Traffic Study

To: James M. Moore, Director of Planning & Building Services, Town of Fairfax

From: David Parisi, PE, TE, Parisi Transportation Consulting

Date: October 14, 2016

Subject: Victory Village Senior Housing Development Traffic Study

PURPOSE

On behalf of the Town of Fairfax, Parisi Transportation Consulting was requested to conduct weekday peak period traffic counts at 11 intersections along Sir Francis Drake Boulevard, estimate the potential number of peak hour vehicle trips the proposed Victory Village Senior Housing development project could generate, determine if these vehicle trips could affect any of the 11 study intersections, and assess the project site's access in the vicinity of Sir Francis Drake Boulevard and Mitchell Drive. This traffic study summarizes the results of our analysis.

TRAFFIC COUNTS

Traffic, pedestrian and bicycle counts were conducted at the following intersections along Sir Francis Drake Boulevard between 7 and 9 a.m. and between 4 and 6 p.m. on September 20 and 22, 2016:

- Mitchell Drive / Alhambra Circle
- June Court / Kingdom Hall
- Oak Manor Drive
- Oak Tree Lane
- Marin Road
- San Miguel Court
- Olema Road
- Marinda Drive
- Broadway
- Azalea Avenue
- Claus Drive

Based on the results of the counts, the peak one-hour of traffic during the morning peak and during the late afternoon/early evening peak was determined. The peak hour traffic counts were used to evaluate traffic conditions.

ESTIMATED VEHICLE TRIP GENERATION

The Victory Village project would consist of 53 affordable apartments for low-income seniors and one manager's apartment. The project would demolish the existing Christ Lutheran Church and a former private elementary school that occupy the site.

Parisi
TRANSPORTATION CONSULTING

Based on vehicle trip generation rates available from the Institute of Transportation Engineer's *Trip Generation, 9th Edition* manual, the project would be estimated to generate about 190 daily weekday vehicle trips, 12 weekday a.m. peak hour vehicle trips, and 14 weekday p.m. peak hour vehicle trips, as shown in Table 1.

Table 1. Estimated Weekday Vehicle Trip Generation

Land Use	Units	Daily		AM Peak Hour				PM Peak Hour			
		Rate	Trips	Rate	Trips	In	Out	Rate	Trips	In	Out
Senior Adult Housing - Attached	53	3.44	**182**	0.20	**11**	4	7	0.25	**13**	7	6
Apartment	1	6.65	**7**	0.51	**1**	0	1	0.62	**1**	1	0
Total Trips			**189**		**12**	4	8		**14**	8	6

Source:

ITE Trip Generation Manual, 9th Edition

Senior Adult Housing – Attached (ITE #252)

Apartment (ITE #230)

According to traffic analysis that was conducted as a part of the Town of Fairfax's General Plan update in 2012, the church and private elementary school generated an average of 48 a.m. peak hour vehicle trips and six p.m. peak hour vehicle trips. In other words, the proposed Victory Village Senior Housing project would generate about 36 fewer a.m. peak hour vehicle trips compared to the current uses when fully occupied, and about eight more p.m. peak hour vehicle trips.

However, in order to provide a conservative or "worst-case" analysis, this traffic study accounts only for the potential new vehicle trips that proposed project could generate, and does not discount vehicle trips previously generated by the current land uses.

PROJECT EFFECTS ON STUDY INTERSECTIONS

The project's estimated 12 weekday a.m. peak hour vehicle trips and 14 p.m. peak hour vehicle trips were assigned to the 11 study intersections along Sir Francis Drake Boulevard to determine if the project could impact intersection level of service. The Town of Fairfax uses the 2000 Highway Capacity Manual operational procedures for evaluating signalized and unsignalized intersection performance. Level of service is measured as a function of vehicle delay, with the corresponding ranges shown in Table 2.

The Town of Fairfax considers level of service (LOS) D to be the minimum level of operation at both signalized and unsignalized intersections. Therefore, a signalized intersection that experiences 55 seconds or greater average motorist delays, or a stop sign-controlled movement at an unsignalized intersection that experiences 35 seconds or great average delays, could be

required to be mitigated to operate at an acceptable level of service. There are occasions, however, when the necessary improvements to mitigate the potential traffic impacts are not feasible to construct (such as requiring an exceedingly high construction cost to improve a short duration impact), or would result in an unduly delay results for other traffic approaches, or the volume of traffic impacted by LOS E or F conditions is relatively minor compared to the intersection's major traffic movements.

Table 2. Intersection Level of Service and Delay

Level of Service	Level of Delay	Signalized Delay (Seconds)	Unsignalized Delay (Seconds)
A	Insignificant	0 to 10	0 to 10
B	Minimal	> 10 to 20	> 10 to 15
C	Acceptable	> 20 to 35	> 15 to 25
D	Tolerable	> 35 to 55	> 25 to 35
E	Significant	> 55 to 80	> 35 to 50
F	Excessive	> 80	> 50

Source:

Transportation Resource Board, Highway Capacity Manual, 2000

Table 3 presents existing (year 2016) weekday a.m. and p.m. peak hour service levels for the 11 study intersections, and compares these with those that could occur with the addition of project trips. Table 4 summarizes General Plan build-out (assumed in year 2030) conditions with and without project-related traffic.

As shown in Table 3, traffic generated by the project would not result in any service level changes at any of the study intersections during the current weekday a.m. and p.m. peak hours. Slight delay increases (e.g., one to three seconds of added delay) could result for stop sign-controlled side-street motorists, who currently experience LOS E or F conditions, entering Sir Francis Drake Boulevard from Oak Tree Lane, Marin Road, Marinda Drive, and Azalea Avenue.

