delay[2]	LOS	Delay[2]	LOS
12	S Yosemite Street / West Access 2	SSSC	Overall	1	-	19	-
			EBL	**63**	**F**	**>200**	**F**
			NBL	12	B	12	B
13	S Yosemite Street / Xeric Street	SSSC	Overall	>200	-	>200	-
			WBL	**>200**	**F**	**>200**	**F**
			SBL	19	C	38	E
14	S Yosemite Street / West Access 3	SSSC	Overall	2	-	61	-
			EBL	**46**	E	**>200**	**F**
			NBL	10	B	12	B
15	S Yosemite Street / Yosemite Court	SSSC	Overall	5	-	100	-
			WBR	34	D	**>200**	**F**

Notes:

1. *Signal equals signalized intersection; SSSC equals side street stop-controlled intersection.*
2. *Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections. At side street-controlled intersections, the delay and LOS for the worst-case movement is reported.*

The results indicate that **two of the study intersections would not operate acceptably under 2040 Build Conditions.** The study intersections that do not operate acceptably are S Yosemite Street / E Arapahoe Road and S Yosemite Street / Dry Creek.

Additionally, six of the access points near the study area do not operate acceptably under 2040 Build Conditions. The access points that do not operate acceptably are S Yosemite Street / S Xanthia Street, S Yosemite Street / West Access 1, S Yosemite Street / West Access 2, S Yosemite Street / Xeric Street, S Yosemite Street / West Access 3 and S Yosemite Street / Yosemite Court. Detailed evaluation and proposed mitigation are summarized in the following sections.

S Yosemite Street / E Arapahoe Road

This intersection would operate at LOS F with a delay of 123 seconds in the AM peak hour and would operate at LOS F with a delay of 183 seconds in the PM peak hour under the 2040 Build Conditions as a signalized intersection. The delay experienced is due to the large number of westbound left turns that are added due to the project trips. In the AM these are primarily generated by the office uses at the site. This intersection is operating unacceptably (LOS E) under Existing and 2040 Background Conditions as well.

Potential Mitigation Strategies:

An additional west left turn lane was considered as a mitigation strategy but was not recommended due to the additional right-of-way that would need to be acquired to add an additional turn lane and receiving lane. This would not only be expensive and require right-of-way acquisition but would also make the intersection wider which would make it less comfortable for people walking and bicycling through the intersection.

Mandatory Transportation Demand Management (TDM) measures, like reducing available parking, parking pricing, or employee incentives for taking alternative modes of transportation, could reduce the number of people estimated to drive to the project site, and therefore improve intersection operations. A table of potential TDM measures are described in **Table 10** of this report.

A high-level analysis was conducted to understand how maximum application of TDM strategies for the development concept would impact the operations of this intersection. It was estimated (using Fehr & Peers' TDM+ Tool) that TDM measures could reduce office generated vehicle trips to and from the site by a maximum of 21%, and residential trips by a maximum of 19%. These estimates were used to analyze the Yosemite Street/Arapahoe Road intersection with reduced project generated volumes.

Table 7 displays the results of the level of service for Yosemite Street/Arapahoe Road if TDM measures are used to reduce the number of vehicles traveling to and from the site. This mitigation scenario also assumes the signal timing of the intersection would be adjusted for optimal operations. The TDM measures are estimated to reduce the overall delay of the intersection by over 33 second/vehicle in the AM peak hour and 80 seconds/vehicle in the PM peak hour.

Table 7: Effects of Mitigation on Intersection Level of Service for Yosemite St/Arapahoe Road

Intersections	Control	Approach	Build 2040				TDM Vehicle Reductions & Signal Optimization[1]			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S Yosemite Street/ Arapahoe Road	Signal	Overall	**123**	**F**	**183**	**F**	**91**	**F**	**103**	**F**
		EB	39	D	160	F	44	D	43	D
		WB	181	F	60	E	117	F	120	F
		NB	110	F	>200	F	71	E	94	F
		SB	84	F	82	F	119	F	180	F

Notes:
1. For the right most scenario analyzed the signal timings and phasing were optimized by the Synchro software.

S Yosemite Street / Dry Creek Road

This intersection would operate at LOS E with a delay of 59 seconds in the AM peak hour and LOS E with a delay of 76 seconds in the PM peak hour under the 2040 Build Conditions as a signalized intersection. The excessive delay experienced in the eastbound approach during the AM peak hour, and the southbound approach during the PM peak hour is due to the vehicle volumes generated by the office uses on the site.

Potential Mitigation Strategies:

Mandatory Transportation Demand Management (TDM) measures, like reducing available parking, parking pricing, or employee incentives for taking alternative modes of transportation, could reduce the number of people estimated to drive to the project site, and therefore improve intersection operations. A table of potential TDM measures are described in **Table 10** of this report. The same TDM analysis described in the previous section for the intersection of Yosemite Street/Arapahoe Road was conducted for the intersection of Yosemite Street/Dry Creek Road.

In addition to the TDM measures, a second southbound left turn lane was also analyzed as a mitigation strategy at this intersection. Adding a southbound turn lane would have some costs, but since there are already two receiving lanes on the east leg of the intersection, this strategy is likely feasible. For this mitigation scenario it was assumed the southbound left turn would be a protected phase (as opposed to permitted protected under existing conditions) and the signal timing and phasing was optimized by the Synchro software. **If a second southbound left turn lane was added to the intersection in addition to the TDM reductions, it would improve the overall intersection delay to 39 seconds/vehicle in the AM peak hour (LOS D) and 51 seconds/vehicle in the PM peak hour (LOS D).** This mitigation strategy was also recommended in the *I-25/Dry Creek Road Interchange and Corridor Study* (2017).

Table 8 displays the results of the level of service for Yosemite Street/Arapahoe Road under two different mitigation scenarios compared to the no mitigation Build 2040 scenario.

Table 8: Effects of Mitigation on Intersection Level of Service for Yosemite St/Dry Creek Road

Intersections	Control	Approach	Build 2040				TDM Vehicle Reductions & Signal Optimization[1]				TDM Vehicle Reductions & Additional SBLT[1]			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S Yosemite Street/ Dry Creek Road	Signal	Overall	**59**	**E**	**76**	**E**	**38**	D	**58**	**E**	39	D	51	D
		EB	101	F	35	C	53	D	50	D	53	D	42	D
		WB	41	D	44	D	30	C	33	C	30	C	32	C
		NB	25	C	60	E	29	C	52	D	30	C	75	E
		SB	27	C	154	F	22	C	101	F	31	C	67	E

Notes:
*1. For the mitigation scenarios analyzed the signal timings and phasing were optimized by the Synchro software. Signal timing and phasing for the mitigation scenarios can be found in **Appendix B**.*

Site Access Points

All the site access points on Yosemite Street would operate at levels of service of F in both the AM and PM peak hours under Build Conditions. The delay experienced on the eastbound and westbound approaches at these access points is primarily due to the vehicles attempting to turn left out of the project site while waiting for gaps because of the high number of through volume on Yosemite Street. The delay at the access points does not negatively affect the operations of the through movements on Yosemite.

Potential Mitigation Strategies:

Adding a traffic signal to the Yosemite Street/Xanthia Street intersection was analyzed as a possible mitigation for the delay of vehicles entering and exiting the project site access points. Signalization and realignment of this intersection was previously vetted in the *AUC4 Regulating Plan (2020)*. To accommodate a signal at Yosemite Street/Xanthia Street the two access points on either side of Yosemite Street would need to be aligned. Additionally, exclusive turn lanes would need to be added. This mitigation analysis found that two southbound left turn lanes, two westbound left turn lanes, and exclusive northbound and westbound right turn lanes are likely needed for this new signal to operate acceptably. The signal phasing and timing for this intersection were optimized by the Synchro software and can be found in **Appendix B**. The exclusive turn lane storage assumptions are as follows:

- Westbound lefts – 150 feet
- Northbound left – 150 feet
- Northbound right – 100 feet
- Southbound left – 200 feet

These intersection specifications were used for analysis only and are not intended to be used for design. The results displayed in **Table 9** include these recommended turn lanes.

In this analysis, the intersection of Yosemite Street/Xeric Street was also changed to a ¾ movement intersection (full movement in, right-turn only out). The westbound left turns from Xeric were moved up to the signal at Yosemite Street/Xanthia Street. Additionally, the other access points were analyzed with separate right and left turn lanes coming out of the project site to mitigate delay of cars attempting to turn out of the project.

In addition, mandatory Transportation Demand Management (TDM) measures, like reducing available parking, parking pricing, or employee incentives for taking alternative modes of transportation, could reduce the number of people estimated to drive to the project site, and therefore improve intersection operations. A table of potential TDM measures are described in **Table 10** of this report. The same TDM

analysis described in the previous section for the intersection of Yosemite Street/Arapahoe Road was conducted for the site access points.

Table 9 displays the results of this mitigation analysis for the site access points. West access 1 is not included in this table because it becomes part of the Yosemite Street/Xanthia Street intersection with the signalization and realignment of that intersection.

Table 9: Effects of Mitigation on Intersection Level of Service for Site Access Points

Intersections	Control	Approach	Build 2040 – No Mitigation				Build 2040 - With Mitigation			
			AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
			Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
S Yosemite Street/S Xanthia Street (& West Access 1)	**SSSC** (No Mitigation) **Signal** (Mitigation)	Overall	38	-	>200	-	35	C	55	D
		EB	-	-	-	-	58	E	57	E
		WB	**128**	**F**	**>200**	**F**	55	E	55	D
		NB	-	-	-	-	46	D	66	E
		SB	28	D	**>200**	**F**	23	C	29	C
S Yosemite Street/West Access 2	SSSC	Overall	1	-	19	-	1	-	**5**	**-**
		EBL	**63**	**F**	**>200**	**F**	**37**	**E**	**>200**	**F**
		NBL	12	B	12	B	11	B	13	B
S Yosemite Street/Xeric Street	SSSC	Overall	>200	-	>200	-	3	-	3	-
		WBR	**>200**	**F**	**>200**	**F**	12	B	**19**	**C**
		SBL	19	C	38	E	14	B	**25**	**D**
S Yosemite Street/West Access 3	SSSC	Overall	2	-	79	-	2	-	25	-
		EBL	**46**	**E**	**>200**	**F**	**42**	**E**	**>200**	**F**
		NBL	10	B	12	B	10	A	11	B
S Yosemite Street/Yosemite Court	SSSC	Overall	5	-	100	-	3	-	62	-
		WBR	34	D	**>200**	**F**	23	C	**>200**	**F**

Under the mitigation conditions the overall delay of the intersection of Yosemite Street/Xanthia Street improves to 14 seconds/vehicle in the AM peak hour (LOS B) and 25 seconds/vehicle (LOS C) in the PM Peak hour. Under these conditions the level of service of the other site access points improve as well.

7.0 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) strategies are tools that can be used to reduce commute trips, single-occupancy vehicle usage, and vehicle miles traveled (VMT). There are six broad categories, under which many strategies are organized.

- Land Use/Location: the design, accessibility, density, and use of the site.
- Neighborhood Site Enhancements: physical or programmatic improvements in connectivity.
- Parking Pricing: management of parking that reduces demand.
- Transit System: improvements to the transit network through expansion, frequency, and reliability.
- Commute Trips: tools, programs, and improvements to promote the use of transit, carpooling, ridesharing, and telecommuting.
- Marketing/Promotions: outreach and information-sharing that promotes alternative transit use.

Within these six categories, the most applicable site-specific strategies were chosen that took into consideration the proposed land uses in the Project as well as existing and future multimodal connectivity surrounding the site. **Table 10** lists TDM strategies along with a brief description. Several strategies have a wide range in potential VMT reduction depending on project location and implementation of complementary TDM strategies. Depending on the strategies chosen for this site, a reduction in vehicle trips in the amount of up to 21% for office trips and up to 19% for residential trips could be realized.

As part of a development agreement the City could require TDM plans for the AUC4 project, in order to minimize the number people using of single occupancy vehicle to get to and from the project site. This reduction in site generated vehicle traffic can help mitigate a future development's impact to traffic flows and intersection operations.

TABLE 10: POTENTIAL TDM STRATEGIES FOR A FUTURE DEVELOPMENT OF THE AUC4 SITE

TDM Measure	Description
Unbundle Parking Cost from Multi-family Housing Prices	Separate the cost of parking from the cost of a unit for multi-family housing residents so that residents have the option of opting in or out of a parking space.
Price Workplace Parking	Disincentives may include charging employees for parking, not providing employees with free parking or auto-centric transportation allowances.
Implement Car-Sharing Program	On-demand access to a fleet of shared-vehicles; User fees are typically collected through an annual membership, mileage, and hourly rates.
Build Comfortable Bike Lanes or Trails with Redevelopment	While there is not currently a network of bike infrastructure around the project site, redevelopment creates an opportunity to incorporate comfortable bicycle facilities into the future site design which will allow for future bicycle facilities to connect to the site in the future. Bicycle facilities internal to the site are important, as are considerations for comfortable bicycle facilities that connect to the light rail station and bus stops to the north, and the Little Dry Creek Trail to the south of the stie.
Provide Bike Parking	If comfortable bicycle facilities are incorporated within the site, it is also important that offices, businesses, and residences provide bicycle parking on site.
Implement Transit Access Improvements	Pedestrian and bicycle mobility improvements from the project site to nearby transit facilities; transit shelter improvements and amenities.
Provide Employer-Sponsored Vanpool/Shuttle	Purchase or leased vans for commute use and the formation of vanpools; Shuttles providing employees direct access to transit stations and other primary residential areas or destinations.
Implement Subsidized Transit Program	Discounted daily, monthly, or annual public transit passes.
Real-time Transit Information/Marketing	Signs in lobbies and other central areas that give the locations of nearby transit stops and present real-time information for arriving trains and buses.

The potential strategies listed above are meant to be a starting point in discussing applicable TDM strategies that would reduce commute trips, single-occupancy vehicle usage, and VMT. Post-development monitoring and reporting to evaluate how effective the TDM strategies are in reducing vehicle trip is a key component of a TDM program. Depending upon the outcomes measured, new strategies or enhancements of existing strategies will be identified as needed to meet a satisfactory outcome.

8.0 SUMMARY OF FINDINGS AND RECOMMENDATIONS

This study analyzed the potential transportation impacts resulting from the proposed District 4 Arapahoe Urban Center (AUC4) development concept in Centennial, Colorado, and outlined mitigation for those impacts. The proposed development concept is located in the southwest quadrant of the I-25 and Arapahoe Road (SH 88) interchange in Centennial, Colorado. The conceptual development areas include apartments, retail, office space, and restaurants. This TIS was prepared in conformance with the Centennial Roadway Design and Construction Manual, described in section 2.5.1 and in discussions with the City of Centennial.

It is expected that the proposed land uses will generate a net total of 30,639 daily trips, 3,558 trips in the AM peak hour and 3,609 trips in the PM peak hour. This includes MXD+ trip reductions from site selection and alternative modes. This does not include TDM strategies which could further reduce the total number of vehicle trips accessing the site. Eight study intersections were analyzed for this study for the following scenarios: Existing Conditions, 2040 Background Conditions and 2040 Build Conditions. In addition to the eight study intersections, six additional access points were analyzed for this study for the 2040 Build Conditions.

A summary of the **study results and recommendations** per scenario follows:

- **Existing Conditions:** Under this scenario, the S Yosemite Street / E Arapahoe Road intersection does not operate acceptably during the PM peak hour. However, all other intersections operate acceptably under these conditions.

- **2040 Background Conditions:** Traffic volumes are expected to increase by an annual growth rate of 1.077 percent in the AM peak hour and 1.077 percent in the PM peak hour. Under this scenario, the S Yosemite Street / E Arapahoe Road intersection does not operate acceptably during the PM peak hour. All other intersections operate acceptably under these conditions.

- **2040 Build Conditions:** In 2040 Build Conditions the Project generated trips were added to the background trips (minus trips form the existing land uses). Under this scenario, two intersections and 6 access points operate unacceptably:

    - **S Yosemite Street / E Arapahoe Road** – This intersection would operate at LOS F with a delay of 106 seconds in the AM peak hour and would operate at LOS F with a delay of 146 seconds in the PM peak hour under the 2040 Build Conditions as a signalized intersection. The delay

experienced is due to the large number of westbound left turns that are added due to the project trips. In the AM these are primarily generated by the office uses at the site.

It is recommended that Transportation Demand Management strategies are pursued for the project site to reduce vehicle traffic to the site and improve the operations of this intersection.

- **S Yosemite Street / Dry Creek Road** – This intersection would operate at LOS E with a delay of 59 seconds in the AM peak hour and LOS E with a delay of 76 seconds in the PM peak hour under the 2040 Build Conditions as a signalized intersection. The excessive delay experienced in the eastbound approach during the AM peak hour, and the southbound approach during the PM peak hour is due to the vehicle volumes generated by the office uses on the site.

  It is recommended that Transportation Demand Management strategies are pursued for the project site to reduce vehicle traffic to the site and improve the operations of this intersection. It is also recommended that a second southbound left turn be added to this intersection to improve intersection operations under the 2040 Build Conditions

- **Site Access Points** – All the site access points on Yosemite Street would operate at levels of service of F in both the AM and PM peak hours under Build Conditions. The delay experienced on the eastbound and westbound approaches at these access points is primarily due to the vehicles attempting to turn left out of the project site while waiting for gaps because of the high number of through volume on Yosemite Street. The delay at the access points does not negatively affect the operations of the through movements on Yosemite.

  It is recommended that the intersection of Yosemite Street/Xanthia Street be signalized and the intersection of Yosemite Street/Xeric Street become a ¾ movement intersection (full movement in, right turn only out). Signalizing Yosemite Street/Xanthia Street will require the alignment of Xanthia Street and West Access 1 as well as the addition of dedicated turn lanes for the north, south, and westbound legs.

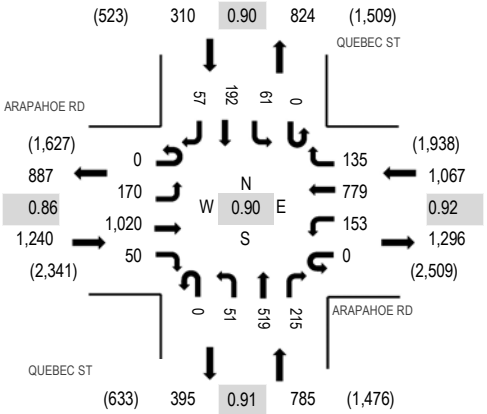
o **Transportation Demand Management**: Given the potential for reduction of commute trips, single-occupancy vehicle usage, and vehicle miles traveled due to the site location and mix of land uses, potential TDM strategies have been provided. It is recommended that TDM strategies be pursued for this site to help mitigate the impacts of the project on roadway operations.

APPENDIX A: EXISTING TRAFFIC COUNTS

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

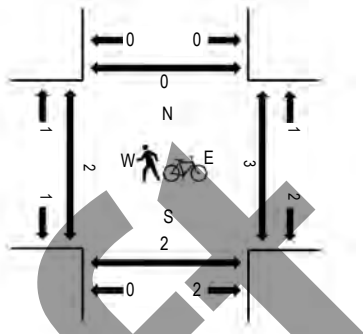
Location: 1 QUEBEC ST & ARAPAHOE RD AM
Date: Tuesday, July 20, 2021
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ARAPAHOE RD Eastbound				ARAPAHOE RD Westbound				QUEBEC ST Northbound				QUEBEC ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	14	193	7	0	9	142	13	0	8	75	43	0	7	15	8	534	2,876	1	2	0	0
7:15 AM	0	29	227	5	0	16	152	25	0	4	94	55	0	15	31	5	658	3,150	0	0	0	0
7:30 AM	0	39	254	10	0	31	194	35	0	6	114	70	0	14	34	12	813	3,306	0	2	0	0
7:45 AM	0	44	264	15	0	24	189	41	0	8	162	52	0	19	41	12	871	3,326	2	1	0	1
8:00 AM	0	41	246	9	0	44	169	34	0	10	127	48	0	13	46	21	808	3,402	0	0	0	0
8:15 AM	0	48	223	12	0	38	180	37	0	14	146	54	0	11	37	14	814		1	0	0	0
8:30 AM	0	25	260	14	0	34	210	31	0	14	110	53	0	15	51	16	833		0	0	0	0
8:45 AM	0	56	291	15	0	37	220	33	0	13	136	60	0	22	58	6	947		0	2	0	0
Count Total	0	296	1,958	87	0	233	1,456	249	0	77	964	435	0	116	313	94	6,278		4	7	0	1
Peak Hour	0	170	1,020	50	0	153	779	135	0	51	519	215	0	61	192	57	3,402		1	2	0	0

ALL TRAFFIC DATA SERVICES
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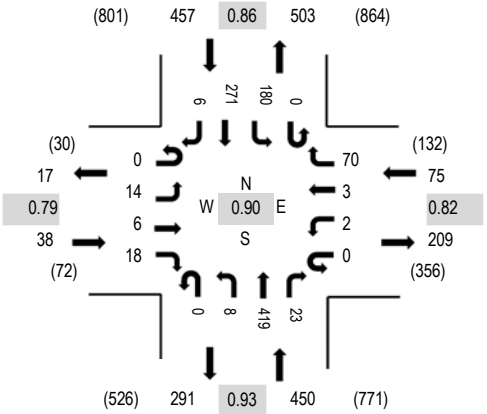
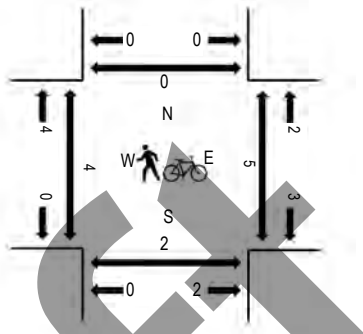
Location: 2 YOSEMITE ST & BRIARWOOD BLVD AM
Date: Tuesday, July 20, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	BRIARWOOD BLVD Eastbound				BRIARWOOD BLVD Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	4	0	5	0	0	0	8	0	0	45	2	0	33	32	1	130	837	0	0	0	0
7:15 AM	0	8	0	3	0	1	0	12	0	3	69	8	0	29	52	0	185	959	0	0	0	0
7:30 AM	0	3	3	4	0	0	0	19	0	3	106	8	0	39	53	0	238	1,020	0	1	0	0
7:45 AM	0	7	0	7	0	0	2	21	0	3	105	6	0	56	76	1	284	995	1	0	0	0
8:00 AM	0	1	1	2	0	0	1	14	0	0	116	5	0	42	69	1	252	939	0	0	1	0
8:15 AM	0	3	2	5	0	2	0	16	0	2	92	4	0	43	73	4	246		2	0	0	0
8:30 AM	0	4	1	7	0	1	0	12	0	1	86	9	0	22	68	2	213		0	0	0	0
8:45 AM	0	2	0	0	0	2	1	20	0	2	91	5	0	38	64	3	228		0	0	0	0
Count Total	0	32	7	33	0	6	4	122	0	14	710	47	0	302	487	12	1,776		3	1	1	0
Peak Hour	0	14	6	18	0	2	3	70	0	8	419	23	0	180	271	6	1,020		3	1	1	0

ALL TRAFFIC DATA SERVICES
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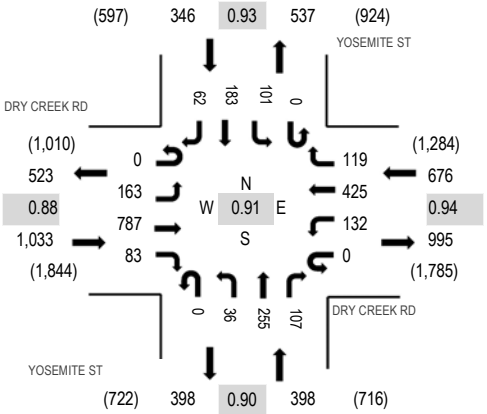
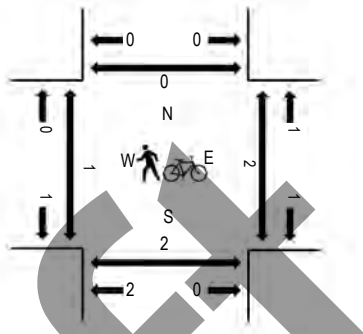
Location: 3 YOSEMITE ST & DRY CREEK RD AM
Date: Tuesday, July 20, 2021
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	DRY CREEK RD Eastbound				DRY CREEK RD Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	30	148	13	0	21	63	11	0	3	21	15	1	15	19	8	368	2,114	1	0	1	1
7:15 AM	0	36	134	13	0	32	85	21	0	10	44	34	0	15	34	6	464	2,323	1	1	0	0
7:30 AM	0	30	217	18	0	30	79	32	0	11	70	30	0	27	47	14	605	2,453	0	0	0	0
7:45 AM	0	61	212	22	0	35	119	33	0	5	70	27	0	27	55	11	677	2,441	0	0	0	0
8:00 AM	0	43	183	22	0	33	102	25	0	6	58	27	0	24	38	16	577	2,327	1	0	1	0
8:15 AM	0	29	175	21	0	34	125	29	0	14	57	23	0	23	43	21	594		0	1	0	0
8:30 AM	0	32	162	22	0	37	135	21	0	10	64	28	0	23	45	14	593		0	0	0	1
8:45 AM	0	42	162	17	0	40	123	19	0	13	45	31	0	23	31	17	563		0	0	0	0
Count Total	0	303	1,393	148	0	262	831	191	0	72	429	215	1	177	312	107	4,441		3	2	2	2
Peak Hour	0	163	787	83	0	132	425	119	0	36	255	107	0	101	183	62	2,453		1	1	1	0

ALL TRAFFIC DATA SERVICES
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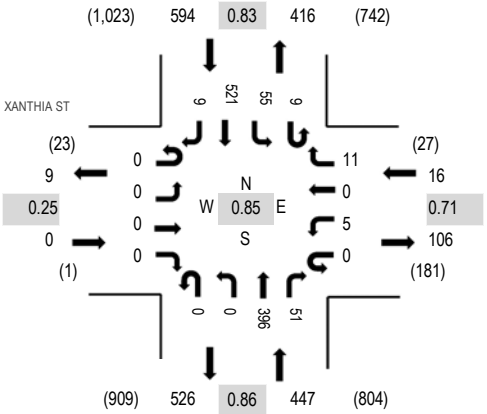
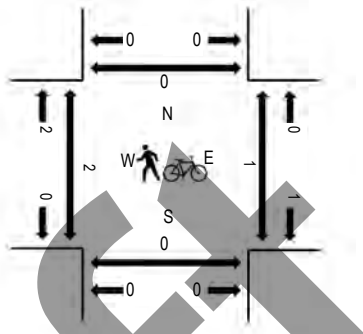
Location: 4 YOSEMITE ST & XANTHIA ST AM
Date: Tuesday, July 20, 2021
Peak Hour: 07:45 AM - 08:45 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	XANTHIA ST Eastbound				XANTHIA ST Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
7:00 AM	0	0	0	0	0	1	0	0	0	1	47	10	3	3	75	1	141	853	1	0	0	0
7:15 AM	0	1	0	0	0	1	0	2	0	0	64	10	1	8	86	2	175	964	2	0	0	0
7:30 AM	0	0	0	0	0	0	0	1	0	1	99	10	1	8	104	2	226	1,038	0	1	0	0
7:45 AM	0	0	0	0	0	1	0	1	0	0	114	16	1	19	157	2	311	1,057	0	0	0	0
8:00 AM	0	0	0	0	0	1	0	3	0	0	101	8	4	13	121	1	252	1,002	0	0	0	0
8:15 AM	0	0	0	0	0	2	0	5	0	0	82	17	2	9	130	2	249		2	0	0	0
8:30 AM	0	0	0	0	0	1	0	2	0	0	99	10	2	14	113	4	245		0	0	0	0
8:45 AM	0	0	0	0	0	3	0	3	0	3	102	10	2	16	113	4	256		0	0	0	0
Count Total	0	1	0	0	0	10	0	17	0	5	708	91	16	90	899	18	1,855		5	1	0	0
Peak Hour	0	0	0	0	0	5	0	11	0	0	396	51	9	55	521	9	1,057		2	0	0	0

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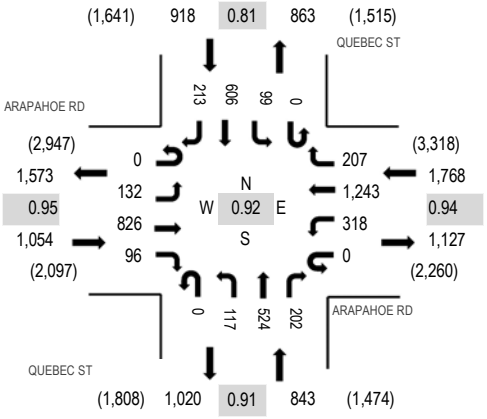
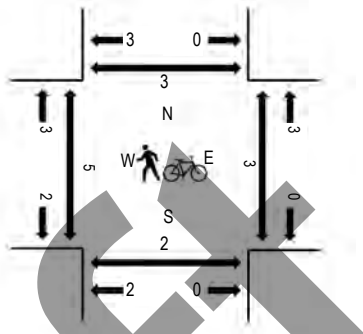
Location: 1 QUEBEC ST & ARAPAHOE RD PM
Date: Tuesday, July 20, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	ARAPAHOE RD Eastbound				ARAPAHOE RD Westbound				QUEBEC ST Northbound				QUEBEC ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	34	193	14	0	72	256	38	0	20	78	51	0	22	128	54	960	4,014	0	2	2	0
4:15 PM	0	32	210	23	0	48	269	29	0	18	66	39	0	31	127	47	939	4,264	0	2	0	1
4:30 PM	0	36	224	21	0	76	311	38	0	21	93	47	0	24	100	39	1,030	4,574	0	0	0	1
4:45 PM	0	32	212	25	0	76	271	48	0	31	123	49	0	21	146	51	1,085	4,583	0	1	0	1
5:00 PM	0	40	229	23	0	79	340	55	0	25	130	58	0	21	154	56	1,210	4,516	2	0	0	2
5:15 PM	0	25	209	33	0	84	334	48	0	36	149	46	0	27	190	68	1,249		0	0	0	0
5:30 PM	0	35	176	15	0	79	298	56	0	25	122	49	0	30	116	38	1,039		0	0	0	0
5:45 PM	0	16	223	17	0	70	281	62	0	17	130	51	0	18	92	41	1,018		0	0	1	0
Count Total	0	250	1,676	171	0	584	2,360	374	0	193	891	390	0	194	1,053	394	8,530		2	5	3	5
Peak Hour	0	132	826	96	0	318	1,243	207	0	117	524	202	0	99	606	213	4,583		2	1	0	3

ALL TRAFFIC DATA SERVICES
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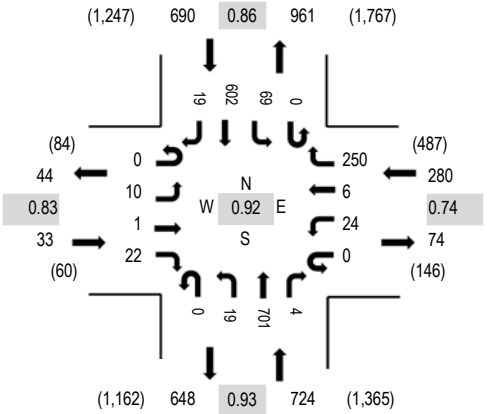
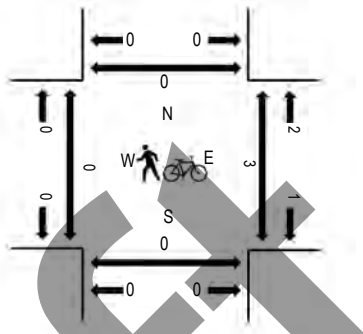
Location: 2 YOSEMITE ST & BRIARWOOD BLVD PM
Date: Tuesday, July 20, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	BRIARWOOD BLVD Eastbound				BRIARWOOD BLVD Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	2	1	6	0	6	2	45	0	7	137	2	0	18	109	1	336	1,452	0	0	0	0
4:15 PM	0	2	1	3	0	6	0	38	0	6	121	1	0	22	131	4	335	1,581	0	0	0	0
4:30 PM	0	0	2	5	0	6	0	67	0	3	167	1	0	10	125	2	388	1,714	0	0	0	0
4:45 PM	0	3	1	5	0	3	0	70	0	7	128	2	0	17	154	3	393	1,727	0	1	0	0
5:00 PM	0	3	0	7	0	7	2	92	0	6	179	0	0	12	154	3	465	1,707	0	0	0	0
5:15 PM	0	2	0	2	0	6	1	45	0	2	208	1	0	26	171	4	468		0	0	0	0
5:30 PM	0	2	0	8	0	8	3	43	0	4	186	1	0	14	123	9	401		0	0	0	0
5:45 PM	0	3	0	2	0	3	0	34	0	5	190	1	0	13	112	10	373		0	0	0	1
Count Total	0	17	5	38	0	45	8	434	0	40	1,316	9	0	132	1,079	36	3,159		0	1	0	1
Peak Hour	0	10	1	22	0	24	6	250	0	19	701	4	0	69	602	19	1,727		0	1	0	0

ALL TRAFFIC DATA SERVICES
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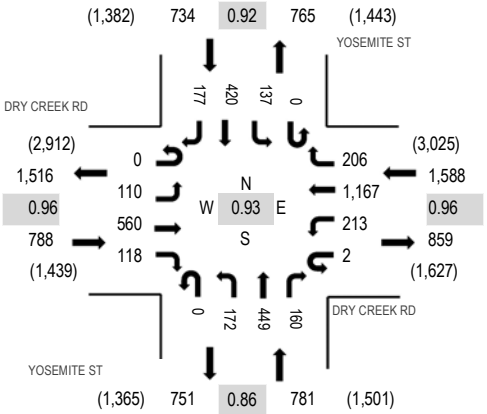
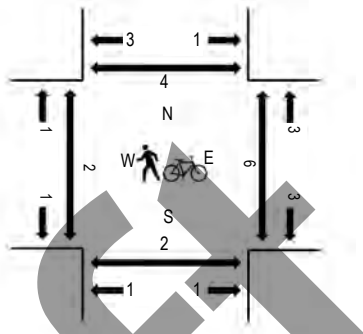
Location: 3 YOSEMITE ST & DRY CREEK RD PM
Date: Tuesday, July 20, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	DRY CREEK RD Eastbound				DRY CREEK RD Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	25	114	17	0	53	273	32	0	43	101	47	0	32	89	52	878	3,529	0	0	0	0
4:15 PM	0	26	138	18	0	45	226	29	0	43	84	37	0	37	99	49	831	3,663	0	2	0	1
4:30 PM	0	29	127	17	0	45	278	42	0	53	100	38	0	34	81	45	889	3,883	0	3	1	2
4:45 PM	0	25	141	32	1	63	274	28	0	42	105	34	0	36	108	42	931	3,891	1	3	1	1
5:00 PM	0	22	140	28	0	48	314	64	0	50	98	52	0	40	110	46	1,012	3,818	0	2	0	1
5:15 PM	0	27	143	35	0	53	297	59	0	47	146	42	0	33	113	56	1,051		0	0	0	0
5:30 PM	0	36	136	23	1	49	282	55	0	33	100	32	0	28	89	33	897		0	0	1	1
5:45 PM	0	23	100	17	0	61	277	76	0	30	111	33	0	31	72	27	858		1	1	0	1
Count Total	0	213	1,039	187	2	417	2,221	385	0	341	845	315	0	271	761	350	7,347		2	11	3	7
Peak Hour	0	110	560	118	2	213	1,167	206	0	172	449	160	0	137	420	177	3,891		1	5	2	3

ALL TRAFFIC DATA SERVICES
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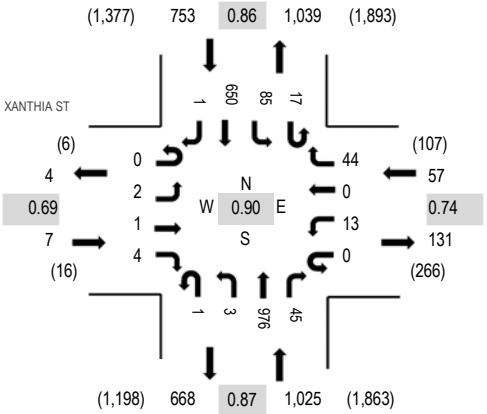
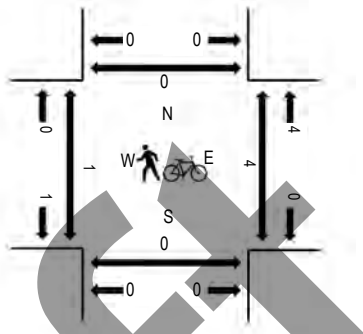
Location: 4 YOSEMITE ST & XANTHIA ST PM
Date: Tuesday, July 20, 2021
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour - All Vehicles



Note: Total study counts contained in parentheses.

Peak Hour - Pedestrians/Bicycles on Crosswalk



Traffic Counts

Interval Start Time	XANTHIA ST Eastbound				XANTHIA ST Westbound				YOSEMITE ST Northbound				YOSEMITE ST Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
4:00 PM	0	0	1	0	0	4	0	14	0	0	189	7	8	23	116	0	362	1,568	0	0	0	0
4:15 PM	0	0	0	1	0	2	0	10	1	1	162	10	8	24	155	0	374	1,715	0	0	0	0
4:30 PM	0	1	0	2	0	5	0	7	0	0	213	18	1	23	126	0	396	1,841	0	0	0	0
4:45 PM	0	0	0	0	0	5	0	12	0	0	218	12	7	15	166	1	436	1,842	0	1	0	0
5:00 PM	0	0	1	2	0	3	0	18	0	1	280	15	3	28	158	0	509	1,795	0	1	0	0
5:15 PM	0	1	0	0	0	1	0	4	0	0	262	13	4	28	187	0	500		0	0	0	0
5:30 PM	0	1	0	2	0	4	0	10	1	2	216	5	3	14	139	0	397		1	1	0	0
5:45 PM	0	2	1	1	0	2	0	6	0	1	229	7	4	21	115	0	389		2	1	0	0
Count Total	0	5	3	8	0	26	0	81	2	5	1,769	87	38	176	1,162	1	3,363		3	4	0	0
Peak Hour	0	2	1	4	0	13	0	44	1	3	976	45	17	85	650	1	1,842		1	3	0	0

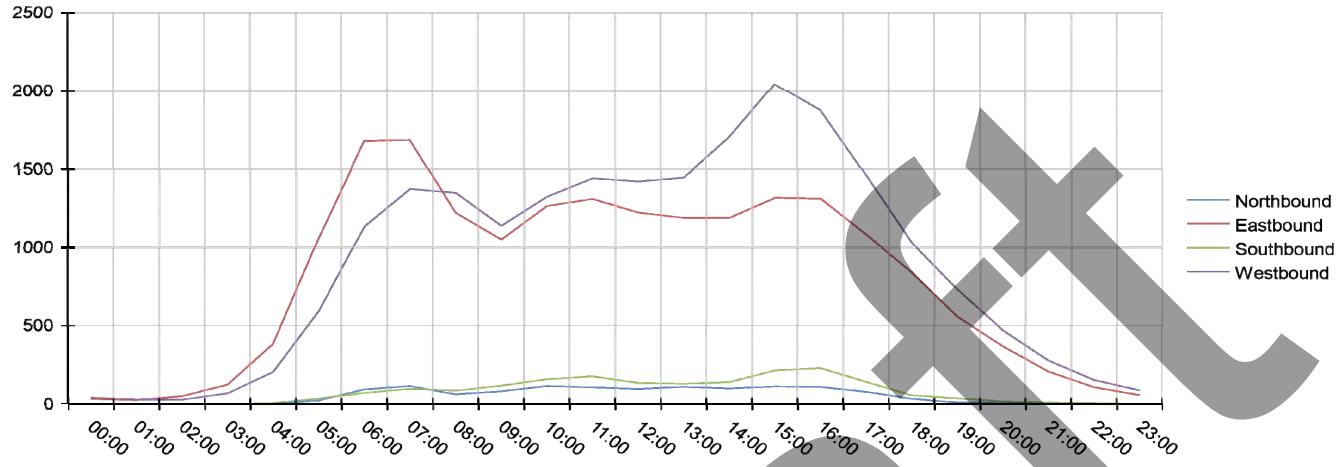
Yosemite Street / Yosemite Circle

VOS Data (9/17/2019 - 9/19/2019)													
	Direction of Travel												
Time of Day	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**SBL**	**SBT**	**SBR**	**NBL**	**NBT**	**NBR**	**Hourly Total**
00:00 - 01:00	1	0	3	12	0	3	2	19	0	0	15	6	**63**
01:00 - 02:00	5	3	7	29	1	13	18	110	41	6	339	11	**584**
02:00 - 03:00	0	0	1	2	0	2	0	4	0	0	3	3	**16**
03:00 - 04:00	0	0	0	3	0	1	1	9	1	1	7	0	**22**
04:00 - 05:00	0	0	2	6	1	6	1	12	2	2	20	4	**55**
05:00 - 06:00	1	0	1	15	1	17	4	35	1	3	79	4	**162**
06:00 - 07:00	5	2	7	44	0	27	15	120	6	9	311	11	**557**
07:00 - 08:00	16	3	14	63	3	41	26	308	79	12	931	17	**1513**
08:00 - 09:00	28	9	25	106	8	103	50	497	70	42	1291	37	**2265**
09:00 - 10:00	25	9	25	117	8	123	38	390	28	42	695	41	**1542**
10:00 - 11:00	30	10	19	104	7	76	27	378	31	56	366	56	**1159**
11:00 - 12:00	56	14	40	171	12	121	67	640	79	100	420	139	**1858**
12:00 - 13:00	108	22	46	226	9	167	109	632	81	100	496	165	**2161**
13:00 - 14:00	89	12	36	192	12	123	80	523	52	66	477	129	**1792**
14:00 - 15:00	63	12	23	147	8	67	47	558	38	60	404	85	**1512**
15:00 - 16:00	59	7	33	116	6	88	49	836	37	54	525	72	**1883**
16:00 - 17:00	69	11	49	115	8	72	39	1166	55	56	774	69	**2482**
17:00 - 18:00	74	6	53	122	8	63	42	1199	72	73	774	69	**2554**
18:00 - 19:00	76	8	58	106	6	65	52	685	48	69	464	79	**1717**
19:00 - 20:00	66	8	17	104	4	20	29	337	31	50	221	71	**959**
20:00 - 21:00	39	7	14	79	3	25	12	203	14	23	160	44	**622**
21:00 - 22:00	19	3	4	58	1	23	9	143	4	9	113	22	**408**
22:00 - 23:00	7	1	4	49	1	14	9	59	1	3	49	17	**213**
23:00 - 00:00	2	1	3	20	0	7	4	31	0	2	27	6	**104**
Daily Total	**836**	**147**	**484**	**2006**	**107**	**1267**	**730**	**8896**	**772**	**838**	**8960**	**1159**	**26203**

GRIDSMART. Turning Movement Counts - Average

Intersection 042 Arapahoe & Syracuse
Date 9/17/2019-9/19/2019

	Right	Through	Left	UTurn	Total
Northbound	581	188	519	3	1292
Eastbound	535	18019	765	37	19357
Southbound	536	196	1168	1	1902
Westbound	1210	19036	1100	92	21440
Total	**2863**	**37441**	**3553**	**135**	**43993**

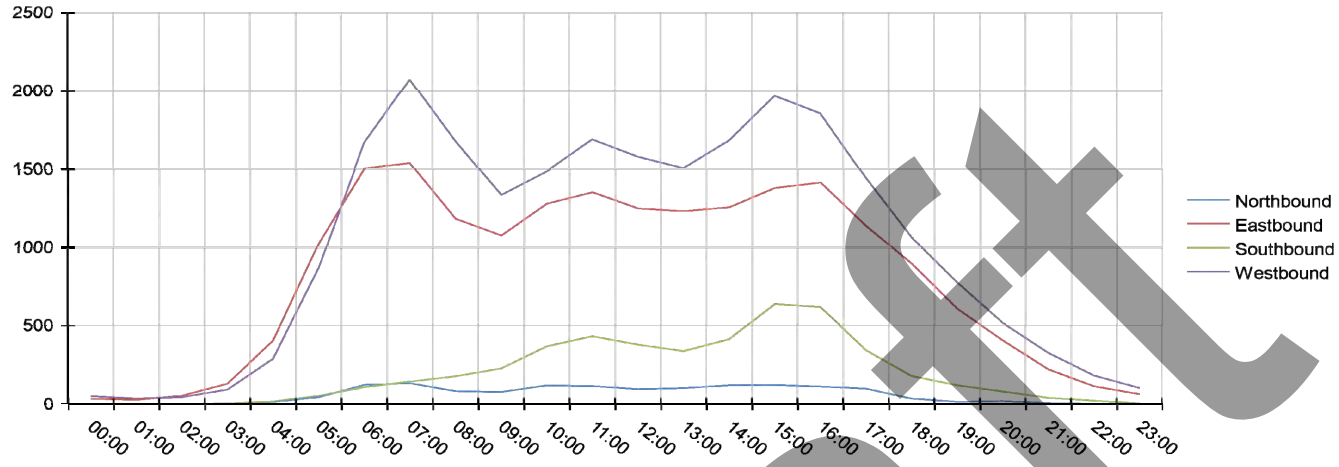


	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00					0	34	0			0	1		3	37	2	
01:00			0		0	27	0				0		2	27	1	0
02:00					0	51	1				0		2	26	2	
03:00		0	0			122	3			0	1		3	65	2	
04:00	1	0	1		3	368	11		0	2	5		14	182	8	0
05:00	18	1	5		8	1015	37	1	10	3	24		51	512	26	0
06:00	56	23	15		37	1566	75	0	17	8	47		125	952	55	1
07:00	58	28	29		53	1541	90	2	18	14	67	0	177	1094	97	4
08:00	26	11	26		46	1103	66	4	25	9	53		98	1148	95	7
09:00	37	14	31	0	32	971	43	2	35	11	71		48	1025	60	5
10:00	45	17	52	1	41	1162	57	4	60	13	85	0	63	1172	81	6
11:00	51	13	43	0	42	1201	58	8	57	10	110		79	1270	81	11
12:00	48	10	38	1	46	1124	48	4	40	13	83		66	1263	81	10
13:00	56	12	42		32	1112	42	2	39	9	82		62	1304	70	9
14:00	45	8	47		37	1112	36	2	46	11	83	0	52	1573	71	6
15:00	46	16	50		44	1226	46	1	63	22	129		66	1872	97	7
16:00	45	14	51		43	1225	42	1	60	26	143	0	78	1704	86	7
17:00	33	9	37		29	1011	40	1	38	11	93		69	1323	62	6
18:00	12	4	19		19	790	29	0	15	9	33		49	931	45	2
19:00	0	0	11		10	526	19	0	4	9	25		42	658	27	2
20:00	0	0	9		3	358	6		2	5	12		28	420	20	0
21:00		0	2		2	202	3	0	1	1	8		16	250	10	1
22:00		0	0		0	105	3		0	3	4		7	137	10	0
23:00			0		0	58	1		0	1	1		4	82	3	0
Total	**581**	**188**	**519**	**3**	**535**	**18019**	**765**	**37**	**536**	**196**	**1168**	**1**	**1210**	**19036**	**1100**	**92**

Turning Movement Counts - Average

Intersection 043 Arapahoe & Greenwood Plaza
Date 9/17/2019-9/19/2019

	Right	Through	Left	UTurn	Total
Northbound	621	472	379	7	1479
Eastbound	473	17391	1714	22	19601
Southbound	1049	515	3162	4	4732
Westbound	4322	18718	1157	131	24329
Total	**6466**	**37097**	**6413**	**165**	**50142**