Under General Plan build-out conditions, traffic generated by the project would degrade the southbound Mitchell Drive stop sign-controlled movement onto Sir Francis Drake Boulevard from LOS D to LOS E conditions, since the added traffic would increase delays by three to four seconds per vehicle. At other study intersections, as shown in Table 4, no level of service changes would occur. Slight delay increases (e.g., one to three seconds of added delay) could result for stop sign-controlled side-street motorists, who would experience LOS E or F conditions under 2030 conditions, entering Sir Francis Drake Boulevard from Oak Tree Lane, Marin Road, Marinda Drive, and Azalea Avenue.

Table 3. Sir Francis Drake Blvd. Intersection Service Levels: Existing and Existing Plus Project Conditions

Sir Francis Drake Blvd. Intersection		Control	Movement	Level of Service							
				Existing				Existing plus Project			
				AM		PM		AM		PM	
				LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Mitchell Dr. / Alhambra Cir.	TWSC	NB LT	C	15	B	12	C	15	B	12
			SB	D	26	D	28	D	28	D	30
2	June Court / Kingdom Hall	TWSC	NB	C	15	B	12	C	15	B	12
			SB	A	0	A	0	A	0	A	0
3	Oak Manor Drive	Signal	Total	B	16	C	22	B	16	C	22
4	Oak Tree Lane	OWSC	SB	**E**	**40**	D	28	**E**	**41**	D	29
5	Marin Road	OWSC	NB LT	**F**	**58**	**E**	**43**	**F**	**60**	**E**	**45**
6	San Miguel Court	OWSC	SB	C	18	D	34	C	20	D	35
7	Olema Road	OWSC	NB LT	C	17	B	15	C	18	B	15
8	Marinda Drive	OWSC	SB LT	**F**	**53**	**E**	**49**	**F**	**54**	**E**	**50**
9	Broadway	TWSC	NB LT	**F**	**>120**	**F**	**>120**	**F**	**>120**	**F**	**>120**
			SB	D	35	**E**	**35**	**E**	**35**	**E**	**36**
10	Azalea Avenue	TWSC	NB	D	26	**E**	**49**	D	26	**F**	**52**
11	Claus Drive	Signal	Total	B	20	C	22	B	20	C	22

Notes:

Bold indicates movement/intersection at LOS E or F

Delay shown in average seconds per vehicle

OWSC – One-way stop control

TWSC – Two-way stop control

Signal – Signalized intersection

NB – Northbound

SB – Southbound

LT – Left-turn

Table 4. Sir Francis Drake Blvd. Intersection Service Levels: General Plan and General Plan Plus Project Conditions

Sir Francis Drake Blvd. Intersection		Control	Movement	Level of Service							
				General Plan				General Plan plus Project			
				AM		PM		AM		PM	
				LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
1	Mitchell Dr. / Alhambra Cir.	TWSC	NB LT	C	17	B	12	C	17	B	12
			SB	D	33	D	33	**E**	**37**	**E**	**36**
2	June Court / Kingdom Hall	TWSC	NB	C	17	B	12	C	17	B	12
			SB	A	0	A	0	A	0	A	0
3	Oak Manor Drive	Signal	Total	B	18	C	30	B	18	C	32
4	Oak Tree Lane	OWSC	SB	**F**	**64**	**E**	**36**	**F**	**67**	**E**	**37**
5	Marin Road	OWSC	NB LT	**F**	**>120**	**F**	**61**	**F**	**>120**	**F**	**63**
6	San Miguel Court	OWSC	SB	C	21	E	42	C	21	**E**	**43**
7	Olema Road	OWSC	NB LT	C	21	D	26	C	21	D	26
8	Marinda Drive	OWSC	SB LT	**F**	**81**	**F**	**67**	**F**	**83**	**F**	**69**
9	Broadway	TWSC	NB LT	**F**	**>120**	**F**	**>120**	**F**	**>120**	**F**	**>120**
			SB	**F**	**53**	**F**	**54**	**F**	**54**	**F**	**56**
10	Azalea Avenue	TWSC	NB	**E**	**36**	**F**	**>120**	**E**	**37**	**F**	**>120**
11	Claus Drive	Signal	Total	C	22	C	24	C	23	C	24

Notes:

Bold indicates movement/intersection at LOS E or F

Delay shown in average seconds per vehicle

OWSC – One-way stop control

TWSC – Two-way stop control

Signal – Signalized intersection

NB – Northbound

SB – Southbound

LT – Left-turn

Based on the intersection level of service analysis and the Town of Fairfax's General Plan, the proposed project could result in a significant impact at the Sir Francis Drake Boulevard/Mitchell Drive intersection under 2030 build-out conditions since left-turning movements from Mitchell Drive onto Sir Francis Drake Boulevard could degrade from LOS D to LOS E operations.

It should be noted, however, that the projected number of left-turning vehicles turning from Mitchell Drive onto Sir Francis Drake Boulevard under year 2030 General Plan conditions is only 10 vehicles per hour during the weekday a.m. peak hour and six during the p.m. peak hour. The proposed project would be estimated to increase these left-turn movements to 18 and 12 vehicles per hour, respectively (i.e, one vehicle turning left every three to five minutes). By 2030 east-west through traffic on Sir Francis Drake Boulevard is expected to reach over 1,200 vehicles per hour. Therefore, signalization of the intersection is not recommended as a mitigation measure in the future as such a strategy would result in increased delays, as well as potential safety issues, for the majority of traffic traveling through the intersection.

The Town of Fairfax's General Plan update predicted that the left-turn movement would be performing at LOS F conditions in 2030 and that left-turning motorists would experience delays of two to three minutes. However, the General Plan assumed that the project site would generate substantially more traffic as it assumed it would be comprised of 40 senior units, a private school serving up to 150 students, and a church. The currently proposed project would consist of 53 senior units and a manager's apartment. Instead of resulting in two- to three-minute left-turn delays in 2030, the project would result in 36-37 second delays by adding three to four additional seconds of delay due to project traffic.

ALTERNATIVE SITE ACCESS EVALUATION

The project would be accessed via its existing driveway on Mitchell Drive. An alternative arrangement would place the site access driveway directly on Sir Francis Drake Boulevard, approximately 100 feet east of Mitchell Drive. Under the alternative alignment, project traffic would not use Mitchell Drive.

In order to serve project traffic into and out of the alternative driveway, the center lane on Sir Francis Drake Boulevard between Mitchell Drive/Alhambra Circle and June Court/Kingdom Hall would need to be modified. It currently provides designated left-turn lanes to Alhmabra Circle and to the Kingdom Hall. The alternative driveway alignment would necessitate creating a continuous two-way left-turn lane on this segment of Sir Francis Drake Boulevard. All current traffic movements could continue to be allowed. While each of the turning movements into and out of the roadways and driveways that would be served by a two-way left-turn lane are relatively low, there would be increased potential for conflicts in the center lane between moving vehicles, particularly due to the close spacing of the alternative driveway alignment and Mitchell Drive/Alhambra Court.

APPENDIX

- Project Site Plan
- Existing Weekday Peak Hour Traffic Counts
- Synchro Intersection Level of Service Results

PROJECT DATA

PROJECT DATA

	Unit Count				Square Footage					
Building Area Summary	2 Bedroom	1 Bedroom	Studio	Unit Count	Res Area	Office/Common	Circulation	Mech/Utl.	Storage	Overall Areas
Floor LL (+104')	1	2	1	4	2,584	0	1,159	1,801	0	
Floor Main (+114')		14	2	16	9,344	2,902	3,413	1,065	456	
Floor 2 (+124')		18	1	19	11,173	897	3,658	445	154	
Floor 3 (+134')		13	2	15	8,729	385	2,158	276	154	
TOTAL	**1**	**47**	**6**	**54**	31,831	4,185	10,388	3,587	764	50,755

Parking Summary	Spaces
Resident Parking	38
Manager Parking	1
TOTAL	**39**
Parking Ratio	0.70

Parking (sq.ft.)				6,758
Driveway (sq. ft.)				12,506
Courtyard (sq.ft.)				4,294
Sidewalks (sq. ft.)				3,523
TOTAL: Impervious Site Work				**27,081**
Landscaping (sq.ft.)				11,351

SHEET NOTES

1	FIRE CONNECTION	12	(E) CROSSWALK
2	BACK FLOW PREVENTERS	13	NEW CROSSWALK
3	PAD MOUNTED TRANSFORMER	14	EXTEND SIDEWALK, CURB AND GUTTER TO NEIGHBOR'S DRIVEWAY, SEE CIVIL DWGS.
4	EXISTING HYDRANT	15	POTENTIAL PEDESTRIAN CROSSING ENHANCEMENT- SIGNAL WITH FLASHING LIGHT BOTH SIDES OF SIR FRANCIS DRAKE
5	NEW HYDRANT	16	STORM DRAIN
6	ELECTRIC UTILITY POLE	17	ROUGHENED CHANNEL, SEE CIVIL DRAWINGS.
7	CONCRETE RETAINING WALL	18	DESIGNATED SMOKING AREA WITH BENCH
8	LOW STEEL FENCE WITH WOOD RAIL	19	ALTERNATE ACCESS LOCATION FROM SIR FRANCIS DRAKE BOULEVARD, SHOWN DASHED.
9	RAISED ACCESSIBLE PLANTERS		
10	METAL DEER FENCE		
11	PARKING POLE LIGHT FIXTURE,		

LEGEND

- PROPERTY LINE
- (N) METAL FENCE,
- BOUNDARY OF PREVIOUSLY DEVELOPED AREA
- ACCESSIBLE PARKING SPACE
- RESIDENTIAL
- CIRCULATION/MAINTENANCE
- COMMON AREAS
- NEW TREE LOCATION, SEE SHEET L-1

1 A-1.0 SITE PLAN

SCALE: 1" = 30'

0 30' 60'

N

Fairfax Senior Housing | A-1.0 PROPOSED SITE PLAN AND PROJECT DATA

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VAN METER WILLIAMS POLLACK LLP

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TOWN OF FAIRFAX

Latitude: 37.999050
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File Name : sir francis drake-alhambra-a
Site Code : 1
Start Date : 9/22/2016
Page No : 1