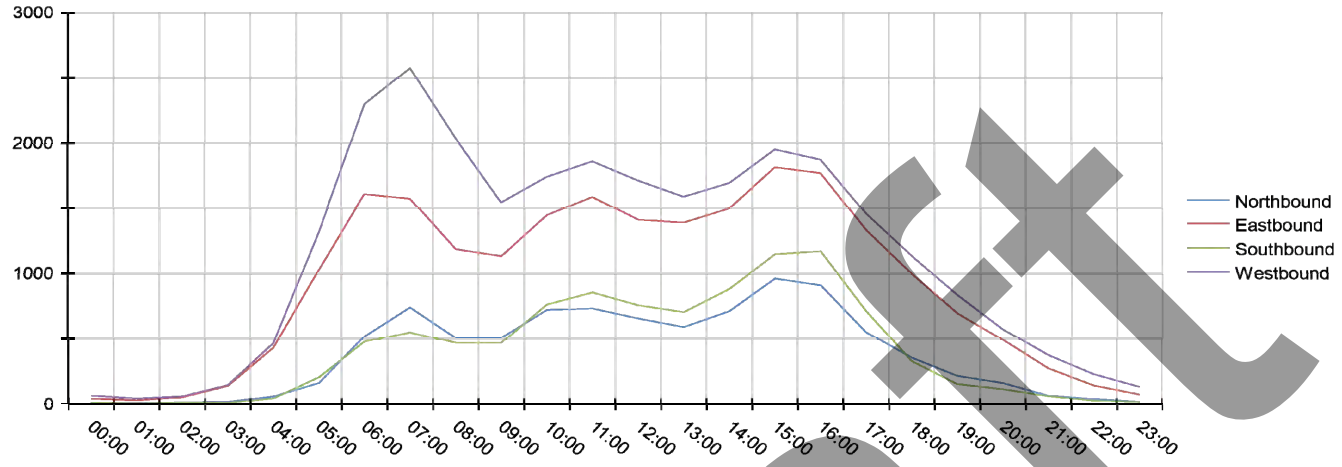


	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00	0	0			1	35			0	1	3		1	48	2	
01:00	0		0		0	28	0			0	2		3	31	3	
02:00	0	1			0	51	4			1	3		11	33	2	
03:00	3	2	0		0	123	7			2	2		13	79	2	
04:00	5	10	1		0	380	23		0	3	15	0	74	207	7	0
05:00	26	15	4		4	924	97	0	5	7	41		264	581	22	1
06:00	39	67	16		17	1289	198	0	15	19	74		576	1013	74	4
07:00	52	48	33	0	22	1291	223	1	35	15	93	0	744	1262	64	2
08:00	37	20	26		22	1031	127	3	42	9	125	1	363	1252	55	9
09:00	38	18	22	0	32	961	80	2	54	17	156		209	1046	71	8
10:00	54	30	33	1	35	1109	132	2	104	25	238		264	1128	79	15
11:00	51	32	31	0	36	1155	160	1	108	33	289	0	381	1215	74	20
12:00	42	26	27	0	31	1096	118	2	105	22	250	0	305	1196	61	17
13:00	51	28	23		38	1107	85	2	83	35	219	0	181	1217	99	9
14:00	56	29	35	0	39	1141	75	1	101	32	278	0	164	1433	78	7
15:00	48	38	36	1	47	1244	87	2	121	72	442	0	207	1656	94	8
16:00	46	31	34	0	50	1248	115	2	131	89	396		213	1530	101	11
17:00	41	26	31	0	38	1009	88	0	88	43	211	0	131	1217	85	8
18:00	12	14	11		26	819	49	1	32	29	118	0	88	906	63	4
19:00	3	9	4		12	570	24		10	27	83		58	674	40	0
20:00	5	12	3		11	382	12		6	16	59		33	445	34	2
21:00	2	4	1		2	216	2		1	6	34		17	283	25	1
22:00	2	2			2	111	1		1	4	18		10	163	10	
23:00	0	1				65	0			1	5		4	94	5	0
Total	**621**	**472**	**379**	**7**	**473**	**17391**	**1714**	**22**	**1049**	**515**	**3162**	**4**	**4322**	**18718**	**1157**	**131**

GRIDSMART. Turning Movement Counts - Average

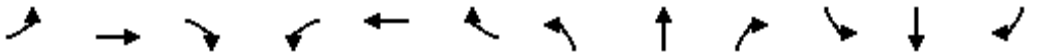
Intersection 044 Arapahoe & Yosemite
Date 9/17/2019-9/19/2019

	Right	Through	Left	UTurn	Total
Northbound	3241	3813	2160	17	9232
Eastbound	1918	18276	1954	8	22157
Southbound	1528	4239	4171	5	9945
Westbound	4281	20302	3070	61	27715
Total	**10969**	**46631**	**11357**	**92**	**69050**



	Northbound				Eastbound				Southbound				Westbound			
	R	T	L	U	R	T	L	U	R	T	L	U	R	T	L	U
00:00	5	3	1		0	40	2		0	6	5		8	50	7	1
01:00	4	2	3		0	29	1			4	3		4	35	6	
02:00	7	3	1		0	52	1		0	6	5		9	43	7	
03:00	10	8	2		5	125	8		0	7	5		26	107	12	
04:00	29	26	3		11	393	24		2	27	15		95	328	39	
05:00	49	91	19	0	49	906	72	0	28	115	60	0	356	855	108	0
06:00	83	354	77	1	125	1300	184		93	269	113		618	1497	179	2
07:00	182	414	143	1	156	1265	153	0	103	302	141	0	641	1715	214	2
08:00	168	213	122	1	146	931	108	0	82	213	170		405	1416	214	1
09:00	230	159	115	0	112	926	93	1	82	170	213	0	221	1100	221	4
10:00	276	233	210	1	147	1160	140	0	123	271	366	1	252	1249	235	5
11:00	266	254	211	0	192	1245	149	2	130	314	409	1	287	1319	249	4
12:00	246	213	193	3	151	1121	138	1	113	291	352	0	238	1234	232	8
13:00	235	189	164	1	135	1141	113	1	122	233	348	0	175	1216	193	5
14:00	265	276	169	1	140	1224	133	0	143	326	411	1	155	1351	183	5
15:00	325	432	203	1	153	1529	134		164	507	477	0	175	1575	196	4
16:00	295	403	210	1	180	1439	151		141	562	465		201	1446	225	2
17:00	174	233	140	0	102	1097	132	1	130	250	330	0	139	1159	155	4
18:00	158	121	73	0	53	857	84		43	147	137		91	909	127	5
19:00	88	81	45		26	604	63		9	88	55		71	673	88	0
20:00	81	52	28	0	15	441	33		7	65	41		48	450	71	1
21:00	33	22	10		4	249	18		1	35	24		28	292	51	1
22:00	18	13	8		5	129	7		1	15	13		18	176	31	0
23:00	7	10	3		3	66	4		0	9	9		13	99	18	1
Total	**3241**	**3813**	**2160**	**17**	**1918**	**18276**	**1954**	**8**	**1528**	**4239**	**4171**	**5**	**4281**	**20302**	**3070**	**61**

APPENDIX B: INTERSECTION LEVEL OF SERVICE CALCULATIONS AND SIGNAL TIMING AND PHASING SHEETS



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1020	50	153	779	135	51	519	215	61	192	57
Future Volume (veh/h)	170	1020	50	153	779	135	51	519	215	61	192	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	189	1159	54	176	875	34	56	611	119	88	231	76
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	239	1322	62	227	1340	415	112	1741	769	135	1735	785
Arrive On Green	0.07	0.26	0.26	0.02	0.09	0.09	0.03	0.48	0.48	0.04	0.49	0.49
Sat Flow, veh/h	3483	4999	233	3401	5106	1581	3456	3610	1595	3510	3554	1607
Grp Volume(v), veh/h	189	789	424	176	875	34	56	611	119	88	231	76
Grp Sat Flow(s),veh/h/ln	1742	1702	1828	1700	1702	1581	1728	1805	1595	1755	1777	1607
Q Serve(g_s), s	7.2	30.0	30.0	7.0	22.4	2.7	2.2	14.2	5.6	3.3	4.8	3.4
Cycle Q Clear(g_c), s	7.2	30.0	30.0	7.0	22.4	2.7	2.2	14.2	5.6	3.3	4.8	3.4
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	900	483	227	1340	415	112	1741	769	135	1735	785
V/C Ratio(X)	0.79	0.88	0.88	0.78	0.65	0.08	0.50	0.35	0.15	0.65	0.13	0.10
Avail Cap(c_a), veh/h	284	1286	691	302	1967	609	179	1741	769	468	1735	785
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	47.6	47.6	65.0	55.7	46.7	64.2	21.8	19.5	64.0	18.9	18.5
Incr Delay (d2), s/veh	10.0	3.8	6.9	6.0	0.2	0.0	1.3	0.6	0.4	2.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	12.8	14.2	3.3	10.3	1.0	1.0	6.1	2.1	1.5	2.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.9	51.4	54.4	71.0	55.9	46.7	65.5	22.3	20.0	66.0	19.1	18.8
LnGrp LOS	E	D	D	E	E	D	E	C	B	E	B	B
Approach Vol, veh/h		1402			1085			786			395	
Approach Delay, s/veh		55.1			58.1			25.0			29.5	
Approach LOS		E			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	70.9	14.2	40.4	10.2	70.1	14.0	40.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	45.0	11.0	52.0	18.0	34.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	4.2	6.8	9.2	24.4	5.3	16.2	9.0	32.0
Green Ext Time (p_c), s	0.0	1.1	0.0	2.9	0.1	2.7	0.1	3.6

Intersection Summary	
HCM 6th Ctrl Delay	46.8
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	1632	51	90	1110	194	28	37	76	65	13	20
Future Volume (veh/h)	97	1632	51	90	1110	194	28	37	76	65	13	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	105	1774	53	98	1207	195	30	40	20	71	14	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	3547	106	295	3083	498	165	56	28	264	107	91
Arrive On Green	0.07	1.00	1.00	0.07	1.00	1.00	0.03	0.05	0.05	0.03	0.06	0.00
Sat Flow, veh/h	1781	5095	152	1781	4430	716	1781	1176	588	3456	1870	1585
Grp Volume(v), veh/h	105	1185	642	98	927	475	30	0	60	71	14	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1843	1781	1702	1742	1781	0	1764	1728	1870	1585
Q Serve(g_s), s	2.3	0.0	0.0	2.2	0.0	0.0	2.1	0.0	4.5	2.6	1.0	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.0	2.2	0.0	0.0	2.1	0.0	4.5	2.6	1.0	0.0
Prop In Lane	1.00		0.08	1.00		0.41	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	386	2370	1283	295	2369	1212	165	0	85	264	107	91
V/C Ratio(X)	0.27	0.50	0.50	0.33	0.39	0.39	0.18	0.00	0.71	0.27	0.13	0.00
Avail Cap(c_a), veh/h	400	2370	1283	363	2369	1212	226	0	222	375	249	211
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	4.9	0.0	0.0	59.0	0.0	63.3	58.1	60.4	0.0
Incr Delay (d2), s/veh	0.1	0.8	1.4	0.2	0.5	1.0	0.2	0.0	4.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.2	0.5	0.7	0.2	0.3	1.0	0.0	2.1	1.1	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.8	1.4	5.2	0.5	1.0	59.2	0.0	67.3	58.3	60.6	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	E	A
Approach Vol, veh/h		1932			1500			90			85	
Approach Delay, s/veh		1.2			0.9			64.6			58.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	101.0	9.4	12.8	11.9	101.0	10.7	11.5
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	10.0	74.0	8.0	18.0	6.0	78.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	4.3	2.0	4.1	3.0	4.3	2.0	4.6	6.5
Green Ext Time (p_c), s	0.0	48.9	0.0	0.0	0.0	34.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	1333	22	76	1254	790	29	74	65	85	18	29
Future Volume (veh/h)	224	1333	22	76	1254	790	29	74	65	85	18	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	243	1449	23	83	1363	595	32	80	45	92	20	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	3318	53	333	3081	956	219	97	54	277	197	167
Arrive On Green	0.15	1.00	1.00	0.07	1.00	1.00	0.03	0.09	0.09	0.04	0.11	0.11
Sat Flow, veh/h	1781	5177	82	1781	5106	1585	1781	1124	632	3456	1870	1585
Grp Volume(v), veh/h	243	953	519	83	1363	595	32	0	125	92	20	2
Grp Sat Flow(s),veh/h/ln	1781	1702	1856	1781	1702	1585	1781	0	1757	1728	1870	1585
Q Serve(g_s), s	7.6	0.0	0.0	2.4	0.0	0.0	2.2	0.0	9.5	3.2	1.3	0.2
Cycle Q Clear(g_c), s	7.6	0.0	0.0	2.4	0.0	0.0	2.2	0.0	9.5	3.2	1.3	0.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	318	2181	1189	333	3081	956	219	0	151	277	197	167
V/C Ratio(X)	0.76	0.44	0.44	0.25	0.44	0.62	0.15	0.00	0.83	0.33	0.10	0.01
Avail Cap(c_a), veh/h	466	2181	1189	336	3081	956	279	0	234	325	236	200
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.6	0.0	0.0	8.9	0.0	0.0	54.2	0.0	60.7	53.6	54.6	54.1
Incr Delay (d2), s/veh	2.1	0.6	1.2	0.1	0.5	3.0	0.1	0.0	7.3	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.2	0.4	0.9	0.1	0.8	1.0	0.0	4.5	1.4	0.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.8	0.6	1.2	9.0	0.5	3.0	54.3	0.0	68.0	53.8	54.7	54.1
LnGrp LOS	A	A	A	A	A	A	D	A	E	D	D	D
Approach Vol, veh/h		1715			2041			157			114	
Approach Delay, s/veh		2.1			1.6			65.2			54.0	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	88.5	9.5	20.2	11.8	93.5	12.1	17.6
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	21.3	63.0	8.0	17.0	5.0	79.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	9.6	2.0	4.2	3.3	4.4	2.0	5.2	11.5
Green Ext Time (p_c), s	0.3	42.5	0.0	0.0	0.0	36.7	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	1342	145	208	1765	693	136	467	147	131	319	108
Future Volume (veh/h)	158	1342	145	208	1765	693	136	467	147	131	319	108
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	172	1459	144	226	1918	700	148	508	160	142	347	117
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	2399	236	626	2498	820	154	580	259	192	457	152
Arrive On Green	0.13	0.80	0.80	0.18	0.52	0.52	0.04	0.16	0.16	0.06	0.17	0.17
Sat Flow, veh/h	3456	5998	591	3456	4826	1585	3456	3554	1585	3456	2621	870
Grp Volume(v), veh/h	172	1173	430	226	1918	700	148	508	160	142	234	230
Grp Sat Flow(s),veh/h/ln	1728	1609	1764	1728	1609	1585	1728	1777	1585	1728	1777	1714
Q Serve(g_s), s	6.5	12.8	12.8	7.7	43.0	51.5	5.8	18.8	8.5	5.5	16.9	17.3
Cycle Q Clear(g_c), s	6.5	12.8	12.8	7.7	43.0	51.5	5.8	18.8	8.5	5.5	16.9	17.3
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	220	1930	706	626	2498	820	154	580	259	192	310	299
V/C Ratio(X)	0.78	0.61	0.61	0.36	0.77	0.85	0.96	0.88	0.62	0.74	0.75	0.77
Avail Cap(c_a), veh/h	307	1930	706	626	2498	820	154	632	282	307	395	381
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	9.4	9.4	48.4	26.1	28.1	64.4	55.2	23.5	62.8	53.0	53.2
Incr Delay (d2), s/veh	5.3	1.4	3.9	0.5	2.3	10.9	61.8	12.5	3.6	2.1	4.3	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.9	3.7	3.3	16.0	20.7	3.8	9.4	3.4	2.4	7.9	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.3	10.8	13.3	48.9	28.4	39.1	126.2	67.6	27.1	64.9	57.2	58.5
LnGrp LOS	E	B	B	D	C	D	F	E	C	E	E	E
Approach Vol, veh/h		1775			2844			816			606	
Approach Delay, s/veh		16.5			32.7			70.3			59.5	
Approach LOS		B			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.5	61.0	13.0	29.5	15.6	76.9	14.5	28.0
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	18.0	54.0	6.0	30.0	12.0	60.0	12.0	24.0
Max Q Clear Time (g_c+I1), s	19.7	14.8	7.8	19.3	8.5	53.5	7.5	20.8
Green Ext Time (p_c), s	0.7	14.0	0.0	1.3	0.1	6.0	0.1	1.2

Intersection Summary	
HCM 6th Ctrl Delay	35.7
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	10	10	11	10	396	51	64	521	10
Future Volume (veh/h)	10	10	10	10	10	11	10	396	51	64	521	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	17	14	0	40	455	60	89	628	13
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	61	104	164	128	0	727	2381	312	760	2721	56
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.03	0.75	0.75	0.08	1.00	1.00
Sat Flow, veh/h	730	902	1546	1389	1900	0	1810	3158	414	1753	3560	74
Grp Volume(v), veh/h	80	0	0	17	14	0	40	255	260	89	313	328
Grp Sat Flow(s),veh/h/ln	1632	0	1546	1389	1900	0	1810	1777	1795	1753	1777	1857
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.8	0.0	0.5	4.5	4.6	1.2	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.2	0.8	0.0	0.5	4.5	4.6	1.2	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.23	1.00		0.04
Lane Grp Cap(c), veh/h	159	0	104	164	128	0	727	1340	1353	760	1358	1419
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.11	0.00	0.06	0.19	0.19	0.12	0.23	0.23
Avail Cap(c_a), veh/h	523	0	450	474	553	0	817	1340	1353	829	1358	1419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	0.0	0.0	48.4	48.2	0.0	2.6	3.9	3.9	2.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.3	0.4	0.0	0.0	0.3	0.3	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.5	0.4	0.0	0.1	1.4	1.5	0.3	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	0.0	0.0	48.7	48.6	0.0	2.6	4.2	4.2	2.5	0.4	0.4
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			31			555			730	
Approach Delay, s/veh		52.8			48.6			4.1			0.6	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	89.1		12.4	9.7	87.9		12.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.2	3.2	6.6		7.3
Green Ext Time (p_c), s	0.0	4.3		0.1	0.1	3.3		0.4

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	787	83	132	425	119	36	255	107	101	183	62
Future Volume (veh/h)	163	787	83	132	425	119	36	255	107	101	183	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	233	865	78	147	472	32	47	280	0	107	220	17
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	353	906	82	214	936	427	588	1507		554	1543	687
Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.27	0.03	0.42	0.00	0.05	0.43	0.43
Sat Flow, veh/h	1810	3322	300	1810	3497	1594	1810	3610	1560	1753	3554	1583
Grp Volume(v), veh/h	233	466	477	147	472	32	47	280	0	107	220	17
Grp Sat Flow(s),veh/h/ln	1810	1791	1830	1810	1749	1594	1810	1805	1560	1753	1777	1583
Q Serve(g_s), s	9.0	28.2	28.2	6.4	12.6	1.7	1.6	5.4	0.0	3.8	4.1	0.7
Cycle Q Clear(g_c), s	9.0	28.2	28.2	6.4	12.6	1.7	1.6	5.4	0.0	3.8	4.1	0.7
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	488	499	214	936	427	588	1507		554	1543	687
V/C Ratio(X)	0.66	0.95	0.95	0.69	0.50	0.08	0.08	0.19		0.19	0.14	0.02
Avail Cap(c_a), veh/h	353	488	499	306	1113	507	674	1507		607	1543	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	39.3	39.3	29.6	34.1	30.1	17.0	20.2	0.0	16.7	18.8	17.8
Incr Delay (d2), s/veh	4.5	30.9	30.5	3.9	0.4	0.1	0.1	0.3	0.0	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	16.1	16.4	2.9	5.3	0.6	0.7	2.2	0.0	1.5	1.7	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	70.2	69.8	33.5	34.5	30.2	17.0	20.5	0.0	16.8	19.0	17.9
LnGrp LOS	C	E	E	C	C	C	B	C		B	B	B
Approach Vol, veh/h		1176			651			327	A		344	
Approach Delay, s/veh		62.9			34.1			20.0			18.3	
Approach LOS		E			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	52.7	14.0	34.4	10.6	50.9	13.4	35.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	3.8	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	13.6	6.1	11.0	14.6	5.8	7.4	8.4	30.2
Green Ext Time (p_c), s	0.0	1.4	0.0	2.9	0.1	1.7	0.2	0.0

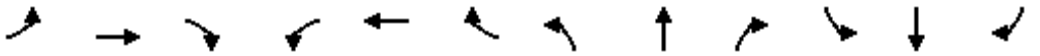
Intersection Summary	
HCM 6th Ctrl Delay	43.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	10	25	107	10	104	42	1304	37	51	502	70
Future Volume (vph)	28	10	25	107	10	104	42	1304	37	51	502	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.88		1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1840		1737	1594		1770	3539	1583	1770	3474	
Flt Permitted		0.79		0.44	0.94		0.38	1.00	1.00	0.11	1.00	
Satd. Flow (perm)		1486		810	1498		712	3539	1583	198	3474	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	30	11	27	116	11	113	46	1417	40	55	546	76
RTOR Reduction (vph)	0	20	0	0	97	0	0	0	17	0	7	0
Lane Group Flow (vph)	0	48	0	104	39	0	46	1417	23	55	615	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		8.6		19.1	19.1		84.1	78.4	78.4	84.5	78.6	
Effective Green, g (s)		8.6		19.1	19.1		84.1	78.4	78.4	84.5	78.6	
Actuated g/C Ratio		0.06		0.14	0.14		0.62	0.58	0.58	0.63	0.58	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		94		114	211		488	2055	919	192	2022	
v/s Ratio Prot							0.00	c0.40		c0.01	0.18	
v/s Ratio Perm		c0.03		c0.13	0.03		0.05		0.01	0.17		
v/c Ratio		0.51		0.91	0.18		0.09	0.69	0.03	0.29	0.30	
Uniform Delay, d1		61.2		57.1	51.1		10.0	19.8	12.0	14.9	14.3	
Progression Factor		1.00		1.00	1.00		0.98	0.87	1.00	1.00	1.00	
Incremental Delay, d2		4.7		57.3	0.4		0.1	1.2	0.0	0.8	0.4	
Delay (s)		65.9		114.4	51.5		9.9	18.4	12.1	15.7	14.7	
Level of Service		E		F	D		A	B	B	B	B	
Approach Delay (s)		65.9			78.8			17.9			14.8	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	10	18	10	10	70	10	419	23	180	271	10
Future Volume (vph)	14	10	18	10	10	70	10	419	23	180	271	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.92			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1731			1863	1568	1798	3540		2040	3509	
Flt Permitted	0.73	1.00			0.86	1.00	0.57	1.00		0.45	1.00	
Satd. Flow (perm)	1386	1731			1627	1568	1072	3540		967	3509	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	20	20	24	16	26	84	13	466	27	225	288	16
RTOR Reduction (vph)	0	22	0	0	0	79	0	2	0	0	2	0
Lane Group Flow (vph)	20	22	0	0	42	5	13	491	0	225	302	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	7.0	7.0			7.0	7.0	84.5	82.6		93.0	87.1	
Effective Green, g (s)	7.0	7.0			7.0	7.0	84.5	82.6		93.0	87.1	
Actuated g/C Ratio	0.06	0.06			0.06	0.06	0.77	0.75		0.85	0.79	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	88	110			103	99	836	2658		879	2778	
v/s Ratio Prot		0.01					0.00	0.14		c0.01	0.09	
v/s Ratio Perm	0.01				c0.03	0.00	0.01			c0.20		
v/c Ratio	0.23	0.20			0.41	0.05	0.02	0.18		0.26	0.11	
Uniform Delay, d1	48.9	48.8			49.5	48.4	3.0	4.0		1.6	2.6	
Progression Factor	1.00	1.00			1.00	1.00	0.59	0.58		1.00	1.00	
Incremental Delay, d2	1.3	0.9			2.6	0.2	0.0	0.2		0.1	0.1	
Delay (s)	50.2	49.7			52.1	48.6	1.8	2.5		1.6	2.7	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		49.9			49.8			2.4			2.2	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	46.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	826	96	318	1243	207	117	524	202	99	606	213
Future Volume (veh/h)	132	826	96	318	1243	207	117	524	202	99	606	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1885	1900	1900	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	150	860	106	335	1351	73	144	589	93	119	758	80
Peak Hour Factor	0.88	0.96	0.77	0.95	0.92	0.89	0.81	0.89	0.88	0.83	0.80	0.79
Percent Heavy Veh, %	0	2	0	0	1	0	0	1	2	0	0	0
Cap, veh/h	200	1015	124	448	1498	467	196	1633	720	168	1617	719
Arrive On Green	0.06	0.22	0.22	0.13	0.29	0.29	0.06	0.46	0.46	0.05	0.45	0.45
Sat Flow, veh/h	3510	4605	565	3510	5147	1605	3510	3582	1580	3510	3610	1605
Grp Volume(v), veh/h	150	635	331	335	1351	73	144	589	93	119	758	80
Grp Sat Flow(s),veh/h/ln	1755	1702	1766	1755	1716	1605	1755	1791	1580	1755	1805	1605
Q Serve(g_s), s	5.7	24.1	24.3	12.4	34.1	3.8	5.5	14.5	2.9	4.5	19.8	3.0
Cycle Q Clear(g_c), s	5.7	24.1	24.3	12.4	34.1	3.8	5.5	14.5	2.9	4.5	19.8	3.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	750	389	448	1498	467	196	1633	720	168	1617	719
V/C Ratio(X)	0.75	0.85	0.85	0.75	0.90	0.16	0.73	0.36	0.13	0.71	0.47	0.11
Avail Cap(c_a), veh/h	234	1009	523	448	1677	523	624	1633	720	286	1617	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	50.4	50.5	56.8	46.0	24.4	62.7	23.9	8.4	63.3	26.0	12.6
Incr Delay (d2), s/veh	8.6	4.0	7.7	6.1	6.2	0.1	2.0	0.6	0.4	2.0	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	10.4	11.3	5.8	14.9	1.8	2.5	6.2	1.7	2.1	8.7	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.3	54.4	58.2	62.8	52.2	24.4	64.7	24.5	8.8	65.3	27.0	12.9
LnGrp LOS	E	D	E	E	D	C	E	C	A	E	C	B
Approach Vol, veh/h		1116			1759			826			957	
Approach Delay, s/veh		57.8			53.1			29.8			30.6	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	65.5	12.7	44.3	11.5	66.5	22.2	34.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	38.0	9.0	44.0	11.0	51.0	13.0	40.0
Max Q Clear Time (g_c+I1), s	7.5	21.8	7.7	36.1	6.5	16.5	14.4	26.3
Green Ext Time (p_c), s	0.1	3.3	0.0	3.2	0.0	2.8	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	45.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	1238	44	98	1891	67	51	16	46	130	22	64
Future Volume (veh/h)	46	1238	44	98	1891	67	51	16	46	130	22	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	50	1346	46	107	2055	71	55	17	0	141	24	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	3539	121	389	3563	123	163	67	0	334	78	66
Arrive On Green	0.06	1.00	1.00	0.07	1.00	1.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1781	5070	173	1781	5068	175	1781	1870	0	3456	1870	1585
Grp Volume(v), veh/h	50	904	488	107	1379	747	55	17	0	141	24	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1839	1781	1702	1839	1781	1870	0	1728	1870	1585
Q Serve(g_s), s	1.1	0.0	0.0	2.4	0.0	0.0	4.0	1.2	0.0	5.3	1.7	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	2.4	0.0	0.0	4.0	1.2	0.0	5.3	1.7	0.0
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	242	2376	1284	389	2393	1293	163	67	0	334	78	66
V/C Ratio(X)	0.21	0.38	0.38	0.28	0.58	0.58	0.34	0.25	0.00	0.42	0.31	0.00
Avail Cap(c_a), veh/h	292	2376	1284	430	2393	1293	173	374	0	334	374	317
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	4.9	0.0	0.0	59.6	63.3	0.0	59.5	62.8	0.0
Incr Delay (d2), s/veh	0.2	0.5	0.9	0.1	1.0	1.9	0.5	0.7	0.0	0.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.3	0.8	0.3	0.7	1.8	0.6	0.0	2.3	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.5	0.9	5.0	1.0	1.9	60.1	64.0	0.0	59.8	63.6	0.0
LnGrp LOS	A	A	A	A	A	A	E	E	A	E	E	A
Approach Vol, veh/h		1442			2233			72			165	
Approach Delay, s/veh		0.8			1.5			61.0			60.4	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	101.2	11.2	10.6	11.2	101.9	12.0	9.9
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	8.0	69.0	6.0	27.0	8.0	69.0	6.0	27.0
Max Q Clear Time (g_c+I1), s	4.4	2.0	6.0	3.7	3.1	2.0	7.3	3.2
Green Ext Time (p_c), s	0.0	31.7	0.0	0.0	0.0	54.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	1290	54	98	1612	229	34	35	46	450	94	136
Future Volume (veh/h)	108	1290	54	98	1612	229	34	35	46	450	94	136
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	1402	56	107	1752	137	37	38	11	489	102	18
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	2867	114	331	2892	898	156	59	17	661	319	270
Arrive On Green	0.09	1.00	1.00	0.08	1.00	1.00	0.03	0.04	0.04	0.15	0.17	0.17
Sat Flow, veh/h	1781	5037	201	1781	5106	1585	1781	1394	404	3456	1870	1585
Grp Volume(v), veh/h	117	947	511	107	1752	137	37	0	49	489	102	18
Grp Sat Flow(s),veh/h/ln	1781	1702	1834	1781	1702	1585	1781	0	1798	1728	1870	1585
Q Serve(g_s), s	3.8	0.0	0.0	3.5	0.0	0.0	2.7	0.0	3.6	17.7	6.5	1.3
Cycle Q Clear(g_c), s	3.8	0.0	0.0	3.5	0.0	0.0	2.7	0.0	3.6	17.7	6.5	1.3
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.22	1.00		1.00
Lane Grp Cap(c), veh/h	265	1937	1044	331	2892	898	156	0	76	661	319	270
V/C Ratio(X)	0.44	0.49	0.49	0.32	0.61	0.15	0.24	0.00	0.65	0.74	0.32	0.07
Avail Cap(c_a), veh/h	308	1937	1044	378	2892	898	265	0	200	736	360	305
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	0.0	0.0	10.7	0.0	0.0	59.6	0.0	63.7	49.8	49.1	47.0
Incr Delay (d2), s/veh	0.4	0.9	1.6	0.2	1.0	0.4	0.3	0.0	3.4	2.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	0.5	1.3	0.3	0.1	1.2	0.0	1.7	7.9	3.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.0	0.9	1.6	10.9	1.0	0.4	59.9	0.0	67.1	52.7	49.3	47.0
LnGrp LOS	B	A	A	B	A	A	E	A	E	D	D	D
Approach Vol, veh/h		1575			1996			86			609	
Approach Delay, s/veh		1.9			1.4			64.0			51.9	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	83.5	9.8	29.0	12.4	83.8	27.1	11.7
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	5.8	62.0	12.0	26.0	9.0	62.0	23.0	* 15
Max Q Clear Time (g_c+I1), s	5.8	2.0	4.7	8.5	5.5	2.0	19.7	5.6
Green Ext Time (p_c), s	0.0	43.9	0.0	0.3	0.0	32.2	0.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	1626	180	225	1586	191	223	433	325	491	560	147
Future Volume (veh/h)	141	1626	180	225	1586	191	223	433	325	491	560	147
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	153	1767	181	245	1724	194	242	471	353	534	609	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	2036	209	476	2321	261	256	535	239	590	708	165
Arrive On Green	0.09	0.34	0.34	0.14	0.39	0.39	0.07	0.15	0.15	0.06	0.08	0.08
Sat Flow, veh/h	0	5974	612	3456	5911	665	3456	3554	1585	3456	2862	666
Grp Volume(v), veh/h	0	1427	521	245	1407	511	242	471	353	534	378	373
Grp Sat Flow(s),veh/h/ln	0	1609	1760	1728	1609	1751	1728	1777	1585	1728	1777	1751
Q Serve(g_s), s	0.0	37.4	37.4	8.9	33.8	33.8	9.4	17.5	14.7	20.7	28.3	28.4
Cycle Q Clear(g_c), s	0.0	37.4	37.4	8.9	33.8	33.8	9.4	17.5	14.7	20.7	28.3	28.4
Prop In Lane	0.00		0.35	1.00		0.38	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	0	1644	600	476	1894	687	256	535	239	590	440	433
V/C Ratio(X)	0.00	0.87	0.87	0.51	0.74	0.74	0.95	0.88	1.48	0.90	0.86	0.86
Avail Cap(c_a), veh/h	0	1644	600	476	1894	687	256	579	258	640	487	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	41.7	41.7	54.0	35.2	35.2	62.2	56.1	30.1	62.6	59.7	59.7
Incr Delay (d2), s/veh	0.0	6.5	15.6	1.3	2.7	7.1	41.7	13.1	236.7	14.9	12.3	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.3	18.3	3.9	13.2	15.2	5.6	8.8	21.3	10.9	15.1	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	48.2	57.3	55.3	37.8	42.3	103.9	69.2	266.8	77.5	72.0	72.5
LnGrp LOS	A	D	E	E	D	D	F	E	F	E	E	E
Approach Vol, veh/h		1948			2163			1066			1285	
Approach Delay, s/veh		50.6			40.9			142.5			74.4	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	53.0	17.0	39.4	18.6	60.0	30.1	26.3
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	15.0	46.0	10.0	37.0	8.0	53.0	25.0	22.0
Max Q Clear Time (g_c+I1), s	10.9	39.4	11.4	30.4	0.0	35.8	22.7	19.5
Green Ext Time (p_c), s	0.4	5.3	0.0	1.8	0.0	11.3	0.3	0.8

Intersection Summary	
HCM 6th Ctrl Delay	67.2
HCM 6th LOS	E

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	13	10	44	10	976	45	102	650	10
Future Volume (veh/h)	10	10	10	13	10	44	10	976	45	102	650	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1900	1900	1885	1900	1900
Adj Flow Rate, veh/h	20	20	0	16	40	0	20	1109	31	121	747	32
Peak Hour Factor	0.50	0.50	0.63	0.80	0.25	0.65	0.50	0.88	0.81	0.84	0.87	0.25
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	0	0
Cap, veh/h	73	41	78	150	96	0	644	2758	77	527	2794	120
Arrive On Green	0.05	0.05	0.00	0.05	0.05	0.00	0.04	1.00	1.00	0.09	1.00	1.00
Sat Flow, veh/h	477	814	1546	1414	1900	0	1810	3586	100	1795	3526	151
Grp Volume(v), veh/h	40	0	0	16	40	0	20	558	582	121	382	397
Grp Sat Flow(s),veh/h/ln	1292	0	1546	1414	1900	0	1810	1805	1882	1795	1805	1872
Q Serve(g_s), s	1.5	0.0	0.0	0.0	2.2	0.0	0.3	0.0	0.0	1.5	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	0.9	2.2	0.0	0.3	0.0	0.0	1.5	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.05	1.00		0.08
Lane Grp Cap(c), veh/h	114	0	78	150	96	0	644	1388	1447	527	1430	1484
V/C Ratio(X)	0.35	0.00	0.00	0.11	0.42	0.00	0.03	0.40	0.40	0.23	0.27	0.27
Avail Cap(c_a), veh/h	500	0	450	490	553	0	754	1388	1447	595	1430	1484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	0.0	0.0	50.0	50.7	0.0	2.4	0.0	0.0	2.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	1.1	0.0	0.0	0.9	0.8	0.1	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.4	1.1	0.0	0.1	0.3	0.3	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	0.0	0.0	50.2	51.7	0.0	2.4	0.9	0.8	2.0	0.5	0.4
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		40			56			1160			900	
Approach Delay, s/veh		52.1			51.3			0.9			0.7	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	92.2		10.5	9.9	89.6		10.5				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0		4.2	3.5	2.0		5.8				
Green Ext Time (p_c), s	0.0	2.3		0.1	0.0	3.8		0.1				

Intersection Summary	
HCM 6th Ctrl Delay	3.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	560	118	215	1167	206	172	449	160	137	420	177
Future Volume (veh/h)	110	560	118	215	1167	206	172	449	160	137	420	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1870	1900	1900	1885	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	145	571	119	253	1255	112	189	576	0	149	452	13
Peak Hour Factor	0.76	0.98	0.84	0.85	0.93	0.84	0.91	0.78	0.80	0.92	0.93	0.84
Percent Heavy Veh, %	1	1	0	2	0	0	1	0	1	0	0	0
Cap, veh/h	253	1343	279	455	1721	766	305	718		254	720	318
Arrive On Green	0.06	0.46	0.46	0.08	0.48	0.48	0.08	0.20	0.00	0.16	0.40	0.40
Sat Flow, veh/h	1795	2951	613	1781	3610	1606	1795	3610	1598	1810	3610	1596
Grp Volume(v), veh/h	145	346	344	253	1255	112	189	576	0	149	452	13
Grp Sat Flow(s),veh/h/ln	1795	1791	1773	1781	1805	1606	1795	1805	1598	1810	1805	1596
Q Serve(g_s), s	4.7	14.3	14.4	8.4	30.7	4.3	9.0	16.7	0.0	7.1	11.0	0.5
Cycle Q Clear(g_c), s	4.7	14.3	14.4	8.4	30.7	4.3	9.0	16.7	0.0	7.1	11.0	0.5
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	815	807	455	1721	766	305	718		254	720	318
V/C Ratio(X)	0.57	0.42	0.43	0.56	0.73	0.15	0.62	0.80		0.59	0.63	0.04
Avail Cap(c_a), veh/h	292	815	807	455	1721	766	305	985		335	1149	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	20.2	20.3	15.2	23.1	16.2	32.8	42.0	0.0	29.6	29.8	26.6
Incr Delay (d2), s/veh	0.8	1.6	1.6	0.9	2.8	0.4	2.9	2.3	0.0	0.8	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	6.1	6.0	3.3	12.8	1.6	4.2	7.5	0.0	2.8	4.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.5	21.9	21.9	16.1	25.8	16.6	35.7	44.3	0.0	30.4	30.1	26.7
LnGrp LOS	C	C	C	B	C	B	D	D		C	C	C
Approach Vol, veh/h		835			1620			765	A		614	
Approach Delay, s/veh		21.6			23.7			42.2			30.1	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	55.1	14.0	26.9	11.6	57.4	14.0	26.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	10.4	16.4	11.0	13.0	6.7	32.7	9.1	18.7
Green Ext Time (p_c), s	0.0	2.5	0.0	1.5	0.0	2.4	0.0	1.5

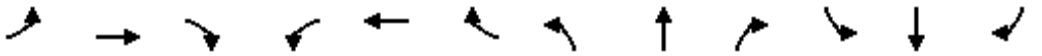
Intersection Summary	
HCM 6th Ctrl Delay	28.0
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	74	10	54	123	10	64	74	781	69	42	1211	72
Future Volume (vph)	74	10	54	123	10	64	74	781	69	42	1211	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.97		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1833		1737	1626		1770	3539	1583	1770	3510	
Flt Permitted		0.77		0.53	0.87		0.08	1.00	1.00	0.26	1.00	
Satd. Flow (perm)		1458		976	1432		142	3539	1583	490	3510	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	11	59	134	11	70	80	849	75	46	1316	78
RTOR Reduction (vph)	0	18	0	0	57	0	0	0	37	0	3	0
Lane Group Flow (vph)	0	132	0	111	47	0	80	849	38	46	1391	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		17.4		19.6	19.6		76.5	69.2	69.2	73.5	67.7	
Effective Green, g (s)		17.4		19.6	19.6		76.5	69.2	69.2	73.5	67.7	
Actuated g/C Ratio		0.13		0.15	0.15		0.57	0.51	0.51	0.54	0.50	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		187		141	207		168	1814	811	321	1760	
v/s Ratio Prot							c0.03	0.24		0.01	c0.40	
v/s Ratio Perm		c0.09		c0.11	0.03		0.24		0.02	0.07		
v/c Ratio		0.70		0.79	0.23		0.48	0.47	0.05	0.14	0.79	
Uniform Delay, d1		56.3		55.7	51.0		21.6	21.1	16.4	15.2	27.8	
Progression Factor		1.00		1.00	1.00		2.36	1.82	12.04	1.00	1.00	
Incremental Delay, d2		11.4		24.5	0.6		1.1	0.4	0.1	0.2	3.7	
Delay (s)		67.7		80.2	51.6		52.1	38.8	197.9	15.4	31.5	
Level of Service		E		F	D		D	D	F	B	C	
Approach Delay (s)		67.7			66.3			51.8			31.0	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



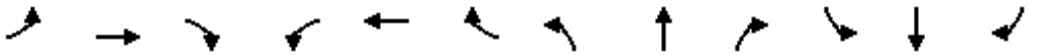
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	22	24	10	250	19	701	10	69	602	19
Future Volume (vph)	10	10	22	24	10	250	19	701	10	69	602	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.90			1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1710			1730	1599	1805	3599		2024	3588	
Flt Permitted	0.72	1.00			0.81	1.00	0.38	1.00		0.33	1.00	
Satd. Flow (perm)	1374	1710			1446	1599	723	3599		694	3588	
Peak-hour factor, PHF	0.83	0.63	0.69	0.75	0.50	0.74	0.82	0.92	0.75	0.66	0.88	0.65
Adj. Flow (vph)	12	16	32	32	20	338	23	762	13	105	684	29
RTOR Reduction (vph)	0	28	0	0	0	236	0	1	0	0	2	0
Lane Group Flow (vph)	12	20	0	0	52	102	23	774	0	105	711	0
Confl. Peds. (#/hr)									3	3		
Heavy Vehicles (%)	0%	0%	0%	0%	17%	1%	0%	0%	0%	1%	0%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	13.1	13.1			13.1	13.1	79.2	77.1		86.6	80.8	
Effective Green, g (s)	13.1	13.1			13.1	13.1	79.2	77.1		86.6	80.8	
Actuated g/C Ratio	0.12	0.12			0.12	0.12	0.72	0.70		0.79	0.73	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	163	203			172	190	541	2522		616	2635	
v/s Ratio Prot		0.01					0.00	c0.22		c0.01	0.20	
v/s Ratio Perm	0.01				0.04	c0.06	0.03			0.13		
v/c Ratio	0.07	0.10			0.30	0.54	0.04	0.31		0.17	0.27	
Uniform Delay, d1	43.1	43.2			44.3	45.6	4.4	6.3		2.9	4.8	
Progression Factor	1.00	1.00			1.00	1.00	0.44	0.40		1.00	1.00	
Incremental Delay, d2	0.2	0.2			1.0	2.9	0.0	0.3		0.0	0.3	
Delay (s)	43.3	43.4			45.3	48.5	2.0	2.8		3.0	5.1	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		43.4			48.1			2.7			4.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	51.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	1100	55	165	840	145	55	560	230	65	205	60
Future Volume (veh/h)	185	1100	55	165	840	145	55	560	230	65	205	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	206	1250	60	190	944	38	60	659	108	94	247	19
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	255	1412	68	236	1424	441	114	1658	732	142	1658	750
Arrive On Green	0.07	0.28	0.28	0.14	0.56	0.56	0.03	0.46	0.46	0.04	0.47	0.47
Sat Flow, veh/h	3483	4991	240	3401	5106	1582	3456	3610	1594	3510	3554	1607
Grp Volume(v), veh/h	206	852	458	190	944	38	60	659	108	94	247	19
Grp Sat Flow(s),veh/h/ln	1742	1702	1827	1700	1702	1582	1728	1805	1594	1755	1777	1607
Q Serve(g_s), s	7.9	32.3	32.4	7.3	17.5	1.5	2.3	16.3	5.3	3.6	5.4	0.9
Cycle Q Clear(g_c), s	7.9	32.3	32.4	7.3	17.5	1.5	2.3	16.3	5.3	3.6	5.4	0.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	963	517	236	1424	441	114	1658	732	142	1658	750
V/C Ratio(X)	0.81	0.89	0.89	0.81	0.66	0.09	0.52	0.40	0.15	0.66	0.15	0.03
Avail Cap(c_a), veh/h	284	1286	690	302	1967	609	179	1658	732	468	1658	750
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	46.3	46.3	57.3	25.4	21.8	64.2	24.2	21.2	63.9	20.6	19.4
Incr Delay (d2), s/veh	12.8	5.0	8.8	9.1	0.2	0.0	1.4	0.7	0.4	2.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	13.9	15.5	3.2	5.1	0.6	1.0	7.1	2.0	1.6	2.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	51.3	55.1	66.3	25.6	21.9	65.6	24.9	21.6	65.8	20.8	19.5
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	C	B
Approach Vol, veh/h		1516			1172			827			360	
Approach Delay, s/veh		55.6			32.1			27.4			32.5	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	68.0	14.9	42.7	10.5	67.0	14.4	43.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	45.0	11.0	52.0	18.0	34.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	4.3	7.4	9.9	19.5	5.6	18.3	9.3	34.4
Green Ext Time (p_c), s	0.0	1.1	0.0	3.2	0.1	2.8	0.1	3.8

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	1760	55	95	1195	210	30	40	80	70	15	20
Future Volume (veh/h)	105	1760	55	95	1195	210	30	40	80	70	15	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	114	1913	58	103	1299	211	33	43	26	76	16	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	326	3139	95	248	2727	443	168	57	34	252	113	96
Arrive On Green	0.07	1.00	1.00	0.07	1.00	1.00	0.03	0.06	0.06	0.04	0.07	0.00
Sat Flow, veh/h	1603	4583	139	1603	3983	647	1603	982	594	3110	1683	1427
Grp Volume(v), veh/h	114	1278	693	103	999	511	33	0	69	76	16	0
Grp Sat Flow(s),veh/h/ln	1603	1532	1658	1603	1532	1567	1603	0	1576	1555	1683	1427
Q Serve(g_s), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Prop In Lane	1.00		0.08	1.00		0.41	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	326	2099	1136	248	2097	1073	168	0	91	252	113	96
V/C Ratio(X)	0.35	0.61	0.61	0.42	0.48	0.48	0.20	0.00	0.75	0.30	0.14	0.00
Avail Cap(c_a), veh/h	338	2099	1136	309	2097	1073	221	0	199	349	224	190
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	0.0	5.4	0.0	0.0	57.8	0.0	62.6	57.0	59.3	0.0
Incr Delay (d2), s/veh	0.2	1.3	2.4	0.4	0.8	1.5	0.2	0.0	4.7	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	0.8	0.8	0.2	0.5	1.1	0.0	2.5	1.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	1.3	2.4	5.8	0.8	1.5	58.0	0.0	67.3	57.2	59.5	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	E	A
Approach Vol, veh/h		2085			1613			102			92	
Approach Delay, s/veh		1.9			1.3			64.3			57.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	99.5	9.5	14.1	11.9	99.4	10.8	12.8
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	10.0	74.0	8.0	18.0	6.0	78.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	4.7	2.0	4.6	3.2	5.0	2.0	5.1	7.8
Green Ext Time (p_c), s	0.0	53.6	0.0	0.0	0.0	38.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1435	25	80	1350	850	30	80	70	90	20	30
Future Volume (veh/h)	240	1435	25	80	1350	850	30	80	70	90	20	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	1560	26	87	1467	665	33	87	50	98	22	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	3270	54	306	3007	934	229	104	60	282	212	180
Arrive On Green	0.16	1.00	1.00	0.07	1.00	1.00	0.03	0.09	0.09	0.04	0.11	0.11
Sat Flow, veh/h	1781	5173	86	1781	5106	1585	1781	1115	641	3456	1870	1585
Grp Volume(v), veh/h	261	1027	559	87	1467	665	33	0	137	98	22	3
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	1781	1702	1585	1781	0	1755	1728	1870	1585
Q Serve(g_s), s	8.3	0.0	0.0	2.6	0.0	0.0	2.2	0.0	10.4	3.4	1.4	0.2
Cycle Q Clear(g_c), s	8.3	0.0	0.0	2.6	0.0	0.0	2.2	0.0	10.4	3.4	1.4	0.2
Prop In Lane	1.00		0.05	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	305	2152	1172	306	3007	934	229	0	163	282	212	180
V/C Ratio(X)	0.86	0.48	0.48	0.28	0.49	0.71	0.14	0.00	0.84	0.35	0.10	0.02
Avail Cap(c_a), veh/h	442	2152	1172	309	3007	934	288	0	234	325	236	200
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.7	0.0	0.0	9.6	0.0	0.0	53.3	0.0	60.2	52.7	53.7	53.2
Incr Delay (d2), s/veh	7.7	0.8	1.4	0.2	0.6	4.6	0.1	0.0	11.8	0.3	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.2	0.5	1.0	0.2	1.2	1.0	0.0	5.2	1.5	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.8	1.4	9.8	0.6	4.6	53.5	0.0	72.0	53.0	53.8	53.2
LnGrp LOS	C	A	A	A	A	A	D	A	E	D	D	D
Approach Vol, veh/h		1847			2219			170			123	
Approach Delay, s/veh		3.7			2.1			68.4			53.1	
Approach LOS		A			A			E			D	

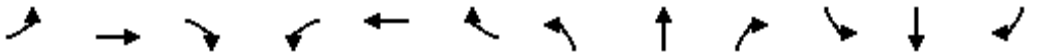
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	86.5	9.5	21.3	11.8	92.3	12.3	18.6
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	21.0	63.0	8.0	17.0	5.0	79.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	10.3	2.0	4.2	3.4	4.6	2.0	5.4	12.4
Green Ext Time (p_c), s	0.3	46.5	0.0	0.0	0.0	41.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1445	155	225	1900	745	145	505	160	140	345	115
Future Volume (veh/h)	170	1445	155	225	1900	745	145	505	160	140	345	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	1571	156	245	2065	770	158	549	174	152	375	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1889	187	590	2325	764	154	605	270	204	517	133
Arrive On Green	0.18	0.80	0.80	0.17	0.48	0.48	0.04	0.17	0.17	0.02	0.06	0.06
Sat Flow, veh/h	1781	4722	468	3456	4826	1585	3456	3554	1585	3456	2795	722
Grp Volume(v), veh/h	185	1132	595	245	2065	770	158	549	174	152	237	236
Grp Sat Flow(s),veh/h/ln	1781	1702	1786	1728	1609	1585	1728	1777	1585	1728	1777	1740
Q Serve(g_s), s	12.0	26.8	26.9	8.5	52.3	65.1	6.0	20.5	9.4	5.9	17.7	18.0
Cycle Q Clear(g_c), s	12.0	26.8	26.9	8.5	52.3	65.1	6.0	20.5	9.4	5.9	17.7	18.0
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	158	1362	714	590	2325	764	154	605	270	204	328	322
V/C Ratio(X)	1.17	0.83	0.83	0.42	0.89	1.01	1.03	0.91	0.64	0.75	0.72	0.73
Avail Cap(c_a), veh/h	158	1362	714	590	2325	764	154	632	282	307	395	387
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	10.8	10.8	50.0	31.7	35.0	64.5	55.0	24.0	65.2	60.0	60.1
Incr Delay (d2), s/veh	124.0	6.0	10.9	0.7	5.5	34.6	80.4	16.0	3.5	2.0	3.6	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	5.2	6.4	3.7	20.3	30.7	4.3	10.4	3.8	2.7	8.8	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	179.5	16.8	21.7	50.6	37.2	69.6	144.9	71.0	27.5	67.2	63.6	64.4
LnGrp LOS	F	B	C	D	D	F	F	E	C	E	E	E
Approach Vol, veh/h		1912			3080			881			625	
Approach Delay, s/veh		34.1			46.4			75.7			64.8	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.1	61.0	13.0	30.9	19.0	72.1	15.0	29.0
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	18.0	54.0	6.0	30.0	12.0	60.0	12.0	24.0
Max Q Clear Time (g_c+I1), s	10.5	28.9	8.0	20.0	14.0	67.1	7.9	22.5
Green Ext Time (p_c), s	0.7	13.0	0.0	1.3	0.0	0.0	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	10	10	10	10	425	55	70	560	10
Future Volume (veh/h)	10	10	10	10	10	10	10	425	55	70	560	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	17	14	0	40	489	65	97	675	13
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	61	104	164	128	0	701	2376	314	736	2726	52
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.03	0.75	0.75	0.09	1.00	1.00
Sat Flow, veh/h	730	902	1546	1389	1900	0	1810	3154	417	1753	3566	69
Grp Volume(v), veh/h	80	0	0	17	14	0	40	275	279	97	336	352
Grp Sat Flow(s),veh/h/ln	1632	0	1546	1389	1900	0	1810	1777	1795	1753	1777	1858
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.8	0.0	0.5	5.0	5.0	1.3	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.2	0.8	0.0	0.5	5.0	5.0	1.3	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.23	1.00		0.04
Lane Grp Cap(c), veh/h	159	0	104	164	128	0	701	1338	1352	736	1358	1420
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.11	0.00	0.06	0.21	0.21	0.13	0.25	0.25
Avail Cap(c_a), veh/h	523	0	450	474	553	0	791	1338	1352	804	1358	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	0.0	0.0	48.4	48.2	0.0	2.6	4.0	4.0	2.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.3	0.4	0.0	0.0	0.3	0.3	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.5	0.4	0.0	0.1	1.6	1.6	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	0.0	0.0	48.7	48.6	0.0	2.6	4.3	4.3	2.5	0.4	0.4
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			31			594			785	
Approach Delay, s/veh		52.8			48.6			4.2			0.7	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	89.1		12.4	9.7	87.9		12.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.2	3.3	7.0		7.3				
Green Ext Time (p_c), s	0.0	4.6		0.1	0.1	3.6		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		5.9	
HCM 6th LOS		A	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	850	90	140	460	130	40	275	115	110	195	65
Future Volume (veh/h)	175	850	90	140	460	130	40	275	115	110	195	65
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	250	934	86	156	511	57	52	302	0	117	235	0
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	339	904	83	211	948	432	562	1481		539	1525	680
Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.27	0.04	0.41	0.00	0.02	0.14	0.00
Sat Flow, veh/h	1810	3315	305	1810	3497	1594	1810	3610	1560	1753	3554	1585
Grp Volume(v), veh/h	250	505	515	156	511	57	52	302	0	117	235	0
Grp Sat Flow(s),veh/h/ln	1810	1791	1829	1810	1749	1594	1810	1805	1560	1753	1777	1585
Q Serve(g_s), s	9.0	30.0	30.0	6.7	13.7	3.0	1.8	5.9	0.0	4.2	6.4	0.0
Cycle Q Clear(g_c), s	9.0	30.0	30.0	6.7	13.7	3.0	1.8	5.9	0.0	4.2	6.4	0.0
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	488	499	211	948	432	562	1481		539	1525	680
V/C Ratio(X)	0.74	1.03	1.03	0.74	0.54	0.13	0.09	0.20		0.22	0.15	0.00
Avail Cap(c_a), veh/h	339	488	499	296	1113	507	579	1481		586	1525	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.8	40.0	40.0	29.4	34.2	30.3	17.4	20.9	0.0	17.7	29.7	0.0
Incr Delay (d2), s/veh	8.2	49.5	49.1	6.0	0.5	0.1	0.1	0.3	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	19.4	19.8	3.2	5.7	1.1	0.7	2.5	0.0	1.8	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.1	89.5	89.1	35.4	34.7	30.4	17.5	21.2	0.0	17.9	29.9	0.0
LnGrp LOS	D	F	F	D	C	C	B	C		B	C	A
Approach Vol, veh/h		1270			724			354	A		352	
Approach Delay, s/veh		79.4			34.5			20.7			25.9	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	52.2	14.0	34.8	11.1	50.1	13.8	35.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	3.8	8.4	11.0	15.7	6.2	7.9	8.7	32.0
Green Ext Time (p_c), s	0.0	1.5	0.0	3.2	0.1	1.9	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.7
HCM 6th LOS	D

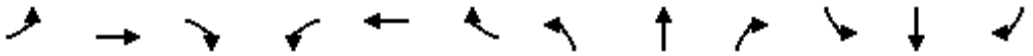
Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	25	115	10	110	45	1405	40	55	540	75
Future Volume (vph)	30	10	25	115	10	110	45	1405	40	55	540	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.88		1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1842		1737	1593		1770	3539	1583	1770	3474	
Flt Permitted		0.78		0.47	0.94		0.36	1.00	1.00	0.08	1.00	
Satd. Flow (perm)		1466		852	1500		668	3539	1583	150	3474	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	27	125	11	120	49	1527	43	60	587	82
RTOR Reduction (vph)	0	18	0	0	103	0	0	0	18	0	7	0
Lane Group Flow (vph)	0	53	0	112	41	0	49	1527	25	60	662	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Effective Green, g (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Actuated g/C Ratio		0.07		0.14	0.14		0.62	0.57	0.57	0.62	0.58	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		97		121	214		460	2034	909	166	2004	
v/s Ratio Prot							0.00	c0.43		c0.02	0.19	
v/s Ratio Perm		c0.04		c0.13	0.03		0.06		0.02	0.21		
v/c Ratio		0.55		0.93	0.19		0.11	0.75	0.03	0.36	0.33	
Uniform Delay, d1		61.0		57.1	51.0		10.4	21.5	12.4	17.5	14.9	
Progression Factor		1.00		1.00	1.00		0.66	0.58	1.00	1.00	1.00	
Incremental Delay, d2		6.2		58.7	0.4		0.0	1.2	0.0	1.3	0.4	
Delay (s)		67.3		115.8	51.4		6.9	13.7	12.4	18.9	15.4	
Level of Service		E		F	D		A	B	B	B	B	
Approach Delay (s)		67.3			79.6			13.5			15.7	
Approach LOS		E			E			B			B	

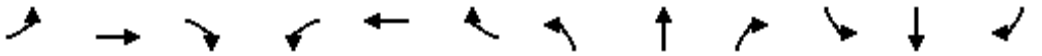
Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	10	20	10	10	75	10	450	25	195	290	10
Future Volume (vph)	15	10	20	10	10	75	10	450	25	195	290	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1722			1863	1568	1798	3539		2041	3511	
Flt Permitted	0.73	1.00			0.86	1.00	0.56	1.00		0.43	1.00	
Satd. Flow (perm)	1386	1722			1624	1568	1051	3539		932	3511	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	22	20	27	16	26	90	13	500	30	244	309	16
RTOR Reduction (vph)	0	25	0	0	0	84	0	2	0	0	2	0
Lane Group Flow (vph)	22	22	0	0	42	6	13	528	0	244	323	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	7.0	7.0			7.0	7.0	84.3	82.4		93.0	87.1	
Effective Green, g (s)	7.0	7.0			7.0	7.0	84.3	82.4		93.0	87.1	
Actuated g/C Ratio	0.06	0.06			0.06	0.06	0.77	0.75		0.85	0.79	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	88	109			103	99	818	2651		854	2780	
v/s Ratio Prot		0.01					0.00	0.15		c0.02	0.09	
v/s Ratio Perm	0.02				c0.03	0.00	0.01			c0.22		
v/c Ratio	0.25	0.20			0.41	0.06	0.02	0.20		0.29	0.12	
Uniform Delay, d1	49.0	48.8			49.5	48.4	3.0	4.1		1.6	2.6	
Progression Factor	1.00	1.00			1.00	1.00	0.85	0.74		1.00	1.00	
Incremental Delay, d2	1.5	0.9			2.6	0.2	0.0	0.2		0.1	0.1	
Delay (s)	50.5	49.7			52.1	48.6	2.6	3.2		1.7	2.7	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		50.0			49.8			3.2			2.3	
Approach LOS		D			D			A			A	

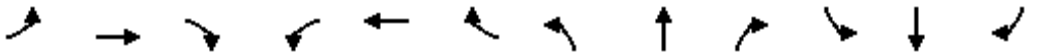
Intersection Summary			
HCM 2000 Control Delay	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	47.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	890	105	340	1340	225	125	565	220	105	655	230
Future Volume (veh/h)	140	890	105	340	1340	225	125	565	220	105	655	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1870	1900	1900	1885	1900	1900	1885	1870	1900	1900	1900
Adj Flow Rate, veh/h	159	927	117	358	1457	95	154	635	114	127	819	101
Peak Hour Factor	0.88	0.96	0.77	0.95	0.92	0.89	0.81	0.89	0.88	0.83	0.80	0.79
Percent Heavy Veh, %	0	2	0	0	1	0	0	1	2	0	0	0
Cap, veh/h	209	1074	135	467	1582	494	207	1557	686	177	1538	684
Arrive On Green	0.06	0.23	0.23	0.13	0.31	0.31	0.06	0.43	0.43	0.05	0.43	0.43
Sat Flow, veh/h	3510	4590	577	3510	5147	1605	3510	3582	1580	3510	3610	1605
Grp Volume(v), veh/h	159	687	357	358	1457	95	154	635	114	127	819	101
Grp Sat Flow(s),veh/h/ln	1755	1702	1764	1755	1716	1605	1755	1791	1580	1755	1805	1605
Q Serve(g_s), s	6.0	26.1	26.3	13.3	36.9	4.8	5.8	16.4	3.8	4.8	22.7	4.0
Cycle Q Clear(g_c), s	6.0	26.1	26.3	13.3	36.9	4.8	5.8	16.4	3.8	4.8	22.7	4.0
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	796	413	467	1582	494	207	1557	686	177	1538	684
V/C Ratio(X)	0.76	0.86	0.87	0.77	0.92	0.19	0.74	0.41	0.17	0.72	0.53	0.15
Avail Cap(c_a), veh/h	234	1009	523	467	1677	523	624	1557	686	286	1538	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	49.6	49.7	56.5	45.2	23.2	62.5	26.2	9.3	63.2	28.8	14.0
Incr Delay (d2), s/veh	10.4	5.4	10.1	6.8	8.2	0.1	2.0	0.8	0.5	2.0	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	11.4	12.4	6.2	16.4	2.2	2.6	7.2	2.2	2.2	10.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	55.0	59.8	63.3	53.3	23.2	64.5	27.0	9.9	65.2	30.1	14.4
LnGrp LOS	E	D	E	E	D	C	E	C	A	E	C	B
Approach Vol, veh/h		1203			1910			903			1047	
Approach Delay, s/veh		58.8			53.7			31.3			32.8	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	62.5	13.0	46.5	11.8	63.7	22.9	36.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	38.0	9.0	44.0	11.0	51.0	13.0	40.0
Max Q Clear Time (g_c+I1), s	7.8	24.7	8.0	38.9	6.8	18.4	15.3	28.3
Green Ext Time (p_c), s	0.1	3.4	0.0	2.6	0.0	3.1	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	46.6
HCM 6th LOS	D



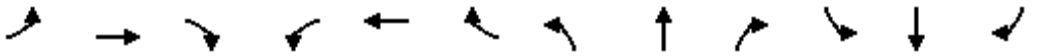
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1335	50	105	2035	70	55	15	50	140	25	70
Future Volume (veh/h)	50	1335	50	105	2035	70	55	15	50	140	25	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	54	1451	52	114	2212	74	60	16	0	152	27	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	224	3530	127	362	3562	119	162	68	0	336	72	61
Arrive On Green	0.06	1.00	1.00	0.07	1.00	1.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1781	5060	181	1781	5075	169	1781	1870	0	3456	1870	1585
Grp Volume(v), veh/h	54	976	527	114	1481	805	60	16	0	152	27	0
Grp Sat Flow(s),veh/h/ln	1781	1702	1838	1781	1702	1840	1781	1870	0	1728	1870	1585
Q Serve(g_s), s	1.1	0.0	0.0	2.5	0.0	0.0	4.3	1.1	0.0	5.7	1.9	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	2.5	0.0	0.0	4.3	1.1	0.0	5.7	1.9	0.0
Prop In Lane	1.00		0.10	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	224	2375	1282	362	2390	1292	162	68	0	336	72	61
V/C Ratio(X)	0.24	0.41	0.41	0.32	0.62	0.62	0.37	0.24	0.00	0.45	0.37	0.00
Avail Cap(c_a), veh/h	272	2375	1282	402	2390	1292	167	374	0	336	374	317
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	4.9	0.0	0.0	59.4	63.2	0.0	59.7	63.3	0.0
Incr Delay (d2), s/veh	0.2	0.5	1.0	0.2	1.2	2.3	0.5	0.7	0.0	0.4	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.3	0.8	0.4	0.8	2.0	0.5	0.0	2.5	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	0.5	1.0	5.1	1.2	2.3	59.9	63.9	0.0	60.0	64.5	0.0
LnGrp LOS	A	A	A	A	A	A	E	E	A	E	E	A
Approach Vol, veh/h		1557			2400			76			179	
Approach Delay, s/veh		0.8			1.8			60.7			60.7	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	101.2	11.7	10.2	11.3	101.8	12.0	9.9
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	8.0	69.0	6.0	27.0	8.0	69.0	6.0	27.0
Max Q Clear Time (g_c+I1), s	4.5	2.0	6.3	3.9	3.1	2.0	7.7	3.1
Green Ext Time (p_c), s	0.0	35.6	0.0	0.0	0.0	58.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	1390	60	105	1735	245	35	40	50	485	100	145
Future Volume (veh/h)	115	1390	60	105	1735	245	35	40	50	485	100	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	1511	62	114	1886	152	38	43	16	527	109	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	2775	114	309	2801	869	164	62	23	691	345	293
Arrive On Green	0.09	1.00	1.00	0.09	1.00	1.00	0.03	0.05	0.05	0.16	0.18	0.18
Sat Flow, veh/h	1781	5031	206	1781	5106	1585	1781	1300	484	3456	1870	1585
Grp Volume(v), veh/h	125	1022	551	114	1886	152	38	0	59	527	109	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1833	1781	1702	1585	1781	0	1783	1728	1870	1585
Q Serve(g_s), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	18.9	6.8	1.5
Cycle Q Clear(g_c), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	18.9	6.8	1.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	249	1878	1011	309	2801	869	164	0	85	691	345	293
V/C Ratio(X)	0.50	0.54	0.54	0.37	0.67	0.17	0.23	0.00	0.69	0.76	0.32	0.07
Avail Cap(c_a), veh/h	286	1878	1011	351	2801	869	272	0	198	735	360	305
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	0.0	0.0	11.5	0.0	0.0	58.9	0.0	63.3	48.6	47.7	45.5
Incr Delay (d2), s/veh	0.6	1.1	2.1	0.3	1.3	0.4	0.3	0.0	3.7	3.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.3	0.6	1.5	0.3	0.1	1.2	0.0	2.1	8.6	3.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.0	1.1	2.1	11.8	1.3	0.4	59.1	0.0	66.9	52.5	47.8	45.5
LnGrp LOS	B	A	A	B	A	A	E	A	E	D	D	D
Approach Vol, veh/h		1698			2152			97			657	
Approach Delay, s/veh		2.2			1.8			63.9			51.5	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	81.1	9.8	30.9	12.8	81.5	28.2	12.5
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	9.0	62.0	12.0	26.0	9.0	62.0	23.0	* 15
Max Q Clear Time (g_c+I1), s	6.3	2.0	4.7	8.8	5.9	2.0	20.9	6.4
Green Ext Time (p_c), s	0.0	47.3	0.0	0.3	0.0	35.8	0.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1750	195	245	1710	205	240	465	350	530	605	160
Future Volume (veh/h)	150	1750	195	245	1710	205	240	465	350	530	605	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	1902	197	266	1859	209	261	505	380	576	658	156
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	1603	165	415	2321	261	256	560	250	627	756	179
Arrive On Green	0.05	0.23	0.23	0.12	0.39	0.39	0.07	0.16	0.16	0.06	0.09	0.09
Sat Flow, veh/h	1781	4703	484	3456	5912	665	3456	3554	1585	3456	2851	675
Grp Volume(v), veh/h	163	1373	726	266	1517	551	261	505	380	576	410	404
Grp Sat Flow(s),veh/h/ln	1781	1702	1783	1728	1609	1751	1728	1777	1585	1728	1777	1749
Q Serve(g_s), s	9.2	46.0	46.0	9.9	37.6	37.6	10.0	18.8	15.8	22.4	30.8	30.8
Cycle Q Clear(g_c), s	9.2	46.0	46.0	9.9	37.6	37.6	10.0	18.8	15.8	22.4	30.8	30.8
Prop In Lane	1.00		0.27	1.00		0.38	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	122	1160	608	415	1894	687	256	560	250	627	471	464
V/C Ratio(X)	1.34	1.18	1.19	0.64	0.80	0.80	1.02	0.90	1.52	0.92	0.87	0.87
Avail Cap(c_a), veh/h	122	1160	608	415	1894	687	256	579	258	640	487	479
HCM Platoon Ratio	0.67	0.67	0.67	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.4	52.1	52.1	56.6	36.3	36.3	62.5	55.8	31.4	62.5	59.3	59.3
Incr Delay (d2), s/veh	198.1	91.8	103.0	3.8	3.7	9.5	61.4	16.4	253.7	17.8	14.6	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	34.7	38.3	4.5	14.8	17.2	6.6	9.7	23.6	12.0	16.6	16.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	262.5	143.8	155.1	60.4	40.0	45.9	123.9	72.2	285.1	80.3	73.9	74.3
LnGrp LOS	F	F	F	E	D	D	F	E	F	F	E	E
Approach Vol, veh/h		2262			2334			1146			1390	
Approach Delay, s/veh		156.0			43.7			154.6			76.6	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	53.0	17.0	41.8	16.2	60.0	31.5	27.3
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	15.0	46.0	10.0	37.0	8.0	53.0	25.0	22.0
Max Q Clear Time (g_c+I1), s	11.9	48.0	12.0	32.8	11.2	39.6	24.4	20.8
Green Ext Time (p_c), s	0.4	0.0	0.0	1.4	0.0	10.0	0.1	0.4

Intersection Summary	
HCM 6th Ctrl Delay	103.6
HCM 6th LOS	F

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	15	10	45	10	1050	50	110	700	10
Future Volume (veh/h)	10	10	10	15	10	45	10	1050	50	110	700	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1900	1900	1885	1900	1900
Adj Flow Rate, veh/h	20	20	0	19	40	0	20	1193	60	131	805	36
Peak Hour Factor	0.50	0.50	0.63	0.80	0.25	0.65	0.50	0.88	0.81	0.84	0.87	0.25
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	0	0
Cap, veh/h	73	41	78	150	96	0	613	2687	135	489	2788	125
Arrive On Green	0.05	0.05	0.00	0.05	0.05	0.00	0.04	1.00	1.00	0.09	1.00	1.00
Sat Flow, veh/h	478	817	1546	1414	1900	0	1810	3497	176	1795	3519	157
Grp Volume(v), veh/h	40	0	0	19	40	0	20	615	638	131	413	428
Grp Sat Flow(s),veh/h/ln	1296	0	1546	1414	1900	0	1810	1805	1868	1795	1805	1871
Q Serve(g_s), s	1.5	0.0	0.0	0.0	2.2	0.0	0.3	0.0	0.0	1.7	0.0	0.0
Cycle Q Clear(g_c), s	3.8	0.0	0.0	1.1	2.2	0.0	0.3	0.0	0.0	1.7	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.09	1.00		0.08
Lane Grp Cap(c), veh/h	115	0	78	150	96	0	613	1387	1435	489	1430	1483
V/C Ratio(X)	0.35	0.00	0.00	0.13	0.42	0.00	0.03	0.44	0.44	0.27	0.29	0.29
Avail Cap(c_a), veh/h	500	0	450	490	553	0	724	1387	1435	556	1430	1483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	0.0	0.0	50.1	50.6	0.0	2.4	0.0	0.0	2.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.1	1.1	0.0	0.0	1.0	1.0	0.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.5	1.1	0.0	0.1	0.4	0.4	0.4	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.1	0.0	0.0	50.2	51.7	0.0	2.4	1.0	1.0	2.1	0.5	0.5
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		40			59			1273			972	
Approach Delay, s/veh		52.1			51.2			1.0			0.7	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	92.2		10.6	9.9	89.5		10.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.3	2.0		4.2	3.7	2.0		5.8				
Green Ext Time (p_c), s	0.0	2.5		0.1	0.0	4.4		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		3.0	
HCM 6th LOS		A	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	605	125	230	1255	220	185	485	170	150	450	190
Future Volume (veh/h)	120	605	125	230	1255	220	185	485	170	150	450	190
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1900	1870	1900	1900	1885	1900	1885	1900	1900	1900
Adj Flow Rate, veh/h	158	617	126	271	1349	124	203	622	0	163	484	24
Peak Hour Factor	0.76	0.98	0.84	0.85	0.93	0.84	0.91	0.78	0.80	0.92	0.93	0.84
Percent Heavy Veh, %	1	1	0	2	0	0	1	0	1	0	0	0
Cap, veh/h	230	1300	265	420	1643	731	312	757		261	778	344
Arrive On Green	0.07	0.44	0.44	0.08	0.46	0.46	0.08	0.21	0.00	0.18	0.43	0.43
Sat Flow, veh/h	1795	2962	604	1781	3610	1606	1795	3610	1598	1810	3610	1597
Grp Volume(v), veh/h	158	373	370	271	1349	124	203	622	0	163	484	24
Grp Sat Flow(s),veh/h/ln	1795	1791	1775	1781	1805	1606	1795	1805	1598	1810	1805	1597
Q Serve(g_s), s	5.3	16.2	16.3	9.0	35.8	5.0	9.0	18.1	0.0	7.7	11.5	1.0
Cycle Q Clear(g_c), s	5.3	16.2	16.3	9.0	35.8	5.0	9.0	18.1	0.0	7.7	11.5	1.0
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	786	779	420	1643	731	312	757		261	778	344
V/C Ratio(X)	0.69	0.47	0.48	0.65	0.82	0.17	0.65	0.82		0.62	0.62	0.07
Avail Cap(c_a), veh/h	259	786	779	420	1643	731	312	985		332	1149	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	21.9	21.9	17.5	26.1	17.7	32.8	41.5	0.0	28.6	27.8	24.8
Incr Delay (d2), s/veh	4.6	2.0	2.1	2.7	4.7	0.5	3.7	3.4	0.0	0.9	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.9	6.9	3.9	15.4	1.9	4.5	8.2	0.0	3.0	4.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	23.9	24.0	20.1	30.8	18.2	36.5	44.9	0.0	29.5	28.1	24.8
LnGrp LOS	C	C	C	C	C	B	D	D		C	C	C
Approach Vol, veh/h		901			1744			825	A		671	
Approach Delay, s/veh		24.6			28.3			42.8			28.3	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	53.3	14.0	28.7	12.2	55.1	14.7	28.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	11.0	18.3	11.0	13.5	7.3	37.8	9.7	20.1
Green Ext Time (p_c), s	0.0	2.6	0.0	1.6	0.0	0.0	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	10	60	130	10	70	80	840	75	45	1305	80
Future Volume (vph)	80	10	60	130	10	70	80	840	75	45	1305	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.97		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1831		1737	1623		1770	3539	1583	1770	3509	
Flt Permitted		0.77		0.53	0.87		0.06	1.00	1.00	0.23	1.00	
Satd. Flow (perm)		1449		976	1433		110	3539	1583	431	3509	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	11	65	141	11	76	87	913	82	49	1418	87
RTOR Reduction (vph)	0	19	0	0	60	0	0	0	41	0	3	0
Lane Group Flow (vph)	0	144	0	117	51	0	87	913	41	49	1502	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Effective Green, g (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Actuated g/C Ratio		0.14		0.15	0.15		0.55	0.50	0.50	0.53	0.49	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		196		146	215		152	1769	791	288	1715	
v/s Ratio Prot							c0.03	0.26		0.01	c0.43	
v/s Ratio Perm		c0.10		c0.12	0.04		0.29		0.03	0.08		
v/c Ratio		0.73		0.80	0.24		0.57	0.52	0.05	0.17	0.88	
Uniform Delay, d1		56.0		55.4	50.5		25.6	22.7	17.3	16.3	30.8	
Progression Factor		1.00		1.00	1.00		2.00	1.86	9.44	1.00	1.00	
Incremental Delay, d2		13.3		26.2	0.6		2.0	0.4	0.0	0.3	6.6	
Delay (s)		69.3		81.6	51.1		53.4	42.7	163.5	16.6	37.5	
Level of Service		E		F	D		D	D	F	B	D	
Approach Delay (s)		69.3			66.7			52.7			36.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay	46.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	25	25	10	270	20	755	10	75	650	20
Future Volume (vph)	10	10	25	25	10	270	20	755	10	75	650	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.90			1.00	0.85	1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1703			1732	1599	1805	3600		2024	3588	
Flt Permitted	0.72	1.00			0.82	1.00	0.36	1.00		0.30	1.00	
Satd. Flow (perm)	1373	1703			1459	1599	678	3600		639	3588	
Peak-hour factor, PHF	0.83	0.63	0.69	0.75	0.50	0.74	0.82	0.92	0.75	0.66	0.88	0.65
Adj. Flow (vph)	12	16	36	33	20	365	24	821	13	114	739	31
RTOR Reduction (vph)	0	31	0	0	0	211	0	1	0	0	2	0
Lane Group Flow (vph)	12	21	0	0	53	154	24	833	0	114	768	0
Confl. Peds. (#/hr)									3	3		
Heavy Vehicles (%)	0%	0%	0%	0%	17%	1%	0%	0%	0%	1%	0%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	16.0	16.0			16.0	16.0	77.0	73.9		83.0	76.9	
Effective Green, g (s)	16.0	16.0			16.0	16.0	77.0	73.9		83.0	76.9	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.70	0.67		0.75	0.70	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	199	247			212	232	506	2418		558	2508	
v/s Ratio Prot		0.01					0.00	c0.23		c0.01	0.21	
v/s Ratio Perm	0.01				0.04	c0.10	0.03			0.14		
v/c Ratio	0.06	0.09			0.25	0.66	0.05	0.34		0.20	0.31	
Uniform Delay, d1	40.5	40.7			41.7	44.5	5.0	7.7		3.9	6.3	
Progression Factor	1.00	1.00			1.00	1.00	0.46	0.42		1.00	1.00	
Incremental Delay, d2	0.1	0.2			0.6	7.0	0.0	0.4		0.1	0.3	
Delay (s)	40.6	40.8			42.3	51.4	2.3	3.6		4.0	6.7	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		40.8			50.3			3.6			6.3	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	1170	55	165	865	145	55	560	230	65	205	60
Future Volume (veh/h)	185	1170	55	165	865	145	55	560	230	65	205	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	206	1330	61	190	972	40	60	659	104	94	247	17
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	255	1493	68	236	1503	466	114	1602	707	142	1603	725
Arrive On Green	0.07	0.30	0.30	0.14	0.59	0.59	0.03	0.44	0.44	0.04	0.45	0.45
Sat Flow, veh/h	3483	5003	229	3401	5106	1582	3456	3610	1594	3510	3554	1607
Grp Volume(v), veh/h	206	905	486	190	972	40	60	659	104	94	247	17
Grp Sat Flow(s),veh/h/ln	1742	1702	1829	1700	1702	1582	1728	1805	1594	1755	1777	1607
Q Serve(g_s), s	7.9	34.3	34.3	7.3	17.1	1.5	2.3	16.8	5.2	3.6	5.5	0.8
Cycle Q Clear(g_c), s	7.9	34.3	34.3	7.3	17.1	1.5	2.3	16.8	5.2	3.6	5.5	0.8
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1016	546	236	1503	466	114	1602	707	142	1603	725
V/C Ratio(X)	0.81	0.89	0.89	0.81	0.65	0.09	0.52	0.41	0.15	0.66	0.15	0.02
Avail Cap(c_a), veh/h	284	1286	691	302	1967	609	179	1602	707	468	1603	725
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	45.3	45.3	57.3	23.1	19.9	64.2	25.6	22.3	63.9	21.9	20.6
Incr Delay (d2), s/veh	12.8	5.9	10.2	9.1	0.2	0.0	1.4	0.8	0.4	2.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.9	16.6	3.2	4.9	0.5	1.0	7.3	2.0	1.6	2.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	51.1	55.4	66.3	23.3	19.9	65.6	26.3	22.8	65.8	22.1	20.6
LnGrp LOS	E	D	E	E	C	B	E	C	C	E	C	C
Approach Vol, veh/h		1597			1202			823			358	
Approach Delay, s/veh		55.4			30.0			28.8			33.5	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	65.9	14.9	44.7	10.5	64.9	14.4	45.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	45.0	11.0	52.0	18.0	34.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	4.3	7.5	9.9	19.1	5.6	18.8	9.3	36.3
Green Ext Time (p_c), s	0.0	1.1	0.0	3.4	0.1	2.8	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	1830	55	95	1220	210	30	40	80	70	15	20
Future Volume (veh/h)	105	1830	55	95	1220	210	30	40	80	70	15	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	114	1989	58	103	1326	211	33	43	26	76	16	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	3144	92	238	2736	435	168	57	34	252	113	96
Arrive On Green	0.07	1.00	1.00	0.07	1.00	1.00	0.03	0.06	0.06	0.04	0.07	0.00
Sat Flow, veh/h	1603	4589	134	1603	3997	636	1603	982	594	3110	1683	1427
Grp Volume(v), veh/h	114	1327	720	103	1016	521	33	0	69	76	16	0
Grp Sat Flow(s),veh/h/ln	1603	1532	1659	1603	1532	1569	1603	0	1576	1555	1683	1427
Q Serve(g_s), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Prop In Lane	1.00		0.08	1.00		0.41	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	320	2099	1137	238	2097	1074	168	0	91	252	113	96
V/C Ratio(X)	0.36	0.63	0.63	0.43	0.48	0.48	0.20	0.00	0.75	0.30	0.14	0.00
Avail Cap(c_a), veh/h	333	2099	1137	299	2097	1074	221	0	199	349	224	190
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	0.0	5.4	0.0	0.0	57.8	0.0	62.6	57.0	59.3	0.0
Incr Delay (d2), s/veh	0.2	1.5	2.7	0.5	0.8	1.6	0.2	0.0	4.7	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	0.9	0.8	0.2	0.5	1.1	0.0	2.5	1.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	1.5	2.7	5.9	0.8	1.6	58.0	0.0	67.3	57.2	59.5	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	E	A
Approach Vol, veh/h		2161			1640			102			92	
Approach Delay, s/veh		2.1			1.4			64.3			57.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	99.5	9.5	14.1	11.9	99.4	10.8	12.8
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	10.0	74.0	8.0	18.0	6.0	78.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	4.7	2.0	4.6	3.2	5.0	2.0	5.1	7.8
Green Ext Time (p_c), s	0.0	55.8	0.0	0.0	0.0	39.6	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1510	25	80	1375	875	30	80	70	165	20	30
Future Volume (veh/h)	240	1510	25	80	1375	875	30	80	70	165	20	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	1641	26	87	1495	694	33	87	50	179	22	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	300	3208	51	288	2934	911	229	104	60	325	236	200
Arrive On Green	0.16	1.00	1.00	0.07	1.00	1.00	0.03	0.09	0.09	0.05	0.13	0.13
Sat Flow, veh/h	1781	5178	82	1781	5106	1585	1781	1115	641	3456	1870	1585
Grp Volume(v), veh/h	261	1079	588	87	1495	694	33	0	137	179	22	3
Grp Sat Flow(s),veh/h/ln	1781	1702	1856	1781	1702	1585	1781	0	1755	1728	1870	1585
Q Serve(g_s), s	8.6	0.0	0.0	2.7	0.0	0.0	2.2	0.0	10.4	6.3	1.4	0.2
Cycle Q Clear(g_c), s	8.6	0.0	0.0	2.7	0.0	0.0	2.2	0.0	10.4	6.3	1.4	0.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	300	2109	1150	288	2934	911	229	0	163	325	236	200
V/C Ratio(X)	0.87	0.51	0.51	0.30	0.51	0.76	0.14	0.00	0.84	0.55	0.09	0.02
Avail Cap(c_a), veh/h	433	2109	1150	290	2934	911	288	0	234	325	236	200
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.9	0.0	0.0	10.4	0.0	0.0	53.3	0.0	60.2	52.5	52.2	51.7
Incr Delay (d2), s/veh	9.4	0.9	1.6	0.2	0.6	6.0	0.1	0.0	11.8	1.2	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.3	0.5	1.0	0.2	1.5	1.0	0.0	5.2	2.8	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	0.9	1.6	10.6	0.6	6.0	53.5	0.0	72.0	53.7	52.2	51.7
LnGrp LOS	C	A	A	B	A	A	D	A	E	D	D	D
Approach Vol, veh/h		1928			2276			170			204	
Approach Delay, s/veh		4.2			2.7			68.4			53.5	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	84.6	9.5	23.0	11.8	90.6	14.0	18.6
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	21.0	63.0	8.0	17.0	5.0	79.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	10.6	2.0	4.2	3.4	4.7	2.0	8.3	12.4
Green Ext Time (p_c), s	0.3	47.7	0.0	0.0	0.0	44.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1490	260	895	1900	745	200	585	290	155	555	115
Future Volume (veh/h)	170	1490	260	895	1900	745	200	585	290	155	555	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	1620	260	973	2065	768	217	636	315	168	603	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1775	284	476	2166	712	154	705	315	220	653	120
Arrive On Green	0.18	0.80	0.80	0.14	0.45	0.45	0.04	0.20	0.20	0.02	0.07	0.07
Sat Flow, veh/h	1781	4438	709	3456	4826	1585	3456	3554	1585	3456	2998	551
Grp Volume(v), veh/h	185	1241	639	973	2065	768	217	636	315	168	357	357
Grp Sat Flow(s),veh/h/ln	1781	1702	1743	1728	1609	1585	1728	1777	1585	1728	1777	1771
Q Serve(g_s), s	12.0	36.3	37.1	18.6	55.7	60.6	6.0	23.6	19.0	6.5	27.0	27.1
Cycle Q Clear(g_c), s	12.0	36.3	37.1	18.6	55.7	60.6	6.0	23.6	19.0	6.5	27.0	27.1
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	158	1362	697	476	2166	712	154	705	315	220	387	386
V/C Ratio(X)	1.17	0.91	0.92	2.04	0.95	1.08	1.41	0.90	1.00	0.76	0.92	0.93
Avail Cap(c_a), veh/h	158	1362	697	476	2166	712	154	705	315	307	395	394
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	11.7	11.8	58.2	35.8	37.2	64.5	52.8	27.1	65.1	61.5	61.6
Incr Delay (d2), s/veh	124.0	10.7	18.9	476.6	11.1	57.2	219.7	14.5	51.1	4.2	26.1	26.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	6.5	8.2	39.5	22.8	33.4	7.3	11.9	11.6	3.1	15.7	15.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	179.5	22.5	30.7	534.8	46.9	94.4	284.2	67.3	78.2	69.3	87.6	88.4
LnGrp LOS	F	C	C	F	D	F	F	E	F	E	F	F
Approach Vol, veh/h		2065			3806			1168			882	
Approach Delay, s/veh		39.1			181.2			110.5			84.4	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.6	61.0	13.0	35.4	19.0	67.6	15.6	32.8
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	18.6	54.0	6.0	30.0	12.0	60.0	12.0	24.0
Max Q Clear Time (g_c+I1), s	20.6	39.1	8.0	29.1	14.0	62.6	8.5	25.6
Green Ext Time (p_c), s	0.0	10.2	0.0	0.3	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	123.0
HCM 6th LOS	F

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	10	10	10	10	1020	55	70	780	10
Future Volume (veh/h)	10	10	10	10	10	10	10	1020	55	70	780	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	17	14	0	40	1172	70	97	940	13
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	61	104	164	128	0	574	2566	153	416	2743	38
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.03	0.75	0.75	0.09	1.00	1.00
Sat Flow, veh/h	730	902	1546	1389	1900	0	1810	3407	203	1753	3589	50
Grp Volume(v), veh/h	80	0	0	17	14	0	40	611	631	97	465	488
Grp Sat Flow(s),veh/h/ln	1632	0	1546	1389	1900	0	1810	1777	1833	1753	1777	1861
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.8	0.0	0.5	14.2	14.2	1.3	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.2	0.8	0.0	0.5	14.2	14.2	1.3	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.11	1.00		0.03
Lane Grp Cap(c), veh/h	159	0	104	164	128	0	574	1338	1381	416	1358	1423
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.11	0.00	0.07	0.46	0.46	0.23	0.34	0.34
Avail Cap(c_a), veh/h	523	0	450	474	553	0	664	1338	1381	484	1358	1423
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	0.0	0.0	48.4	48.2	0.0	2.6	5.1	5.1	3.4	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.3	0.4	0.0	0.1	1.1	1.1	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.5	0.4	0.0	0.1	4.5	4.7	0.3	0.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	0.0	0.0	48.7	48.6	0.0	2.6	6.2	6.2	3.7	0.7	0.7
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			31			1282			1050	
Approach Delay, s/veh		52.8			48.6			6.1			1.0	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	89.1		12.4	9.7	87.9		12.4				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.2	3.3	16.2		7.3				
Green Ext Time (p_c), s	0.0	7.2		0.1	0.1	10.5		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	850	90	140	460	515	40	495	115	220	280	95
Future Volume (veh/h)	250	850	90	140	460	515	40	495	115	220	280	95
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	357	934	85	156	511	374	52	544	0	234	337	13
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	307	907	83	210	950	433	498	1382		441	1490	664
Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.27	0.05	0.38	0.00	0.03	0.14	0.14
Sat Flow, veh/h	1810	3319	302	1810	3497	1594	1810	3610	1560	1753	3554	1583
Grp Volume(v), veh/h	357	504	515	156	511	374	52	544	0	234	337	13
Grp Sat Flow(s),veh/h/ln	1810	1791	1830	1810	1749	1594	1810	1805	1560	1753	1777	1583
Q Serve(g_s), s	9.0	30.1	30.1	6.7	13.7	24.6	1.9	12.0	0.0	8.6	9.3	0.8
Cycle Q Clear(g_c), s	9.0	30.1	30.1	6.7	13.7	24.6	1.9	12.0	0.0	8.6	9.3	0.8
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	307	489	500	210	950	433	498	1382		441	1490	664
V/C Ratio(X)	1.16	1.03	1.03	0.74	0.54	0.86	0.10	0.39		0.53	0.23	0.02
Avail Cap(c_a), veh/h	307	489	500	296	1113	507	498	1382		441	1490	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	40.0	40.0	29.4	34.2	38.1	18.6	24.7	0.0	19.7	31.5	27.9
Incr Delay (d2), s/veh	102.8	48.5	48.1	6.0	0.5	12.8	0.1	0.8	0.0	1.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	19.3	19.7	3.2	5.7	10.8	0.8	5.1	0.0	3.9	4.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	138.8	88.5	88.1	35.4	34.7	51.0	18.7	25.5	0.0	20.9	31.9	27.9
LnGrp LOS	F	F	F	D	C	D	B	C		C	C	C
Approach Vol, veh/h		1376			1041			596	A		584	
Approach Delay, s/veh		101.4			40.6			24.9			27.4	
Approach LOS		F			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	51.1	14.0	34.9	14.0	47.1	13.8	35.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	13.9	11.3	11.0	26.6	10.6	14.0	8.7	32.1
Green Ext Time (p_c), s	0.0	2.2	0.0	3.0	0.0	3.4	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	59.1
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	37.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	245	110	525	355	795	930
Future Vol, veh/h	245	110	525	355	795	930
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	266	120	571	386	864	1011

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2998	479	0	0	957	0
Stage 1	764	-	-	-	-	-
Stage 2	2234	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 11	533	-	-	~ 714	-
Stage 1	420	-	-	-	-	-
Stage 2	~ 67	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	533	-	-	~ 714	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	420	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.5	0	59
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	533	~ 714	-
HCM Lane V/C Ratio	-	-	0.724	1.21	-
HCM Control Delay (s)	-	-	27.5	128	-
HCM Lane LOS	-	-	D	F	-
HCM 95th %tile Q(veh)	-	-	5.9	29.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	15	40	855	1110	65
Future Vol, veh/h	25	15	40	855	1110	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	16	43	929	1207	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1794	639	1278	0	-	0
Stage 1	1243	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	72	419	539	-	-	-
Stage 1	235	-	-	-	-	-
Stage 2	541	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	66	419	539	-	-	-
Mov Cap-2 Maneuver	66	-	-	-	-	-
Stage 1	216	-	-	-	-	-
Stage 2	541	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	70.4	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	539	-	96	-	-
HCM Lane V/C Ratio	0.081	-	0.453	-	-
HCM Control Delay (s)	12.3	-	70.4	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	15	40	870	1065	60
Future Vol, veh/h	25	15	40	870	1065	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	16	43	946	1158	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1750	612	1223	0	-	0
Stage 1	1191	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	77	436	566	-	-	-
Stage 1	251	-	-	-	-	-
Stage 2	536	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	71	436	566	-	-	-
Mov Cap-2 Maneuver	71	-	-	-	-	-
Stage 1	232	-	-	-	-	-
Stage 2	536	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	63.4	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	566	-	103	-	-
HCM Lane V/C Ratio	0.077	-	0.422	-	-
HCM Control Delay (s)	11.9	-	63.4	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	1.8	-	-

Intersection	
Int Delay, s/veh	210

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	105	10	900	20	395	685
Future Vol, veh/h	105	10	900	20	395	685
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	11	978	22	429	745

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2220	500	0	0	1000	0
Stage 1	989	-	-	-	-	-
Stage 2	1231	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 37	516	-	-	688	-
Stage 1	321	-	-	-	-	-
Stage 2	239	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 14	516	-	-	688	-
Mov Cap-2 Maneuver	~ 14	-	-	-	-	-
Stage 1	321	-	-	-	-	-
Stage 2	~ 90	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 3798.3	0	6.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	15	688	-
HCM Lane V/C Ratio	-	-	8.333	0.624	-
HCM Control Delay (s)	-	-	$ 3798.3	18.5	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q(veh)	-	-	16.6	4.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	30	70	875	685	105
Future Vol, veh/h	45	30	70	875	685	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	33	76	951	745	114

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1430	430	859	0	-	0
Stage 1	802	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	125	573	778	-	-	-
Stage 1	402	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	113	573	778	-	-	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	494	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46	0.8	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	778	-	166	-	-
HCM Lane V/C Ratio	0.098	-	0.491	-	-
HCM Control Delay (s)	10.1	-	46	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.3	-	2.4	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	295	650	485	0	715
Future Vol, veh/h	0	295	650	485	0	715
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	321	707	527	0	777