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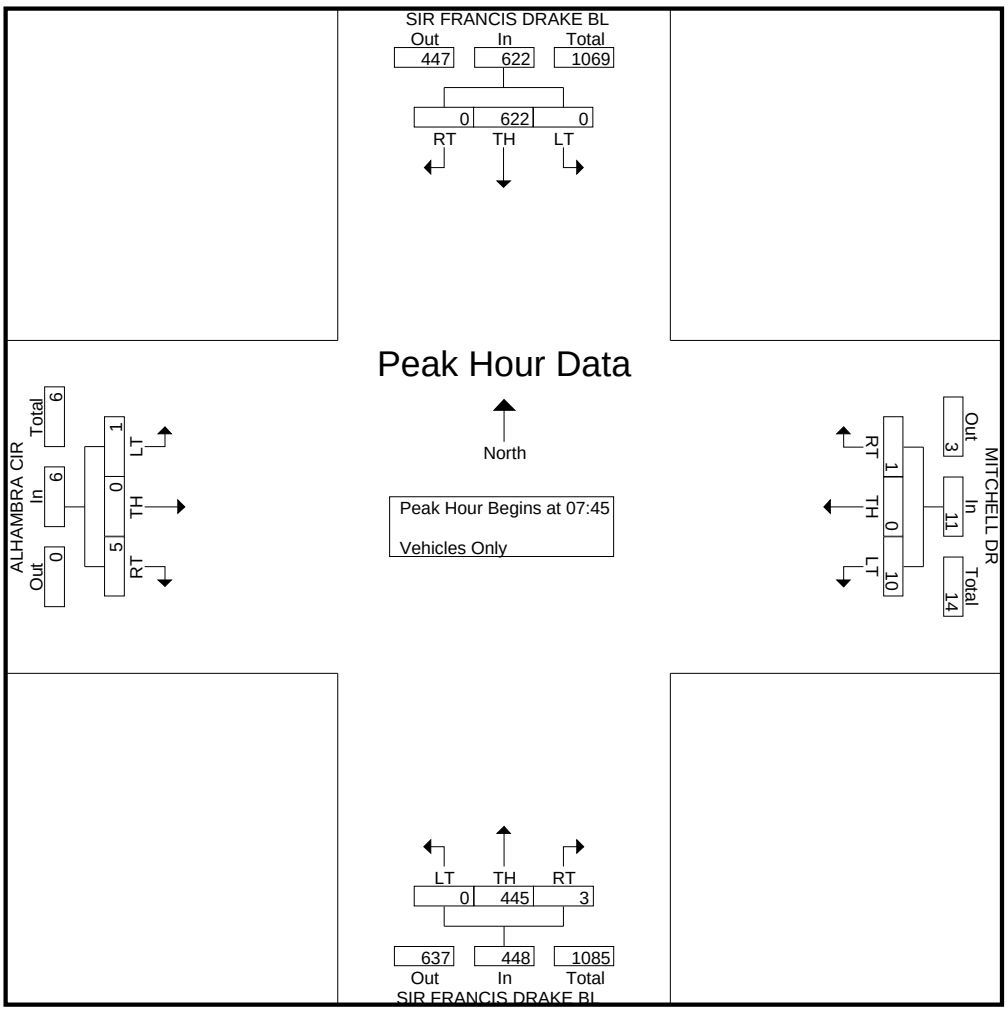
	SIR FRANCIS DRAKE BL Southbound				MITCHELL DR Westbound				SIR FRANCIS DRAKE BL Northbound				ALHAMBRA CIR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	155	0	155	0	0	2	2	0	47	0	47	3	0	0	3	207
07:15	0	156	0	156	1	0	3	4	0	60	0	60	1	0	1	2	222
07:30	1	200	2	203	2	0	1	3	0	79	0	79	3	0	0	3	288
07:45	0	169	0	169	1	0	1	2	0	149	0	149	3	0	0	3	323
Total	1	680	2	683	4	0	7	11	0	335	0	335	10	0	1	11	1040
08:00	0	140	0	140	0	0	1	1	0	78	0	78	0	0	0	0	219
08:15	0	151	0	151	0	0	7	7	0	85	0	85	1	0	0	1	244
08:30	0	162	0	162	0	0	1	1	3	133	0	136	1	0	1	2	301
08:45	0	153	0	153	0	0	5	5	0	126	0	126	2	0	0	2	286
Total	0	606	0	606	0	0	14	14	3	422	0	425	4	0	1	5	1050
Grand Total	1	1286	2	1289	4	0	21	25	3	757	0	760	14	0	2	16	2090
Apprch %	0.1	99.8	0.2		16	0	84		0.4	99.6	0		87.5	0	12.5		
Total %	0	61.5	0.1	61.7	0.2	0	1	1.2	0.1	36.2	0	36.4	0.7	0	0.1	0.8	

	SIR FRANCIS DRAKE BL Southbound				MITCHELL DR Westbound				SIR FRANCIS DRAKE BL Northbound				ALHAMBRA CIR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	**169**	0	**169**	**1**	0	1	2	0	**149**	0	**149**	**3**	0	0	**3**	**323**
08:00	0	140	0	140	0	0	1	1	0	78	0	78	0	0	0	0	219
08:15	0	151	0	151	0	0	**7**	**7**	0	85	0	85	1	0	0	1	244
08:30	0	162	0	162	0	0	1	1	**3**	133	0	136	1	0	**1**	2	301
Total Volume	0	622	0	622	1	0	10	11	3	445	0	448	5	0	1	6	1087
% App. Total	0	100	0		9.1	0	90.9		0.7	99.3	0		83.3	0	16.7		
PHF	.000	.920	.000	.920	.250	.000	.357	.393	.250	.747	.000	.752	.417	.000	.250	.500	.841