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	617	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	433	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	433	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	433	-
HCM Lane V/C Ratio	-	-	0.741	-
HCM Control Delay (s)	-	-	33.5	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	25	115	10	110	45	1485	40	55	765	75
Future Volume (vph)	30	10	25	115	10	110	45	1485	40	55	765	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.88		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1842		1737	1593		1770	3539	1583	1770	3492	
Flt Permitted		0.78		0.47	0.94		0.25	1.00	1.00	0.06	1.00	
Satd. Flow (perm)		1466		852	1500		473	3539	1583	119	3492	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	27	125	11	120	49	1614	43	60	832	82
RTOR Reduction (vph)	0	18	0	0	103	0	0	0	18	0	5	0
Lane Group Flow (vph)	0	53	0	112	41	0	49	1614	25	60	909	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Effective Green, g (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Actuated g/C Ratio		0.07		0.14	0.14		0.62	0.57	0.57	0.62	0.58	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		97		121	214		347	2034	909	148	2015	
v/s Ratio Prot							0.01	c0.46		c0.02	0.26	
v/s Ratio Perm		c0.04		c0.13	0.03		0.08		0.02	0.23		
v/c Ratio		0.55		0.93	0.19		0.14	0.79	0.03	0.41	0.45	
Uniform Delay, d1		61.0		57.1	51.0		11.0	22.4	12.4	19.7	16.3	
Progression Factor		1.00		1.00	1.00		0.97	0.92	1.00	1.00	1.00	
Incremental Delay, d2		6.2		58.7	0.4		0.1	0.9	0.0	1.8	0.7	
Delay (s)		67.3		115.8	51.4		10.7	21.5	12.4	21.5	17.1	
Level of Service		E		F	D		B	C	B	C	B	
Approach Delay (s)		67.3			79.6			21.0			17.3	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	10	20	10	10	75	10	1045	25	195	510	10
Future Volume (vph)	15	10	20	10	10	75	10	1045	25	195	510	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1722			1863	1568	1801	3559		2045	3523	
Flt Permitted	0.73	1.00			0.86	1.00	0.44	1.00		0.20	1.00	
Satd. Flow (perm)	1386	1722			1624	1568	839	3559		433	3523	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	22	20	27	16	26	90	13	1161	30	244	543	16
RTOR Reduction (vph)	0	25	0	0	0	84	0	1	0	0	1	0
Lane Group Flow (vph)	22	22	0	0	42	6	13	1190	0	244	558	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	7.0	7.0			7.0	7.0	83.9	82.0		93.0	87.1	
Effective Green, g (s)	7.0	7.0			7.0	7.0	83.9	82.0		93.0	87.1	
Actuated g/C Ratio	0.06	0.06			0.06	0.06	0.76	0.75		0.85	0.79	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	88	109			103	99	656	2653		468	2789	
v/s Ratio Prot		0.01					0.00	0.33		c0.03	0.16	
v/s Ratio Perm	0.02				c0.03	0.00	0.01			c0.41		
v/c Ratio	0.25	0.20			0.41	0.06	0.02	0.45		0.52	0.20	
Uniform Delay, d1	49.0	48.8			49.5	48.4	3.1	5.4		3.0	2.8	
Progression Factor	1.00	1.00			1.00	1.00	0.84	0.65		1.00	1.00	
Incremental Delay, d2	1.5	0.9			2.6	0.2	0.0	0.5		0.5	0.2	
Delay (s)	50.5	49.7			52.1	48.6	2.6	4.0		3.4	3.0	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		50.0			49.8			4.0			3.1	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	60.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1840	95	0	3540	0	110
Future Volume (Veh/h)	1840	95	0	3540	0	110
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	2000	103	0	3848	0	120
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	429					
pX, platoon unblocked			0.69		0.69	0.69
vC, conflicting volume			2103		3014	552
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			357		1676	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	84
cM capacity (veh/h)			827		60	749

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	571	571	571	389	962	962	962	962	120
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	103	0	0	0	0	120
cSH	1700	1700	1700	1700	1700	1700	1700	1700	749
Volume to Capacity	0.34	0.34	0.34	0.23	0.57	0.57	0.57	0.57	0.16
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	14
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.7
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.7
Approach LOS									B

Intersection Summary				
Average Delay	0.2			
Intersection Capacity Utilization	54.6%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	910	105	340	1400	225	125	565	220	105	655	230
Future Volume (veh/h)	140	910	105	340	1400	225	125	565	220	105	655	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	156	1034	114	391	1573	109	137	665	134	152	789	98
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	205	1312	144	327	1626	504	188	1505	665	202	1493	675
Arrive On Green	0.06	0.28	0.28	0.19	0.64	0.64	0.05	0.42	0.42	0.06	0.42	0.42
Sat Flow, veh/h	3483	4667	514	3401	5106	1582	3456	3610	1594	3510	3554	1607
Grp Volume(v), veh/h	156	754	394	391	1573	109	137	665	134	152	789	98
Grp Sat Flow(s),veh/h/ln	1742	1702	1777	1700	1702	1582	1728	1805	1594	1755	1777	1607
Q Serve(g_s), s	6.0	27.6	27.7	13.0	39.3	3.9	5.3	17.8	7.2	5.8	22.3	5.1
Cycle Q Clear(g_c), s	6.0	27.6	27.7	13.0	39.3	3.9	5.3	17.8	7.2	5.8	22.3	5.1
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	957	499	327	1626	504	188	1505	665	202	1493	675
V/C Ratio(X)	0.76	0.79	0.79	1.19	0.97	0.22	0.73	0.44	0.20	0.75	0.53	0.15
Avail Cap(c_a), veh/h	232	1009	526	327	1664	516	614	1505	665	286	1493	675
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	44.8	44.8	54.5	23.9	17.4	62.8	28.1	25.1	62.7	29.2	24.2
Incr Delay (d2), s/veh	10.1	3.6	6.8	113.3	14.7	0.1	2.0	0.9	0.7	3.6	1.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	11.8	12.8	10.0	11.1	1.3	2.4	7.8	2.8	2.7	9.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.7	48.4	51.6	167.8	38.6	17.5	64.9	29.1	25.7	66.2	30.5	24.6
LnGrp LOS	E	D	D	F	D	B	E	C	C	E	C	C
Approach Vol, veh/h		1304			2073			936			1039	
Approach Delay, s/veh		52.3			61.9			33.8			35.2	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	61.7	13.0	48.0	12.8	61.3	18.0	42.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	38.0	9.0	44.0	11.0	51.0	13.0	40.0
Max Q Clear Time (g_c+I1), s	7.3	24.3	8.0	41.3	7.8	19.8	15.0	29.7
Green Ext Time (p_c), s	0.1	3.3	0.0	1.6	0.1	3.3	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	49.5
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1355	45	105	2100	70	55	15	50	140	25	70
Future Volume (veh/h)	50	1355	45	105	2100	70	55	15	50	140	25	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	54	1473	47	114	2283	74	60	16	0	152	27	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	3188	102	327	3206	104	151	62	0	313	62	53
Arrive On Green	0.06	1.00	1.00	0.07	1.00	1.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1603	4575	146	1603	4573	148	1603	1683	0	3110	1683	1427
Grp Volume(v), veh/h	54	986	534	114	1527	830	60	16	0	152	27	0
Grp Sat Flow(s),veh/h/ln	1603	1532	1657	1603	1532	1657	1603	1683	0	1555	1683	1427
Q Serve(g_s), s	1.3	0.0	0.0	2.9	0.0	0.0	4.8	1.2	0.0	6.0	2.1	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	2.9	0.0	0.0	4.8	1.2	0.0	6.0	2.1	0.0
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	2135	1155	327	2148	1162	151	62	0	313	62	53
V/C Ratio(X)	0.27	0.46	0.46	0.35	0.71	0.71	0.40	0.26	0.00	0.49	0.43	0.00
Avail Cap(c_a), veh/h	243	2135	1155	364	2148	1162	151	337	0	313	337	285
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	5.0	0.0	0.0	59.2	63.2	0.0	60.0	63.6	0.0
Incr Delay (d2), s/veh	0.3	0.7	1.3	0.2	2.0	3.8	0.6	0.8	0.0	0.4	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.4	0.9	0.6	1.2	2.0	0.6	0.0	2.5	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	0.7	1.3	5.2	2.0	3.8	59.8	64.0	0.0	60.4	65.4	0.0
LnGrp LOS	A	A	A	A	A	A	E	E	A	E	E	A
Approach Vol, veh/h		1574			2471			76			179	
Approach Delay, s/veh		1.1			2.8			60.7			61.1	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	101.1	12.0	10.0	11.3	101.7	12.0	10.0
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	8.0	69.0	6.0	27.0	8.0	69.0	6.0	27.0
Max Q Clear Time (g_c+I1), s	4.9	2.0	6.8	4.1	3.3	2.0	8.0	3.2
Green Ext Time (p_c), s	0.0	36.2	0.0	0.0	0.0	59.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	1410	60	105	1800	310	35	40	50	505	100	145
Future Volume (veh/h)	115	1410	60	105	1800	310	35	40	50	505	100	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	1533	62	114	1957	197	38	43	16	549	109	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	237	2748	111	304	2772	860	164	62	23	709	355	301
Arrive On Green	0.09	1.00	1.00	0.09	1.00	1.00	0.03	0.05	0.05	0.16	0.19	0.19
Sat Flow, veh/h	1781	5034	204	1781	5106	1585	1781	1300	484	3456	1870	1585
Grp Volume(v), veh/h	125	1037	558	114	1957	197	38	0	59	549	109	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1834	1781	1702	1585	1781	0	1783	1728	1870	1585
Q Serve(g_s), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	19.8	6.8	1.5
Cycle Q Clear(g_c), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	19.8	6.8	1.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	237	1858	1001	304	2772	860	164	0	85	709	355	301
V/C Ratio(X)	0.53	0.56	0.56	0.37	0.71	0.23	0.23	0.00	0.69	0.77	0.31	0.07
Avail Cap(c_a), veh/h	273	1858	1001	345	2772	860	272	0	198	735	360	305
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	0.0	11.8	0.0	0.0	58.9	0.0	63.3	48.3	47.0	44.9
Incr Delay (d2), s/veh	0.7	1.2	2.2	0.3	1.5	0.6	0.3	0.0	3.7	4.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.3	0.6	1.5	0.4	0.1	1.2	0.0	2.1	9.0	3.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	1.2	2.2	12.1	1.5	0.6	59.1	0.0	66.9	52.8	47.2	44.9
LnGrp LOS	B	A	A	B	A	A	E	A	E	D	D	D
Approach Vol, veh/h		1720			2268			97			679	
Approach Delay, s/veh		2.4			2.0			63.9			51.7	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	80.3	9.8	31.6	12.9	80.7	29.0	12.5
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	9.0	62.0	12.0	26.0	9.0	62.0	23.0	* 15
Max Q Clear Time (g_c+I1), s	6.3	2.0	4.7	8.8	5.9	2.0	21.8	6.4
Green Ext Time (p_c), s	0.0	49.3	0.0	0.3	0.0	36.5	0.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1765	230	410	1710	205	360	650	655	535	670	160
Future Volume (veh/h)	150	1765	230	410	1710	205	360	650	655	535	670	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	1918	233	446	1859	209	391	707	712	582	728	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	1574	189	392	2334	262	256	579	258	632	789	171
Arrive On Green	0.08	0.45	0.45	0.11	0.39	0.39	0.07	0.16	0.16	0.06	0.09	0.09
Sat Flow, veh/h	1781	4618	556	3456	5912	665	3456	3554	1585	3456	2904	630
Grp Volume(v), veh/h	163	1409	742	446	1517	551	391	707	712	582	445	441
Grp Sat Flow(s),veh/h/ln	1781	1702	1770	1728	1609	1751	1728	1777	1585	1728	1777	1757
Q Serve(g_s), s	8.0	46.0	46.0	15.3	37.5	37.5	10.0	22.0	16.5	22.6	33.6	33.6
Cycle Q Clear(g_c), s	8.0	46.0	46.0	15.3	37.5	37.5	10.0	22.0	16.5	22.6	33.6	33.6
Prop In Lane	1.00		0.31	1.00		0.38	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	106	1160	603	392	1905	691	256	579	258	632	483	478
V/C Ratio(X)	1.54	1.21	1.23	1.14	0.80	0.80	1.53	1.22	2.76	0.92	0.92	0.92
Avail Cap(c_a), veh/h	106	1160	603	392	1905	691	256	579	258	640	487	482
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	36.9	36.9	59.8	36.1	36.1	62.5	56.5	31.7	62.5	60.0	60.0
Incr Delay (d2), s/veh	286.3	104.8	117.4	88.7	3.6	9.3	256.2	114.3	801.2	18.2	22.6	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	33.6	37.1	11.4	14.7	17.1	13.5	19.0	63.8	12.1	19.1	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	348.4	141.7	154.3	148.6	39.6	45.3	318.7	170.8	832.9	80.7	82.7	82.9
LnGrp LOS	F	F	F	F	D	D	F	F	F	F	F	F
Approach Vol, veh/h		2314			2514			1810			1468	
Approach Delay, s/veh		160.3			60.2			463.2			82.0	
Approach LOS		F			E			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	53.0	17.0	42.7	15.0	60.3	31.7	28.0
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	15.0	46.0	10.0	37.0	8.0	53.0	25.0	22.0
Max Q Clear Time (g_c+I1), s	17.3	48.0	12.0	35.6	10.0	39.5	24.6	24.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	10.1	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	182.7
HCM 6th LOS	F

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	15	10	45	10	1240	50	110	1195	10
Future Volume (veh/h)	10	10	10	15	10	45	10	1240	50	110	1195	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	26	14	0	40	1425	64	153	1440	14
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	60	103	162	126	0	403	2605	117	406	2759	27
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.06	1.00	1.00	0.09	1.00	1.00
Sat Flow, veh/h	729	896	1546	1389	1900	0	1810	3464	155	1753	3606	35
Grp Volume(v), veh/h	80	0	0	26	14	0	40	729	760	153	709	745
Grp Sat Flow(s),veh/h/ln	1624	0	1546	1389	1900	0	1810	1777	1842	1753	1777	1864
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.8	0.0	0.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.8	0.8	0.0	0.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.08	1.00		0.02
Lane Grp Cap(c), veh/h	157	0	103	162	126	0	403	1336	1385	406	1359	1426
V/C Ratio(X)	0.51	0.00	0.00	0.16	0.11	0.00	0.10	0.55	0.55	0.38	0.52	0.52
Avail Cap(c_a), veh/h	522	0	450	474	553	0	493	1336	1385	471	1359	1426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	0.0	48.8	48.3	0.0	2.5	0.0	0.0	2.4	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.1	0.0	0.0	1.6	1.6	0.2	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.7	0.4	0.0	0.1	0.6	0.6	0.5	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	0.0	0.0	48.9	48.4	0.0	2.6	1.6	1.6	2.6	1.4	1.4
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			40			1529			1607	
Approach Delay, s/veh		51.4			48.8			1.6			1.5	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	89.2		12.3	10.0	87.7		12.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.8	4.2	2.0		7.3				
Green Ext Time (p_c), s	0.0	5.6		0.0	0.1	5.9		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	3.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	605	125	230	1255	320	185	555	170	505	640	255
Future Volume (veh/h)	140	605	125	230	1255	320	185	555	170	505	640	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	200	665	112	256	1394	174	240	610	0	537	771	137
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	220	1256	211	387	1432	653	241	720		318	871	387
Arrive On Green	0.08	0.41	0.41	0.08	0.41	0.41	0.08	0.20	0.00	0.21	0.41	0.41
Sat Flow, veh/h	1810	3066	516	1810	3497	1595	1810	3610	1560	1753	3554	1581
Grp Volume(v), veh/h	200	388	389	256	1394	174	240	610	0	537	771	137
Grp Sat Flow(s),veh/h/ln	1810	1791	1791	1810	1749	1595	1810	1805	1560	1753	1777	1581
Q Serve(g_s), s	7.7	18.0	18.0	9.0	43.0	8.0	9.0	17.9	0.0	14.0	22.1	6.6
Cycle Q Clear(g_c), s	7.7	18.0	18.0	9.0	43.0	8.0	9.0	17.9	0.0	14.0	22.1	6.6
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	733	734	387	1432	653	241	720		318	871	387
V/C Ratio(X)	0.91	0.53	0.53	0.66	0.97	0.27	1.00	0.85		1.69	0.89	0.35
Avail Cap(c_a), veh/h	220	733	734	387	1432	653	241	985		318	1131	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	24.5	24.5	19.2	31.9	21.5	38.4	42.4	0.0	30.7	31.1	26.5
Incr Delay (d2), s/veh	36.6	2.7	2.7	3.4	18.2	1.0	56.8	3.9	0.0	323.4	5.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.8	7.9	4.0	20.7	3.0	5.8	8.1	0.0	34.4	8.5	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.1	27.2	27.2	22.6	50.1	22.5	95.2	46.3	0.0	354.2	37.0	26.7
LnGrp LOS	E	C	C	C	D	C	F	D		F	D	C
Approach Vol, veh/h		977			1824			850	A		1445	
Approach Delay, s/veh		35.0			43.6			60.1			153.9	
Approach LOS		C			D			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	50.1	14.0	31.9	14.0	50.1	19.0	26.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	9.0	37.0	9.0	35.0	9.0	37.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	11.0	20.0	11.0	24.1	9.7	45.0	16.0	19.9
Green Ext Time (p_c), s	0.0	2.7	0.0	2.3	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	76.0
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	346.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	585	260	1730	160	360	520
Future Vol, veh/h	585	260	1730	160	360	520
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	636	283	1880	174	391	565

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3032	1027	0	0	2054	0
Stage 1	1967	-	-	-	-	-
Stage 2	1065	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 10	~ 232	-	-	~ 269	-
Stage 1	~ 95	-	-	-	-	-
Stage 2	~ 292	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 232	-	-	~ 269	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	~ 95	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1372.5	0	106.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	232	~ 269	-
HCM Lane V/C Ratio	-	-	3.959	1.455	-
HCM Control Delay (s)	-	-	$ 1372.5	259.3	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	89.7	22	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	19.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	40	20	1830	1080	25
Future Vol, veh/h	60	40	20	1830	1080	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	43	22	1989	1174	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2227	601	1201	0	-	0
Stage 1	1188	-	-	-	-	-
Stage 2	1039	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 37	443	577	-	-	-
Stage 1	252	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 36	443	577	-	-	-
Mov Cap-2 Maneuver	~ 36	-	-	-	-	-
Stage 1	242	-	-	-	-	-
Stage 2	302	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 581.8	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	577	-	57	-	-
HCM Lane V/C Ratio	0.038	-	1.907	-	-
HCM Control Delay (s)	11.5	-	$ 581.8	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	10.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	19.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	40	20	1790	1095	25
Future Vol, veh/h	60	40	20	1790	1095	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	65	43	22	1946	1190	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2221	609	1217	0	-	0
Stage 1	1204	-	-	-	-	-
Stage 2	1017	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 37	438	569	-	-	-
Stage 1	247	-	-	-	-	-
Stage 2	310	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 36	438	569	-	-	-
Mov Cap-2 Maneuver	~ 36	-	-	-	-	-
Stage 1	237	-	-	-	-	-
Stage 2	310	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 581.8	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	569	-	57	-	-
HCM Lane V/C Ratio	0.038	-	1.907	-	-
HCM Control Delay (s)	11.6	-	$ 581.8	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	10.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3322.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	260	30	1780	10	180	955
Future Vol, veh/h	260	30	1780	10	180	955
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	283	33	1935	11	196	1038

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2852	973	0	0	1946	0
Stage 1	1941	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	252	-	-	297	-
Stage 1	~ 98	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 4	252	-	-	297	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	~ 98	-	-	-	-	-
Stage 2	~ 120	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, $	36806	0	6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	4	297	-
HCM Lane V/C Ratio	-	-	78.804	0.659	-
HCM Control Delay (s)	-	-	$ 36806	37.8	-
HCM Lane LOS	-	-	F	E	-
HCM 95th %tile Q(veh)	-	-	41.7	4.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	78.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	105	70	30	1685	1165	50
Future Vol, veh/h	105	70	30	1685	1165	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	76	33	1832	1266	54

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2275	660	1320	0	-	0
Stage 1	1293	-	-	-	-	-
Stage 2	982	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 34	406	519	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	323	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 32	406	519	-	-	-
Mov Cap-2 Maneuver	~ 32	-	-	-	-	-
Stage 1	207	-	-	-	-	-
Stage 2	323	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 1393.8	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	519	-	51	-	-
HCM Lane V/C Ratio	0.063	-	3.73	-	-
HCM Control Delay (s)	12.4		$ 1393.8	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	20.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	99.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	710	1005	220	0	1235
Future Vol, veh/h	0	710	1005	220	0	1235
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	772	1092	239	0	1342

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	666	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	~ 402	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 402	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 445.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	402	-
HCM Lane V/C Ratio	-	-	1.92	-
HCM Control Delay (s)	-	-	$ 445.8	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	51.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	10	60	130	10	70	80	1025	75	45	1375	80
Future Volume (vph)	80	10	60	130	10	70	80	1025	75	45	1375	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.97		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1831		1737	1623		1770	3539	1583	1770	3510	
Flt Permitted		0.77		0.53	0.87		0.06	1.00	1.00	0.16	1.00	
Satd. Flow (perm)		1449		976	1433		110	3539	1583	295	3510	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	11	65	141	11	76	87	1114	82	49	1495	87
RTOR Reduction (vph)	0	19	0	0	60	0	0	0	41	0	3	0
Lane Group Flow (vph)	0	144	0	117	51	0	87	1114	41	49	1579	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Effective Green, g (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Actuated g/C Ratio		0.14		0.15	0.15		0.55	0.50	0.50	0.53	0.49	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		196		146	215		152	1769	791	221	1716	
v/s Ratio Prot							c0.03	0.31		0.01	c0.45	
v/s Ratio Perm		c0.10		c0.12	0.04		0.29		0.03	0.11		
v/c Ratio		0.73		0.80	0.24		0.57	0.63	0.05	0.22	0.92	
Uniform Delay, d1		56.0		55.4	50.5		27.2	24.6	17.3	17.8	32.1	
Progression Factor		1.00		1.00	1.00		2.41	0.58	0.25	1.00	1.00	
Incremental Delay, d2		13.3		26.2	0.6		0.5	0.2	0.0	0.5	9.6	
Delay (s)		69.3		81.6	51.1		66.0	14.5	4.3	18.3	41.6	
Level of Service		E		F	D		E	B	A	B	D	
Approach Delay (s)		69.3			66.7			17.3			40.9	
Approach LOS		E			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	25	25	10	270	20	945	10	75	1140	20
Future Volume (vph)	10	10	25	25	10	270	20	945	10	75	1140	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1707			1842	1568	1805	3567		2045	3525	
Flt Permitted	0.71	1.00			0.81	1.00	0.19	1.00		0.23	1.00	
Satd. Flow (perm)	1357	1707			1543	1568	359	3567		491	3525	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	14	20	33	40	26	325	27	1050	12	94	1213	32
RTOR Reduction (vph)	0	28	0	0	0	159	0	1	0	0	1	0
Lane Group Flow (vph)	14	25	0	0	66	166	27	1061	0	94	1244	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	16.7	16.7			16.7	16.7	77.6	74.4		81.0	76.1	
Effective Green, g (s)	16.7	16.7			16.7	16.7	77.6	74.4		81.0	76.1	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.71	0.68		0.74	0.69	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	206	259			234	238	295	2412		430	2438	
v/s Ratio Prot		0.01					0.00	0.30		c0.01	c0.35	
v/s Ratio Perm	0.01				0.04	c0.11	0.06			0.15		
v/c Ratio	0.07	0.10			0.28	0.70	0.09	0.44		0.22	0.51	
Uniform Delay, d1	40.0	40.2			41.3	44.2	5.5	8.2		4.8	8.1	
Progression Factor	1.00	1.00			1.00	1.00	0.38	0.31		1.00	1.00	
Incremental Delay, d2	0.1	0.2			0.7	8.5	0.0	0.5		0.1	0.8	
Delay (s)	40.1	40.3			42.0	52.8	2.1	3.1		4.8	8.8	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		40.3			50.9			3.0			8.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2910	45	0	2325	0	260
Future Volume (Veh/h)	2910	45	0	2325	0	260
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3163	49	0	2527	0	283
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	429					
pX, platoon unblocked			0.69		0.69	0.69
vC, conflicting volume			3212		3819	815
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1984		2859	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	62
cM capacity (veh/h)			199		9	753

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	904	904	904	501	632	632	632	632	283
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	49	0	0	0	0	283
cSH	1700	1700	1700	1700	1700	1700	1700	1700	753
Volume to Capacity	0.53	0.53	0.53	0.29	0.37	0.37	0.37	0.37	0.38
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	44
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Lane LOS									B
Approach Delay (s)	0.0				0.0				12.6
Approach LOS									B

Intersection Summary				
Average Delay	0.6			
Intersection Capacity Utilization	65.7%	ICU Level of Service		C
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	1155	55	165	860	145	55	560	230	65	205	60
Future Volume (veh/h)	185	1155	55	165	860	145	55	560	230	65	205	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	206	1312	61	190	966	40	60	659	104	94	247	17
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	255	1475	69	236	1486	460	114	1614	713	142	1615	730
Arrive On Green	0.07	0.29	0.29	0.14	0.58	0.58	0.03	0.45	0.45	0.04	0.45	0.45
Sat Flow, veh/h	3483	5000	232	3401	5106	1582	3456	3610	1594	3510	3554	1607
Grp Volume(v), veh/h	206	893	480	190	966	40	60	659	104	94	247	17
Grp Sat Flow(s),veh/h/ln	1742	1702	1828	1700	1702	1582	1728	1805	1594	1755	1777	1607
Q Serve(g_s), s	7.9	33.9	33.9	7.3	17.2	1.5	2.3	16.7	5.2	3.6	5.5	0.8
Cycle Q Clear(g_c), s	7.9	33.9	33.9	7.3	17.2	1.5	2.3	16.7	5.2	3.6	5.5	0.8
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1004	539	236	1486	460	114	1614	713	142	1615	730
V/C Ratio(X)	0.81	0.89	0.89	0.81	0.65	0.09	0.52	0.41	0.15	0.66	0.15	0.02
Avail Cap(c_a), veh/h	284	1286	691	302	1967	609	179	1614	713	468	1615	730
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	45.5	45.5	57.3	23.6	20.3	64.2	25.2	22.1	63.9	21.6	20.3
Incr Delay (d2), s/veh	12.8	5.7	9.9	9.1	0.2	0.0	1.4	0.8	0.4	2.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.6	16.3	3.2	4.9	0.6	1.0	7.3	2.0	1.6	2.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	51.2	55.3	66.3	23.8	20.3	65.6	26.0	22.5	65.8	21.8	20.4
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	C	C
Approach Vol, veh/h		1579			1196			823			358	
Approach Delay, s/veh		55.5			30.4			28.5			33.3	
Approach LOS		E			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	66.3	14.9	44.3	10.5	65.4	14.4	44.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	7.0	45.0	11.0	52.0	18.0	34.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	4.3	7.5	9.9	19.2	5.6	18.7	9.3	35.9
Green Ext Time (p_c), s	0.0	1.1	0.0	3.3	0.1	2.8	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	1815	55	95	1215	210	30	40	80	70	15	20
Future Volume (veh/h)	105	1815	55	95	1215	210	30	40	80	70	15	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	114	1973	58	103	1321	211	33	43	26	76	16	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	3143	92	240	2735	437	168	57	34	252	113	96
Arrive On Green	0.07	1.00	1.00	0.07	1.00	1.00	0.03	0.06	0.06	0.04	0.07	0.00
Sat Flow, veh/h	1603	4588	135	1603	3994	638	1603	982	594	3110	1683	1427
Grp Volume(v), veh/h	114	1316	715	103	1013	519	33	0	69	76	16	0
Grp Sat Flow(s),veh/h/ln	1603	1532	1659	1603	1532	1568	1603	0	1576	1555	1683	1427
Q Serve(g_s), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.7	0.0	0.0	2.6	0.0	5.8	3.1	1.2	0.0
Prop In Lane	1.00		0.08	1.00		0.41	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	321	2099	1136	240	2097	1074	168	0	91	252	113	96
V/C Ratio(X)	0.36	0.63	0.63	0.43	0.48	0.48	0.20	0.00	0.75	0.30	0.14	0.00
Avail Cap(c_a), veh/h	334	2099	1136	301	2097	1074	221	0	199	349	224	190
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.4	0.0	0.0	5.4	0.0	0.0	57.8	0.0	62.6	57.0	59.3	0.0
Incr Delay (d2), s/veh	0.2	1.4	2.6	0.5	0.8	1.6	0.2	0.0	4.7	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.4	0.8	0.8	0.2	0.5	1.1	0.0	2.5	1.2	0.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.7	1.4	2.6	5.9	0.8	1.6	58.0	0.0	67.3	57.2	59.5	0.0
LnGrp LOS	A	A	A	A	A	A	E	A	E	E	E	A
Approach Vol, veh/h		2145			1635			102			92	
Approach Delay, s/veh		2.1			1.4			64.3			57.6	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	99.5	9.5	14.1	11.9	99.4	10.8	12.8
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	10.0	74.0	8.0	18.0	6.0	78.0	9.0	17.0
Max Q Clear Time (g_c+I1), s	4.7	2.0	4.6	3.2	5.0	2.0	5.1	7.8
Green Ext Time (p_c), s	0.0	55.4	0.0	0.0	0.0	39.4	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.7
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1495	25	80	1370	870	30	80	70	150	20	30
Future Volume (veh/h)	240	1495	25	80	1370	870	30	80	70	150	20	30
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	1625	26	87	1489	689	33	87	50	163	22	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	3207	51	291	2934	911	229	104	60	325	236	200
Arrive On Green	0.16	1.00	1.00	0.07	1.00	1.00	0.03	0.09	0.09	0.05	0.13	0.13
Sat Flow, veh/h	1781	5177	83	1781	5106	1585	1781	1115	641	3456	1870	1585
Grp Volume(v), veh/h	261	1069	582	87	1489	689	33	0	137	163	22	3
Grp Sat Flow(s),veh/h/ln	1781	1702	1855	1781	1702	1585	1781	0	1755	1728	1870	1585
Q Serve(g_s), s	8.6	0.0	0.0	2.7	0.0	0.0	2.2	0.0	10.4	5.7	1.4	0.2
Cycle Q Clear(g_c), s	8.6	0.0	0.0	2.7	0.0	0.0	2.2	0.0	10.4	5.7	1.4	0.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	301	2109	1150	291	2934	911	229	0	163	325	236	200
V/C Ratio(X)	0.87	0.51	0.51	0.30	0.51	0.76	0.14	0.00	0.84	0.50	0.09	0.02
Avail Cap(c_a), veh/h	434	2109	1150	293	2934	911	288	0	234	325	236	200
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	0.0	0.0	10.4	0.0	0.0	53.3	0.0	60.2	52.2	52.2	51.7
Incr Delay (d2), s/veh	9.1	0.9	1.6	0.2	0.6	5.8	0.1	0.0	11.8	0.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.3	0.5	1.0	0.2	1.5	1.0	0.0	5.2	2.5	0.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.9	1.6	10.6	0.6	5.8	53.5	0.0	72.0	52.7	52.2	51.7
LnGrp LOS	C	A	A	B	A	A	D	A	E	D	D	D
Approach Vol, veh/h		1912			2265			170			188	
Approach Delay, s/veh		4.1			2.6			68.4			52.6	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	84.6	9.5	23.0	11.8	90.6	14.0	18.6
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	10.9	63.0	8.0	17.0	5.0	79.0	7.0	* 18
Max Q Clear Time (g_c+I1), s	10.6	2.0	4.2	3.4	4.7	2.0	7.7	12.4
Green Ext Time (p_c), s	0.3	47.5	0.0	0.0	0.0	44.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1480	235	790	1900	745	190	565	260	150	515	115
Future Volume (veh/h)	170	1480	235	790	1900	745	190	565	260	150	515	115
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	185	1609	232	859	2065	768	207	614	283	163	560	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	158	1804	259	506	2208	725	154	680	303	215	618	122
Arrive On Green	0.18	0.80	0.80	0.15	0.46	0.46	0.04	0.19	0.19	0.02	0.07	0.07
Sat Flow, veh/h	1781	4510	648	3456	4826	1585	3456	3554	1585	3456	2958	584
Grp Volume(v), veh/h	185	1213	628	859	2065	768	207	614	283	163	336	335
Grp Sat Flow(s),veh/h/ln	1781	1702	1754	1728	1609	1585	1728	1777	1585	1728	1777	1765
Q Serve(g_s), s	12.0	33.5	34.0	19.8	54.8	61.8	6.0	22.8	16.6	6.3	25.3	25.5
Cycle Q Clear(g_c), s	12.0	33.5	34.0	19.8	54.8	61.8	6.0	22.8	16.6	6.3	25.3	25.5
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	158	1362	701	506	2208	725	154	680	303	215	372	369
V/C Ratio(X)	1.17	0.89	0.89	1.70	0.94	1.06	1.35	0.90	0.93	0.76	0.90	0.91
Avail Cap(c_a), veh/h	158	1362	701	506	2208	725	154	680	303	307	395	392
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	11.5	11.5	57.6	34.7	36.6	64.5	53.4	26.3	65.1	61.5	61.6
Incr Delay (d2), s/veh	124.0	9.1	16.3	322.2	9.0	50.1	193.3	15.1	34.2	3.5	21.9	22.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	6.1	7.7	31.1	22.0	32.6	6.8	11.5	9.1	3.0	14.4	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	179.5	20.6	27.8	379.8	43.7	86.7	257.8	68.5	60.5	68.6	83.4	84.4
LnGrp LOS	F	C	C	F	D	F	F	E	E	E	F	F
Approach Vol, veh/h		2026			3692			1104			834	
Approach Delay, s/veh		37.3			130.9			101.9			80.9	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.8	61.0	13.0	34.2	19.0	68.8	15.4	31.8
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	18.0	54.0	6.0	30.0	12.0	60.0	12.0	24.0
Max Q Clear Time (g_c+I1), s	21.8	36.0	8.0	27.5	14.0	63.8	8.3	24.8
Green Ext Time (p_c), s	0.0	11.4	0.0	0.8	0.0	0.0	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	96.5
HCM 6th LOS	F

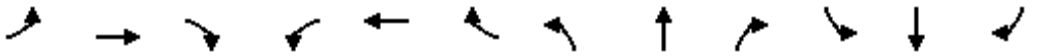
Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	10	10	10	10	895	55	70	730	10
Future Volume (veh/h)	10	10	10	10	10	10	10	895	55	70	730	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	17	14	0	40	1029	70	97	880	13
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	61	104	164	128	0	600	2543	173	467	2740	40
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.03	0.75	0.75	0.09	1.00	1.00
Sat Flow, veh/h	730	902	1546	1389	1900	0	1810	3376	230	1753	3585	53
Grp Volume(v), veh/h	80	0	0	17	14	0	40	541	558	97	436	457
Grp Sat Flow(s),veh/h/ln	1632	0	1546	1389	1900	0	1810	1777	1829	1753	1777	1861
Q Serve(g_s), s	4.5	0.0	0.0	0.0	0.8	0.0	0.5	11.9	11.9	1.3	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.2	0.8	0.0	0.5	11.9	11.9	1.3	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.13	1.00		0.03
Lane Grp Cap(c), veh/h	159	0	104	164	128	0	600	1338	1377	467	1358	1422
V/C Ratio(X)	0.50	0.00	0.00	0.10	0.11	0.00	0.07	0.40	0.40	0.21	0.32	0.32
Avail Cap(c_a), veh/h	523	0	450	474	553	0	690	1338	1377	535	1358	1422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	0.0	0.0	48.4	48.2	0.0	2.6	4.8	4.8	3.1	0.0	0.0
Incr Delay (d2), s/veh	2.5	0.0	0.0	0.3	0.4	0.0	0.0	0.9	0.9	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	0.5	0.4	0.0	0.1	3.8	3.9	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	0.0	0.0	48.7	48.6	0.0	2.6	5.7	5.7	3.3	0.6	0.6
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			31			1139			990	
Approach Delay, s/veh		52.8			48.6			5.6			0.9	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.5	89.1		12.4	9.7	87.9		12.4
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.2	3.3	13.9		7.3
Green Ext Time (p_c), s	0.0	6.6		0.1	0.1	8.8		0.4

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	850	90	140	460	455	40	450	115	195	260	90
Future Volume (veh/h)	235	850	90	140	460	455	40	450	115	195	260	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	336	934	85	156	511	308	52	495	0	207	313	7
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	371	1038	94	232	986	450	528	1214		429	1228	547
Arrive On Green	0.11	0.31	0.31	0.08	0.28	0.28	0.08	0.34	0.00	0.15	0.58	0.58
Sat Flow, veh/h	1810	3319	302	1810	3497	1594	1810	3610	1560	1753	3554	1582
Grp Volume(v), veh/h	336	504	515	156	511	308	52	495	0	207	313	7
Grp Sat Flow(s),veh/h/ln	1810	1791	1830	1810	1749	1594	1810	1805	1560	1753	1777	1582
Q Serve(g_s), s	12.0	29.6	29.6	6.6	13.5	14.1	0.0	11.6	0.0	0.0	4.8	0.1
Cycle Q Clear(g_c), s	12.0	29.6	29.6	6.6	13.5	14.1	0.0	11.6	0.0	0.0	4.8	0.1
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	560	572	232	986	450	528	1214		429	1228	547
V/C Ratio(X)	0.91	0.90	0.90	0.67	0.52	0.69	0.10	0.41		0.48	0.25	0.01
Avail Cap(c_a), veh/h	371	602	616	254	1113	507	528	1214		429	1228	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	36.2	36.2	28.6	33.2	19.6	22.6	28.1	0.0	30.2	16.2	7.4
Incr Delay (d2), s/veh	25.1	15.9	15.6	6.1	0.4	3.3	0.1	1.0	0.0	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	14.8	15.1	3.1	5.6	5.4	0.9	5.0	0.0	4.5	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	52.0	51.8	34.7	33.6	22.9	22.7	29.1	0.0	31.0	16.7	7.4
LnGrp LOS	E	D	D	C	C	C	C	C		C	B	A
Approach Vol, veh/h		1355			975			547	A		527	
Approach Delay, s/veh		52.8			30.4			28.5			22.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	43.0	17.0	36.0	15.0	42.0	13.6	39.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	38.0	12.0	35.0	6.0	37.0	10.0	37.0
Max Q Clear Time (g_c+I1), s	2.0	6.8	14.0	16.1	2.0	13.6	8.6	31.6
Green Ext Time (p_c), s	0.0	2.1	0.0	4.1	0.2	3.1	0.1	2.8

Intersection Summary	
HCM 6th Ctrl Delay	37.7
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	18087.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	210	95	470	310	690	855
Future Vol, veh/h	210	95	470	310	690	855
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	228	103	511	337	750	929

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2645	424	0	0	848	0
Stage 1	680	-	-	-	-	-
Stage 2	1965	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 19	579	-	-	785	-
Stage 1	465	-	-	-	-	-
Stage 2	~ 95	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	579	-	-	785	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	465	-	-	-	-	-
Stage 2	~ 4	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$155867	0	20.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1	785	-
HCM Lane V/C Ratio	-	-	331.522	0.955	-
HCM Control Delay (s)	-	-	$-155867	45.1	-
HCM Lane LOS	-	-	F	E	-
HCM 95th %tile Q(veh)	-	-	44.1	14.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	15	35	760	1010	55
Future Vol, veh/h	20	15	35	760	1010	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	16	38	826	1098	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1617	579	1158	0	-	0
Stage 1	1128	-	-	-	-	-
Stage 2	489	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	94	458	599	-	-	-
Stage 1	271	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	458	599	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	254	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	41.8	0.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	599	-	135	-	-
HCM Lane V/C Ratio	0.064	-	0.282	-	-
HCM Control Delay (s)	11.4	-	41.8	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	15	35	775	970	55
Future Vol, veh/h	20	15	35	775	970	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	16	38	842	1054	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1581	557	1114	0	-	0
Stage 1	1084	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	100	474	623	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	94	474	623	-	-	-
Mov Cap-2 Maneuver	94	-	-	-	-	-
Stage 1	269	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	39.1	0.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	623	-	143	-	-
HCM Lane V/C Ratio	0.061	-	0.266	-	-
HCM Control Delay (s)	11.2	-	39.1	-	-
HCM Lane LOS	B	-	E	-	-
HCM 95th %tile Q(veh)	0.2	-	1	-	-

Intersection	
Int Delay, s/veh	75.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	90	10	800	20	340	645
Future Vol, veh/h	90	10	800	20	340	645
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	11	870	22	370	701

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1972	446	0	0	892	0
Stage 1	881	-	-	-	-	-
Stage 2	1091	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 54	560	-	-	756	-
Stage 1	365	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 28	560	-	-	756	-
Mov Cap-2 Maneuver	~ 28	-	-	-	-	-
Stage 1	365	-	-	-	-	-
Stage 2	145	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 1393	0	4.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	31	756	-
HCM Lane V/C Ratio	-	-	3.506	0.489	-
HCM Control Delay (s)	-	-	$ 1393	14.2	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q(veh)	-	-	12.9	2.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	25	60	780	640	95
Future Vol, veh/h	40	25	60	780	640	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	27	65	848	696	103

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1302	400	799	0	-	0
Stage 1	748	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	152	600	819	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	140	600	819	-	-	-
Mov Cap-2 Maneuver	140	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	539	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.7	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	819	-	199	-	-
HCM Lane V/C Ratio	0.08	-	0.355	-	-
HCM Control Delay (s)	9.8	-	32.7	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0.3	-	1.5	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	260	580	430	0	665
Future Vol, veh/h	0	260	580	430	0	665
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	283	630	467	0	723

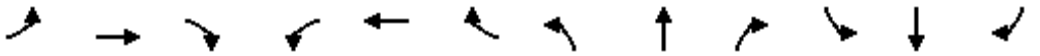
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	549	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	480	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	480	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	480	-
HCM Lane V/C Ratio	-	-	0.589	-
HCM Control Delay (s)	-	-	22.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	3.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	25	115	10	110	45	1465	40	55	720	75
Future Volume (vph)	30	10	25	115	10	110	45	1465	40	55	720	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.88		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.98		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1842		1737	1593		1770	3539	1583	1770	3489	
Flt Permitted		0.78		0.47	0.94		0.27	1.00	1.00	0.07	1.00	
Satd. Flow (perm)		1466		852	1500		508	3539	1583	127	3489	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	27	125	11	120	49	1592	43	60	783	82
RTOR Reduction (vph)	0	18	0	0	103	0	0	0	18	0	5	0
Lane Group Flow (vph)	0	53	0	112	41	0	49	1592	25	60	860	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Effective Green, g (s)		9.0		19.3	19.3		83.4	77.6	77.6	84.0	77.9	
Actuated g/C Ratio		0.07		0.14	0.14		0.62	0.57	0.57	0.62	0.58	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		97		121	214		368	2034	909	153	2013	
v/s Ratio Prot							0.01	c0.45		c0.02	0.25	
v/s Ratio Perm		c0.04		c0.13	0.03		0.08		0.02	0.23		
v/c Ratio		0.55		0.93	0.19		0.13	0.78	0.03	0.39	0.43	
Uniform Delay, d1		61.0		57.1	51.0		10.8	22.2	12.4	19.1	16.0	
Progression Factor		1.00		1.00	1.00		0.97	0.92	1.00	1.00	1.00	
Incremental Delay, d2		6.2		58.7	0.4		0.1	1.0	0.0	1.7	0.7	
Delay (s)		67.3		115.8	51.4		10.6	21.4	12.4	20.8	16.7	
Level of Service		E		F	D		B	C	B	C	B	
Approach Delay (s)		67.3			79.6			20.8			17.0	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



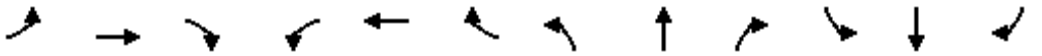
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	10	20	10	10	75	10	920	25	195	460	10
Future Volume (vph)	15	10	20	10	10	75	10	920	25	195	460	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1722			1863	1568	1801	3557		2045	3521	
Flt Permitted	0.73	1.00			0.86	1.00	0.47	1.00		0.24	1.00	
Satd. Flow (perm)	1386	1722			1624	1568	884	3557		516	3521	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	22	20	27	16	26	90	13	1022	30	244	489	16
RTOR Reduction (vph)	0	25	0	0	0	84	0	1	0	0	1	0
Lane Group Flow (vph)	22	22	0	0	42	6	13	1051	0	244	504	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	7.0	7.0			7.0	7.0	84.3	82.4		93.0	87.1	
Effective Green, g (s)	7.0	7.0			7.0	7.0	84.3	82.4		93.0	87.1	
Actuated g/C Ratio	0.06	0.06			0.06	0.06	0.77	0.75		0.85	0.79	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	88	109			103	99	693	2664		527	2787	
v/s Ratio Prot		0.01					0.00	0.30		c0.03	0.14	
v/s Ratio Perm	0.02				c0.03	0.00	0.01			c0.36		
v/c Ratio	0.25	0.20			0.41	0.06	0.02	0.39		0.46	0.18	
Uniform Delay, d1	49.0	48.8			49.5	48.4	3.0	4.9		2.3	2.8	
Progression Factor	1.00	1.00			1.00	1.00	0.94	0.77		1.00	1.00	
Incremental Delay, d2	1.5	0.9			2.6	0.2	0.0	0.4		0.2	0.1	
Delay (s)	50.5	49.7			52.1	48.6	2.9	4.2		2.5	2.9	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		50.0			49.8			4.2			2.8	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1805	85	0	3435	0	95
Future Volume (Veh/h)	1805	85	0	3435	0	95
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	1962	92	0	3734	0	103
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	429					
pX, platoon unblocked			0.69		0.69	0.69
vC, conflicting volume			2054		2942	536
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			307		1587	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	86
cM capacity (veh/h)			867		68	752

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	561	561	561	372	934	934	934	934	103
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	92	0	0	0	0	103
cSH	1700	1700	1700	1700	1700	1700	1700	1700	752
Volume to Capacity	0.33	0.33	0.33	0.22	0.55	0.55	0.55	0.55	0.14
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	12
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.5
Lane LOS									B
Approach Delay (s)	0.0				0.0				10.5
Approach LOS									B

Intersection Summary					
Average Delay	0.2				
Intersection Capacity Utilization	53.1%	ICU Level of Service			A
Analysis Period (min)	15				



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	905	105	340	1380	225	125	565	220	105	655	230
Future Volume (veh/h)	140	905	105	340	1380	225	125	565	220	105	655	230
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1870	1870	1841	1870	1870	1870	1900	1885	1900	1870	1900
Adj Flow Rate, veh/h	156	1028	114	391	1551	109	137	665	134	152	789	98
Peak Hour Factor	0.90	0.88	0.83	0.87	0.89	0.90	0.91	0.85	0.80	0.69	0.83	0.75
Percent Heavy Veh, %	1	2	2	4	2	2	2	0	1	0	2	0
Cap, veh/h	205	1297	144	327	1611	499	188	1516	669	202	1503	680
Arrive On Green	0.06	0.28	0.28	0.19	0.63	0.63	0.05	0.42	0.42	0.06	0.42	0.42
Sat Flow, veh/h	3483	4664	516	3401	5106	1582	3456	3610	1594	3510	3554	1607
Grp Volume(v), veh/h	156	750	392	391	1551	109	137	665	134	152	789	98
Grp Sat Flow(s),veh/h/ln	1742	1702	1776	1700	1702	1582	1728	1805	1594	1755	1777	1607
Q Serve(g_s), s	6.0	27.5	27.6	13.0	38.6	4.0	5.3	17.7	7.2	5.8	22.2	5.1
Cycle Q Clear(g_c), s	6.0	27.5	27.6	13.0	38.6	4.0	5.3	17.7	7.2	5.8	22.2	5.1
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	205	946	494	327	1611	499	188	1516	669	202	1503	680
V/C Ratio(X)	0.76	0.79	0.79	1.19	0.96	0.22	0.73	0.44	0.20	0.75	0.52	0.14
Avail Cap(c_a), veh/h	232	1009	526	327	1664	516	614	1516	669	286	1503	680
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	45.1	45.2	54.5	24.2	17.8	62.8	27.8	24.8	62.7	28.9	23.9
Incr Delay (d2), s/veh	10.1	3.7	6.9	113.3	13.9	0.1	2.0	0.9	0.7	3.6	1.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	11.8	12.8	10.0	10.9	1.4	2.4	7.8	2.8	2.7	9.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.7	48.8	52.1	167.8	38.0	17.9	64.9	28.8	25.5	66.2	30.2	24.4
LnGrp LOS	E	D	D	F	D	B	E	C	C	E	C	C
Approach Vol, veh/h		1298			2051			936			1039	
Approach Delay, s/veh		52.7			61.7			33.6			34.9	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	62.1	13.0	47.6	12.8	61.7	18.0	42.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	38.0	9.0	44.0	11.0	51.0	13.0	40.0
Max Q Clear Time (g_c+I1), s	7.3	24.2	8.0	40.6	7.8	19.7	15.0	29.6
Green Ext Time (p_c), s	0.1	3.3	0.0	2.0	0.1	3.3	0.0	2.8

Intersection Summary	
HCM 6th Ctrl Delay	49.3
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1350	45	105	2080	70	55	15	50	140	25	70
Future Volume (veh/h)	50	1350	45	105	2080	70	55	15	50	140	25	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	54	1467	47	114	2261	74	60	16	0	152	27	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	3187	102	328	3205	105	151	62	0	313	62	53
Arrive On Green	0.06	1.00	1.00	0.07	1.00	1.00	0.04	0.04	0.00	0.04	0.04	0.00
Sat Flow, veh/h	1603	4574	147	1603	4571	149	1603	1683	0	3110	1683	1427
Grp Volume(v), veh/h	54	983	531	114	1512	823	60	16	0	152	27	0
Grp Sat Flow(s),veh/h/ln	1603	1532	1657	1603	1532	1656	1603	1683	0	1555	1683	1427
Q Serve(g_s), s	1.3	0.0	0.0	2.9	0.0	0.0	4.8	1.2	0.0	6.0	2.1	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.0	2.9	0.0	0.0	4.8	1.2	0.0	6.0	2.1	0.0
Prop In Lane	1.00		0.09	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	2135	1155	328	2148	1162	151	62	0	313	62	53
V/C Ratio(X)	0.27	0.46	0.46	0.35	0.70	0.71	0.40	0.26	0.00	0.49	0.43	0.00
Avail Cap(c_a), veh/h	245	2135	1155	365	2148	1162	151	337	0	313	337	285
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.0	0.0	0.0	5.0	0.0	0.0	59.2	63.2	0.0	60.0	63.6	0.0
Incr Delay (d2), s/veh	0.3	0.7	1.3	0.2	2.0	3.7	0.6	0.8	0.0	0.4	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.2	0.4	0.9	0.6	1.2	2.0	0.6	0.0	2.5	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	0.7	1.3	5.2	2.0	3.7	59.8	64.0	0.0	60.4	65.4	0.0
LnGrp LOS	A	A	A	A	A	A	E	E	A	E	E	A
Approach Vol, veh/h		1568			2449			76			179	
Approach Delay, s/veh		1.1			2.7			60.7			61.1	
Approach LOS		A			A			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	101.1	12.0	10.0	11.3	101.7	12.0	10.0
Change Period (Y+Rc), s	7.0	7.0	6.0	5.0	7.0	7.0	6.0	5.0
Max Green Setting (Gmax), s	8.0	69.0	6.0	27.0	8.0	69.0	6.0	27.0
Max Q Clear Time (g_c+I1), s	4.9	2.0	6.8	4.1	3.3	2.0	8.0	3.2
Green Ext Time (p_c), s	0.0	36.0	0.0	0.0	0.0	58.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.6
HCM 6th LOS	A

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	1405	60	105	1780	290	35	40	50	500	100	145
Future Volume (veh/h)	115	1405	60	105	1780	290	35	40	50	500	100	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	125	1527	62	114	1935	175	38	43	16	543	109	21
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	2756	112	305	2780	863	164	62	23	704	352	299
Arrive On Green	0.09	1.00	1.00	0.09	1.00	1.00	0.03	0.05	0.05	0.16	0.19	0.19
Sat Flow, veh/h	1781	5033	204	1781	5106	1585	1781	1300	484	3456	1870	1585
Grp Volume(v), veh/h	125	1033	556	114	1935	175	38	0	59	543	109	21
Grp Sat Flow(s),veh/h/ln	1781	1702	1834	1781	1702	1585	1781	0	1783	1728	1870	1585
Q Serve(g_s), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	19.5	6.8	1.5
Cycle Q Clear(g_c), s	4.3	0.0	0.0	3.9	0.0	0.0	2.7	0.0	4.4	19.5	6.8	1.5
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	241	1864	1004	305	2780	863	164	0	85	704	352	299
V/C Ratio(X)	0.52	0.55	0.55	0.37	0.70	0.20	0.23	0.00	0.69	0.77	0.31	0.07
Avail Cap(c_a), veh/h	277	1864	1004	347	2780	863	272	0	198	735	360	305
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.6	0.0	0.0	11.7	0.0	0.0	58.9	0.0	63.3	48.4	47.2	45.1
Incr Delay (d2), s/veh	0.6	1.2	2.2	0.3	1.5	0.5	0.3	0.0	3.7	4.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.3	0.6	1.5	0.4	0.1	1.2	0.0	2.1	8.9	3.2	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	1.2	2.2	12.0	1.5	0.5	59.1	0.0	66.9	52.7	47.4	45.1
LnGrp LOS	B	A	A	B	A	A	E	A	E	D	D	D
Approach Vol, veh/h		1714			2224			97			673	
Approach Delay, s/veh		2.3			1.9			63.9			51.6	
Approach LOS		A			A			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	80.5	9.8	31.4	12.9	80.9	28.8	12.5
Change Period (Y+Rc), s	7.0	7.0	6.0	6.0	7.0	7.0	7.0	* 6
Max Green Setting (Gmax), s	9.0	62.0	12.0	26.0	9.0	62.0	23.0	* 15
Max Q Clear Time (g_c+I1), s	6.3	2.0	4.7	8.8	5.9	2.0	21.5	6.4
Green Ext Time (p_c), s	0.0	48.6	0.0	0.3	0.0	36.3	0.2	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.5
HCM 6th LOS	B

Notes

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

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1760	220	355	1710	205	325	600	570	535	650	160
Future Volume (veh/h)	150	1760	220	355	1710	205	325	600	570	535	650	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	163	1913	222	386	1859	209	353	652	620	582	707	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	1582	182	392	2334	262	256	579	258	632	785	175
Arrive On Green	0.08	0.45	0.45	0.11	0.39	0.39	0.07	0.16	0.16	0.06	0.09	0.09
Sat Flow, veh/h	1781	4644	535	3456	5912	665	3456	3554	1585	3456	2886	645
Grp Volume(v), veh/h	163	1398	737	386	1517	551	353	652	620	582	435	430
Grp Sat Flow(s),veh/h/ln	1781	1702	1774	1728	1609	1751	1728	1777	1585	1728	1777	1754
Q Serve(g_s), s	8.0	46.0	46.0	15.1	37.5	37.5	10.0	22.0	16.5	22.6	32.7	32.8
Cycle Q Clear(g_c), s	8.0	46.0	46.0	15.1	37.5	37.5	10.0	22.0	16.5	22.6	32.7	32.8
Prop In Lane	1.00		0.30	1.00		0.38	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	106	1160	605	392	1905	691	256	579	258	632	483	477
V/C Ratio(X)	1.54	1.21	1.22	0.99	0.80	0.80	1.38	1.13	2.40	0.92	0.90	0.90
Avail Cap(c_a), veh/h	106	1160	605	392	1905	691	256	579	258	640	487	481
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	36.9	36.9	59.7	36.1	36.1	62.5	56.5	31.7	62.5	59.6	59.7
Incr Delay (d2), s/veh	286.3	100.8	112.9	41.4	3.6	9.3	193.2	77.1	641.8	18.2	19.1	19.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	32.9	36.4	8.7	14.7	17.1	11.2	16.0	52.4	12.1	18.2	18.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	348.4	137.7	149.9	101.2	39.6	45.3	255.7	133.6	673.6	80.7	78.7	79.0
LnGrp LOS	F	F	F	F	D	D	F	F	F	F	E	E
Approach Vol, veh/h		2298			2454			1625			1447	
Approach Delay, s/veh		156.5			50.6			366.1			79.6	
Approach LOS		F			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.3	53.0	17.0	42.7	15.0	60.3	31.7	28.0
Change Period (Y+Rc), s	7.0	7.0	7.0	6.0	7.0	7.0	7.0	6.0
Max Green Setting (Gmax), s	15.3	46.0	10.0	37.0	8.0	53.0	25.0	22.0
Max Q Clear Time (g_c+I1), s	17.1	48.0	12.0	34.8	10.0	39.5	24.6	24.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.9	0.0	10.1	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	152.6
HCM 6th LOS	F

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	15	10	45	10	1180	50	110	1060	10
Future Volume (veh/h)	10	10	10	15	10	45	10	1180	50	110	1060	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1824	1900	1900	1900	1900	1870	1870	1841	1870	1870
Adj Flow Rate, veh/h	40	40	0	26	14	0	40	1356	64	153	1277	14
Peak Hour Factor	0.25	0.25	0.25	0.58	0.71	0.65	0.25	0.87	0.75	0.72	0.83	0.69
Percent Heavy Veh, %	0	0	0	0	0	0	0	2	2	4	2	2
Cap, veh/h	98	60	103	162	126	0	450	2598	122	424	2755	30
Arrive On Green	0.07	0.07	0.00	0.07	0.07	0.00	0.06	1.00	1.00	0.09	1.00	1.00
Sat Flow, veh/h	729	896	1546	1389	1900	0	1810	3455	163	1753	3601	39
Grp Volume(v), veh/h	80	0	0	26	14	0	40	696	724	153	630	661
Grp Sat Flow(s),veh/h/ln	1624	0	1546	1389	1900	0	1810	1777	1841	1753	1777	1863
Q Serve(g_s), s	4.6	0.0	0.0	0.0	0.8	0.0	0.5	0.0	0.0	2.2	0.0	0.0
Cycle Q Clear(g_c), s	5.3	0.0	0.0	1.8	0.8	0.0	0.5	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.50		1.00	1.00		0.00	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	157	0	103	162	126	0	450	1336	1384	424	1359	1425
V/C Ratio(X)	0.51	0.00	0.00	0.16	0.11	0.00	0.09	0.52	0.52	0.36	0.46	0.46
Avail Cap(c_a), veh/h	522	0	450	474	553	0	540	1336	1384	489	1359	1425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	0.0	48.8	48.3	0.0	2.5	0.0	0.0	2.4	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.2	0.1	0.0	0.0	1.5	1.4	0.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.0	0.7	0.4	0.0	0.1	0.5	0.5	0.5	0.4	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.4	0.0	0.0	48.9	48.4	0.0	2.6	1.5	1.4	2.6	1.1	1.1
LnGrp LOS	D	A	A	D	D	A	A	A	A	A	A	A
Approach Vol, veh/h		80			40			1460			1444	
Approach Delay, s/veh		51.4			48.8			1.5			1.3	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.5	89.2		12.3	10.0	87.7		12.3				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	9.0	54.0		32.0	9.0	54.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	2.0		3.8	4.2	2.0		7.3				
Green Ext Time (p_c), s	0.0	4.6		0.0	0.1	5.4		0.2				

Intersection Summary	
HCM 6th Ctrl Delay	3.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	605	125	230	1255	285	185	530	170	435	590	235
Future Volume (veh/h)	135	605	125	230	1255	285	185	530	170	435	590	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	193	665	112	256	1394	135	240	582	0	463	711	112
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	174	1196	201	402	1554	709	268	694		335	844	376
Arrive On Green	0.05	0.39	0.39	0.10	0.44	0.44	0.09	0.19	0.00	0.23	0.40	0.40
Sat Flow, veh/h	1810	3066	516	1810	3497	1595	1810	3610	1560	1753	3554	1581
Grp Volume(v), veh/h	193	388	389	256	1394	135	240	582	0	463	711	112
Grp Sat Flow(s),veh/h/ln	1810	1791	1791	1810	1749	1595	1810	1805	1560	1753	1777	1581
Q Serve(g_s), s	5.0	18.6	18.6	8.9	40.5	5.7	10.0	17.1	0.0	15.0	19.9	5.3
Cycle Q Clear(g_c), s	5.0	18.6	18.6	8.9	40.5	5.7	10.0	17.1	0.0	15.0	19.9	5.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	698	699	402	1554	709	268	694		335	844	376
V/C Ratio(X)	1.11	0.56	0.56	0.64	0.90	0.19	0.90	0.84		1.38	0.84	0.30
Avail Cap(c_a), veh/h	174	698	699	435	1554	709	268	985		335	1131	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.67	1.67	1.67
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	26.1	26.1	18.5	28.2	18.6	36.6	42.8	0.0	30.4	31.3	26.9
Incr Delay (d2), s/veh	100.6	3.2	3.2	1.9	8.5	0.6	28.8	3.2	0.0	190.2	3.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	8.2	8.2	3.7	17.7	2.1	3.7	7.7	0.0	23.9	7.5	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	133.5	29.3	29.3	20.4	36.8	19.2	65.4	46.0	0.0	220.5	34.7	27.1
LnGrp LOS	F	C	C	C	D	B	E	D		F	C	C
Approach Vol, veh/h		970			1785			822	A		1286	
Approach Delay, s/veh		50.1			33.1			51.7			101.0	
Approach LOS		D			C			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	47.9	15.0	31.1	10.0	53.9	20.0	26.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	13.0	32.0	10.0	35.0	5.0	40.0	15.0	30.0
Max Q Clear Time (g_c+I1), s	10.9	20.6	12.0	21.9	7.0	42.5	17.0	19.1
Green Ext Time (p_c), s	0.1	2.4	0.0	2.2	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	57.6
HCM 6th LOS	E

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	216.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	500	225	1590	140	310	495
Future Vol, veh/h	500	225	1590	140	310	495
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	543	245	1728	152	337	538

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2747	940	0	0	1880	0
Stage 1	1804	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 16	265	-	-	~ 315	-
Stage 1	~ 117	-	-	-	-	-
Stage 2	~ 339	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	265	-	-	~ 315	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	~ 117	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 926.8	0	41.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	265	~ 315	-
HCM Lane V/C Ratio	-	-	2.974	1.07	-
HCM Control Delay (s)	-	-	$ 926.8	107.9	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q(veh)	-	-	69.6	12.7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	35	15	1680	970	25
Future Vol, veh/h	50	35	15	1680	970	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	38	16	1826	1054	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2013	541	1081	0	-	0
Stage 1	1068	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 51	485	641	-	-	-
Stage 1	291	-	-	-	-	-
Stage 2	338	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 50	485	641	-	-	-
Mov Cap-2 Maneuver	~ 50	-	-	-	-	-
Stage 1	284	-	-	-	-	-
Stage 2	338	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	248.2	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	641	-	79	-	-
HCM Lane V/C Ratio	0.025	-	1.17	-	-
HCM Control Delay (s)	10.8	-	248.2	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	6.8	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	35	15	1645	980	25
Future Vol, veh/h	50	35	15	1645	980	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	38	16	1788	1065	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2005	546	1092	0	-	0
Stage 1	1079	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 52	482	635	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 51	482	635	-	-	-
Mov Cap-2 Maneuver	~ 51	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	346	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	235.4	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	635	-	81	-	-
HCM Lane V/C Ratio	0.026	-	1.141	-	-
HCM Control Delay (s)	10.8	-	235.4	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	6.6	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	857

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	220	25	1635	10	155	860
Future Vol, veh/h	220	25	1635	10	155	860
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	27	1777	11	168	935

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2587	894	0	0	1788	0
Stage 1	1783	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 21	284	-	-	342	-
Stage 1	~ 120	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 11	284	-	-	342	-
Mov Cap-2 Maneuver	~ 11	-	-	-	-	-
Stage 1	~ 120	-	-	-	-	-
Stage 2	~ 204	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	$ 10145.9	0	3.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	12	342	-
HCM Lane V/C Ratio	-	-	22.192	0.493	-
HCM Control Delay (s)	-	-	$ 10145.9	25.3	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q(veh)	-	-	34.7	2.6	-

Notes				
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	40.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	90	60	30	1555	1040	40
Future Vol, veh/h	90	60	30	1555	1040	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	65	33	1690	1130	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2063	587	1173	0	-	0
Stage 1	1152	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 47	453	591	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 44	453	591	-	-	-
Mov Cap-2 Maneuver	~ 44	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 750.5	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	591	-	69	-	-
HCM Lane V/C Ratio	0.055	-	2.363	-	-
HCM Control Delay (s)	11.4	-	$ 750.5	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.2	-	15.7	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	62

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	610	975	190	0	1100
Future Vol, veh/h	0	610	975	190	0	1100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	663	1060	207	0	1196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	634	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	~ 422	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 422	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	292.2	0	0
HCM LOS	F		

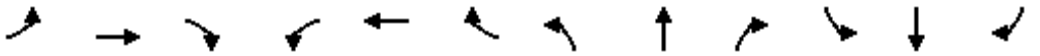
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	422	-
HCM Lane V/C Ratio	-	-	1.571	-
HCM Control Delay (s)	-	-	292.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	36.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	10	60	130	10	70	80	975	75	45	1350	80
Future Volume (vph)	80	10	60	130	10	70	80	975	75	45	1350	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	14	12	13	13	12	12	12	12	12	12	12
Total Lost time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Lane Util. Factor		1.00		0.95	0.95		1.00	0.95	1.00	1.00	0.95	
Frt		0.95		1.00	0.90		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.97		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1831		1737	1623		1770	3539	1583	1770	3509	
Flt Permitted		0.77		0.53	0.87		0.06	1.00	1.00	0.18	1.00	
Satd. Flow (perm)		1449		976	1433		110	3539	1583	329	3509	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	87	11	65	141	11	76	87	1060	82	49	1467	87
RTOR Reduction (vph)	0	19	0	0	60	0	0	0	41	0	3	0
Lane Group Flow (vph)	0	144	0	117	51	0	87	1060	41	49	1551	0
Turn Type	Perm	NA		Perm	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Effective Green, g (s)		18.3		20.3	20.3		74.9	67.5	67.5	71.9	66.0	
Actuated g/C Ratio		0.14		0.15	0.15		0.55	0.50	0.50	0.53	0.49	
Clearance Time (s)		5.0		5.0	5.0		7.0	6.0	6.0	7.0	6.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		196		146	215		152	1769	791	238	1715	
v/s Ratio Prot							c0.03	0.30		0.01	c0.44	
v/s Ratio Perm		c0.10		c0.12	0.04		0.29		0.03	0.10		
v/c Ratio		0.73		0.80	0.24		0.57	0.60	0.05	0.21	0.90	
Uniform Delay, d1		56.0		55.4	50.5		26.6	24.1	17.3	17.3	31.6	
Progression Factor		1.00		1.00	1.00		2.36	0.58	0.24	1.00	1.00	
Incremental Delay, d2		13.3		26.2	0.6		1.7	0.5	0.0	0.4	8.3	
Delay (s)		69.3		81.6	51.1		64.5	14.5	4.1	17.7	39.9	
Level of Service		E		F	D		E	B	A	B	D	
Approach Delay (s)		69.3			66.7			17.3			39.2	
Approach LOS		E			E			B			D	

Intersection Summary			
HCM 2000 Control Delay	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	23.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



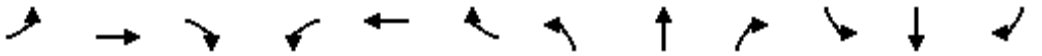
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	25	25	10	270	20	885	10	75	1005	20
Future Volume (vph)	10	10	25	25	10	270	20	885	10	75	1005	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width	12	12	12	12	12	12	12	12	12	16	12	12
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00			1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99			1.00	1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.91			1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00			0.97	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1805	1707			1842	1568	1804	3567		2045	3523	
Flt Permitted	0.71	1.00			0.81	1.00	0.23	1.00		0.25	1.00	
Satd. Flow (perm)	1357	1707			1540	1568	440	3567		538	3523	
Peak-hour factor, PHF	0.69	0.50	0.75	0.63	0.38	0.83	0.75	0.90	0.84	0.80	0.94	0.63
Adj. Flow (vph)	14	20	33	40	26	325	27	983	12	94	1069	32
RTOR Reduction (vph)	0	28	0	0	0	172	0	1	0	0	1	0
Lane Group Flow (vph)	14	25	0	0	66	153	27	994	0	94	1100	0
Confl. Peds. (#/hr)			2	2			4		5	5		4
Heavy Vehicles (%)	0%	0%	0%	0%	0%	3%	0%	1%	0%	0%	2%	0%
Turn Type	Perm	NA		Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		4			4		1	6		5	2	
Permitted Phases	4			4		4	6			2		
Actuated Green, G (s)	16.1	16.1			16.1	16.1	78.1	75.0		81.7	76.8	
Effective Green, g (s)	16.1	16.1			16.1	16.1	78.1	75.0		81.7	76.8	
Actuated g/C Ratio	0.15	0.15			0.15	0.15	0.71	0.68		0.74	0.70	
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	198	249			225	229	350	2432		466	2459	
v/s Ratio Prot		0.01					0.00	0.28		c0.01	c0.31	
v/s Ratio Perm	0.01				0.04	c0.10	0.05			0.14		
v/c Ratio	0.07	0.10			0.29	0.67	0.08	0.41		0.20	0.45	
Uniform Delay, d1	40.5	40.7			41.9	44.4	5.0	7.7		4.4	7.3	
Progression Factor	1.00	1.00			1.00	1.00	0.39	0.32		1.00	1.00	
Incremental Delay, d2	0.2	0.2			0.7	7.2	0.0	0.4		0.1	0.6	
Delay (s)	40.6	40.8			42.6	51.7	2.0	2.9		4.4	7.9	
Level of Service	D	D			D	D	A	A		A	A	
Approach Delay (s)		40.8			50.1			2.9			7.6	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2830	35	0	2270	0	225
Future Volume (Veh/h)	2830	35	0	2270	0	225
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3076	38	0	2467	0	245
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	429					
pX, platoon unblocked			0.69		0.69	0.69
vC, conflicting volume			3114		3712	788
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1843		2704	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	67
cM capacity (veh/h)			226		12	753

Direction, Lane #	EB 1	EB 2	EB 3	EB 4	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	879	879	879	477	617	617	617	617	245
Volume Left	0	0	0	0	0	0	0	0	0
Volume Right	0	0	0	38	0	0	0	0	245
cSH	1700	1700	1700	1700	1700	1700	1700	1700	753
Volume to Capacity	0.52	0.52	0.52	0.28	0.36	0.36	0.36	0.36	0.33
Queue Length 95th (ft)	0	0	0	0	0	0	0	0	35
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.1
Lane LOS									B
Approach Delay (s)	0.0				0.0				12.1
Approach LOS									B

Intersection Summary				
Average Delay	0.5			
Intersection Capacity Utilization	62.2%	ICU Level of Service		B
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	850	90	140	460	455	40	450	115	195	260	90
Future Volume (veh/h)	235	850	90	140	460	455	40	450	115	195	260	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	336	934	85	156	511	308	52	495	0	207	313	7
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	371	1038	94	232	986	450	497	1149		371	1228	547
Arrive On Green	0.11	0.31	0.31	0.08	0.28	0.28	0.08	0.32	0.00	0.14	0.46	0.46
Sat Flow, veh/h	1810	3319	302	1810	3497	1594	1810	3610	1560	3401	3554	1582
Grp Volume(v), veh/h	336	504	515	156	511	308	52	495	0	207	313	7
Grp Sat Flow(s),veh/h/ln	1810	1791	1830	1810	1749	1594	1810	1805	1560	1700	1777	1582
Q Serve(g_s), s	12.0	29.6	29.6	6.6	13.5	13.6	0.0	11.9	0.0	6.2	5.9	0.2
Cycle Q Clear(g_c), s	12.0	29.6	29.6	6.6	13.5	13.6	0.0	11.9	0.0	6.2	5.9	0.2
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	560	572	232	986	450	497	1149		371	1228	547
V/C Ratio(X)	0.91	0.90	0.90	0.67	0.52	0.69	0.10	0.43		0.56	0.25	0.01
Avail Cap(c_a), veh/h	371	602	616	254	1113	507	497	1149		371	1228	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.2	36.2	36.2	28.6	33.2	18.3	24.7	29.6	0.0	44.6	21.1	9.4
Incr Delay (d2), s/veh	25.1	15.9	15.6	6.1	0.4	3.3	0.1	1.2	0.0	1.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	14.8	15.1	3.1	5.6	5.2	0.9	5.2	0.0	2.6	2.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	52.0	51.8	34.7	33.6	21.6	24.8	30.8	0.0	46.4	21.6	9.5
LnGrp LOS	E	D	D	C	C	C	C	C		D	C	A
Approach Vol, veh/h		1355			975			547	A		527	
Approach Delay, s/veh		52.8			30.0			30.2			31.2	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	43.0	17.0	36.0	17.0	40.0	13.6	39.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	5.0	38.0	12.0	35.0	8.0	35.0	10.0	37.0
Max Q Clear Time (g_c+I1), s	2.0	7.9	14.0	15.6	8.2	13.9	8.6	31.6
Green Ext Time (p_c), s	0.0	2.1	0.0	4.2	0.0	3.0	0.1	2.8

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

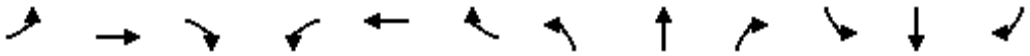
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	605	125	230	1255	285	185	530	170	435	590	235
Future Volume (veh/h)	135	605	125	230	1255	285	185	530	170	435	590	235
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1885	1885	1900	1841	1885	1900	1900	1841	1841	1870	1870
Adj Flow Rate, veh/h	193	665	112	256	1394	135	240	582	0	463	711	112
Peak Hour Factor	0.70	0.91	0.99	0.90	0.90	0.90	0.77	0.91	0.87	0.94	0.83	0.81
Percent Heavy Veh, %	0	1	1	0	4	1	0	0	4	4	2	2
Cap, veh/h	190	1226	206	409	1554	709	214	694		433	844	376
Arrive On Green	0.05	0.40	0.40	0.10	0.44	0.44	0.08	0.19	0.00	0.13	0.24	0.24
Sat Flow, veh/h	1810	3066	516	1810	3497	1595	1810	3610	1560	3401	3554	1581
Grp Volume(v), veh/h	193	388	389	256	1394	135	240	582	0	463	711	112
Grp Sat Flow(s),veh/h/ln	1810	1791	1791	1810	1749	1595	1810	1805	1560	1700	1777	1581
Q Serve(g_s), s	6.0	18.3	18.3	8.8	40.5	3.4	9.0	17.1	0.0	14.0	21.0	6.4
Cycle Q Clear(g_c), s	6.0	18.3	18.3	8.8	40.5	3.4	9.0	17.1	0.0	14.0	21.0	6.4
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	716	716	409	1554	709	214	694		433	844	376
V/C Ratio(X)	1.01	0.54	0.54	0.63	0.90	0.19	1.12	0.84		1.07	0.84	0.30
Avail Cap(c_a), veh/h	190	716	716	493	1554	709	214	985		433	1131	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	25.3	25.3	17.9	28.2	6.8	45.5	42.8	0.0	48.0	40.0	34.4
Incr Delay (d2), s/veh	68.8	2.9	2.9	0.8	8.5	0.6	98.9	3.2	0.0	63.1	3.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.0	8.1	3.5	17.7	2.0	7.2	7.7	0.0	9.6	9.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	98.9	28.2	28.2	18.8	36.8	7.4	144.5	46.0	0.0	111.1	43.4	34.6
LnGrp LOS	F	C	C	B	D	A	F	D		F	D	C
Approach Vol, veh/h		970			1785			822	A		1286	
Approach Delay, s/veh		42.3			32.0			74.8			67.0	
Approach LOS		D			C			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	49.0	14.0	31.1	11.0	53.9	19.0	26.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	16.0	30.0	9.0	35.0	6.0	40.0	14.0	30.0
Max Q Clear Time (g_c+I1), s	10.8	20.3	11.0	23.0	8.0	42.5	16.0	19.1
Green Ext Time (p_c), s	0.1	2.2	0.0	2.2	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	50.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	15	300	10	95	35	450	310	690	800	55
Future Volume (veh/h)	20	10	15	300	10	95	35	450	310	690	800	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	22	11	16	326	11	103	38	489	337	750	870	60
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	22	24	393	374	317	442	844	376	1556	1667	115
Arrive On Green	0.05	0.05	0.05	0.11	0.20	0.20	0.19	0.24	0.24	0.45	0.49	0.49
Sat Flow, veh/h	563	460	496	3456	1870	1585	1781	3554	1585	3456	3373	233
Grp Volume(v), veh/h	49	0	0	326	11	103	38	489	337	750	458	472
Grp Sat Flow(s),veh/h/ln	1520	0	0	1728	1870	1585	1781	1777	1585	1728	1777	1828
Q Serve(g_s), s	2.9	0.0	0.0	11.1	0.6	6.7	0.0	14.6	18.6	18.3	21.1	21.1
Cycle Q Clear(g_c), s	3.7	0.0	0.0	11.1	0.6	6.7	0.0	14.6	18.6	18.3	21.1	21.1
Prop In Lane	0.45		0.33	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	117	0	0	393	374	317	442	844	376	1556	878	904
V/C Ratio(X)	0.42	0.00	0.00	0.83	0.03	0.33	0.09	0.58	0.90	0.48	0.52	0.52
Avail Cap(c_a), veh/h	267	0	0	533	639	542	442	844	376	1556	878	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.0	0.0	0.0	52.0	38.6	41.1	35.5	40.5	25.1	23.2	20.7	20.7
Incr Delay (d2), s/veh	2.4	0.0	0.0	7.9	0.0	0.6	0.1	2.9	26.2	0.2	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	0.0	5.2	0.3	2.7	0.9	6.7	9.7	7.3	9.0	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.4	0.0	0.0	60.0	38.7	41.7	35.6	43.3	51.3	23.4	22.9	22.8
LnGrp LOS	E	A	A	E	D	D	D	D	D	C	C	C
Approach Vol, veh/h		49			440			864			1680	
Approach Delay, s/veh		58.4			55.2			46.1			23.1	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	58.5	33.0	18.1	10.3	27.7	63.8		28.5				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	36.5	28.5	18.5	18.0	5.7	59.3		41.0				
Max Q Clear Time (g_c+I1), s	20.3	20.6	13.1	5.7	2.0	23.1		8.7				
Green Ext Time (p_c), s	2.6	2.7	0.6	0.1	0.0	6.8		0.4				

Intersection Summary			
HCM 6th Ctrl Delay		34.9	
HCM 6th LOS		C	

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	15	35	775	970	55
Future Vol, veh/h	20	15	35	775	970	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	16	38	842	1054	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1581	557	1114	0	-	0
Stage 1	1084	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	100	474	623	-	-	-
Stage 1	286	-	-	-	-	-
Stage 2	577	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	94	474	623	-	-	-
Mov Cap-2 Maneuver	94	-	-	-	-	-
Stage 1	269	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	36.7	0.5	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	623	-	94	474	-	-
HCM Lane V/C Ratio	0.061	-	0.231	0.034	-	-
HCM Control Delay (s)	11.2	-	54.5	12.9	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.8	0.1	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	800	20	340	645
Future Vol, veh/h	0	10	800	20	340	645
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	870	22	370	701

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	446	0	0	892	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	560	-	-	756	-
Stage 1	0	-	-	-	-	-
Stage 2	0	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	560	-	-	756	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.6	0	4.9
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	560	756	-
HCM Lane V/C Ratio	-	-	0.019	0.489	-
HCM Control Delay (s)	-	-	11.6	14.2	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.1	2.7	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	25	60	780	640	95
Future Vol, veh/h	40	25	60	780	640	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	27	65	848	696	103

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1302	400	799	0	-	0
Stage 1	748	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	152	600	819	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	140	600	819	-	-	-
Mov Cap-2 Maneuver	140	-	-	-	-	-
Stage 1	395	-	-	-	-	-
Stage 2	539	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.1	0.7	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	819	-	140	600	-	-
HCM Lane V/C Ratio	0.08	-	0.311	0.045	-	-
HCM Control Delay (s)	9.8	-	41.9	11.3	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.2	0.1	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	260	580	430	0	665
Future Vol, veh/h	0	260	580	430	0	665
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	283	630	467	0	723

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	549	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	480	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	480	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	480	-
HCM Lane V/C Ratio	-	-	0.589	-
HCM Control Delay (s)	-	-	22.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	3.7	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	10	40	500	10	225	20	1535	140	310	465	25
Future Volume (veh/h)	60	10	40	500	10	225	20	1535	140	310	465	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	11	22	543	11	105	22	1668	145	337	505	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	19	27	613	564	478	371	1581	705	487	1949	92
Arrive On Green	0.09	0.09	0.09	0.18	0.30	0.30	0.02	0.45	0.45	0.14	0.56	0.56
Sat Flow, veh/h	869	223	316	3456	1870	1585	1781	3554	1585	3456	3454	164
Grp Volume(v), veh/h	98	0	0	543	11	105	22	1668	145	337	259	270
Grp Sat Flow(s),veh/h/ln	1409	0	0	1728	1870	1585	1781	1777	1585	1728	1777	1841
Q Serve(g_s), s	7.6	0.0	0.0	18.4	0.5	5.9	0.9	53.4	3.7	11.1	8.9	9.0
Cycle Q Clear(g_c), s	8.2	0.0	0.0	18.4	0.5	5.9	0.9	53.4	3.7	11.1	8.9	9.0
Prop In Lane	0.66		0.22	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	172	0	0	613	564	478	371	1581	705	487	1003	1039
V/C Ratio(X)	0.57	0.00	0.00	0.89	0.02	0.22	0.06	1.05	0.21	0.69	0.26	0.26
Avail Cap(c_a), veh/h	260	0	0	708	734	622	406	1581	705	487	1003	1039
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	0.0	0.0	48.2	29.5	31.4	20.7	33.3	6.0	49.0	13.3	13.3
Incr Delay (d2), s/veh	3.0	0.0	0.0	11.8	0.0	0.2	0.1	38.6	0.7	4.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	0.0	8.9	0.2	0.0	0.4	30.4	2.5	5.0	3.6	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.7	0.0	0.0	59.9	29.5	31.6	20.7	71.9	6.7	53.2	14.0	13.9
LnGrp LOS	E	A	A	E	C	C	C	F	A	D	B	B
Approach Vol, veh/h		98			659			1835			866	
Approach Delay, s/veh		56.7			54.9			66.2			29.2	
Approach LOS		E			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	21.4	57.9	25.8	14.9	7.1	72.2		40.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5		4.5				
Max Green Setting (Gmax), s	5.5	53.4	24.6	18.0	5.0	53.9		47.1				
Max Q Clear Time (g_c+I1), s	13.1	55.4	20.4	10.2	2.9	11.0		7.9				
Green Ext Time (p_c), s	0.0	0.0	0.9	0.2	0.0	3.4		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	54.5
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	35	15	1645	980	25
Future Vol, veh/h	50	35	15	1645	980	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	38	16	1788	1065	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2005	546	1092	0	-	0
Stage 1	1079	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 52	482	635	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 51	482	635	-	-	-
Mov Cap-2 Maneuver	~ 51	-	-	-	-	-
Stage 1	281	-	-	-	-	-
Stage 2	346	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	167.1	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	635	-	51	482	-	-
HCM Lane V/C Ratio	0.026	-	1.066	0.079	-	-
HCM Control Delay (s)	10.8	-	274.9	13.1	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.1	-	4.7	0.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	220	25	1635	10	155	860
Future Vol, veh/h	220	25	1635	10	155	860
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	27	1777	11	168	935

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2587	894	0	0	1788	0
Stage 1	1783	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 21	284	-	-	342	-
Stage 1	~ 120	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 11	284	-	-	342	-
Mov Cap-2 Maneuver	~ 11	-	-	-	-	-
Stage 1	~ 120	-	-	-	-	-
Stage 2	~ 204	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	3.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	284	342	-
HCM Lane V/C Ratio	-	-	0.096	0.493	-
HCM Control Delay (s)	-	-	19	25.3	-
HCM Lane LOS	-	-	C	D	-
HCM 95th %tile Q(veh)	-	-	0.3	2.6	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	24.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	90	60	30	1555	1040	40
Future Vol, veh/h	90	60	30	1555	1040	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	60	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	98	65	33	1690	1130	43

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2063	587	1173	0	-	0
Stage 1	1152	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	~ 47	453	591	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 44	453	591	-	-	-
Mov Cap-2 Maneuver	~ 44	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 461.2	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	591	-	44	453	-	-
HCM Lane V/C Ratio	0.055	-	2.223	0.144	-	-
HCM Control Delay (s)	11.4	-	$ 759.1	14.3	-	-
HCM Lane LOS	B	-	F	B	-	-
HCM 95th %tile Q(veh)	0.2	-	10.3	0.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	62

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	610	975	190	0	1100
Future Vol, veh/h	0	610	975	190	0	1100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	663	1060	207	0	1196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	634	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	~ 422	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 422	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	292.2	0	0
HCM LOS	F		

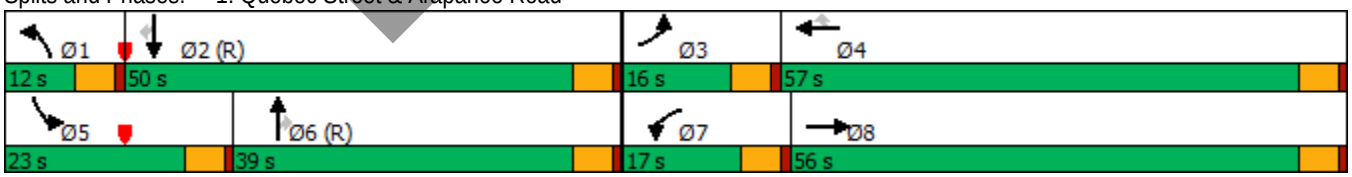
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	422	-
HCM Lane V/C Ratio	-	-	1.571	-
HCM Control Delay (s)	-	-	292.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	36.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	170	1020	153	779	135	51	519	215	61	192	57
Future Volume (vph)	170	1020	153	779	135	51	519	215	61	192	57
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.2	38.7	10.5	39.0	39.0	6.1	58.4	58.4	7.4	61.7	61.7
Actuated g/C Ratio	0.08	0.29	0.08	0.29	0.29	0.05	0.43	0.43	0.05	0.46	0.46
v/c Ratio	0.75	0.84	0.70	0.62	0.28	0.37	0.40	0.35	0.47	0.15	0.10
Control Delay	79.3	50.7	46.5	44.3	17.1	69.5	28.8	8.5	69.9	23.9	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.3	50.7	46.5	44.3	17.1	69.5	28.8	8.5	69.9	23.9	3.1
LOS	E	D	D	D	B	E	C	A	E	C	A
Approach Delay		54.6		41.3			25.4			30.1	
Approach LOS		D		D			C			C	

Intersection Summary		
Cycle Length: 135		
Actuated Cycle Length: 135		
Offset: 97 (72%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.84		
Intersection Signal Delay: 41.1	Intersection LOS: D	
Intersection Capacity Utilization 65.8%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Maximum Green (s)	11.0	51.0	12.0	52.0	52.0	7.0	34.0	34.0	18.0	45.0	45.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	11.0	45.4	12.0	46.4	46.4	7.0	47.7	47.7	9.9	50.6	50.6
90th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
70th %ile Green (s)	11.0	41.4	12.0	42.4	42.4	7.0	53.2	53.2	8.4	54.6	54.6
70th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	11.0	38.9	11.2	39.1	39.1	6.2	57.5	57.5	7.4	58.7	58.7
50th %ile Term Code	Max	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.1	35.7	9.7	35.3	35.3	5.4	63.2	63.2	6.4	64.2	64.2
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	7.9	31.9	7.6	31.6	31.6	0.0	70.5	70.5	5.0	80.5	80.5
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Min	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 97 (72%), Referenced to phase 2:SBT and 6:NBT, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	97	1632	90	1110	28	37	65	13	20
Future Volume (vph)	97	1632	90	1110	28	37	65	13	20
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	94.7	88.1	96.4	89.0	14.4	9.7	16.4	12.5	12.5
Actuated g/C Ratio	0.70	0.65	0.71	0.66	0.11	0.07	0.12	0.09	0.09
v/c Ratio	0.39	0.55	0.49	0.43	0.18	0.69	0.26	0.08	0.08
Control Delay	10.2	22.4	21.6	26.5	48.3	49.7	49.5	55.8	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	22.4	21.6	26.5	48.3	49.7	49.5	55.8	0.6
LOS	B	C	C	C	D	D	D	E	A
Approach Delay		21.7		26.2		49.4		40.3	
Approach LOS		C		C		D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 100 (74%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 25.2	Intersection LOS: C
Intersection Capacity Utilization 62.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 2: S Spruce Street & Arapahoe Road

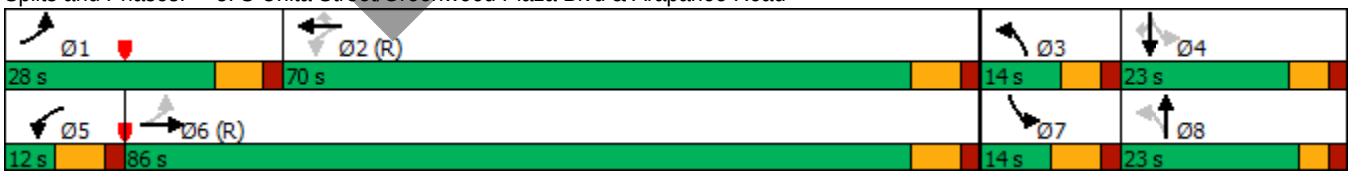
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Maximum Green (s)	6.0	74.0	10.0	78.0	8.0	17.0	9.0	18.0	18.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	7.7	74.4	11.3	78.0	8.0	15.4	8.9	16.3	16.3
90th %ile Term Code	Max	Coord	Gap	Coord	Max	Gap	Gap	Hold	Hold
70th %ile Green (s)	7.5	82.0	8.4	82.9	7.3	11.9	7.7	12.3	12.3
70th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	6.6	87.2	6.5	87.1	6.4	9.4	6.9	9.9	9.9
50th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	5.9	91.0	5.8	90.9	0.0	6.9	6.3	19.2	19.2
30th %ile Term Code	Gap	Coord	Gap	Coord	Skip	Gap	Gap	Hold	Hold
10th %ile Green (s)	5.0	106.0	5.0	106.0	0.0	5.0	0.0	5.0	5.0
10th %ile Term Code	Min	Coord	Min	Coord	Skip	Min	Skip	Hold	Hold

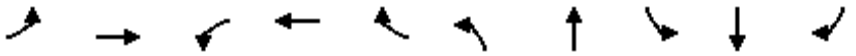
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 100 (74%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	224	1333	76	1254	790	29	74	85	18	29
Future Volume (vph)	224	1333	76	1254	790	29	74	85	18	29
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	94.2	82.9	80.6	74.9	74.9	19.1	13.7	21.6	18.4	18.4
Actuated g/C Ratio	0.70	0.61	0.60	0.55	0.55	0.14	0.10	0.16	0.14	0.14
v/c Ratio	0.75	0.47	0.37	0.48	0.77	0.15	0.76	0.31	0.08	0.08
Control Delay	29.0	16.5	17.2	28.4	23.6	44.3	71.2	47.2	53.2	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.0	16.5	17.2	28.4	23.6	44.3	71.2	47.2	53.2	0.4
LOS	C	B	B	C	C	D	E	D	D	A
Approach Delay		18.2		26.2			66.5		37.6	
Approach LOS		B		C			E		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 11 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 25.1	Intersection LOS: C
Intersection Capacity Utilization 85.0%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: S Unita Street/Greenwood Plaza Blvd & Arapahoe Road





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Maximum Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold
70th %ile Green (s)	16.6	79.0	6.3	68.7	68.7	7.3	16.7	7.0	16.4	16.4
70th %ile Term Code	Gap	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	13.5	81.4	6.4	74.3	74.3	6.4	14.2	7.0	14.8	14.8
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	10.3	84.7	5.7	80.1	80.1	0.0	11.6	7.0	24.6	24.6
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Gap	Max	Hold	Hold
10th %ile Green (s)	7.2	90.6	5.0	88.4	88.4	0.0	7.8	5.6	19.4	19.4
10th %ile Term Code	Gap	Coord	Min	Coord	Coord	Skip	Gap	Gap	Hold	Hold

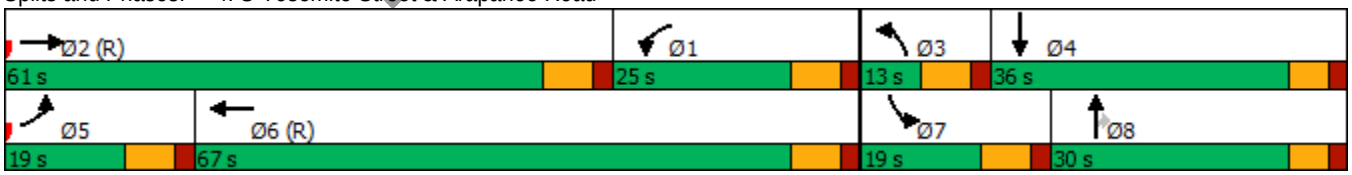
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 11 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	158	1342	208	1765	136	467	147	131	319
Future Volume (vph)	158	1342	208	1765	136	467	147	131	319
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	49.0	49.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	10.5	56.9	18.0	64.4	6.0	23.4	23.4	9.8	27.1
Actuated g/C Ratio	0.08	0.42	0.13	0.48	0.04	0.17	0.17	0.07	0.20
v/c Ratio	0.64	0.63	0.49	0.94dr	1.01	0.83	0.58	0.57	0.65
Control Delay	101.5	10.6	58.4	36.8	139.1	66.2	60.5	68.3	69.7
Queue Delay	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	107.0	10.6	58.4	36.8	139.1	66.2	60.5	68.3	69.7
LOS	F	B	E	D	F	E	E	E	E
Approach Delay		19.9		38.5		78.3			69.4
Approach LOS		B		D		E			E

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 20 (15%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.01	
Intersection Signal Delay: 41.4	Intersection LOS: D
Intersection Capacity Utilization 81.3%	ICU Level of Service D
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	49.0	49.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Maximum Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	3.0	3.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Hold
70th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.8	24.8	11.2	30.0
70th %ile Term Code	Max	Coord	Hold	Coord	Max	Max	Max	Gap	Hold
50th %ile Green (s)	11.1	54.5	18.0	61.4	6.0	25.5	25.5	10.0	29.5
50th %ile Term Code	Gap	Coord	Hold	Coord	Max	Gap	Gap	Gap	Hold
30th %ile Green (s)	9.7	58.0	18.0	66.3	6.0	23.3	23.3	8.7	26.0
30th %ile Term Code	Gap	Coord	Hold	Coord	Max	Gap	Gap	Gap	Hold
10th %ile Green (s)	7.7	63.9	18.0	74.2	6.0	19.2	19.2	6.9	20.1
10th %ile Term Code	Gap	Coord	Hold	Coord	Max	Gap	Gap	Gap	Hold

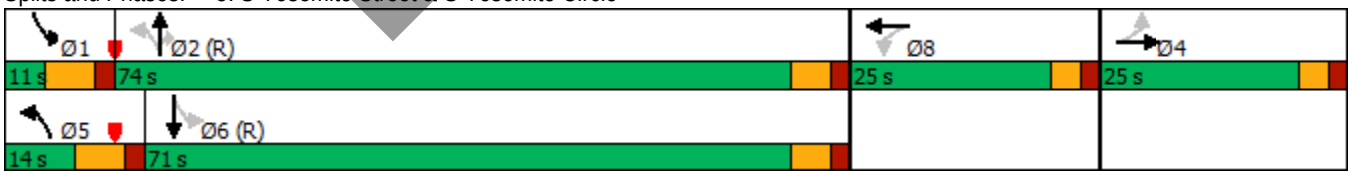
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 20 (15%), Referenced to phase 2:EBT and 6:WBT, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	28	10	107	10	42	1304	37	51	502
Future Volume (vph)	28	10	107	10	42	1304	37	51	502
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		9.7	19.1	19.1	85.5	80.8	80.8	85.9	81.0
Actuated g/C Ratio		0.07	0.14	0.14	0.63	0.60	0.60	0.64	0.60
v/c Ratio		0.54	0.90	0.44	0.09	0.67	0.04	0.27	0.30
Control Delay		58.0	118.8	18.1	9.4	19.3	0.2	12.5	15.2
Queue Delay		0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0
Total Delay		58.0	118.8	18.1	9.4	20.7	0.2	12.5	15.2
LOS		E	F	B	A	C	A	B	B
Approach Delay		58.0		61.7		19.8			14.9
Approach LOS		E		E		B			B

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
Natural Cycle: 125
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.90
Intersection Signal Delay: 23.6 — Intersection LOS: C
Intersection Capacity Utilization 61.8% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle