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

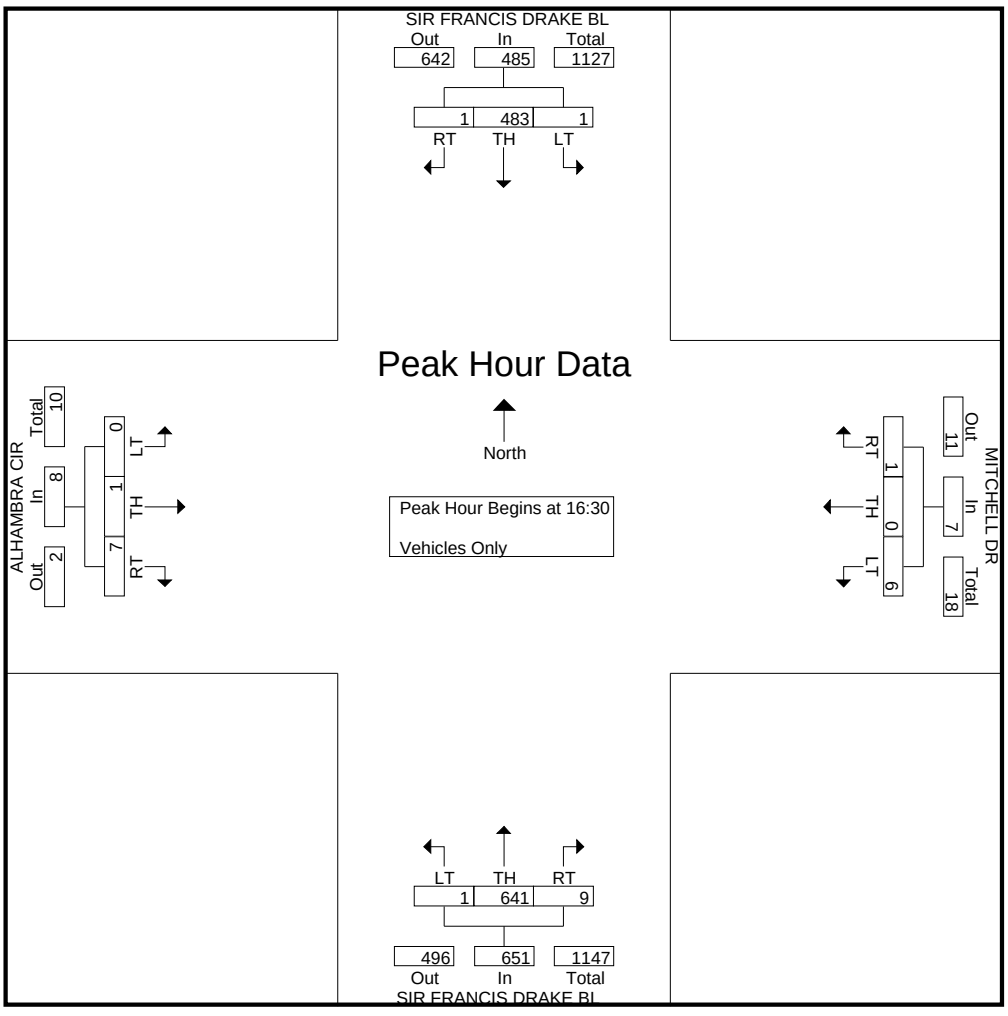
Latitude: 37.999050
Longitude: -122.600324

File Name : sir francis drake-alhambra-p
Site Code : 1
Start Date : 9/22/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				MITCHELL DR Westbound				SIR FRANCIS DRAKE BL Northbound				ALHAMBRA CIR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	125	2	127	0	0	1	1	0	151	1	152	0	0	0	0	280
16:15	1	104	0	105	0	0	1	1	2	154	3	159	1	1	0	2	267
16:30	0	98	0	98	0	0	0	0	2	139	0	141	1	1	0	2	241
16:45	0	105	1	106	0	0	2	2	1	177	0	178	1	0	0	1	287
Total	1	432	3	436	0	0	4	4	5	621	4	630	3	2	0	5	1075
17:00	0	148	0	148	0	0	2	2	4	172	1	177	2	0	0	2	329
17:15	1	132	0	133	1	0	2	3	2	153	0	155	3	0	0	3	294
17:30	0	102	0	102	0	0	2	2	3	133	0	136	0	0	0	0	240
17:45	0	89	1	90	1	0	0	1	1	178	2	181	0	0	0	0	272
Total	1	471	1	473	2	0	6	8	10	636	3	649	5	0	0	5	1135
Grand Total	2	903	4	909	2	0	10	12	15	1257	7	1279	8	2	0	10	2210
Apprch %	0.2	99.3	0.4		16.7	0	83.3		1.2	98.3	0.5		80	20	0		
Total %	0.1	40.9	0.2	41.1	0.1	0	0.5	0.5	0.7	56.9	0.3	57.9	0.4	0.1	0	0.5	

	SIR FRANCIS DRAKE BL Southbound				MITCHELL DR Westbound				SIR FRANCIS DRAKE BL Northbound				ALHAMBRA CIR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	0	98	0	98	0	0	0	0	2	139	0	141	1	**1**	0	2	241
16:45	0	105	**1**	106	0	0	**2**	2	1	**177**	0	**178**	1	0	0	1	287
17:00	0	**148**	0	**148**	0	0	2	2	**4**	172	**1**	177	2	0	0	2	**329**
17:15	**1**	132	0	133	**1**	0	2	**3**	2	153	0	155	**3**	0	0	**3**	294
Total Volume	1	483	1	485	1	0	6	7	9	641	1	651	7	1	0	8	1151
% App. Total	0.2	99.6	0.2		14.3	0	85.7		1.4	98.5	0.2		87.5	12.5	0		
PHF	.250	.816	.250	.819	.250	.000	.750	.583	.563	.905	.250	.914	.583	.250	.000	.667	.875