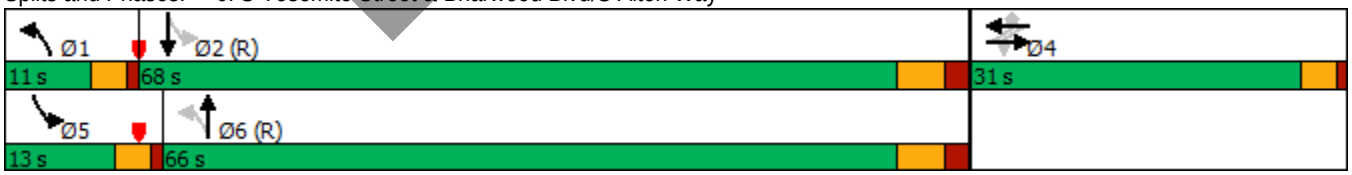
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Maximum Green (s)	20.0	20.0	20.0	20.0	7.0	68.0	68.0	4.0	65.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	14.3	14.3	20.0	20.0	8.2	69.0	69.0	8.7	69.5
90th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
70th %ile Green (s)	11.5	11.5	20.0	20.0	7.3	72.9	72.9	7.6	73.2
70th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
50th %ile Green (s)	9.5	9.5	20.0	20.0	6.7	75.6	75.6	6.9	75.8
50th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	7.6	7.6	20.0	20.0	6.2	78.1	78.1	6.3	78.2
30th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	15.6	15.6	0.0	108.4	108.4	0.0	108.4
10th %ile Term Code	Skip	Skip	Gap	Gap	Skip	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 13 (10%), Referenced to phase 2:NBTL and 6:SBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	14	10	10	10	70	10	419	180	271
Future Volume (vph)	14	10	10	10	70	10	419	180	271
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	8.1	8.1		8.1	8.1	90.0	83.4	95.3	91.5
Actuated g/C Ratio	0.07	0.07		0.07	0.07	0.82	0.76	0.87	0.83
v/c Ratio	0.20	0.29		0.35	0.44	0.01	0.18	0.25	0.10
Control Delay	51.3	31.8		55.8	17.6	1.0	2.7	2.1	2.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.3	31.8		55.8	17.6	1.0	2.7	2.1	2.8
LOS	D	C		E	B	A	A	A	A
Approach Delay		37.9		30.3			2.6		2.5
Approach LOS		D		C			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 11 (10%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.44	
Intersection Signal Delay: 7.3	Intersection LOS: A
Intersection Capacity Utilization 46.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/S Alton Way



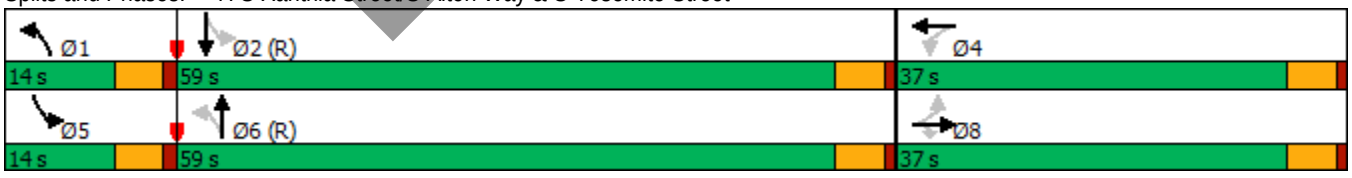
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	11.0	11.0	11.0	11.0	11.0	4.9	76.8	8.2	80.1
90th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
70th %ile Green (s)	9.2	9.2	9.2	9.2	9.2	4.7	79.7	7.1	82.1
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	8.0	8.0	8.0	8.0	8.0	0.0	81.6	6.4	92.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	6.9	6.9	6.9	6.9	6.9	0.0	83.2	5.9	93.1
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	95.5	4.5	104.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Gap	Coord

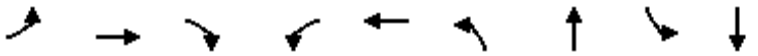
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 11 (10%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	10	10	10	396	64	521
Future Volume (vph)	10	10	10	10	10	10	396	64	521
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		10.9	10.9	10.8	10.8	86.7	82.8	88.9	85.6
Actuated g/C Ratio		0.10	0.10	0.10	0.10	0.79	0.75	0.81	0.78
v/c Ratio		0.53	0.19	0.13	0.18	0.06	0.20	0.12	0.23
Control Delay		59.0	5.5	45.6	28.3	1.5	5.6	2.7	5.0
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	5.5	45.6	28.3	1.5	5.6	2.7	5.0
LOS		E	A	D	C	A	A	A	A
Approach Delay		41.2			34.4		5.4		4.7
Approach LOS		D			C		A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: S Xanthia Street/S Alton Way & S Yosemite Street





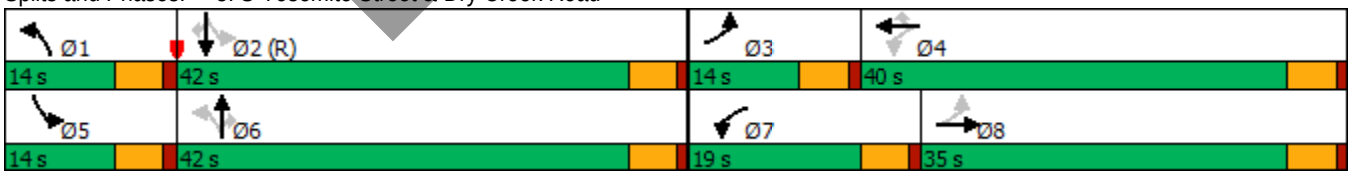
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	15.5	15.5	15.5	15.5	15.5	6.7	71.5	8.0	72.8
90th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
70th %ile Green (s)	12.8	12.8	12.8	12.8	12.8	6.2	75.1	7.1	76.0
70th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
50th %ile Green (s)	10.9	10.9	10.9	10.9	10.9	5.9	77.5	6.6	78.2
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
30th %ile Green (s)	9.1	9.1	9.1	9.1	9.1	0.0	79.8	6.1	90.9
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	105.0	0.0	105.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Skip	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	163	787	132	425	119	36	255	107	101	183	62
Future Volume (vph)	163	787	132	425	119	36	255	107	101	183	62
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	14.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	12.7%	38.2%	38.2%	12.7%	38.2%	38.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	Max	None	None	None	None	Max	Max	None	C-Max	C-Max
Act Effct Green (s)	40.9	31.9	47.1	35.0	35.0	44.7	37.7	37.7	48.1	41.0	41.0
Actuated g/C Ratio	0.37	0.29	0.43	0.32	0.32	0.41	0.34	0.34	0.44	0.37	0.37
v/c Ratio	0.61	0.92	0.59	0.43	0.22	0.09	0.23	0.20	0.22	0.17	0.12
Control Delay	29.4	53.1	30.2	31.1	5.7	17.0	26.6	5.5	29.8	37.0	12.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.4	53.1	30.2	31.1	5.7	17.0	26.6	5.5	29.8	37.0	12.9
LOS	C	D	C	C	A	B	C	A	C	D	B
Approach Delay		48.4		26.4			19.8			30.5	
Approach LOS		D		C			B			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 28 (25%), Referenced to phase 2:SBTL, Start of 1st Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 35.3	Intersection LOS: D
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



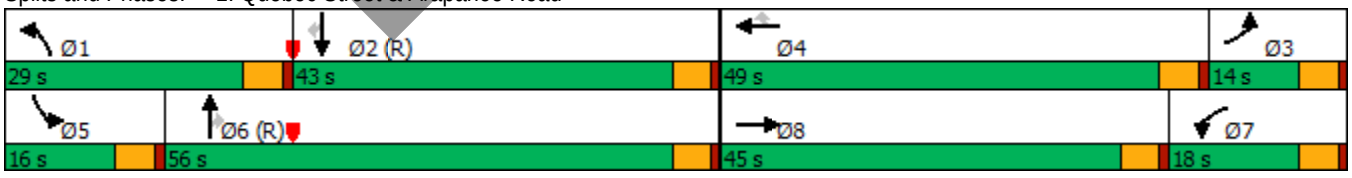
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Minimum Initial (s)	5.0	15.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	14.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	12.7%	38.2%	38.2%	12.7%	38.2%	38.2%
Maximum Green (s)	9.0	30.0	14.0	35.0	35.0	9.0	37.0	37.0	9.0	37.0	37.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	Max	None	None	None	None	Max	Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		30.0	30.0		25.0	25.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	30.0	14.0	35.0	35.0	8.8	37.0	37.0	9.0	37.2	37.2
90th %ile Term Code	Max	MaxR	Max	Hold	Hold	Gap	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	30.0	14.0	35.0	35.0	7.8	37.0	37.0	9.0	38.2	38.2
70th %ile Term Code	Max	MaxR	Max	Hold	Hold	Gap	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	9.0	31.2	12.8	35.0	35.0	7.0	37.0	37.0	9.0	39.0	39.0
50th %ile Term Code	Max	MaxR	Gap	Hold	Hold	Gap	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	9.0	32.9	11.1	35.0	35.0	6.3	37.8	37.8	8.2	39.7	39.7
30th %ile Term Code	Max	MaxR	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	9.0	35.6	8.4	35.0	35.0	0.0	39.5	39.5	6.5	51.0	51.0
10th %ile Term Code	Max	MaxR	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:SBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	132	826	318	1243	207	117	524	202	99	606	213
Future Volume (vph)	132	826	318	1243	207	117	524	202	99	606	213
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	8.8	31.1	19.1	41.4	41.4	9.7	56.2	56.2	8.5	55.1	55.1
Actuated g/C Ratio	0.07	0.23	0.14	0.31	0.31	0.07	0.42	0.42	0.06	0.41	0.41
v/c Ratio	0.68	0.84	0.70	0.89	0.38	0.60	0.41	0.31	0.56	0.53	0.35
Control Delay	77.5	55.8	68.8	67.9	23.0	70.7	29.7	6.1	71.1	32.9	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.5	55.8	68.8	67.9	23.0	70.7	29.7	6.1	71.1	32.9	5.6
LOS	E	E	E	E	C	E	C	A	E	C	A
Approach Delay		58.6		62.6			30.2			30.4	
Approach LOS		E		E			C			C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 52 (39%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 48.5	Intersection LOS: D
Intersection Capacity Utilization 77.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Maximum Green (s)	9.0	40.0	13.0	44.0	44.0	24.0	51.0	51.0	11.0	38.0	38.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	37.3	15.7	44.0	44.0	12.8	51.0	51.0	11.0	49.2	49.2
90th %ile Term Code	Max	Gap	Max	Max	Max	Gap	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	33.4	19.6	44.0	44.0	11.0	52.2	52.2	9.8	51.0	51.0
70th %ile Term Code	Max	Gap	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	9.9	31.2	21.4	42.7	42.7	9.7	53.8	53.8	8.6	52.7	52.7
50th %ile Term Code	Gap	Gap	Hold	Gap	Gap	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	8.6	29.0	19.9	40.3	40.3	8.3	58.6	58.6	7.5	57.8	57.8
30th %ile Term Code	Gap	Gap	Hold	Gap	Gap	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	7.6	24.8	18.8	36.0	36.0	6.5	65.6	65.6	5.8	64.9	64.9
10th %ile Term Code	Hold	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 52 (39%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	46	1238	98	1891	51	16	130	22	64
Future Volume (vph)	46	1238	98	1891	51	16	130	22	64
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	None	None	None	None
Act Effct Green (s)	98.1	92.6	101.5	96.0	10.9	6.9	11.1	7.3	7.3
Actuated g/C Ratio	0.73	0.69	0.75	0.71	0.08	0.05	0.08	0.05	0.05
v/c Ratio	0.33	0.40	0.37	0.59	0.43	0.51	0.61	0.24	0.33
Control Delay	20.3	8.3	9.8	6.8	63.0	36.5	65.1	66.2	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	8.3	9.8	6.8	63.0	36.5	65.1	66.2	4.0
LOS	C	A	A	A	E	D	E	E	A
Approach Delay		8.7		6.9		48.4		47.0	
Approach LOS		A		A		D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 88 (65%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.61	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 68.4%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Syracuse Way & Arapahoe Road

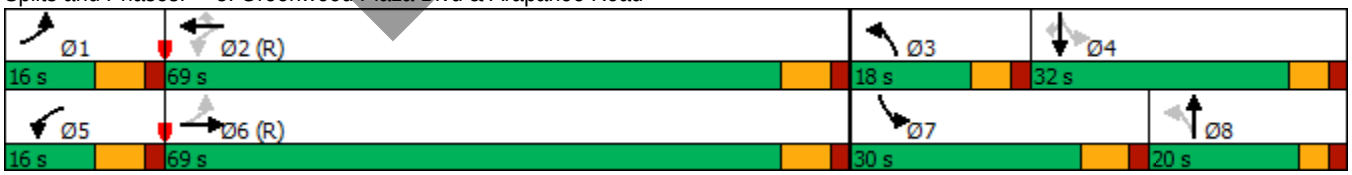
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Maximum Green (s)	8.0	69.0	8.0	69.0	6.0	27.0	6.0	27.0	27.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	6.5	85.4	8.2	87.1	6.0	10.4	6.0	10.4	10.4
90th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
70th %ile Green (s)	5.7	89.2	7.1	90.6	6.0	7.7	6.0	7.7	7.7
70th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
50th %ile Green (s)	5.3	91.4	6.4	92.5	6.0	6.2	6.0	6.2	6.2
50th %ile Term Code	Gap	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
30th %ile Green (s)	5.0	93.0	5.8	93.8	6.0	5.2	6.0	5.2	5.2
30th %ile Term Code	Min	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
10th %ile Green (s)	0.0	104.0	5.0	116.0	0.0	0.0	6.0	7.0	7.0
10th %ile Term Code	Skip	Coord	Min	Coord	Skip	Skip	Max	Hold	Hold

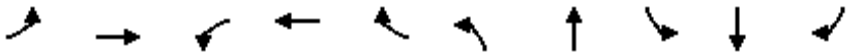
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 88 (65%), Referenced to phase 2:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	108	1290	98	1612	229	34	35	450	94	136
Future Volume (vph)	108	1290	98	1612	229	34	35	450	94	136
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	79.8	70.9	77.6	69.8	69.8	14.4	8.7	35.3	25.8	25.8
Actuated g/C Ratio	0.59	0.53	0.57	0.52	0.52	0.11	0.06	0.26	0.19	0.19
v/c Ratio	0.64	0.55	0.49	0.67	0.27	0.23	0.60	0.73	0.29	0.35
Control Delay	39.6	30.7	22.7	14.4	1.3	40.1	52.3	49.3	49.3	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.6	30.7	22.7	14.4	1.3	40.1	52.3	49.3	49.3	9.2
LOS	D	C	C	B	A	D	D	D	D	A
Approach Delay		31.4		13.3			48.7		41.3	
Approach LOS		C		B			D		D	

Intersection Summary		
Cycle Length: 135		
Actuated Cycle Length: 135		
Offset: 84 (62%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green		
Natural Cycle: 95		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.73		
Intersection Signal Delay: 25.1	Intersection LOS: C	
Intersection Capacity Utilization 73.3%	ICU Level of Service D	
Analysis Period (min) 15		

Splits and Phases: 3: Greenwood Plaza Blvd & Arapahoe Road





Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Maximum Green (s)	9.0	62.0	9.0	62.0	62.0	12.0	15.0	23.0	26.0	26.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	10.7	62.0	10.7	62.0	62.0	8.7	13.3	23.0	27.6	27.6
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	11.5	66.8	8.8	64.1	64.1	7.4	10.4	23.0	26.0	26.0
70th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	9.3	69.9	7.7	68.3	68.3	6.6	8.4	23.0	24.8	24.8
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	7.2	75.2	6.6	74.6	74.6	5.7	6.4	20.8	21.5	21.5
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	5.9	80.5	5.4	80.0	80.0	0.0	5.0	18.1	29.1	29.1
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Min	Gap	Hold	Hold

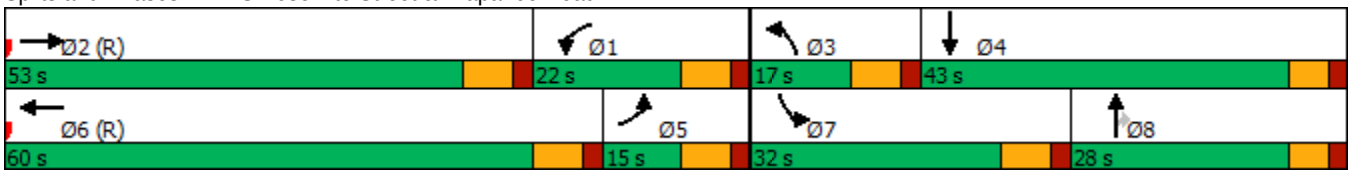
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 84 (62%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	Ø5
Lane Configurations									
Traffic Volume (vph)	1626	225	1586	223	433	325	491	560	
Future Volume (vph)	1626	225	1586	223	433	325	491	560	
Turn Type	NA	Prot	NA	Prot	NA	Perm	Prot	NA	
Protected Phases	2	1	6	3	8		7	4	5
Permitted Phases						8			
Detector Phase	2	1	6	3	8	8	7	4	
Switch Phase									
Minimum Initial (s)	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0	12.0
Total Split (s)	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0	15.0
Total Split (%)	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%	11%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0	
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	C-Max	None	C-Max	None	None	None	None	None	None
Act Effct Green (s)	46.0	14.2	67.2	10.8	24.2	24.2	23.6	37.0	
Actuated g/C Ratio	0.34	0.11	0.50	0.08	0.18	0.18	0.17	0.27	
v/c Ratio	9.33dl	0.68	0.61	0.91	0.74	1.25	0.89	0.80	
Control Delay	655.4	68.2	25.1	98.2	61.1	182.6	62.8	29.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	655.4	68.2	25.1	98.2	61.1	182.6	62.8	29.5	
LOS	F	E	C	F	E	F	E	C	
Approach Delay	655.4		29.9		109.8			43.1	
Approach LOS	F		C		F			D	

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 62 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.40
Intersection Signal Delay: 243.9 Intersection LOS: F
Intersection Capacity Utilization 103.9% ICU Level of Service G
Analysis Period (min) 15
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



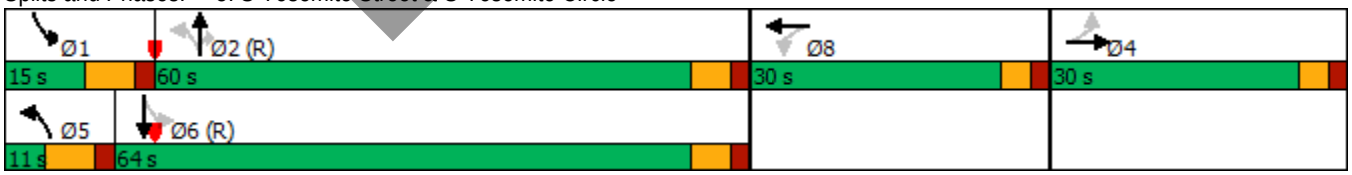
Lane Group	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	Ø5
Protected Phases	2	1	6	3	8		7	4	5
Permitted Phases						8			
Minimum Initial (s)	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0	12.0
Total Split (s)	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0	15.0
Total Split (%)	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%	11%
Maximum Green (s)	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0	8.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	C-Max	None	C-Max	None	None	None	None	None	None
Walk Time (s)	4.0		4.0		4.0	4.0		4.0	
Flash Dont Walk (s)	24.0		21.0		38.0	38.0		34.0	
Pedestrian Calls (#/hr)	0		0		0	0		0	
90th %ile Green (s)	46.0	15.0	68.0	10.0	22.0	22.0	25.0	37.0	0.0
90th %ile Term Code	Coord	Max	Coord	Max	Max	Max	Max	Max	Skip
70th %ile Green (s)	46.0	15.0	68.0	10.0	22.0	22.0	25.0	37.0	0.0
70th %ile Term Code	Coord	Max	Coord	Max	Max	Max	Max	Max	Skip
50th %ile Green (s)	46.0	15.0	68.0	10.0	22.0	22.0	25.0	37.0	0.0
50th %ile Term Code	Coord	Max	Coord	Max	Max	Max	Max	Hold	Skip
30th %ile Green (s)	46.0	14.2	67.2	10.8	24.5	24.5	23.3	37.0	0.0
30th %ile Term Code	Coord	Gap	Coord	Max	Max	Max	Gap	Hold	Skip
10th %ile Green (s)	46.0	11.8	64.8	13.2	30.4	30.4	19.8	37.0	0.0
10th %ile Term Code	Coord	Gap	Coord	Max	Max	Max	Gap	Hold	Skip

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 62 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	74	10	123	10	74	781	69	42	1211
Future Volume (vph)	74	10	123	10	74	781	69	42	1211
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	4.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	11.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		17.4	19.6	19.6	75.6	70.6	70.6	73.6	67.7
Actuated g/C Ratio		0.13	0.15	0.15	0.56	0.52	0.52	0.55	0.50
v/c Ratio		0.73	0.79	0.39	0.48	0.46	0.09	0.14	0.79
Control Delay		67.8	89.6	24.5	41.7	42.8	15.1	15.4	33.7
Queue Delay		0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
Total Delay		67.8	89.6	24.5	41.7	43.3	15.1	15.4	33.7
LOS		E	F	C	D	D	B	B	C
Approach Delay		67.8		58.1		41.0			33.1
Approach LOS		E		E		D			C

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 129 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 39.7	Intersection LOS: D
Intersection Capacity Utilization 69.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	4.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	11.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Maximum Green (s)	25.0	25.0	25.0	25.0	4.0	54.0	54.0	8.0	58.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	24.8	24.8	25.0	25.0	4.2	54.0	54.0	8.2	58.0
90th %ile Term Code	Gap	Gap	Max	Max	Max	Coord	Coord	Max	Coord
70th %ile Green (s)	20.4	20.4	24.5	24.5	9.1	59.3	59.3	7.8	58.0
70th %ile Term Code	Gap	Gap	Gap	Gap	Max	Coord	Coord	Gap	Coord
50th %ile Green (s)	17.4	17.4	20.6	20.6	8.9	67.1	67.1	6.9	65.1
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	14.3	14.3	16.7	16.7	7.8	74.8	74.8	6.2	73.2
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	9.9	9.9	11.1	11.1	6.7	98.0	98.0	0.0	84.3
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 129 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	24	10	250	19	701	69	602
Future Volume (vph)	10	10	24	10	250	19	701	69	602
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	13.1	13.1		13.1	13.1	84.0	77.1	88.0	83.2
Actuated g/C Ratio	0.12	0.12		0.12	0.12	0.76	0.70	0.80	0.76
v/c Ratio	0.07	0.21		0.30	0.79	0.04	0.31	0.17	0.26
Control Delay	39.2	20.8		45.6	24.6	1.7	3.2	3.7	5.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.2	20.8		45.6	24.6	1.7	3.2	3.7	5.8
LOS	D	C		D	C	A	A	A	A
Approach Delay		24.5		27.4			3.1		5.5
Approach LOS		C		C			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 9.3	Intersection LOS: A
Intersection Capacity Utilization 51.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/Alton Way

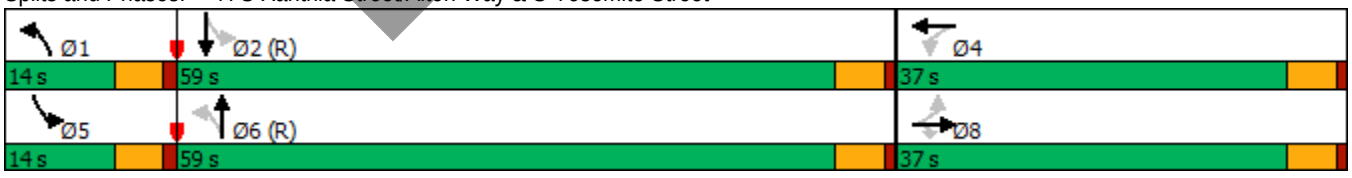
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	23.7	23.7	23.7	23.7	23.7	5.5	64.8	7.5	66.8
90th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
70th %ile Green (s)	16.5	16.5	16.5	16.5	16.5	5.0	73.3	6.2	74.5
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	12.1	12.1	12.1	12.1	12.1	0.0	78.4	5.5	87.9
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	7.6	7.6	7.6	7.6	7.6	0.0	83.4	5.0	92.4
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	5.5	5.5	5.5	5.5	5.5	0.0	85.8	4.7	94.5
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord

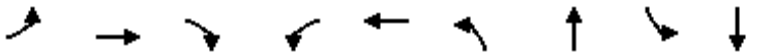
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	13	10	10	976	102	650
Future Volume (vph)	10	10	10	13	10	10	976	102	650
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		7.7	7.7	7.7	7.7	86.8	81.8	90.8	88.3
Actuated g/C Ratio		0.07	0.07	0.07	0.07	0.79	0.74	0.83	0.80
v/c Ratio		0.50	0.10	0.17	0.62	0.03	0.44	0.31	0.27
Control Delay		68.8	1.2	50.5	36.1	1.9	4.5	4.1	1.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay		68.8	1.2	50.5	36.1	1.9	4.7	4.1	1.9
LOS		E	A	D	D	A	A	A	A
Approach Delay		49.4			38.0		4.6		2.2
Approach LOS		D			D		A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 54.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: S Xanthia Street/Alton Way & S Yosemite Street





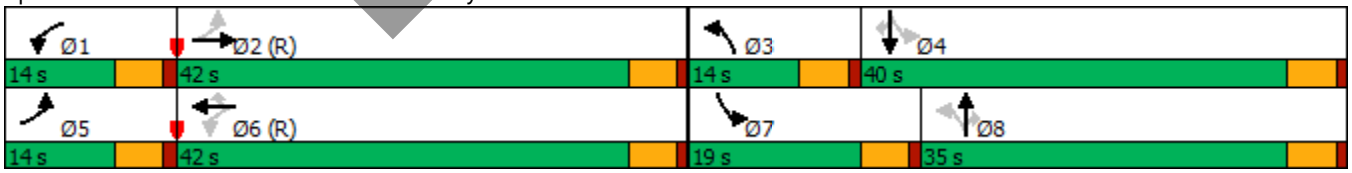
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	12.3	12.3	12.3	12.3	12.3	5.0	75.9	6.8	77.7
90th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Min	Coord	Gap	Coord
70th %ile Green (s)	9.0	9.0	9.0	9.0	9.0	5.0	80.3	5.7	81.0
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Min	Coord	Gap	Coord
50th %ile Green (s)	6.8	6.8	6.8	6.8	6.8	0.0	83.0	5.2	93.2
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	5.4	5.4	5.4	5.4	5.4	0.0	84.6	5.0	94.6
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Min	Coord
10th %ile Green (s)	5.0	5.0	5.0	5.0	5.0	0.0	85.0	5.0	95.0
10th %ile Term Code	Hold	Hold	Hold	Min	Min	Skip	Coord	Min	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	110	560	215	1167	206	172	449	160	137	420	177
Future Volume (vph)	110	560	215	1167	206	172	449	160	137	420	177
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	52.4	43.7	61.4	48.7	48.7	30.7	21.8	21.8	34.5	23.7	23.7
Actuated g/C Ratio	0.48	0.40	0.56	0.44	0.44	0.28	0.20	0.20	0.31	0.22	0.22
v/c Ratio	0.69	0.51	0.65	0.79	0.30	0.69	0.80	0.42	0.61	0.58	0.43
Control Delay	38.0	26.9	24.2	32.6	6.8	40.5	50.9	7.7	31.1	36.7	6.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.0	26.9	24.2	32.6	6.8	40.5	50.9	7.7	31.1	36.7	6.9
LOS	D	C	C	C	A	D	D	A	C	D	A
Approach Delay		28.8		27.8			39.9			27.9	
Approach LOS		C		C			D			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.80	
Intersection Signal Delay: 30.7	Intersection LOS: C
Intersection Capacity Utilization 77.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



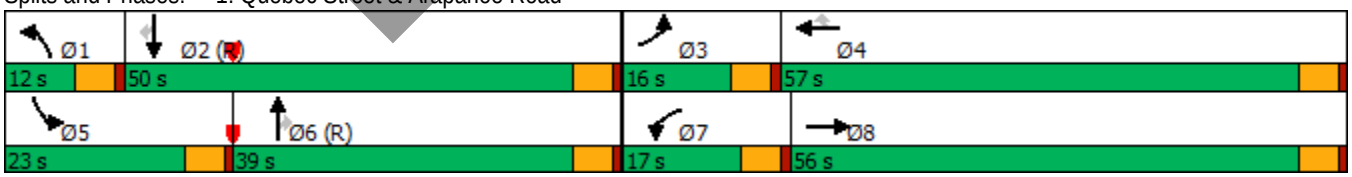
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Maximum Green (s)	9.0	37.0	9.0	37.0	37.0	9.0	30.0	30.0	14.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	2.0	1.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		25.0	25.0		30.0	30.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	11.5	37.0	11.5	37.0	37.0	9.0	27.5	27.5	14.0	32.5	32.5
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	11.0	37.0	15.8	41.8	41.8	9.0	24.5	24.5	12.7	28.2	28.2
70th %ile Term Code	Gap	Coord	Max	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	8.5	41.5	15.9	48.9	48.9	9.0	21.6	21.6	11.0	23.6	23.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	7.1	47.1	14.2	54.2	54.2	9.0	19.4	19.4	9.3	19.7	19.7
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	5.5	55.7	11.3	61.5	61.5	8.3	16.2	16.2	6.8	14.7	14.7
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Gap	Hold	Hold

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	185	1100	165	840	145	55	560	230	65	205	60
Future Volume (vph)	185	1100	165	840	145	55	560	230	65	205	60
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.5	41.3	10.8	41.6	41.6	6.2	55.2	55.2	7.7	58.7	58.7
Actuated g/C Ratio	0.08	0.31	0.08	0.31	0.31	0.05	0.41	0.41	0.06	0.43	0.43
v/c Ratio	0.79	0.85	0.73	0.62	0.28	0.39	0.46	0.38	0.49	0.17	0.11
Control Delay	82.3	49.4	91.4	55.1	15.8	70.1	31.9	7.7	70.1	25.8	3.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	49.4	91.4	55.1	15.8	70.1	31.9	7.7	70.1	25.8	3.8
LOS	F	D	F	E	B	E	C	A	E	C	A
Approach Delay		53.9		55.5			27.2			31.5	
Approach LOS		D		E			C			C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay: 45.8	Intersection LOS: D
Intersection Capacity Utilization 68.0%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Maximum Green (s)	11.0	51.0	12.0	52.0	52.0	7.0	34.0	34.0	18.0	45.0	45.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	11.0	47.9	12.0	48.9	48.9	7.0	44.9	44.9	10.2	48.1	48.1
90th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
70th %ile Green (s)	11.0	44.0	12.0	45.0	45.0	7.0	50.3	50.3	8.7	52.0	52.0
70th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	11.0	41.5	11.7	42.2	42.2	6.4	54.1	54.1	7.7	55.4	55.4
50th %ile Term Code	Max	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.9	38.9	10.2	38.2	38.2	5.5	59.3	59.3	6.6	60.4	60.4
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	8.7	34.4	8.0	33.7	33.7	0.0	67.5	67.5	5.1	77.6	77.6
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	105	1760	95	1195	30	40	70	15	20
Future Volume (vph)	105	1760	95	1195	30	40	70	15	20
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	92.3	85.7	95.8	87.5	15.7	10.8	18.0	13.8	13.8
Actuated g/C Ratio	0.68	0.63	0.71	0.65	0.12	0.08	0.13	0.10	0.10
v/c Ratio	0.53	0.68	0.62	0.52	0.20	0.73	0.29	0.09	0.08
Control Delay	28.4	32.0	44.2	15.3	47.5	54.5	48.8	54.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.4	32.0	44.2	15.3	47.5	54.5	48.8	54.7	0.6
LOS	C	C	D	B	D	D	D	D	A
Approach Delay		31.8		17.1		53.1		40.3	
Approach LOS		C		B		D		D	

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 7 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 26.9 — Intersection LOS: C
Intersection Capacity Utilization 69.7% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Syracuse Way & Arapahoe Road

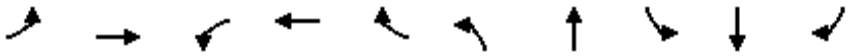
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Maximum Green (s)	6.0	74.0	10.0	78.0	8.0	17.0	9.0	18.0	18.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	6.0	74.0	10.0	78.0	8.0	17.0	9.0	18.0	18.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Hold	Hold
70th %ile Green (s)	8.4	76.9	11.2	79.7	7.9	13.6	8.3	14.0	14.0
70th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	7.2	83.0	8.9	84.7	6.8	10.7	7.4	11.3	11.3
50th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	6.3	88.8	6.6	89.1	0.0	7.9	6.7	20.6	20.6
30th %ile Term Code	Gap	Coord	Gap	Coord	Skip	Gap	Gap	Hold	Hold
10th %ile Green (s)	5.0	106.0	5.0	106.0	0.0	5.0	0.0	5.0	5.0
10th %ile Term Code	Min	Coord	Min	Coord	Skip	Min	Skip	Hold	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 7 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	240	1435	80	1350	850	30	80	90	20	30
Future Volume (vph)	240	1435	80	1350	850	30	80	90	20	30
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	94.2	82.4	77.7	72.1	72.1	19.8	14.3	22.3	19.1	19.1
Actuated g/C Ratio	0.70	0.61	0.58	0.53	0.53	0.15	0.11	0.17	0.14	0.14
v/c Ratio	0.81	0.51	0.43	0.54	0.86	0.15	0.78	0.33	0.08	0.08
Control Delay	56.9	13.2	20.0	33.8	30.7	43.8	73.6	47.1	52.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.9	13.2	20.0	33.8	30.7	43.8	73.6	47.1	52.9	0.4
LOS	E	B	B	C	C	D	E	D	D	A
Approach Delay		19.3		32.2			68.6		37.8	
Approach LOS		B		C			E		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 11 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green	
Natural Cycle: 95	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 28.8	Intersection LOS: C
Intersection Capacity Utilization 90.3%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 3: Greenwood Plaza Boulevard & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Maximum Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold
70th %ile Green (s)	20.1	79.0	5.2	64.1	64.1	7.4	17.8	7.0	17.4	17.4
70th %ile Term Code	Gap	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	16.4	80.3	6.6	70.5	70.5	6.5	15.1	7.0	15.6	15.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	13.1	83.8	5.8	76.5	76.5	0.0	12.4	7.0	25.4	25.4
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Gap	Max	Hold	Hold
10th %ile Green (s)	8.3	89.9	5.0	86.6	86.6	0.0	8.4	5.7	20.1	20.1
10th %ile Term Code	Gap	Coord	Min	Coord	Coord	Skip	Gap	Gap	Hold	Hold

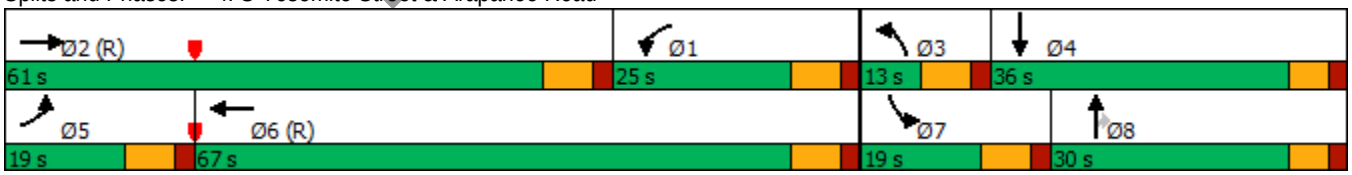
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 11 (8%), Referenced to phase 2:WBTL and 6:EBTL, Start of 1st Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	170	1445	225	1900	145	505	160	140	345
Future Volume (vph)	170	1445	225	1900	145	505	160	140	345
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	14.4	56.4	18.0	60.0	6.0	23.5	23.5	10.0	27.6
Actuated g/C Ratio	0.11	0.42	0.13	0.44	0.04	0.17	0.17	0.07	0.20
v/c Ratio	0.98	0.85	0.54	1.07dr	1.07	0.89	0.63	0.60	0.69
Control Delay	131.0	30.8	59.4	62.4	154.6	71.9	62.6	68.2	70.9
Queue Delay	46.9	0.0	0.0	2.0	0.0	0.6	0.0	0.0	0.0
Total Delay	177.9	30.8	59.4	64.4	154.6	72.4	62.6	68.2	70.9
LOS	F	C	E	E	F	E	E	E	E
Approach Delay		44.9		64.0		85.2			70.3
Approach LOS		D		E		F			E

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 61.9	Intersection LOS: E
Intersection Capacity Utilization 90.1%	ICU Level of Service E
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Maximum Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Hold
70th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.4	24.4	11.6	30.0
70th %ile Term Code	Max	Coord	Hold	Coord	Max	Max	Max	Gap	Hold
50th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	25.7	25.7	10.3	30.0
50th %ile Term Code	Max	Coord	Hold	Coord	Max	Max	Max	Gap	Hold
30th %ile Green (s)	15.4	57.4	18.0	60.0	6.0	23.5	23.5	9.1	26.6
30th %ile Term Code	Max	Coord	Hold	Coord	Max	Gap	Gap	Gap	Hold
10th %ile Green (s)	20.7	62.7	18.0	60.0	6.0	20.1	20.1	7.2	21.3
10th %ile Term Code	Max	Coord	Hold	Coord	Max	Gap	Gap	Gap	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	10	115	10	45	1405	40	55	540
Future Volume (vph)	30	10	115	10	45	1405	40	55	540
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		10.1	19.3	19.3	84.7	79.9	79.9	85.5	80.3
Actuated g/C Ratio		0.07	0.14	0.14	0.63	0.59	0.59	0.63	0.59
v/c Ratio		0.56	0.92	0.45	0.10	0.73	0.04	0.33	0.32
Control Delay		60.4	119.4	17.9	9.8	22.3	0.2	14.4	15.8
Queue Delay		0.0	0.0	0.0	0.0	3.3	0.0	0.0	0.0
Total Delay		60.4	119.4	17.9	9.8	25.5	0.2	14.4	15.8
LOS		E	F	B	A	C	A	B	B
Approach Delay		60.4		62.3		24.4			15.7
Approach LOS		E		E		C			B

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 26.6	Intersection LOS: C
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Maximum Green (s)	20.0	20.0	20.0	20.0	7.0	68.0	68.0	4.0	65.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	15.0	15.0	20.0	20.0	8.4	68.0	68.0	9.0	68.6
90th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Max	Coord
70th %ile Green (s)	12.1	12.1	20.0	20.0	7.4	72.0	72.0	7.9	72.5
70th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
50th %ile Green (s)	10.0	10.0	20.0	20.0	6.8	74.8	74.8	7.2	75.2
50th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	8.0	8.0	20.0	20.0	6.2	77.4	77.4	6.6	77.8
30th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	16.5	16.5	0.0	107.5	107.5	0.0	107.5
10th %ile Term Code	Skip	Skip	Gap	Gap	Skip	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	10	10	10	75	10	450	195	290
Future Volume (vph)	15	10	10	10	75	10	450	195	290
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	8.1	8.1		8.1	8.1	89.8	83.2	95.4	91.5
Actuated g/C Ratio	0.07	0.07		0.07	0.07	0.82	0.76	0.87	0.83
v/c Ratio	0.22	0.31		0.35	0.45	0.01	0.20	0.28	0.11
Control Delay	51.9	31.1		55.8	17.5	2.7	6.7	2.2	2.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	31.1		55.8	17.5	2.7	6.7	2.2	2.8
LOS	D	C		E	B	A	A	A	A
Approach Delay		37.7		29.7			6.6		2.6
Approach LOS		D		C			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 65	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 47.6%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/S Alton Way

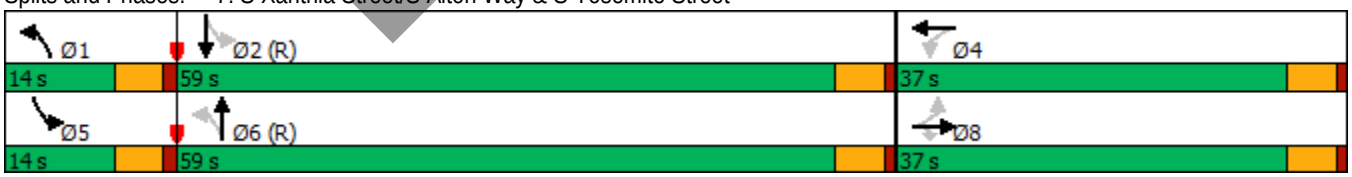
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	11.0	11.0	11.0	11.0	11.0	4.9	76.5	8.5	80.1
90th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
70th %ile Green (s)	9.2	9.2	9.2	9.2	9.2	4.7	79.5	7.3	82.1
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	8.0	8.0	8.0	8.0	8.0	0.0	81.4	6.6	92.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	6.9	6.9	6.9	6.9	6.9	0.0	83.1	6.0	93.1
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	95.5	4.5	104.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Gap	Coord

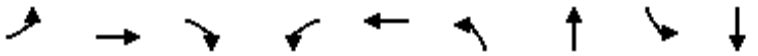
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	10	10	10	425	70	560
Future Volume (vph)	10	10	10	10	10	10	425	70	560
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		10.9	10.9	10.7	10.7	85.6	79.6	89.0	85.6
Actuated g/C Ratio		0.10	0.10	0.10	0.10	0.78	0.72	0.81	0.78
v/c Ratio		0.53	0.19	0.13	0.17	0.06	0.22	0.14	0.25
Control Delay		59.0	5.5	45.6	28.9	3.8	6.1	2.8	5.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.0	5.5	45.6	28.9	3.8	6.1	2.8	5.1
LOS		E	A	D	C	A	A	A	A
Approach Delay		41.2			35.1		6.0		4.8
Approach LOS		D			D		A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 9.0	Intersection LOS: A
Intersection Capacity Utilization 49.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: S Xanthia Street/S Alton Way & S Yosemite Street





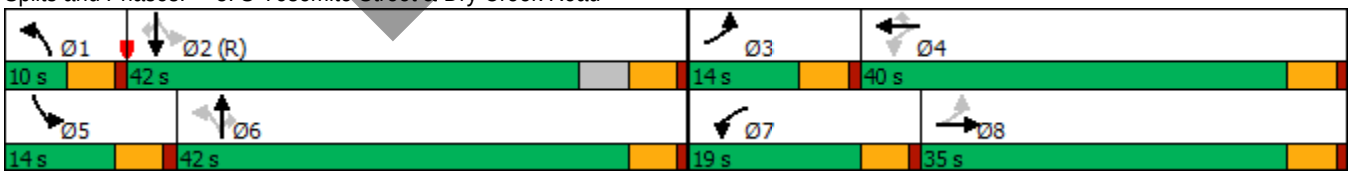
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	15.5	15.5	15.5	15.5	15.5	6.7	71.3	8.2	72.8
90th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
70th %ile Green (s)	12.8	12.8	12.8	12.8	12.8	6.2	75.0	7.2	76.0
70th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
50th %ile Green (s)	10.9	10.9	10.9	10.9	10.9	5.9	77.4	6.7	78.2
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
30th %ile Green (s)	9.0	9.0	9.0	9.0	9.0	0.0	79.8	6.2	91.0
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	94.5	5.5	105.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Gap	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	175	850	140	460	130	40	275	115	110	195	65
Future Volume (vph)	175	850	140	460	130	40	275	115	110	195	65
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	10.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	9.1%	38.2%	38.2%	12.7%	38.2%	38.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Act Effct Green (s)	40.8	31.8	47.2	35.0	35.0	42.5	37.5	37.5	50.1	43.0	43.0
Actuated g/C Ratio	0.37	0.29	0.43	0.32	0.32	0.39	0.34	0.34	0.46	0.39	0.39
v/c Ratio	0.69	1.00	0.62	0.46	0.24	0.11	0.25	0.22	0.25	0.17	0.12
Control Delay	33.8	68.3	31.7	31.7	5.6	17.4	26.9	5.4	18.8	24.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	68.3	31.7	31.7	5.6	17.4	26.9	5.4	18.8	24.0	9.2
LOS	C	E	C	C	A	B	C	A	B	C	A
Approach Delay		61.5		27.0			20.0			19.8	
Approach LOS		E		C			C			B	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.00	
Intersection Signal Delay: 39.5	Intersection LOS: D
Intersection Capacity Utilization 86.1%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



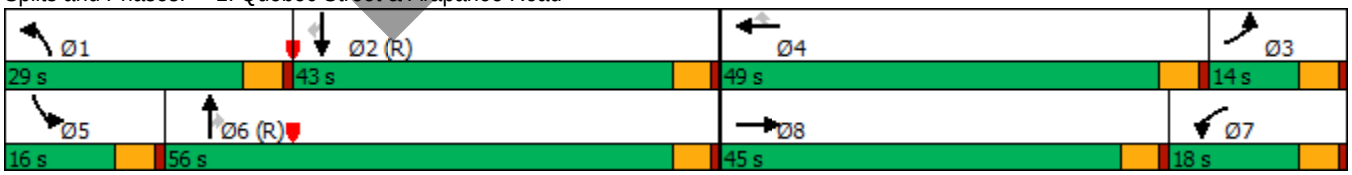
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	10.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	9.1%	38.2%	38.2%	12.7%	38.2%	38.2%
Maximum Green (s)	9.0	30.0	14.0	35.0	35.0	5.0	37.0	37.0	9.0	37.0	37.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		30.0	30.0		25.0	25.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	30.0	14.0	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
90th %ile Term Code	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	30.0	14.0	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
70th %ile Term Code	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	9.0	30.8	13.2	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
50th %ile Term Code	Max	Max	Gap	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	9.0	32.7	11.3	35.0	35.0	5.0	37.5	37.5	8.5	41.0	41.0
30th %ile Term Code	Max	Max	Gap	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	9.0	35.3	8.7	35.0	35.0	0.0	39.2	39.2	6.8	51.0	51.0
10th %ile Term Code	Max	Max	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	890	340	1340	225	125	565	220	105	655	230
Future Volume (vph)	140	890	340	1340	225	125	565	220	105	655	230
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	9.5	33.3	19.1	42.9	42.9	10.1	53.8	53.8	8.8	52.5	52.5
Actuated g/C Ratio	0.07	0.25	0.14	0.32	0.32	0.07	0.40	0.40	0.07	0.39	0.39
v/c Ratio	0.67	0.85	0.75	0.92	0.40	0.61	0.46	0.35	0.58	0.60	0.39
Control Delay	75.5	54.8	70.6	68.6	23.3	70.8	31.7	8.3	71.6	35.8	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	54.8	70.6	68.6	23.3	70.8	31.7	8.3	71.6	35.8	7.6
LOS	E	D	E	E	C	E	C	A	E	D	A
Approach Delay		57.5		63.4			31.9			32.8	
Approach LOS		E		E			C			C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 52 (39%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 49.4	Intersection LOS: D
Intersection Capacity Utilization 78.7%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Maximum Green (s)	9.0	40.0	13.0	44.0	44.0	24.0	51.0	51.0	11.0	38.0	38.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	39.3	13.7	44.0	44.0	13.3	51.0	51.0	11.0	48.7	48.7
90th %ile Term Code	Max	Gap	Max	Max	Max	Gap	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	35.5	17.5	44.0	44.0	11.4	51.8	51.8	10.2	50.6	50.6
70th %ile Term Code	Max	Gap	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	9.0	33.3	19.7	44.0	44.0	10.1	53.0	53.0	9.0	51.9	51.9
50th %ile Term Code	Max	Gap	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	9.0	31.0	21.3	43.3	43.3	8.7	55.0	55.0	7.7	54.0	54.0
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	11.7	27.5	23.3	39.1	39.1	6.8	58.2	58.2	6.0	57.4	57.4
10th %ile Term Code	Hold	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 52 (39%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	50	1335	105	2035	55	15	140	25	70
Future Volume (vph)	50	1335	105	2035	55	15	140	25	70
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	None	None	None	None	None
Act Effct Green (s)	97.7	92.0	101.7	95.8	11.0	7.0	11.2	7.4	7.4
Actuated g/C Ratio	0.72	0.68	0.75	0.71	0.08	0.05	0.08	0.05	0.05
v/c Ratio	0.40	0.44	0.42	0.64	0.47	0.51	0.66	0.27	0.35
Control Delay	25.9	10.1	14.3	8.6	64.7	35.2	68.0	67.1	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	10.1	14.3	8.6	64.7	35.2	68.0	67.1	4.5
LOS	C	B	B	A	E	D	E	E	A
Approach Delay		10.7		8.9		48.8		49.0	
Approach LOS		B		A		D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 88 (65%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 13.1	Intersection LOS: B
Intersection Capacity Utilization 71.5%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 2: Syracuse Way & Arapahoe Road