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TOWN OF FAIRFAX

Latitude: 37.989128
Longitude: -122.591284

File Name : sir francis drake-azalea-a
Site Code : 9
Start Date : 9/20/2016
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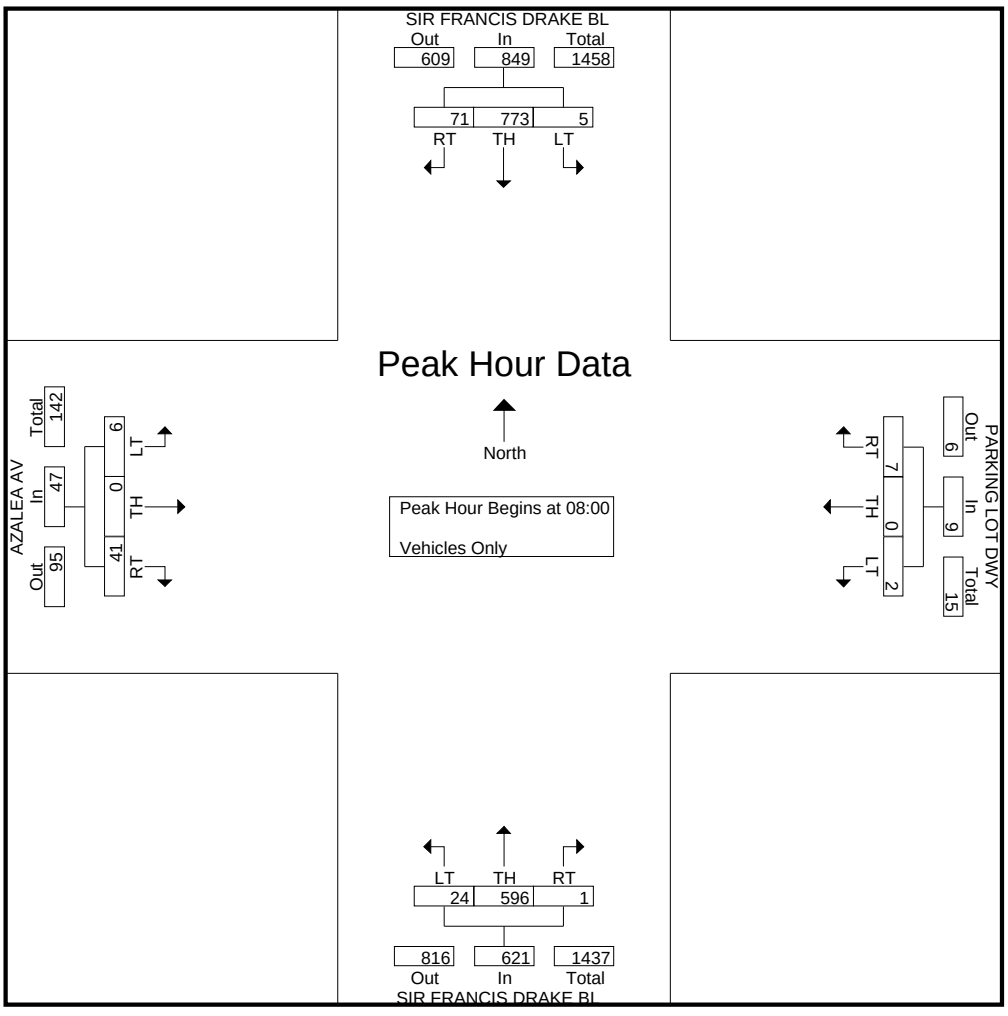
	SIR FRANCIS DRAKE BL Southbound				PARKING LOT DWY Westbound				SIR FRANCIS DRAKE BL Northbound				AZALEA AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	5	189	0	194	2	1	0	3	0	44	2	46	10	0	1	11	254
07:15	5	202	1	208	4	0	0	4	0	63	1	64	8	0	0	8	284
07:30	14	205	1	220	3	0	0	3	0	108	5	113	5	0	1	6	342
07:45	9	161	4	174	4	0	0	4	0	158	5	163	7	0	4	11	352
Total	33	757	6	796	13	1	0	14	0	373	13	386	30	0	6	36	1232
08:00	10	167	3	180	1	0	0	1	0	142	3	145	15	0	1	16	342
08:15	14	174	0	188	3	0	2	5	0	175	9	184	12	0	2	14	391
08:30	30	224	0	254	1	0	0	1	0	147	7	154	8	0	2	10	419
08:45	17	208	2	227	2	0	0	2	1	132	5	138	6	0	1	7	374
Total	71	773	5	849	7	0	2	9	1	596	24	621	41	0	6	47	1526
Grand Total	104	1530	11	1645	20	1	2	23	1	969	37	1007	71	0	12	83	2758
Apprch %	6.3	93	0.7		87	4.3	8.7		0.1	96.2	3.7		85.5	0	14.5		
Total %	3.8	55.5	0.4	59.6	0.7	0	0.1	0.8	0	35.1	1.3	36.5	2.6	0	0.4	3	