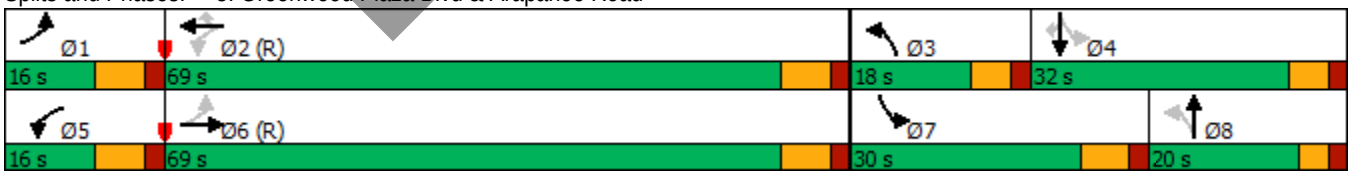
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Maximum Green (s)	8.0	69.0	8.0	69.0	6.0	27.0	6.0	27.0	27.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	7.1	83.3	10.3	86.5	6.0	10.4	6.0	10.4	10.4
90th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
70th %ile Green (s)	5.8	89.1	7.2	90.5	6.0	7.7	6.0	7.7	7.7
70th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
50th %ile Green (s)	5.4	91.1	6.5	92.2	6.0	6.4	6.0	6.4	6.4
50th %ile Term Code	Gap	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
30th %ile Green (s)	5.0	92.7	5.9	93.6	6.0	5.4	6.0	5.4	5.4
30th %ile Term Code	Min	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
10th %ile Green (s)	0.0	104.0	5.0	116.0	0.0	0.0	6.0	7.0	7.0
10th %ile Term Code	Skip	Coord	Min	Coord	Skip	Skip	Max	Hold	Hold

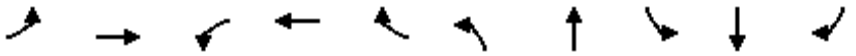
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 88 (65%), Referenced to phase 2:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	115	1390	105	1735	245	35	40	485	100	145
Future Volume (vph)	115	1390	105	1735	245	35	40	485	100	145
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	78.8	69.5	76.2	68.2	68.2	15.1	9.4	36.5	27.0	27.0
Actuated g/C Ratio	0.58	0.51	0.56	0.51	0.51	0.11	0.07	0.27	0.20	0.20
v/c Ratio	0.71	0.60	0.58	0.73	0.29	0.23	0.63	0.77	0.29	0.36
Control Delay	49.9	31.0	32.3	8.8	1.2	39.2	55.3	50.2	48.5	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.9	31.0	32.3	8.8	1.2	39.2	55.3	50.2	48.5	8.8
LOS	D	C	C	A	A	D	E	D	D	A
Approach Delay		32.4		9.1			50.8		41.7	
Approach LOS		C		A			D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 84 (62%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 23.6	Intersection LOS: C
Intersection Capacity Utilization 77.1%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Greenwood Plaza Blvd & Arapahoe Road





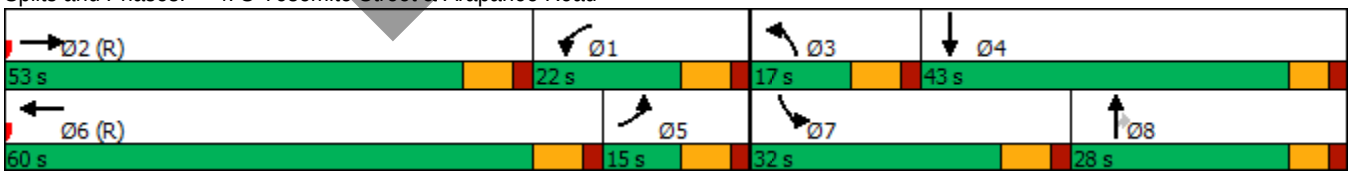
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Maximum Green (s)	9.0	62.0	9.0	62.0	62.0	12.0	15.0	23.0	26.0	26.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	9.7	62.0	9.7	62.0	62.0	8.7	14.3	23.0	28.6	28.6
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	12.3	65.0	9.7	62.4	62.4	7.5	11.3	23.0	26.8	26.8
70th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	10.1	68.8	8.0	66.7	66.7	6.6	9.2	23.0	25.6	25.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	7.9	72.7	6.9	71.7	71.7	5.7	7.0	22.4	23.7	23.7
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	6.2	79.1	5.5	78.4	78.4	0.0	5.0	19.4	30.4	30.4
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Min	Gap	Hold	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 84 (62%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	150	1750	245	1710	240	465	350	530	605
Future Volume (vph)	150	1750	245	1710	240	465	350	530	605
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	45.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	46.0	15.0	53.0	10.0	22.6	22.6	24.4	37.0
Actuated g/C Ratio	0.06	0.34	0.11	0.39	0.07	0.17	0.17	0.18	0.27
v/c Ratio	1.57	1.27	0.70	0.84	1.07	0.85	1.44	0.93	0.87
Control Delay	324.4	169.3	68.4	40.3	133.8	69.5	258.2	66.1	30.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	324.4	169.3	68.4	40.3	133.8	69.5	258.2	66.1	30.7
LOS	F	F	E	D	F	E	F	E	C
Approach Delay		180.4		43.5		146.7			45.2
Approach LOS		F		D		F			D

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 62 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.57	
Intersection Signal Delay: 103.7	Intersection LOS: F
Intersection Capacity Utilization 96.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



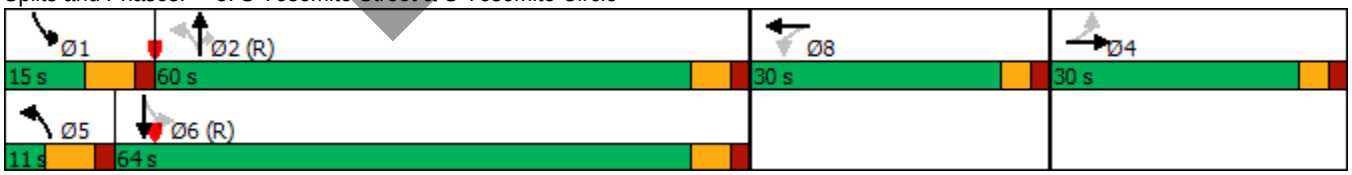
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	45.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Maximum Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
70th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
70th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
50th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
50th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
30th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
30th %ile Term Code	Max	Coord	Hold	Coord	Max	Max	Max	Max	Hold
10th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	24.9	24.9	22.1	37.0
10th %ile Term Code	Max	Coord	Hold	Coord	Max	Max	Max	Gap	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 62 (46%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	80	10	130	10	80	840	75	45	1305
Future Volume (vph)	80	10	130	10	80	840	75	45	1305
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		18.3	20.3	20.3	73.9	69.0	69.0	72.1	66.1
Actuated g/C Ratio		0.14	0.15	0.15	0.55	0.51	0.51	0.53	0.49
v/c Ratio		0.76	0.80	0.40	0.58	0.50	0.09	0.16	0.88
Control Delay		69.6	90.5	24.4	45.0	42.5	13.1	16.2	39.0
Queue Delay		0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay		69.6	90.5	24.4	45.0	43.0	13.1	16.2	39.0
LOS		E	F	C	D	D	B	B	D
Approach Delay		69.6		58.3		40.9			38.3
Approach LOS		E		E		D			D

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 129 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 42.4	Intersection LOS: D
Intersection Capacity Utilization 73.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Maximum Green (s)	25.0	25.0	25.0	25.0	4.0	54.0	54.0	8.0	58.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	25.0	25.0	25.0	25.0	4.0	54.0	54.0	8.0	58.0
90th %ile Term Code	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord
70th %ile Green (s)	21.8	21.8	25.0	25.0	7.2	57.2	57.2	8.0	58.0
70th %ile Term Code	Gap	Gap	Max	Max	Max	Coord	Coord	Gap	Coord
50th %ile Green (s)	18.6	18.6	21.7	21.7	9.7	64.6	64.6	7.1	62.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	15.3	15.3	17.7	17.7	8.6	72.7	72.7	6.3	70.4
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	10.7	10.7	11.9	11.9	7.3	96.4	96.4	0.0	82.1
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 129 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	25	10	270	20	755	75	650
Future Volume (vph)	10	10	25	10	270	20	755	75	650
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	16.0	16.0		16.0	16.0	80.8	73.9	84.7	78.5
Actuated g/C Ratio	0.15	0.15		0.15	0.15	0.73	0.67	0.77	0.71
v/c Ratio	0.06	0.19		0.25	0.82	0.04	0.34	0.20	0.30
Control Delay	35.8	17.9		40.8	29.8	2.2	4.2	4.8	7.8
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	17.9		40.8	29.8	2.2	4.2	4.8	7.8
LOS	D	B		D	C	A	A	A	A
Approach Delay		21.3		31.2			4.1		7.4
Approach LOS		C		C			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 70	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 11.0	Intersection LOS: B
Intersection Capacity Utilization 53.7%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/Alton Way

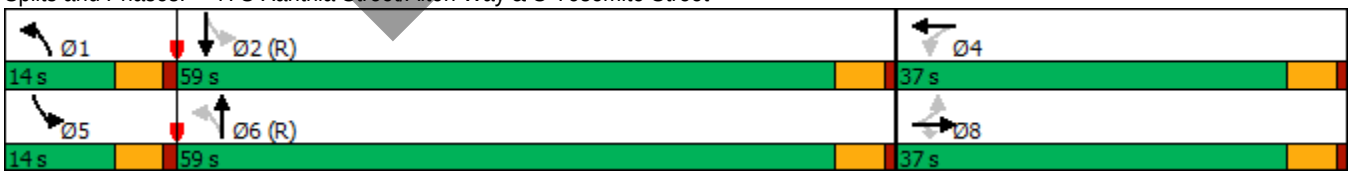
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	27.0	27.0	27.0	27.0	27.0	5.7	60.9	8.1	63.3
90th %ile Term Code	Max	Max	Max	Max	Max	Gap	Coord	Gap	Coord
70th %ile Green (s)	21.2	21.2	21.2	21.2	21.2	5.1	68.1	6.7	69.7
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	15.8	15.8	15.8	15.8	15.8	4.8	74.3	5.9	75.4
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
30th %ile Green (s)	10.3	10.3	10.3	10.3	10.3	0.0	80.5	5.2	89.7
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	5.5	5.5	5.5	5.5	5.5	0.0	85.8	4.7	94.5
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord

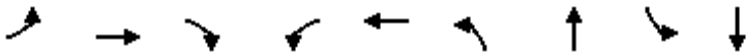
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	15	10	10	1050	110	700
Future Volume (vph)	10	10	10	15	10	10	1050	110	700
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		7.7	7.7	7.7	7.7	86.5	81.5	91.0	88.3
Actuated g/C Ratio		0.07	0.07	0.07	0.07	0.79	0.74	0.83	0.80
v/c Ratio		0.50	0.10	0.20	0.62	0.04	0.47	0.37	0.29
Control Delay		69.2	1.2	51.5	36.1	2.0	4.9	6.1	1.9
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay		69.2	1.2	51.5	36.1	2.0	5.0	6.1	1.9
LOS		E	A	D	D	A	A	A	A
Approach Delay		49.8			38.4		5.0		2.5
Approach LOS		D			D		A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.62	
Intersection Signal Delay: 6.8	Intersection LOS: A
Intersection Capacity Utilization 57.0%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 7: S Xanthia Street/Alton Way & S Yosemite Street





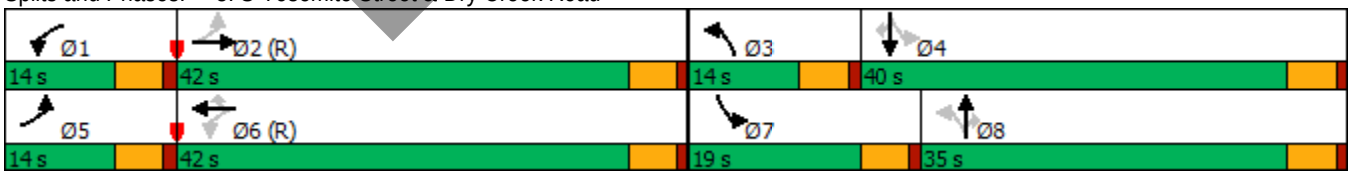
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	12.4	12.4	12.4	12.4	12.4	5.0	74.9	7.7	77.6
90th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Min	Coord	Gap	Coord
70th %ile Green (s)	9.0	9.0	9.0	9.0	9.0	5.0	80.1	5.9	81.0
70th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Min	Coord	Gap	Coord
50th %ile Green (s)	6.8	6.8	6.8	6.8	6.8	0.0	82.9	5.3	93.2
50th %ile Term Code	Hold	Hold	Hold	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	5.4	5.4	5.4	5.4	5.4	0.0	84.6	5.0	94.6
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Min	Coord
10th %ile Green (s)	5.0	5.0	5.0	5.0	5.0	0.0	85.0	5.0	95.0
10th %ile Term Code	Hold	Hold	Hold	Min	Min	Skip	Coord	Min	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	120	605	230	1255	220	185	485	170	150	450	190
Future Volume (vph)	120	605	230	1255	220	185	485	170	150	450	190
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Act Effct Green (s)	48.0	38.9	58.5	46.2	46.2	32.5	23.5	23.5	37.0	25.8	25.8
Actuated g/C Ratio	0.44	0.35	0.53	0.42	0.42	0.30	0.21	0.21	0.34	0.23	0.23
v/c Ratio	0.73	0.62	0.73	0.89	0.33	0.72	0.81	0.42	0.64	0.57	0.44
Control Delay	41.3	31.2	31.7	40.0	8.3	40.9	49.4	7.2	34.2	33.7	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.3	31.2	31.7	40.0	8.3	40.9	49.4	7.2	34.2	33.7	5.6
LOS	D	C	C	D	A	D	D	A	C	C	A
Approach Delay		32.9		34.4			39.1			26.5	
Approach LOS		C		C			D			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.89	
Intersection Signal Delay: 33.7	Intersection LOS: C
Intersection Capacity Utilization 81.8%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



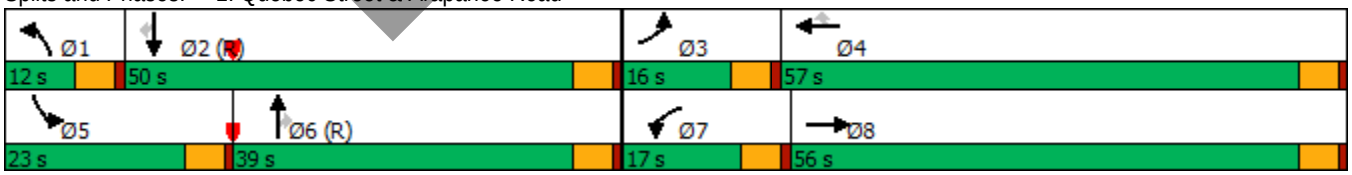
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Maximum Green (s)	9.0	37.0	9.0	37.0	37.0	9.0	30.0	30.0	14.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	2.0	1.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		25.0	25.0		30.0	30.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.3	37.0	9.3	37.0	37.0	9.0	29.7	29.7	14.0	34.7	34.7
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	12.2	37.0	13.6	38.4	38.4	9.0	26.0	26.0	13.4	30.4	30.4
70th %ile Term Code	Gap	Coord	Max	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	9.9	37.0	17.5	44.6	44.6	9.0	23.8	23.8	11.7	26.5	26.5
50th %ile Term Code	Gap	Coord	Max	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	7.8	39.9	19.5	51.6	51.6	9.0	20.7	20.7	9.9	21.6	21.6
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	6.0	43.7	21.7	59.4	59.4	8.8	17.4	17.4	7.2	15.8	15.8
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Gap	Gap	Hold	Hold

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	185	1170	165	865	145	55	560	230	65	205	60
Future Volume (vph)	185	1170	165	865	145	55	560	230	65	205	60
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	10.5	43.4	10.8	43.7	43.7	6.2	53.2	53.2	7.7	56.6	56.6
Actuated g/C Ratio	0.08	0.32	0.08	0.32	0.32	0.05	0.39	0.39	0.06	0.42	0.42
v/c Ratio	0.79	0.86	0.73	0.61	0.27	0.39	0.48	0.39	0.49	0.17	0.11
Control Delay	82.3	48.6	91.3	54.3	15.3	70.1	33.6	8.2	70.1	27.1	4.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.3	48.6	91.3	54.3	15.3	70.1	33.6	8.2	70.1	27.1	4.0
LOS	F	D	F	D	B	E	C	A	E	C	A
Approach Delay		52.9		54.8			28.5			32.3	
Approach LOS		D		D			C			C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay: 45.9	Intersection LOS: D
Intersection Capacity Utilization 69.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	16.0	56.0	17.0	57.0	57.0	12.0	39.0	39.0	23.0	50.0	50.0
Total Split (%)	11.9%	41.5%	12.6%	42.2%	42.2%	8.9%	28.9%	28.9%	17.0%	37.0%	37.0%
Maximum Green (s)	11.0	51.0	12.0	52.0	52.0	7.0	34.0	34.0	18.0	45.0	45.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	11.0	49.7	12.0	50.7	50.7	7.0	43.1	43.1	10.2	46.3	46.3
90th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
70th %ile Green (s)	11.0	46.5	12.0	47.5	47.5	7.0	47.8	47.8	8.7	49.5	49.5
70th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Gap	Coord	Coord
50th %ile Green (s)	11.0	43.5	11.7	44.2	44.2	6.4	52.1	52.1	7.7	53.4	53.4
50th %ile Term Code	Max	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	10.9	40.9	10.2	40.2	40.2	5.5	57.3	57.3	6.6	58.4	58.4
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	8.7	36.4	8.0	35.7	35.7	0.0	65.5	65.5	5.1	75.6	75.6
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	105	1830	95	1220	30	40	70	15	20
Future Volume (vph)	105	1830	95	1220	30	40	70	15	20
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	92.4	85.7	95.8	87.4	15.7	10.8	18.0	13.8	13.8
Actuated g/C Ratio	0.68	0.63	0.71	0.65	0.12	0.08	0.13	0.10	0.10
v/c Ratio	0.54	0.71	0.65	0.53	0.20	0.73	0.29	0.09	0.08
Control Delay	28.9	33.4	48.7	15.8	47.5	54.5	48.8	54.7	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.9	33.4	48.7	15.8	47.5	54.5	48.8	54.7	0.6
LOS	C	C	D	B	D	D	D	D	A
Approach Delay		33.2		17.9		53.1		40.3	
Approach LOS		C		B		D		D	

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 7 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Natural Cycle: 115
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 28.0 — Intersection LOS: C
Intersection Capacity Utilization 71.2% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: Syracuse Way & Arapahoe Road

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	12.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	13.0	81.0	17.0	85.0	14.0	22.0	15.0	23.0	23.0
Total Split (%)	9.6%	60.0%	12.6%	63.0%	10.4%	16.3%	11.1%	17.0%	17.0%
Maximum Green (s)	6.0	74.0	10.0	78.0	8.0	17.0	9.0	18.0	18.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	6.0	74.0	10.0	78.0	8.0	17.0	9.0	18.0	18.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Hold	Hold
70th %ile Green (s)	8.5	76.9	11.2	79.6	7.9	13.6	8.3	14.0	14.0
70th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
50th %ile Green (s)	7.3	83.0	8.9	84.6	6.8	10.7	7.4	11.3	11.3
50th %ile Term Code	Gap	Coord	Gap	Coord	Gap	Gap	Gap	Hold	Hold
30th %ile Green (s)	6.4	88.8	6.6	89.0	0.0	7.9	6.7	20.6	20.6
30th %ile Term Code	Gap	Coord	Gap	Coord	Skip	Gap	Gap	Hold	Hold
10th %ile Green (s)	5.0	106.0	5.0	106.0	0.0	5.0	0.0	5.0	5.0
10th %ile Term Code	Min	Coord	Min	Coord	Skip	Min	Skip	Hold	Hold

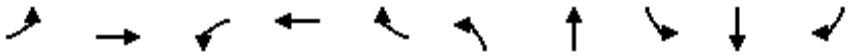
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 7 (5%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	240	1510	80	1375	875	30	80	165	20	30
Future Volume (vph)	240	1510	80	1375	875	30	80	165	20	30
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	94.0	82.1	77.1	71.5	71.5	19.8	14.3	22.6	19.4	19.4
Actuated g/C Ratio	0.70	0.61	0.57	0.53	0.53	0.15	0.11	0.17	0.14	0.14
v/c Ratio	0.82	0.54	0.47	0.55	0.89	0.15	0.78	0.59	0.08	0.08
Control Delay	58.5	13.3	19.6	34.0	29.4	43.8	73.6	54.3	52.9	0.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.5	13.3	19.6	34.0	29.4	43.8	73.6	54.3	52.9	0.4
LOS	E	B	B	C	C	D	E	D	D	A
Approach Delay		19.5		31.8			68.6		46.5	
Approach LOS		B		C			E		D	

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 27 (20%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 29.1 — Intersection LOS: C
Intersection Capacity Utilization 91.8% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 3: Greenwood Plaza Boulevard & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	28.0	86.0	12.0	70.0	70.0	14.0	23.0	14.0	23.0	23.0
Total Split (%)	20.7%	63.7%	8.9%	51.9%	51.9%	10.4%	17.0%	10.4%	17.0%	17.0%
Maximum Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	21.0	79.0	5.0	63.0	63.0	8.0	18.0	7.0	17.0	17.0
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Max	Max	Hold	Hold
70th %ile Green (s)	20.6	79.0	5.2	63.6	63.6	7.4	17.8	7.0	17.4	17.4
70th %ile Term Code	Gap	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	16.8	80.3	6.6	70.1	70.1	6.5	15.1	7.0	15.6	15.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	13.5	83.8	5.8	76.1	76.1	0.0	12.4	7.0	25.4	25.4
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Gap	Max	Hold	Hold
10th %ile Green (s)	8.7	88.6	5.0	84.9	84.9	0.0	8.4	7.0	21.4	21.4
10th %ile Term Code	Gap	Coord	Min	Coord	Coord	Skip	Gap	Max	Hold	Hold

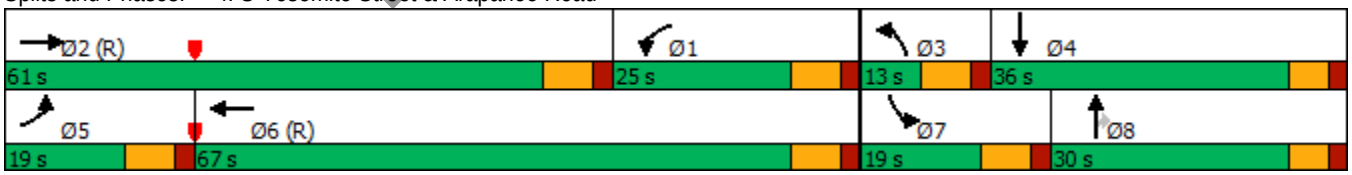
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 27 (20%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	170	1490	895	1900	200	585	290	155	555
Future Volume (vph)	170	1490	895	1900	200	585	290	155	555
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	12.0	54.0	18.0	60.0	6.0	25.6	25.6	10.4	30.0
Actuated g/C Ratio	0.09	0.40	0.13	0.44	0.04	0.19	0.19	0.08	0.22
v/c Ratio	1.18	0.98	2.13	1.07dr	1.48	0.95	1.05	0.63	0.93
Control Delay	186.2	46.1	543.3	62.4	289.8	78.4	118.3	69.8	89.5
Queue Delay	63.1	0.0	0.0	2.1	0.0	10.0	0.0	0.0	0.0
Total Delay	249.3	46.1	543.3	64.5	289.8	88.3	118.3	69.8	89.5
LOS	F	D	F	E	F	F	F	E	F
Approach Delay		64.1		185.6		133.8			85.8
Approach LOS		E		F		F			F

Intersection Summary

Cycle Length: 135
Actuated Cycle Length: 135
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 2.13
Intersection Signal Delay: 135.1 Intersection LOS: F
Intersection Capacity Utilization 107.3% ICU Level of Service G
Analysis Period (min) 15
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	61.0	25.0	67.0	13.0	30.0	30.0	19.0	36.0
Total Split (%)	14.1%	45.2%	18.5%	49.6%	9.6%	22.2%	22.2%	14.1%	26.7%
Maximum Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
70th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	24.0	24.0	12.0	30.0
70th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
50th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	25.0	25.0	11.0	30.0
50th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Gap	Max
30th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	26.4	26.4	9.6	30.0
30th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Gap	Max
10th %ile Green (s)	12.0	54.0	18.0	60.0	6.0	28.4	28.4	7.6	30.0
10th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Gap	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	30	10	115	10	45	1485	40	55	765
Future Volume (vph)	30	10	115	10	45	1485	40	55	765
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		10.1	19.3	19.3	84.7	79.9	79.9	85.5	80.3
Actuated g/C Ratio		0.07	0.14	0.14	0.63	0.59	0.59	0.63	0.59
v/c Ratio		0.56	0.92	0.45	0.14	0.77	0.04	0.37	0.44
Control Delay		60.4	119.4	17.9	9.5	22.8	0.2	16.7	17.7
Queue Delay		0.0	0.0	0.0	0.0	8.1	0.0	0.0	0.0
Total Delay		60.4	119.4	17.9	9.5	30.8	0.2	16.7	17.7
LOS		E	F	B	A	C	A	B	B
Approach Delay		60.4		62.3		29.4			17.6
Approach LOS		E		E		C			B

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 29.2	Intersection LOS: C
Intersection Capacity Utilization 65.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle

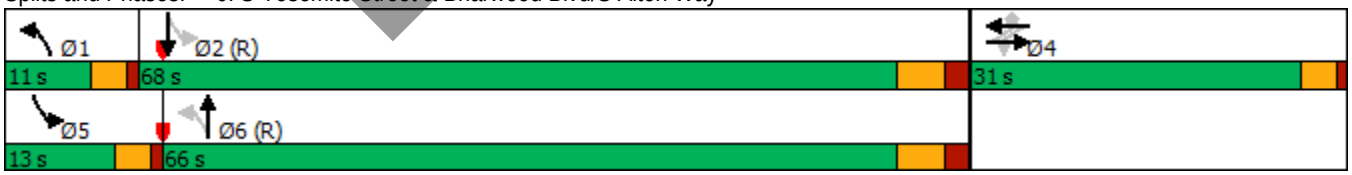
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	12.0	21.0	21.0	12.0	17.0
Total Split (s)	25.0	25.0	25.0	25.0	14.0	74.0	74.0	11.0	71.0
Total Split (%)	18.5%	18.5%	18.5%	18.5%	10.4%	54.8%	54.8%	8.1%	52.6%
Maximum Green (s)	20.0	20.0	20.0	20.0	7.0	68.0	68.0	4.0	65.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	15.0	15.0	20.0	20.0	8.4	68.0	68.0	9.0	68.6
90th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Max	Coord
70th %ile Green (s)	12.1	12.1	20.0	20.0	7.4	72.0	72.0	7.9	72.5
70th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
50th %ile Green (s)	10.0	10.0	20.0	20.0	6.8	74.8	74.8	7.2	75.2
50th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	8.0	8.0	20.0	20.0	6.2	77.4	77.4	6.6	77.8
30th %ile Term Code	Gap	Gap	Max	Max	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	16.5	16.5	0.0	107.5	107.5	0.0	107.5
10th %ile Term Code	Skip	Skip	Gap	Gap	Skip	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	15	10	10	10	75	10	1045	195	510
Future Volume (vph)	15	10	10	10	75	10	1045	195	510
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	8.1	8.1		8.1	8.1	89.4	82.8	95.5	91.5
Actuated g/C Ratio	0.07	0.07		0.07	0.07	0.81	0.75	0.87	0.83
v/c Ratio	0.22	0.31		0.35	0.45	0.02	0.44	0.51	0.19
Control Delay	51.9	31.1		55.8	17.5	1.5	4.3	5.3	3.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.9	31.1		55.8	17.5	1.5	4.3	5.3	3.0
LOS	D	C		E	B	A	A	A	A
Approach Delay		37.7		29.7			4.3		3.7
Approach LOS		D		C			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.51	
Intersection Signal Delay: 6.6	Intersection LOS: A
Intersection Capacity Utilization 60.6%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/S Alton Way



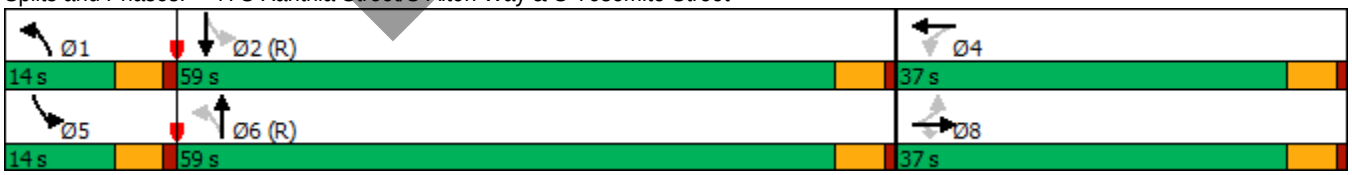
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	7.0	26.0	7.0	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	11.0	11.0	11.0	11.0	11.0	4.9	74.8	10.2	80.1
90th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
70th %ile Green (s)	9.2	9.2	9.2	9.2	9.2	4.7	79.4	7.4	82.1
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	8.0	8.0	8.0	8.0	8.0	0.0	81.3	6.7	92.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
30th %ile Green (s)	6.9	6.9	6.9	6.9	6.9	0.0	83.0	6.1	93.1
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	95.5	4.5	104.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Gap	Coord

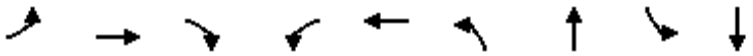
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	10	10	10	1020	70	780
Future Volume (vph)	10	10	10	10	10	10	1020	70	780
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		10.9	10.9	10.7	10.7	85.6	79.6	89.0	85.6
Actuated g/C Ratio		0.10	0.10	0.10	0.10	0.78	0.72	0.81	0.78
v/c Ratio		0.53	0.19	0.13	0.17	0.08	0.49	0.28	0.35
Control Delay		59.0	5.5	45.6	28.9	4.5	9.6	4.4	5.1
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Total Delay		59.0	5.5	45.6	28.9	4.5	10.1	4.4	5.1
LOS		E	A	D	C	A	B	A	A
Approach Delay		41.2			35.1		10.0		5.0
Approach LOS		D			D		A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 85	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 9.9	Intersection LOS: A
Intersection Capacity Utilization 54.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 7: S Xanthia Street/S Alton Way & S Yosemite Street





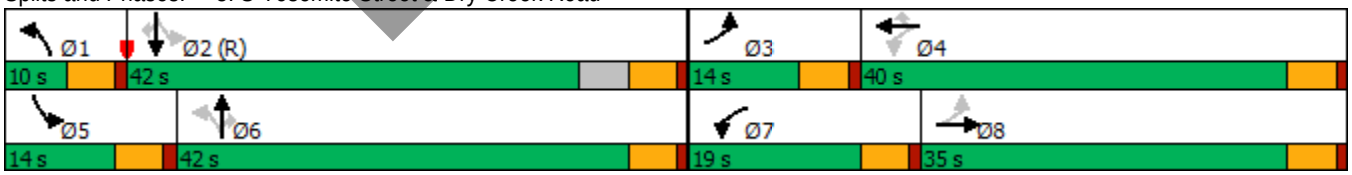
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	15.5	15.5	15.5	15.5	15.5	6.7	71.3	8.2	72.8
90th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
70th %ile Green (s)	12.8	12.8	12.8	12.8	12.8	6.2	75.0	7.2	76.0
70th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
50th %ile Green (s)	10.9	10.9	10.9	10.9	10.9	5.9	77.4	6.7	78.2
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
30th %ile Green (s)	9.0	9.0	9.0	9.0	9.0	0.0	79.8	6.2	91.0
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	94.5	5.5	105.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Gap	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	250	850	140	460	515	40	495	115	220	280	95
Future Volume (vph)	250	850	140	460	515	40	495	115	220	280	95
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	10.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	9.1%	38.2%	38.2%	12.7%	38.2%	38.2%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Act Effct Green (s)	41.4	32.4	46.6	35.0	35.0	42.0	37.0	37.0	50.2	43.0	43.0
Actuated g/C Ratio	0.38	0.29	0.42	0.32	0.32	0.38	0.34	0.34	0.46	0.39	0.39
v/c Ratio	0.99	0.98	0.65	0.46	0.87	0.12	0.45	0.22	0.67	0.24	0.18
Control Delay	73.3	63.0	33.3	31.7	37.6	17.5	30.0	5.4	30.8	24.5	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	73.3	63.0	33.3	31.7	37.6	17.5	30.0	5.4	30.8	24.5	11.5
LOS	E	E	C	C	D	B	C	A	C	C	B
Approach Delay		65.6		34.6			24.6			24.4	
Approach LOS		E		C			C			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 41.7	Intersection LOS: D
Intersection Capacity Utilization 92.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



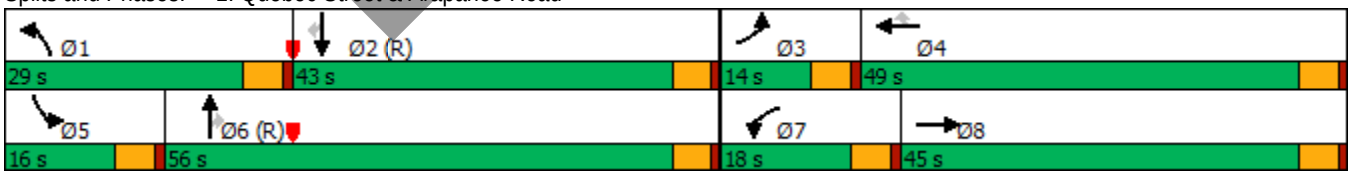
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	14.0	35.0	19.0	40.0	40.0	10.0	42.0	42.0	14.0	42.0	42.0
Total Split (%)	12.7%	31.8%	17.3%	36.4%	36.4%	9.1%	38.2%	38.2%	12.7%	38.2%	38.2%
Maximum Green (s)	9.0	30.0	14.0	35.0	35.0	5.0	37.0	37.0	9.0	37.0	37.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		30.0	30.0		25.0	25.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	30.0	14.0	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	30.4	13.6	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
70th %ile Term Code	Max	Max	Gap	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	9.0	32.3	11.7	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
50th %ile Term Code	Max	Max	Gap	Max	Max	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	9.0	33.7	10.3	35.0	35.0	5.0	37.0	37.0	9.0	41.0	41.0
30th %ile Term Code	Max	Max	Gap	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	9.0	35.6	8.4	35.0	35.0	0.0	37.0	37.0	9.0	51.0	51.0
10th %ile Term Code	Max	Max	Gap	Hold	Hold	Skip	Coord	Coord	Max	Coord	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 2:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	910	340	1400	225	125	565	220	105	655	230
Future Volume (vph)	140	910	340	1400	225	125	565	220	105	655	230
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	8.6	39.6	13.0	44.0	44.0	9.5	53.0	53.0	9.4	52.9	52.9
Actuated g/C Ratio	0.06	0.29	0.10	0.33	0.33	0.07	0.39	0.39	0.07	0.39	0.39
v/c Ratio	0.73	0.79	1.25	0.98	0.40	0.59	0.49	0.39	0.64	0.59	0.40
Control Delay	81.9	47.7	180.2	58.4	7.5	70.9	32.7	11.4	73.7	35.1	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	81.9	47.7	180.2	58.4	7.5	70.9	32.7	11.4	73.7	35.1	7.6
LOS	F	D	F	E	A	E	C	B	E	D	A
Approach Delay		51.7		74.2			32.1			33.1	
Approach LOS		D		E			C			C	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.25	
Intersection Signal Delay: 52.6	Intersection LOS: D
Intersection Capacity Utilization 79.6%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 1: Quebec Street & Arapahoe Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases					4			6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	42.0	10.0	40.0	40.0	10.0	38.0	38.0	10.0	38.0	38.0
Total Split (s)	14.0	45.0	18.0	49.0	49.0	29.0	56.0	56.0	16.0	43.0	43.0
Total Split (%)	10.4%	33.3%	13.3%	36.3%	36.3%	21.5%	41.5%	41.5%	11.9%	31.9%	31.9%
Maximum Green (s)	9.0	40.0	13.0	44.0	44.0	24.0	51.0	51.0	11.0	38.0	38.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.0	1.5	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		32.0		30.0	30.0		28.0	28.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	40.0	13.0	44.0	44.0	12.6	51.0	51.0	11.0	49.4	49.4
90th %ile Term Code	Max	Max	Max	Max	Max	Gap	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	9.0	40.0	13.0	44.0	44.0	10.8	51.0	51.0	11.0	51.2	51.2
70th %ile Term Code	Max	Hold	Max	Max	Max	Gap	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	9.0	40.0	13.0	44.0	44.0	9.5	52.1	52.1	9.9	52.5	52.5
50th %ile Term Code	Max	Hold	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord
30th %ile Green (s)	9.0	40.0	13.0	44.0	44.0	8.2	53.4	53.4	8.6	53.8	53.8
30th %ile Term Code	Max	Hold	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord
10th %ile Green (s)	7.0	38.0	13.0	44.0	44.0	6.4	57.3	57.3	6.7	57.6	57.6
10th %ile Term Code	Gap	Hold	Max	Max	Max	Gap	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 108 (80%), Referenced to phase 2:SBT and 6:NBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations									
Traffic Volume (vph)	50	1355	105	2100	55	15	140	25	70
Future Volume (vph)	50	1355	105	2100	55	15	140	25	70
Turn Type	pm+pt	NA	pm+pt	NA	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Detector Phase	5	2	1	6	3	8	7	4	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	6.0	5.0	6.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	96.9	91.0	101.9	95.2	11.3	7.3	11.5	7.7	7.7
Actuated g/C Ratio	0.72	0.67	0.75	0.71	0.08	0.05	0.09	0.06	0.06
v/c Ratio	0.45	0.50	0.47	0.73	0.50	0.54	0.71	0.29	0.36
Control Delay	20.6	31.8	15.6	28.6	67.7	36.8	73.1	68.0	4.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	31.8	15.6	28.6	67.7	36.8	73.1	68.0	4.8
LOS	C	C	B	C	E	D	E	E	A
Approach Delay		31.4		28.0		51.0		52.2	
Approach LOS		C		C		D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.73	
Intersection Signal Delay: 31.3	Intersection LOS: C
Intersection Capacity Utilization 77.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 2: Syracuse Way & Arapahoe Road

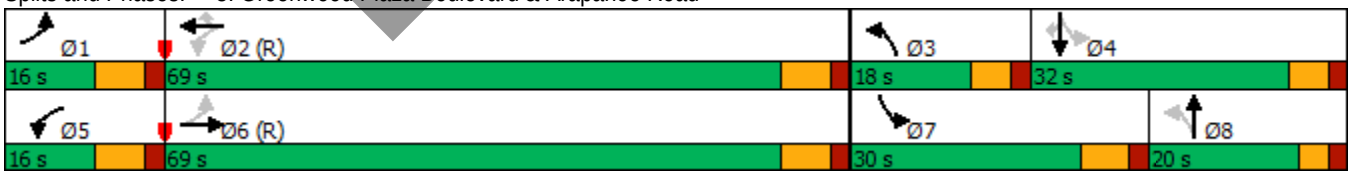
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Protected Phases	5	2	1	6	3	8	7	4	
Permitted Phases	2		6		8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	26.0	17.0	33.0	11.0	36.0	11.0	37.0	37.0
Total Split (s)	15.0	76.0	15.0	76.0	12.0	32.0	12.0	32.0	32.0
Total Split (%)	11.1%	56.3%	11.1%	56.3%	8.9%	23.7%	8.9%	23.7%	23.7%
Maximum Green (s)	8.0	69.0	8.0	69.0	6.0	27.0	6.0	27.0	27.0
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	3.0	4.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0		4.0	4.0
Flash Dont Walk (s)		15.0		22.0		27.0		28.0	28.0
Pedestrian Calls (#/hr)		0		0		0		0	0
90th %ile Green (s)	8.1	80.8	12.1	84.8	6.0	11.1	6.0	11.1	11.1
90th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
70th %ile Green (s)	6.0	87.2	8.7	89.9	6.0	8.1	6.0	8.1	8.1
70th %ile Term Code	Gap	Coord	Gap	Coord	Max	Gap	Max	Hold	Hold
50th %ile Green (s)	5.5	90.6	6.8	91.9	6.0	6.6	6.0	6.6	6.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
30th %ile Green (s)	5.1	92.4	6.1	93.4	6.0	5.5	6.0	5.5	5.5
30th %ile Term Code	Gap	Coord	Gap	Coord	Max	Hold	Max	Gap	Gap
10th %ile Green (s)	0.0	104.0	5.0	116.0	0.0	0.0	6.0	7.0	7.0
10th %ile Term Code	Skip	Coord	Min	Coord	Skip	Skip	Max	Hold	Hold

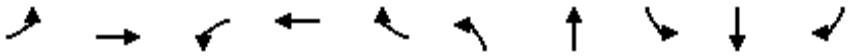
Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	115	1410	105	1800	310	35	40	505	100	145
Future Volume (vph)	115	1410	105	1800	310	35	40	505	100	145
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	Perm
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Detector Phase	1	6	5	2	2	3	8	7	4	4
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	5.0	7.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Act Effct Green (s)	78.4	69.2	76.0	67.9	67.9	15.1	9.4	36.8	27.3	27.3
Actuated g/C Ratio	0.58	0.51	0.56	0.50	0.50	0.11	0.07	0.27	0.20	0.20
v/c Ratio	0.71	0.62	0.59	0.76	0.37	0.23	0.63	0.79	0.29	0.35
Control Delay	64.9	19.0	33.4	36.6	15.3	39.2	55.3	51.3	48.3	8.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.9	19.0	33.4	36.6	15.3	39.2	55.3	51.3	48.3	8.8
LOS	E	B	C	D	B	D	E	D	D	A
Approach Delay		22.3		33.5			50.8		42.7	
Approach LOS		C		C			D		D	

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 27 (20%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green	
Natural Cycle: 105	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.79	
Intersection Signal Delay: 31.6	Intersection LOS: C
Intersection Capacity Utilization 78.9%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 3: Greenwood Plaza Boulevard & Arapahoe Road





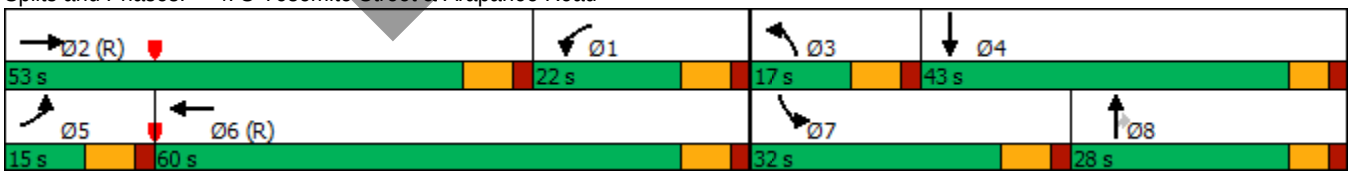
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Protected Phases	1	6	5	2		3	8	7	4	
Permitted Phases	6		2		2	8		4		4
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	25.0	12.0	34.0	34.0	11.0	36.0	12.0	36.0	36.0
Total Split (s)	16.0	69.0	16.0	69.0	69.0	18.0	20.0	30.0	32.0	32.0
Total Split (%)	11.9%	51.1%	11.9%	51.1%	51.1%	13.3%	14.8%	22.2%	23.7%	23.7%
Maximum Green (s)	9.0	62.0	9.0	62.0	62.0	12.0	15.0	23.0	26.0	26.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	3.0	5.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	5.0	2.0	5.0	5.0	2.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0	4.0		4.0		4.0	4.0
Flash Dont Walk (s)		8.0		23.0	23.0		27.0		26.0	26.0
Pedestrian Calls (#/hr)		0		0	0		0		0	0
90th %ile Green (s)	9.7	62.0	9.7	62.0	62.0	8.7	14.3	23.0	28.6	28.6
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	12.3	64.8	9.9	62.4	62.4	7.5	11.3	23.0	26.8	26.8
70th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	10.1	68.8	8.0	66.7	66.7	6.6	9.2	23.0	25.6	25.6
50th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	7.9	72.1	6.9	71.1	71.1	5.7	7.0	23.0	24.3	24.3
30th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Gap	Gap	Max	Hold	Hold
10th %ile Green (s)	6.3	78.2	5.6	77.5	77.5	0.0	5.0	20.2	31.2	31.2
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Skip	Min	Gap	Hold	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 27 (20%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	150	1765	410	1710	360	650	655	535	670
Future Volume (vph)	150	1765	410	1710	360	650	655	535	670
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	46.0	15.0	53.0	10.0	22.5	22.5	24.5	37.0
Actuated g/C Ratio	0.06	0.34	0.11	0.39	0.07	0.17	0.17	0.18	0.27
v/c Ratio	1.57	1.31	1.17	0.84	1.60	1.20	2.71	0.94	0.94
Control Delay	335.3	172.3	152.4	40.3	325.1	152.5	799.7	72.4	79.2
Queue Delay	7.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	342.9	172.3	152.4	40.4	325.1	152.5	799.7	72.4	79.2
LOS	F	F	F	D	F	F	F	E	E
Approach Delay		184.3		60.2		444.4			76.6
Approach LOS		F		E		F			E

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.71	
Intersection Signal Delay: 183.9	Intersection LOS: F
Intersection Capacity Utilization 111.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



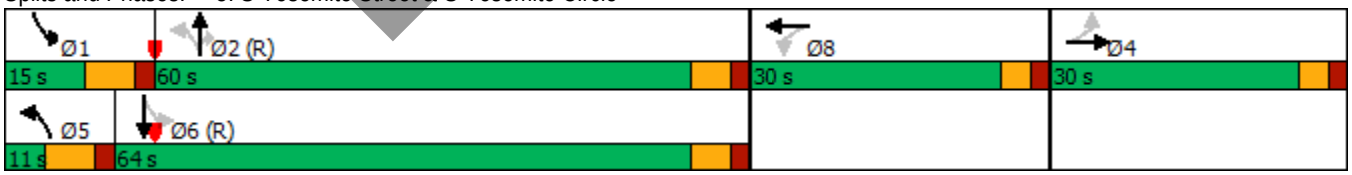
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Maximum Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
70th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
70th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
50th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
50th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
30th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
30th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
10th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	24.6	24.6	22.4	37.0
10th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Gap	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	80	10	130	10	80	1025	75	45	1375
Future Volume (vph)	80	10	130	10	80	1025	75	45	1375
Turn Type	Perm	NA	Perm	NA	pm+pt	NA	Perm	pm+pt	NA
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Detector Phase	4	4	8	8	5	2	2	1	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	4.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	11.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		18.3	20.3	20.3	73.9	69.0	69.0	72.1	66.1
Actuated g/C Ratio		0.14	0.15	0.15	0.55	0.51	0.51	0.53	0.49
v/c Ratio		0.76	0.80	0.40	0.58	0.62	0.09	0.21	0.92
Control Delay		69.6	90.5	24.4	46.1	15.8	0.5	17.1	42.8
Queue Delay		0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0
Total Delay		69.6	90.5	24.4	46.1	16.9	0.5	17.1	42.8
LOS		E	F	C	D	B	A	B	D
Approach Delay		69.6		58.3		17.9			42.0
Approach LOS		E		E		B			D

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 35.1	Intersection LOS: D
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 5: S Yosemite Street & S Yosemite Circle



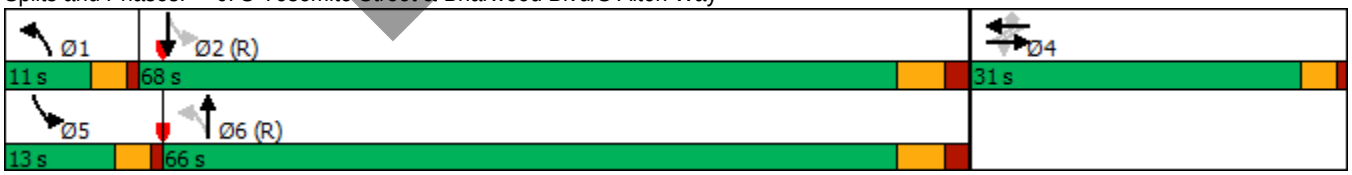
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases		4		8	5	2		1	6
Permitted Phases	4		8		2		2	6	
Minimum Initial (s)	5.0	5.0	5.0	5.0	4.0	10.0	10.0	5.0	10.0
Minimum Split (s)	31.0	31.0	28.0	28.0	11.0	24.0	24.0	12.0	24.0
Total Split (s)	30.0	30.0	30.0	30.0	11.0	60.0	60.0	15.0	64.0
Total Split (%)	22.2%	22.2%	22.2%	22.2%	8.1%	44.4%	44.4%	11.1%	47.4%
Maximum Green (s)	25.0	25.0	25.0	25.0	4.0	54.0	54.0	8.0	58.0
Yellow Time (s)	3.0	3.0	3.0	3.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag					Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Flash Dont Walk (s)	22.0	22.0	19.0	19.0		11.0	11.0		7.0
Pedestrian Calls (#/hr)	0	0	0	0		0	0		0
90th %ile Green (s)	25.0	25.0	25.0	25.0	4.0	54.0	54.0	8.0	58.0
90th %ile Term Code	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord
70th %ile Green (s)	21.8	21.8	25.0	25.0	7.2	57.2	57.2	8.0	58.0
70th %ile Term Code	Gap	Gap	Max	Max	Max	Coord	Coord	Gap	Coord
50th %ile Green (s)	18.6	18.6	21.7	21.7	9.7	64.6	64.6	7.1	62.0
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
30th %ile Green (s)	15.3	15.3	17.7	17.7	8.6	72.7	72.7	6.3	70.4
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Gap	Coord
10th %ile Green (s)	10.7	10.7	11.9	11.9	7.3	96.4	96.4	0.0	82.1
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Coord	Coord	Skip	Coord

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 16 (12%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	25	10	270	20	945	75	1140
Future Volume (vph)	10	10	25	10	270	20	945	75	1140
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Detector Phase	4	4	4	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	16.7	16.7		16.7	16.7	81.3	75.2	83.7	77.8
Actuated g/C Ratio	0.15	0.15		0.15	0.15	0.74	0.68	0.76	0.71
v/c Ratio	0.07	0.19		0.28	0.82	0.08	0.44	0.21	0.50
Control Delay	35.8	19.2		41.2	34.5	2.1	3.5	5.2	10.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	19.2		41.2	34.5	2.1	3.5	5.2	10.2
LOS	D	B		D	C	A	A	A	B
Approach Delay		22.7		35.7			3.5		9.8
Approach LOS		C		D			A		A

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green	
Natural Cycle: 75	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.82	
Intersection Signal Delay: 11.2	Intersection LOS: B
Intersection Capacity Utilization 60.2%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: S Yosemite Street & Briarwood Blvd/S Alton Way



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Protected Phases		4		4		1	6	5	2
Permitted Phases	4		4		4	6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	3.0	20.0	3.0	20.0
Minimum Split (s)	31.0	31.0	31.0	31.0	31.0	9.5	26.0	9.5	26.0
Total Split (s)	31.0	31.0	31.0	31.0	31.0	11.0	66.0	13.0	68.0
Total Split (%)	28.2%	28.2%	28.2%	28.2%	28.2%	10.0%	60.0%	11.8%	61.8%
Maximum Green (s)	27.0	27.0	27.0	27.0	27.0	7.0	60.0	9.0	62.0
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	4.0	3.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	2.0	1.0	2.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	22.0	22.0	22.0	22.0	22.0		15.0		15.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	27.0	27.0	27.0	27.0	27.0	5.8	61.5	7.5	63.2
90th %ile Term Code	Max	Max	Max	Max	Max	Gap	Coord	Gap	Coord
70th %ile Green (s)	21.3	21.3	21.3	21.3	21.3	5.2	68.4	6.3	69.5
70th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
50th %ile Green (s)	17.1	17.1	17.1	17.1	17.1	4.8	73.2	5.7	74.1
50th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Gap	Coord	Gap	Coord
30th %ile Green (s)	12.0	12.0	12.0	12.0	12.0	0.0	78.9	5.1	88.0
30th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Gap	Coord
10th %ile Green (s)	5.9	5.9	5.9	5.9	5.9	0.0	94.1	0.0	94.1
10th %ile Term Code	Gap	Gap	Gap	Gap	Gap	Skip	Coord	Skip	Coord

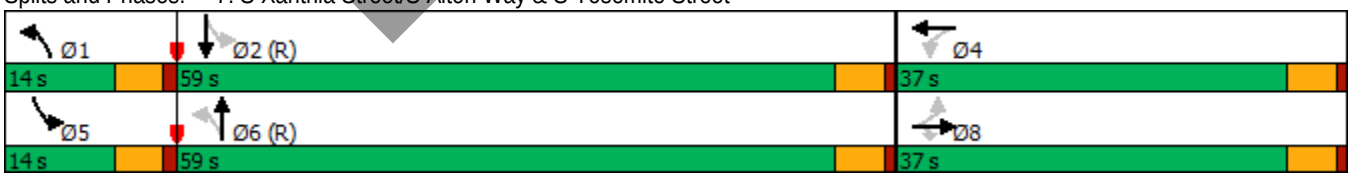
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 13 (12%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

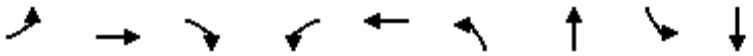
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	10	10	10	15	10	10	1240	110	1195
Future Volume (vph)	10	10	10	15	10	10	1240	110	1195
Turn Type	Perm	NA	Perm	Perm	NA	pm+pt	NA	pm+pt	NA
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Detector Phase	8	8	8	4	4	1	6	5	2
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)		9.7	9.7	9.7	9.7	84.1	79.0	91.9	87.3
Actuated g/C Ratio		0.09	0.09	0.09	0.09	0.76	0.72	0.84	0.79
v/c Ratio		0.62	0.21	0.23	0.42	0.13	0.59	0.51	0.52
Control Delay		68.2	6.0	49.7	20.9	3.6	8.7	19.0	2.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
Total Delay		68.2	6.0	49.7	20.9	3.6	8.8	19.0	2.5
LOS		E	A	D	C	A	A	B	A
Approach Delay		47.4			27.8		8.7		4.0
Approach LOS		D			C		A		A

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.63
Intersection Signal Delay: 8.5 — Intersection LOS: A
Intersection Capacity Utilization 62.2% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 7: S Xanthia Street/S Alton Way & S Yosemite Street





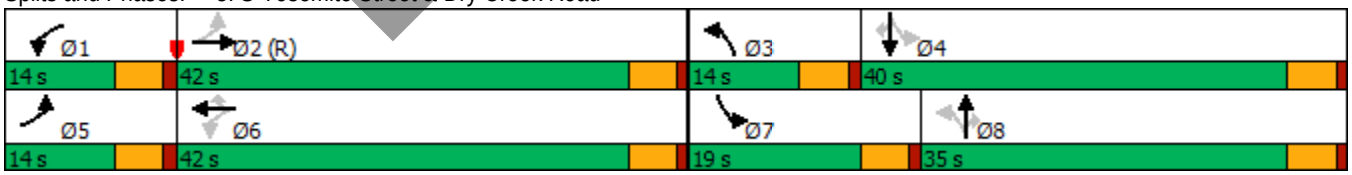
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Protected Phases		8			4	1	6	5	2
Permitted Phases	8		8	4		6		2	
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	5.0	15.0
Minimum Split (s)	33.0	33.0	33.0	37.0	37.0	10.0	35.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	37.0	14.0	59.0	14.0	59.0
Total Split (%)	33.6%	33.6%	33.6%	33.6%	33.6%	12.7%	53.6%	12.7%	53.6%
Maximum Green (s)	32.0	32.0	32.0	32.0	32.0	9.0	54.0	9.0	54.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
Walk Time (s)	5.0	5.0	5.0	5.0	5.0		5.0		5.0
Flash Dont Walk (s)	23.0	23.0	23.0	27.0	27.0		25.0		17.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0		0
90th %ile Green (s)	14.4	14.4	14.4	14.4	14.4	5.2	67.4	13.2	75.4
90th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Gap	Coord
70th %ile Green (s)	11.6	11.6	11.6	11.6	11.6	5.0	73.4	10.0	78.4
70th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Min	Coord	Gap	Coord
50th %ile Green (s)	9.6	9.6	9.6	9.6	9.6	5.0	77.8	7.6	80.4
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Min	Coord	Gap	Coord
30th %ile Green (s)	7.7	7.7	7.7	7.7	7.7	0.0	81.5	5.8	92.3
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	0.0	0.0	0.0	0.0	95.0	5.0	105.0
10th %ile Term Code	Skip	Skip	Skip	Skip	Skip	Skip	Coord	Min	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 76 (69%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	140	605	230	1255	320	185	555	170	505	640	255
Future Volume (vph)	140	605	230	1255	320	185	555	170	505	640	255
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effct Green (s)	49.1	37.7	54.0	40.5	40.5	33.1	24.1	24.1	43.1	29.1	29.1
Actuated g/C Ratio	0.45	0.34	0.49	0.37	0.37	0.30	0.22	0.22	0.39	0.26	0.26
v/c Ratio	0.78	0.66	0.77	1.09	0.47	1.11	0.77	0.40	1.83	0.82	0.59
Control Delay	45.4	33.1	36.9	88.3	10.2	120.7	47.0	7.1	408.5	38.8	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.4	33.1	36.9	88.3	10.2	120.7	47.0	7.1	408.5	38.8	10.8
LOS	D	C	D	F	B	F	D	A	F	D	B
Approach Delay		35.6		67.9			56.5			155.7	
Approach LOS		D		E			E			F	

Intersection Summary			
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 28 (25%), Referenced to phase 2:EBTL, Start of Green			
Natural Cycle: 150			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.83			
Intersection Signal Delay: 85.3		Intersection LOS: F	
Intersection Capacity Utilization 103.1%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	14.0	42.0	14.0	42.0	42.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	12.7%	38.2%	12.7%	38.2%	38.2%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Maximum Green (s)	9.0	37.0	9.0	37.0	37.0	9.0	30.0	30.0	14.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	2.0	1.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		25.0	25.0		30.0	30.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	9.0	37.0	9.0	37.0	37.0	9.0	30.0	30.0	14.0	35.0	35.0
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Max	Max
70th %ile Green (s)	12.0	37.0	12.0	37.0	37.0	9.0	27.0	27.0	14.0	32.0	32.0
70th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap
50th %ile Green (s)	14.0	37.0	14.4	37.4	37.4	9.0	24.6	24.6	14.0	29.6	29.6
50th %ile Term Code	Gap	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap
30th %ile Green (s)	12.2	37.0	17.6	42.4	42.4	9.0	21.4	21.4	14.0	26.4	26.4
30th %ile Term Code	Gap	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap
10th %ile Green (s)	9.7	40.5	17.9	48.7	48.7	9.0	17.6	17.6	14.0	22.6	22.6
10th %ile Term Code	Gap	Coord	Gap	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap

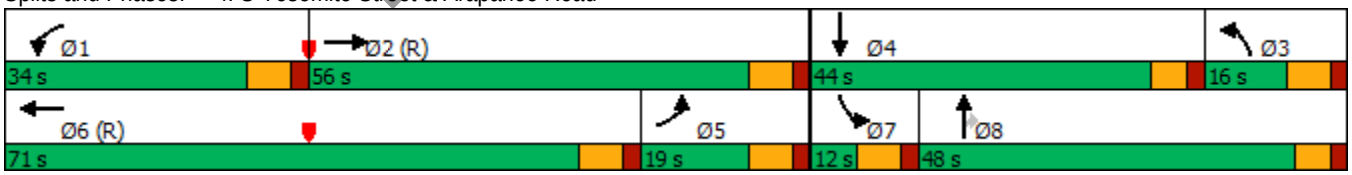
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	170	1480	790	1900	190	565	260	150	515
Future Volume (vph)	170	1480	790	1900	190	565	260	150	515
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	56.0	34.0	71.0	16.0	48.0	48.0	12.0	44.0
Total Split (%)	12.7%	37.3%	22.7%	47.3%	10.7%	32.0%	32.0%	8.0%	29.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	12.0	49.0	27.7	64.7	13.0	41.3	41.3	5.0	33.4
Actuated g/C Ratio	0.08	0.33	0.18	0.43	0.09	0.28	0.28	0.03	0.22
v/c Ratio	1.31	1.18	1.36	1.11dr	0.72	0.63	0.65	1.43	0.88
Control Delay	224.5	122.4	216.3	78.4	80.7	50.9	55.8	284.1	68.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	224.5	122.4	216.3	78.4	80.7	50.9	55.8	284.1	68.2
LOS	F	F	F	E	F	D	E	F	E
Approach Delay		131.7		110.1		57.7			109.7
Approach LOS		F		F		E			F

Intersection Summary	
Cycle Length: 150	
Actuated Cycle Length: 150	
Offset: 11 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.43	
Intersection Signal Delay: 108.3	Intersection LOS: F
Intersection Capacity Utilization 102.2%	ICU Level of Service G
Analysis Period (min) 15	

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



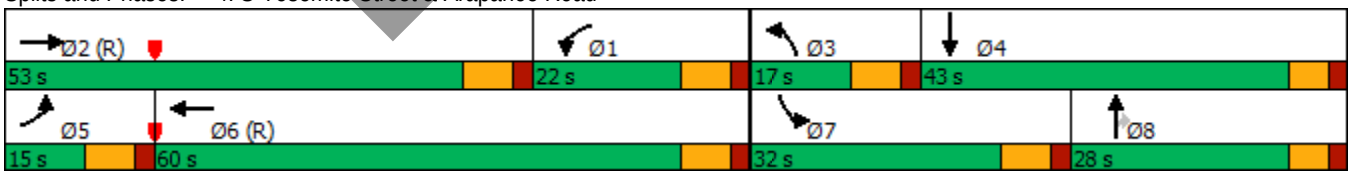
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	19.0	56.0	34.0	71.0	16.0	48.0	48.0	12.0	44.0
Total Split (%)	12.7%	37.3%	22.7%	47.3%	10.7%	32.0%	32.0%	8.0%	29.3%
Maximum Green (s)	12.0	49.0	27.0	64.0	9.0	42.0	42.0	5.0	38.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lag	Lag	Lead	Lead	Lag	Lag	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	12.0	49.0	27.0	64.0	9.0	42.0	42.0	5.0	38.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
70th %ile Green (s)	12.0	49.0	27.0	64.0	9.9	42.0	42.0	5.0	37.1
70th %ile Term Code	Max	Coord	Max	Coord	Max	Hold	Hold	Max	Gap
50th %ile Green (s)	12.0	49.0	27.0	64.0	12.7	42.0	42.0	5.0	34.3
50th %ile Term Code	Max	Coord	Max	Coord	Max	Hold	Hold	Max	Gap
30th %ile Green (s)	12.0	49.0	27.0	64.0	16.2	42.0	42.0	5.0	30.8
30th %ile Term Code	Max	Coord	Max	Coord	Max	Hold	Hold	Max	Gap
10th %ile Green (s)	12.0	49.0	30.3	67.3	17.1	38.7	38.7	5.0	26.6
10th %ile Term Code	Max	Coord	Max	Coord	Gap	Hold	Hold	Max	Gap

Intersection Summary
Cycle Length: 150
Actuated Cycle Length: 150
Offset: 11 (7%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	150	1760	355	1710	325	600	570	535	650
Future Volume (vph)	150	1760	355	1710	325	600	570	535	650
Turn Type	Prot	NA	Prot	NA	Prot	NA	Perm	Prot	NA
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Detector Phase	5	2	1	6	3	8	8	7	4
Switch Phase									
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0	6.0	6.0	7.0	6.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Act Effct Green (s)	8.0	46.0	15.0	53.0	10.0	22.5	22.5	24.5	37.0
Actuated g/C Ratio	0.06	0.34	0.11	0.39	0.07	0.17	0.17	0.18	0.27
v/c Ratio	1.57	1.30	1.01	0.84	1.44	1.11	2.36	0.94	0.92
Control Delay	335.6	168.1	108.2	40.3	262.8	120.4	646.5	73.1	77.4
Queue Delay	4.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	339.6	168.1	108.2	40.4	262.8	120.4	646.5	73.1	77.4
LOS	F	F	F	D	F	F	F	E	E
Approach Delay		180.2		51.0		352.1			75.7
Approach LOS		F		D		F			E

Intersection Summary	
Cycle Length: 135	
Actuated Cycle Length: 135	
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.36	
Intersection Signal Delay: 155.8	Intersection LOS: F
Intersection Capacity Utilization 106.1%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 4: S Yosemite Street & Arapahoe Road



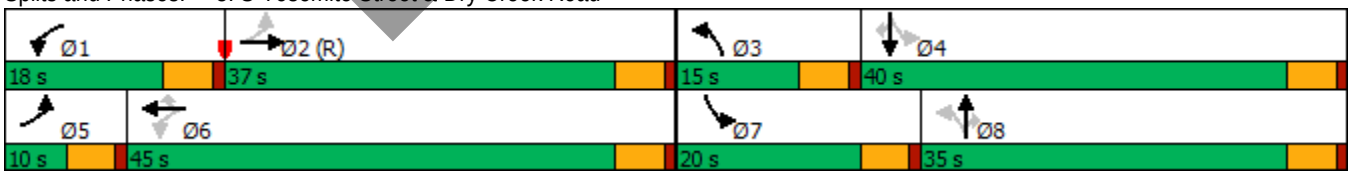
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Protected Phases	5	2	1	6	3	8		7	4
Permitted Phases							8		
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	12.0	35.0	12.0	32.0	12.0	48.0	48.0	12.0	44.0
Total Split (s)	15.0	53.0	22.0	60.0	17.0	28.0	28.0	32.0	43.0
Total Split (%)	11.1%	39.3%	16.3%	44.4%	12.6%	20.7%	20.7%	23.7%	31.9%
Maximum Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	5.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	3.0	4.0	3.0	4.0	2.0	2.0	2.0	2.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	C-Max	None	None	None	None	None
Walk Time (s)		4.0		4.0		4.0	4.0		4.0
Flash Dont Walk (s)		24.0		21.0		38.0	38.0		34.0
Pedestrian Calls (#/hr)		0		0		0	0		0
90th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
90th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
70th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
70th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
50th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
50th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
30th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	22.0	22.0	25.0	37.0
30th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Max	Max
10th %ile Green (s)	8.0	46.0	15.0	53.0	10.0	24.6	24.6	22.4	37.0
10th %ile Term Code	Max	Coord	Max	Coord	Max	Max	Max	Gap	Hold

Intersection Summary
Cycle Length: 135
Actuated Cycle Length: 135
Offset: 39 (29%), Referenced to phase 2:EBT and 6:WBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	135	605	230	1255	285	185	530	170	435	590	235
Future Volume (vph)	135	605	230	1255	285	185	530	170	435	590	235
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	10.0	37.0	18.0	45.0	45.0	15.0	35.0	35.0	20.0	40.0	40.0
Total Split (%)	9.1%	33.6%	16.4%	40.9%	40.9%	13.6%	31.8%	31.8%	18.2%	36.4%	36.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effct Green (s)	49.2	37.2	54.0	40.0	40.0	32.6	22.6	22.6	42.6	27.6	27.6
Actuated g/C Ratio	0.45	0.34	0.49	0.36	0.36	0.30	0.21	0.21	0.39	0.25	0.25
v/c Ratio	0.71	0.67	0.74	1.10	0.43	1.02	0.79	0.42	1.51	0.80	0.59
Control Delay	41.7	34.7	31.3	93.0	8.5	91.7	49.1	7.5	273.9	39.6	13.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.7	34.7	31.3	93.0	8.5	91.7	49.1	7.5	273.9	39.6	13.1
LOS	D	C	C	F	A	F	D	A	F	D	B
Approach Delay		36.1		71.4			51.2			108.4	
Approach LOS		D		E			D			F	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 28 (25%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.51	
Intersection Signal Delay: 71.2	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



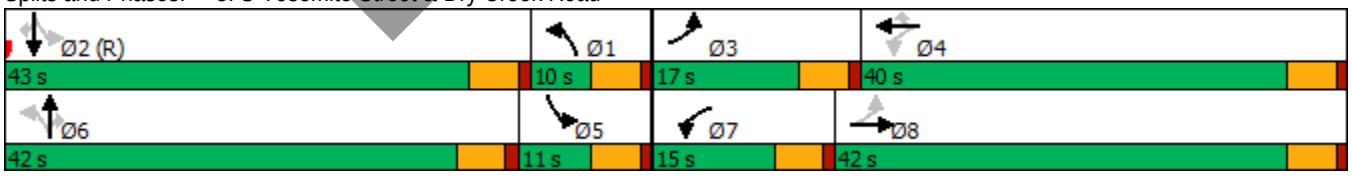
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8	4		4
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	10.0	37.0	18.0	45.0	45.0	15.0	35.0	35.0	20.0	40.0	40.0
Total Split (%)	9.1%	33.6%	16.4%	40.9%	40.9%	13.6%	31.8%	31.8%	18.2%	36.4%	36.4%
Maximum Green (s)	5.0	32.0	13.0	40.0	40.0	10.0	30.0	30.0	15.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	2.0	1.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		25.0	25.0		30.0	30.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	5.9	32.0	13.9	40.0	40.0	10.0	29.1	29.1	15.0	34.1	34.1
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap
70th %ile Green (s)	9.8	32.0	17.8	40.0	40.0	10.0	25.2	25.2	15.0	30.2	30.2
70th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Hold	Hold	Max	Gap	Gap
50th %ile Green (s)	12.4	34.8	17.6	40.0	40.0	10.0	22.6	22.6	15.0	27.6	27.6
50th %ile Term Code	Max	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	15.4	40.1	15.3	40.0	40.0	10.0	19.6	19.6	15.0	24.6	24.6
30th %ile Term Code	Max	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
10th %ile Green (s)	18.7	46.9	11.8	40.0	40.0	10.0	16.3	16.3	15.0	21.3	21.3
10th %ile Term Code	Max	Coord	Gap	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 28 (25%), Referenced to phase 2:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	235	850	140	460	455	40	450	115	195	260	90
Future Volume (vph)	235	850	140	460	455	40	450	115	195	260	90
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	17.0	42.0	15.0	40.0	40.0	10.0	42.0	42.0	11.0	43.0	43.0
Total Split (%)	15.5%	38.2%	13.6%	36.4%	36.4%	9.1%	38.2%	38.2%	10.0%	39.1%	39.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Act Effct Green (s)	47.9	35.8	43.4	33.6	33.6	43.4	38.4	38.4	46.2	41.4	41.4
Actuated g/C Ratio	0.44	0.33	0.39	0.31	0.31	0.39	0.35	0.35	0.42	0.38	0.38
v/c Ratio	0.84	0.89	0.73	0.48	0.77	0.12	0.39	0.21	0.59	0.24	0.18
Control Delay	41.7	45.4	42.0	32.6	26.0	19.6	28.5	5.4	27.9	19.7	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.7	45.4	42.0	32.6	26.0	19.6	28.5	5.4	27.9	19.7	5.1
LOS	D	D	D	C	C	B	C	A	C	B	A
Approach Delay		44.5		31.0			23.4			19.8	
Approach LOS		D		C			C			B	

Intersection Summary		
Cycle Length: 110		
Actuated Cycle Length: 110		
Offset: 86 (78%), Referenced to phase 2:SBTL, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 32.6	Intersection LOS: C	
Intersection Capacity Utilization 90.8%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



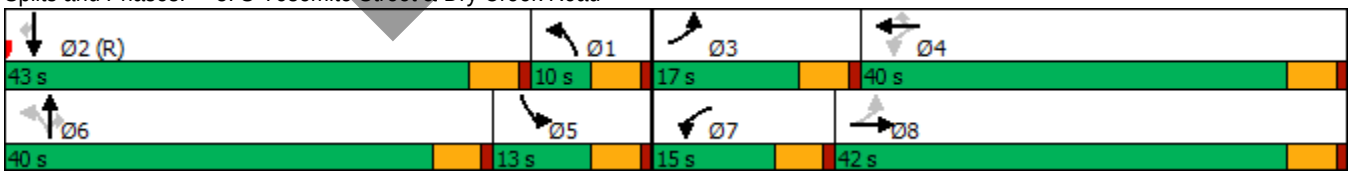
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6	2		2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	17.0	42.0	15.0	40.0	40.0	10.0	42.0	42.0	11.0	43.0	43.0
Total Split (%)	15.5%	38.2%	13.6%	36.4%	36.4%	9.1%	38.2%	38.2%	10.0%	39.1%	39.1%
Maximum Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	37.0	37.0	6.0	38.0	38.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		30.0	30.0		25.0	25.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	37.0	37.0	6.0	38.0	38.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	37.0	37.0	6.0	38.0	38.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	37.0	37.0	6.0	38.0	38.0
50th %ile Term Code	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	12.0	36.3	10.0	34.3	34.3	5.0	37.7	37.7	6.0	38.7	38.7
30th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Hold	Coord	Coord
10th %ile Green (s)	12.3	31.8	9.0	28.5	28.5	0.0	43.5	43.5	5.7	54.2	54.2
10th %ile Term Code	Max	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 86 (78%), Referenced to phase 2:SBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	235	850	140	460	455	40	450	115	195	260	90
Future Volume (vph)	235	850	140	460	455	40	450	115	195	260	90
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6			2
Detector Phase	3	8	7	4	4	1	6	6	5	2	2
Switch Phase											
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	17.0	42.0	15.0	40.0	40.0	10.0	40.0	40.0	13.0	43.0	43.0
Total Split (%)	15.5%	38.2%	13.6%	36.4%	36.4%	9.1%	36.4%	36.4%	11.8%	39.1%	39.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Act Effct Green (s)	47.8	35.8	43.4	33.6	33.6	41.4	36.4	36.4	8.0	41.4	41.4
Actuated g/C Ratio	0.43	0.33	0.39	0.31	0.31	0.38	0.33	0.33	0.07	0.38	0.38
v/c Ratio	0.84	0.89	0.73	0.48	0.78	0.13	0.41	0.22	0.85	0.24	0.18
Control Delay	41.7	45.4	41.9	32.6	27.0	19.8	30.3	5.7	75.3	19.7	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.7	45.4	41.9	32.6	27.0	19.8	30.3	5.7	75.3	19.7	5.3
LOS	D	D	D	C	C	B	C	A	E	B	A
Approach Delay		44.5		31.4			24.7			35.4	
Approach LOS		D		C			C			D	

Intersection Summary		
Cycle Length: 110		
Actuated Cycle Length: 110		
Offset: 87 (79%), Referenced to phase 2:SBT, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.89		
Intersection Signal Delay: 35.5	Intersection LOS: D	
Intersection Capacity Utilization 85.5%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



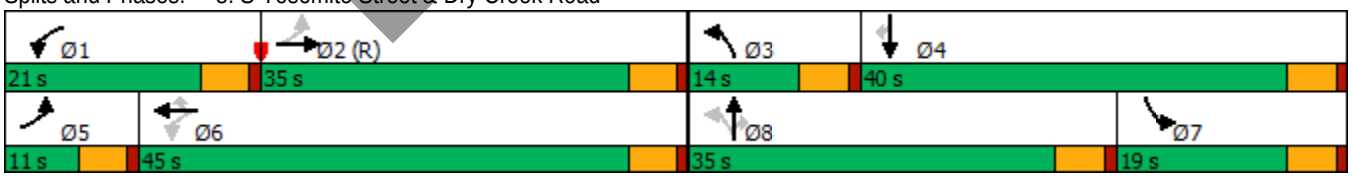
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	3	8	7	4		1	6		5	2	
Permitted Phases	8		4		4	6		6			2
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	15.0	15.0	5.0	15.0	15.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	40.0	40.0	10.0	35.0	35.0
Total Split (s)	17.0	42.0	15.0	40.0	40.0	10.0	40.0	40.0	13.0	43.0	43.0
Total Split (%)	15.5%	38.2%	13.6%	36.4%	36.4%	9.1%	36.4%	36.4%	11.8%	39.1%	39.1%
Maximum Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	35.0	35.0	8.0	38.0	38.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	Max	Max	None	C-Max	C-Max
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		30.0	30.0		25.0	25.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	35.0	35.0	8.0	38.0	38.0
90th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
70th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	35.0	35.0	8.0	38.0	38.0
70th %ile Term Code	Max	Max	Max	Max	Max	Max	Coord	Coord	Max	Coord	Coord
50th %ile Green (s)	12.0	37.0	10.0	35.0	35.0	5.0	35.0	35.0	8.0	38.0	38.0
50th %ile Term Code	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
30th %ile Green (s)	12.0	36.3	10.0	34.3	34.3	5.0	35.7	35.7	8.0	38.7	38.7
30th %ile Term Code	Max	Gap	Max	Hold	Hold	Max	Coord	Coord	Max	Coord	Coord
10th %ile Green (s)	12.0	31.8	9.0	28.8	28.8	0.0	41.2	41.2	8.0	54.2	54.2
10th %ile Term Code	Max	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Max	Coord	Coord

Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 87 (79%), Referenced to phase 2:SBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	135	605	230	1255	285	185	530	170	435	590	235
Future Volume (vph)	135	605	230	1255	285	185	530	170	435	590	235
Turn Type	pm+pt	NA	pm+pt	NA	Perm	pm+pt	NA	Perm	Prot	NA	Perm
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8			4
Detector Phase	5	2	1	6	6	3	8	8	7	4	4
Switch Phase											
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	11.0	35.0	21.0	45.0	45.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	10.0%	31.8%	19.1%	40.9%	40.9%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Act Effct Green (s)	40.2	32.9	51.3	40.0	40.0	22.2	22.2	22.2	20.5	33.7	33.7
Actuated g/C Ratio	0.37	0.30	0.47	0.36	0.36	0.20	0.20	0.20	0.19	0.31	0.31
v/c Ratio	1.02	0.75	0.85	1.10	0.43	1.11	0.80	0.42	0.74	0.66	0.52
Control Delay	100.0	40.0	47.7	93.0	8.5	133.1	50.3	7.7	46.3	31.4	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.0	40.0	47.7	93.0	8.5	133.1	50.3	7.7	46.3	31.4	13.4
LOS	F	D	D	F	A	F	D	A	D	C	B
Approach Delay		51.8		73.5			61.7			32.6	
Approach LOS		D		E			E			C	

Intersection Summary	
Cycle Length: 110	
Actuated Cycle Length: 110	
Offset: 53 (48%), Referenced to phase 2:EBTL, Start of Green	
Natural Cycle: 120	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 56.3	Intersection LOS: E
Intersection Capacity Utilization 86.6%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 8: S Yosemite Street & Dry Creek Road



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2	1	6		3	8		7	4	
Permitted Phases	2		6		6	8		8			4
Minimum Initial (s)	5.0	15.0	5.0	15.0	15.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.0	35.0	10.0	40.0	40.0	10.0	35.0	35.0	10.0	40.0	40.0
Total Split (s)	11.0	35.0	21.0	45.0	45.0	14.0	35.0	35.0	19.0	40.0	40.0
Total Split (%)	10.0%	31.8%	19.1%	40.9%	40.9%	12.7%	31.8%	31.8%	17.3%	36.4%	36.4%
Maximum Green (s)	6.0	30.0	16.0	40.0	40.0	9.0	30.0	30.0	14.0	35.0	35.0
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	1.5	2.0	1.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5
Minimum Gap (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	C-Max	None	Max	Max	None	None	None	None	None	None
Walk Time (s)		5.0		5.0	5.0		5.0	5.0		5.0	5.0
Flash Dont Walk (s)		25.0		30.0	30.0		25.0	25.0		30.0	30.0
Pedestrian Calls (#/hr)		0		0	0		0	0		0	0
90th %ile Green (s)	6.0	30.0	16.0	40.0	40.0	9.0	27.7	27.7	16.3	35.0	35.0
90th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
70th %ile Green (s)	6.0	30.0	16.0	40.0	40.0	9.0	24.7	24.7	19.3	35.0	35.0
70th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
50th %ile Green (s)	6.0	30.0	16.0	40.0	40.0	9.0	22.6	22.6	21.4	35.0	35.0
50th %ile Term Code	Max	Coord	Max	Coord	Coord	Max	Gap	Gap	Max	Hold	Hold
30th %ile Green (s)	8.4	34.5	13.9	40.0	40.0	9.0	19.6	19.6	22.0	32.6	32.6
30th %ile Term Code	Max	Coord	Gap	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold
10th %ile Green (s)	10.3	40.0	10.3	40.0	40.0	9.0	16.3	16.3	23.4	30.7	30.7
10th %ile Term Code	Max	Coord	Gap	Coord	Coord	Max	Gap	Gap	Gap	Hold	Hold

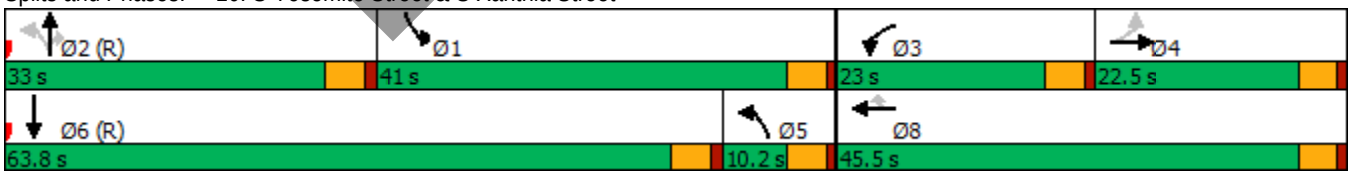
Intersection Summary
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 53 (48%), Referenced to phase 2:EBTL, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	20	10	300	10	95	35	450	310	690	800
Future Volume (vph)	20	10	300	10	95	35	450	310	690	800
Turn Type	Perm	NA	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA
Protected Phases		4	3	8		5	2		1	6
Permitted Phases	4				8	2		2		
Detector Phase	4	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	22.5	22.5	23.0	45.5	45.5	10.2	33.0	33.0	41.0	63.8
Total Split (%)	18.8%	18.8%	19.2%	38.1%	38.1%	8.5%	27.6%	27.6%	34.3%	53.4%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		8.2	16.1	26.7	26.7	52.0	46.4	46.4	32.9	77.7
Actuated g/C Ratio		0.07	0.13	0.22	0.22	0.44	0.39	0.39	0.28	0.65
v/c Ratio		0.42	0.71	0.03	0.24	0.16	0.36	0.44	0.79	0.41
Control Delay		49.1	58.1	32.0	7.5	14.8	29.5	10.2	46.7	12.5
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		49.1	58.1	32.0	7.5	14.8	29.5	10.2	46.7	12.5
LOS		D	E	C	A	B	C	B	D	B
Approach Delay		49.1		45.6			21.3			27.7
Approach LOS		D		D			C			C

Intersection Summary

Cycle Length: 119.5
Actuated Cycle Length: 119.5
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 28.8 — Intersection LOS: C
Intersection Capacity Utilization 58.6% — ICU Level of Service B
Analysis Period (min) 15

Splits and Phases: 10: S Yosemite Street & S Xanthia Street



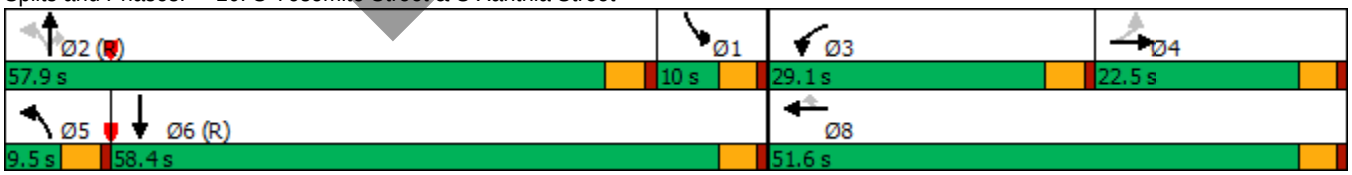
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases		4	3	8		5	2		1	6
Permitted Phases	4				8	2		2		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	22.5	22.5	23.0	45.5	45.5	10.2	33.0	33.0	41.0	63.8
Total Split (%)	18.8%	18.8%	19.2%	38.1%	38.1%	8.5%	27.6%	27.6%	34.3%	53.4%
Maximum Green (s)	18.0	18.0	18.5	41.0	41.0	5.7	28.5	28.5	36.5	59.3
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lag	Lead			Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0
90th %ile Green (s)	11.6	11.6	18.5	34.6	34.6	5.7	34.9	34.9	36.5	65.7
90th %ile Term Code	Gap	Gap	Max	Hold	Hold	Max	Coord	Coord	Max	Coord
70th %ile Green (s)	9.4	9.4	18.3	32.2	32.2	5.7	37.3	37.3	36.5	68.1
70th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Max	Coord	Coord	Hold	Coord
50th %ile Green (s)	7.9	7.9	16.5	28.9	28.9	5.7	40.6	40.6	36.5	71.4
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Max	Coord	Coord	Hold	Coord
30th %ile Green (s)	6.4	6.4	14.8	25.7	25.7	0.0	51.6	51.6	28.7	84.8
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Gap	Coord
10th %ile Green (s)	0.0	0.0	12.2	12.2	12.2	0.0	67.5	67.5	26.3	98.3
10th %ile Term Code	Skip	Skip	Gap	Hold	Hold	Skip	Coord	Coord	Hold	Coord

Intersection Summary
Cycle Length: 119.5
Actuated Cycle Length: 119.5
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Control Type: Actuated-Coordinated

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	60	10	500	10	225	20	1535	140	310	465
Future Volume (vph)	60	10	500	10	225	20	1535	140	310	465
Turn Type	Perm	NA	Prot	NA	Perm	pm+pt	NA	Perm	Prot	NA
Protected Phases		4	3	8		5	2		1	6
Permitted Phases	4				8	2		2		
Detector Phase	4	4	3	8	8	5	2	2	1	6
Switch Phase										
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	22.5	22.5	29.1	51.6	51.6	9.5	57.9	57.9	10.0	58.4
Total Split (%)	18.8%	18.8%	24.4%	43.2%	43.2%	7.9%	48.5%	48.5%	8.4%	48.9%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lead			Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Act Effct Green (s)		13.1	22.6	40.3	40.3	60.2	60.2	60.2	5.5	63.9
Actuated g/C Ratio		0.11	0.19	0.34	0.34	0.50	0.50	0.50	0.05	0.53
v/c Ratio		0.67	0.84	0.02	0.40	0.06	0.94	0.18	2.13	0.28
Control Delay		59.9	58.7	23.3	16.3	17.8	40.0	8.0	557.9	17.4
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay		59.9	58.7	23.3	16.3	17.8	40.0	8.0	557.9	17.4
LOS		E	E	C	B	B	D	A	F	B
Approach Delay		59.9		45.2			37.1			227.0
Approach LOS		E		D			D			F

Intersection Summary	
Cycle Length: 119.5	
Actuated Cycle Length: 119.5	
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green	
Natural Cycle: 140	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 2.13	
Intersection Signal Delay: 85.1	Intersection LOS: F
Intersection Capacity Utilization 83.5%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 10: S Yosemite Street & S Xanthia Street



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Protected Phases		4	3	8		5	2		1	6
Permitted Phases	4				8	2		2		
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	22.5	22.5	22.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5
Total Split (s)	22.5	22.5	29.1	51.6	51.6	9.5	57.9	57.9	10.0	58.4
Total Split (%)	18.8%	18.8%	24.4%	43.2%	43.2%	7.9%	48.5%	48.5%	8.4%	48.9%
Maximum Green (s)	18.0	18.0	24.6	47.1	47.1	5.0	53.4	53.4	5.5	53.9
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lag	Lead			Lead	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes			Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Minimum Gap (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Time Before Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time To Reduce (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0
90th %ile Green (s)	18.0	18.0	24.6	47.1	47.1	5.0	53.4	53.4	5.5	53.9
90th %ile Term Code	Max	Max	Max	Hold	Hold	Max	Coord	Coord	Max	Coord
70th %ile Green (s)	16.0	16.0	24.6	45.1	45.1	6.8	55.4	55.4	5.5	54.1
70th %ile Term Code	Gap	Gap	Max	Hold	Hold	Gap	Coord	Coord	Max	Coord
50th %ile Green (s)	13.5	13.5	23.9	41.9	41.9	6.2	58.6	58.6	5.5	57.9
50th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Gap	Coord	Coord	Max	Coord
30th %ile Green (s)	11.0	11.0	21.7	37.2	37.2	0.0	63.3	63.3	5.5	73.3
30th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Max	Coord
10th %ile Green (s)	7.2	7.2	18.4	30.1	30.1	0.0	70.4	70.4	5.5	80.4
10th %ile Term Code	Gap	Gap	Gap	Hold	Hold	Skip	Coord	Coord	Max	Coord

Intersection Summary
Cycle Length: 119.5
Actuated Cycle Length: 119.5
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Control Type: Actuated-Coordinated

APPENDIX C: MAINSTREET MEMO

FEHR PEERS

Subject: **MainStreet - Trip Generation**

This memo provides you some background information on the trip generation MXD tool we utilized for the District 4 Arapaho Urban Center (AUC4) traffic impact study. This memorandum provides a brief description of the proposed trip generation methodology.

Trip Generation Methodology

Current accepted methodologies, such as the Institute of Transportation Engineers (ITE) Tr*ip Generation* methodology, are primarily based on data collected at suburban, single-use, freestanding sites. These defining characteristics limit their applicability to mixed-use or multi-use development projects, such as the proposed AUC4 development concept, which is in a high-density walkable setting with frequent and nearby local and regional transit service. The land use mix, design features, and setting of the proposed development concept include characteristics that influence travel behavior differently from typical single-use suburban developments. In response to the limitations in the ITE methodology for dense and mixed-use developments, and to provide a straightforward and empirically validated method of estimating vehicle trip generation at mixed-use developments, the US Environmental Protection Agency (EPA) sponsored a national study of the trip generation characteristics of multi-use sites. Travel survey data was gathered from 239 mixed-use developments (MXDs) in six major metropolitan regions, and correlated with the characteristics of the sites and their surroundings. The findings indicate that the amount of external traffic generated is affected by a wide variety of factors, each pertaining to one or more of the following characteristics:

- **The relative numbers of residents and jobs on the site** – the better the site jobs/ housing balance, the greater the proportion of commute trips that remain internal.
- **The amount of retail and service use on the site relative to the number of residences** – the greater the degree to which retail and service opportunities match the needs generated by site residents, the greater the internalization of household-generated shopping, personal services and entertainment travel.
- **The amount of retail and service use relative to the number of employees** – the better the balance of employee-oriented retail and service opportunities, the greater the

internal capture of lunchtime and after-work dining, shopping and errands by site employees.

- **The overall size of the development** – the larger the scale of the development in terms of acreage and total amounts of residential and commercial use, the greater the likelihood that travel destinations can be satisfied within the site as a whole
- **The density of development** – the greater the concentration of dwellings and commercial space per acre, the greater the likelihood that the interacting land uses will be near enough together to encourage walking or short-distance internal driving.
- **The internal connectivity for walking or driving among different activities** – measured in terms of the ratio of intersections to total land area within the site directly influences trip internalization and the number of trips made by walking instead of driving.
- **The availability of transit** – the greater the number of jobs within a reasonable travel time via transit, the greater the share of travel likely to occur by transit, and the lower the traffic generation.
- **The number of convenient trip destinations within the immediate area** – the number of retail and other jobs in neighborhoods immediately surrounding the multi-use site reduces the amount of walking to/from the site and reduce traffic generation.

These characteristics were related statistically to the trip behavior observed at the study development sites using Hierarchical Linear Modeling (HLM) techniques. This quantified relationships between characteristics of the MXDs and the likelihood that trips generated by those MXDs will stay internal and/or use modes of transportation other than the private vehicle. These statistical relationships produced equations, known as the EPA MXD model, that allows predicting external vehicle trip reduction as a function of the MXD characteristics. Applying the external vehicle trip reduction percentage to "raw trips", as predicted by ITE, produces an estimate for the number of vehicle trips traveling in or out of the site.

Validation of MXD model

Since the conclusion of the EPA sponsored study, Fehr & Peers has been actively enhancing the MXD model to improve sensitivity to various site characteristics, improve peak hour performance, and continue to validate the model against MXDs where data is available.

A set of 28 independent MXD sites across the country that were not included in the initial model development have been tested to validate the model. These sites represent locations where it is expected that traditional data and methodologies, such as ITE, would not accurately estimate the Project vehicle trip generation. **Table 2** presents the performance of the MXD model against ITE and ITE internalization procedures.

TABLE 2
MXD MODEL
VALIDATION STATISTICS COMPARISON

Validation Statistic	ITE raw	ITE with internalization	MXD model
Daily			
Average Model Error[1]	30%	17%	**4%**
% RMSE[2]	42%	28%	**17%**
R-Squared[3]	0.72	0.87	**0.95**
AM Peak Hour			
Average Model Error	57%	53%	**3%**
% RMSE	58%	76%	**34%**
R-Squared	0.56	0.56	**0.91**
PM Peak Hour			
Average Model Error	56%	41%	**22%**
% RMSE	96%	81%	**59%**
R-Squared	-0.56	-0.11	**0.41**

1. Average model error measures the difference between the estimated trip generation and the counted trip generation of the 28 survey sites.
2. RMSE stands for percent root mean squared error is a demand assessment of performance of transportation models in that it does not apply average that would allow over-estimates and under-estimates to cancel one another out and it penalizes proportionally more for large errors. A % RMSE of less than 40% is generally considered acceptable in transportation modeling.
3. R-squared is a statistical measure that indicates, in this case, the degree to which each method explains the variation in trip generation among the 28 survey sites. A R-Squared value closer to 1.0 indicates that the method fully explains the variation in trip generation amongst the survey sites and would be suitable to be used for that set of site types.

Source: Fehr & Peers, 2012.

Based on all statistical measures, the MXD model performs better than the ITE recommended procedures for these types of sites.

The MXD model has been approved for use by the EPA[1]. It has also been peer-reviewed in the ASCE Journal of Urban Planning and Development[2], peer-reviewed in a 2012 TRB paper evaluating various smart growth trip generation methodologies[3], recommended by SANDAG for use on mixed-use smart growth developments[4], and has been used successfully in multiple certified EIRs in California.

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[1] Trip Generation Tool for Mixed-Use Developments (2012). www.epa.gov/dced/mxd_tripgeneration.html

[2] "Traffic Generated by Mixed-Use Developments—Six-Region Study Using Consistent Built Environmental Measures." Journal of Urban Planning and Development, 137(3), 248–261.

[3] Shafizadeh, Kevan et al. "Evaluation of the Operation and Accuracy of Available Smart Growth Trip Generation Methodologies for Use in California". Presented at 91st Annual Meeting of the Transportation Research Board, Washington, D.C., 2012.

[4] SANDAG Smart Growth Trip Generation and Parking Study.
http://www.sandag.org/index.asp?projectid=378&fuseaction=projects.detail