	SIR FRANCIS DRAKE BL Southbound				PARKING LOT DWY Westbound				SIR FRANCIS DRAKE BL Northbound				AZALEA AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	10	167	**3**	180	1	0	0	1	0	142	3	145	**15**	0	1	**16**	342
08:15	14	174	0	188	**3**	0	**2**	**5**	0	**175**	**9**	**184**	12	0	**2**	14	391
08:30	**30**	**224**	0	**254**	1	0	0	1	0	147	7	154	8	0	2	10	**419**
08:45	17	208	2	227	2	0	0	2	**1**	132	5	138	6	0	1	7	374
Total Volume	71	773	5	849	7	0	2	9	1	596	24	621	41	0	6	47	1526
% App. Total	8.4	91	0.6		77.8	0	22.2		0.2	96	3.9		87.2	0	12.8		
PHF	.592	.863	.417	.836	.583	.000	.250	.450	.250	.851	.667	.844	.683	.000	.750	.734	.911



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925.305.4358

TOWN OF FAIRFAX

Latitude: 37.989128
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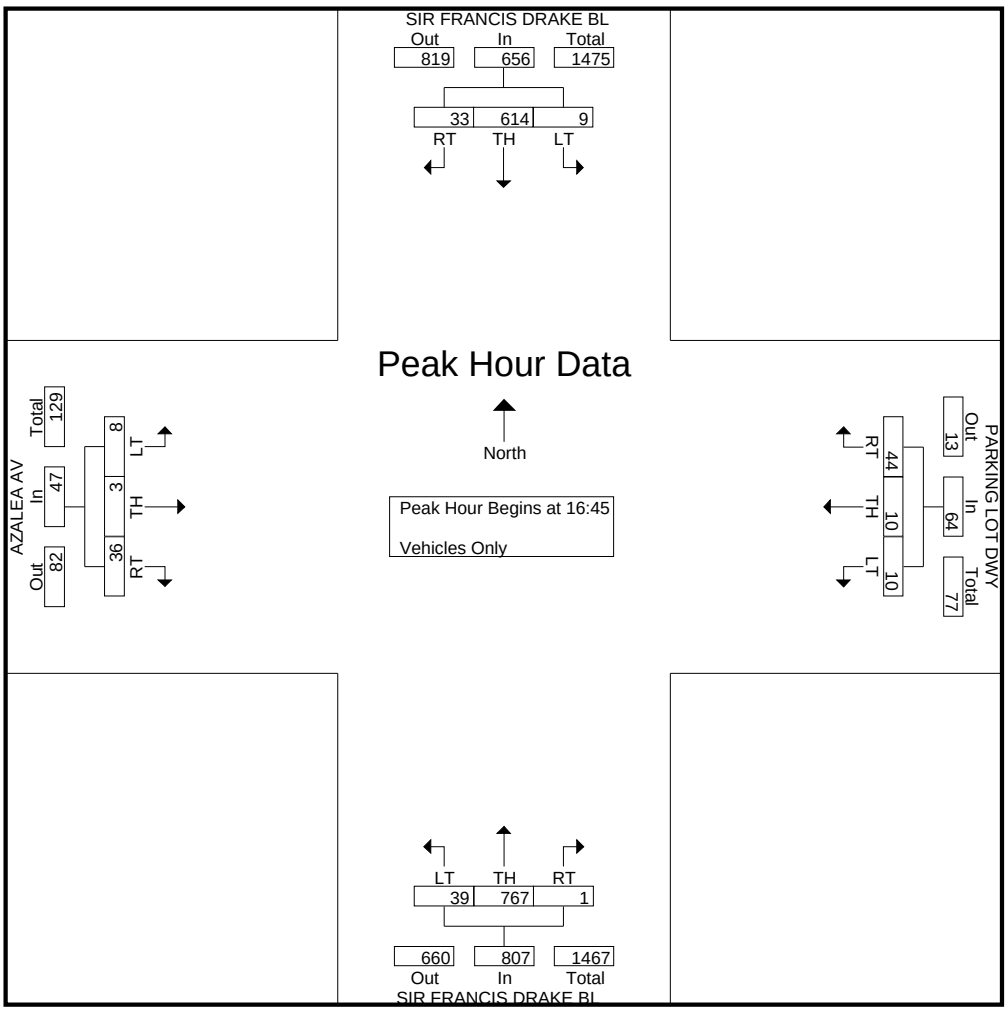
File Name : sir francis drake-azalea-p
Site Code : 9
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				PARKING LOT DWY Westbound				SIR FRANCIS DRAKE BL Northbound				AZALEA AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	4	125	8	137	8	0	1	9	0	203	9	212	7	0	4	11	369
16:15	8	126	1	135	12	1	0	13	0	168	16	184	8	1	2	11	343
16:30	4	133	5	142	12	2	4	18	3	182	11	196	11	0	1	12	368
16:45	5	142	3	150	11	3	5	19	0	190	6	196	11	0	2	13	378
Total	21	526	17	564	43	6	10	59	3	743	42	788	37	1	9	47	1458
17:00	7	158	2	167	13	2	1	16	1	198	10	209	8	1	4	13	405
17:15	9	165	2	176	12	3	3	18	0	207	11	218	7	0	0	7	419
17:30	12	149	2	163	8	2	1	11	0	172	12	184	10	2	2	14	372
17:45	5	126	3	134	11	1	3	15	0	188	14	202	6	1	1	8	359
Total	33	598	9	640	44	8	8	60	1	765	47	813	31	4	7	42	1555
Grand Total	54	1124	26	1204	87	14	18	119	4	1508	89	1601	68	5	16	89	3013
Apprch %	4.5	93.4	2.2		73.1	11.8	15.1		0.2	94.2	5.6		76.4	5.6	18		
Total %	1.8	37.3	0.9	40	2.9	0.5	0.6	3.9	0.1	50	3	53.1	2.3	0.2	0.5	3	

	SIR FRANCIS DRAKE BL Southbound				PARKING LOT DWY Westbound				SIR FRANCIS DRAKE BL Northbound				AZALEA AV Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	5	142	**3**	150	11	**3**	**5**	**19**	0	190	6	196	**11**	0	2	13	378
17:00	7	158	2	167	**13**	2	1	16	**1**	198	10	209	8	1	**4**	13	405
17:15	9	**165**	2	**176**	12	3	3	18	0	**207**	11	**218**	7	0	0	7	**419**
17:30	**12**	149	2	163	8	2	1	11	0	172	**12**	184	10	**2**	2	**14**	372
Total Volume	33	614	9	656	44	10	10	64	1	767	39	807	36	3	8	47	1574
% App. Total	5	93.6	1.4		68.8	15.6	15.6		0.1	95	4.8		76.6	6.4	17		
PHF	.688	.930	.750	.932	.846	.833	.500	.842	.250	.926	.813	.925	.818	.375	.500	.839	.939



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TOWN OF FAIRFAX

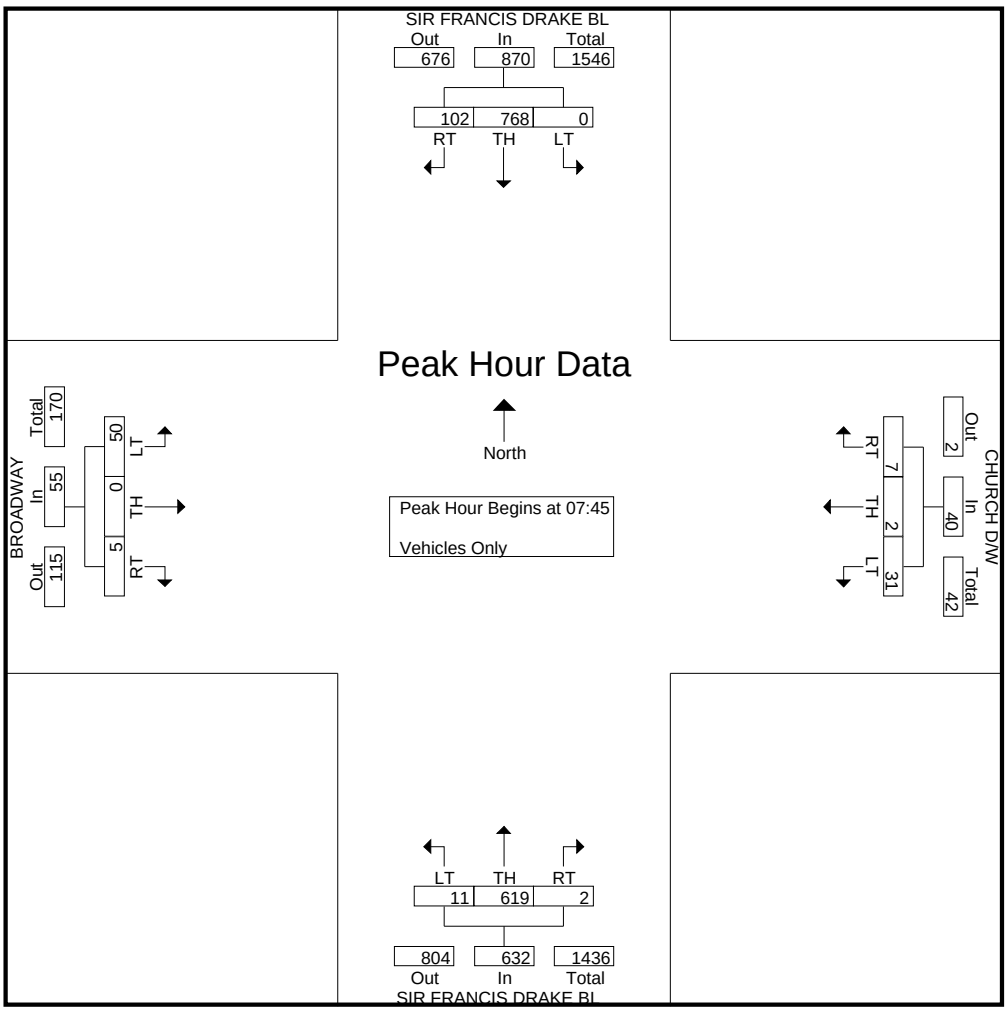
Latitude: 37.990165
Longitude: -122.591707

File Name : sir francis drake-broadway-a
Site Code : 8
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				BROADWAY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	6	189	1	196	0	0	0	0	1	47	0	48	0	0	3	3	247
07:15	15	208	0	223	0	0	1	1	2	59	0	61	0	0	2	2	287
07:30	33	225	0	258	0	0	0	0	0	110	1	111	3	0	5	8	377
07:45	48	176	0	224	0	1	0	1	2	150	4	156	1	0	11	12	393
Total	102	798	1	901	0	1	1	2	5	366	5	376	4	0	21	25	1304
08:00	23	174	0	197	0	1	4	5	0	148	2	150	1	0	12	13	365
08:15	4	180	0	184	4	0	10	14	0	173	3	176	2	0	17	19	393
08:30	27	238	0	265	3	0	17	20	0	148	2	150	1	0	10	11	446
08:45	14	229	0	243	0	0	1	1	0	132	3	135	4	0	9	13	392
Total	68	821	0	889	7	1	32	40	0	601	10	611	8	0	48	56	1596
Grand Total	170	1619	1	1790	7	2	33	42	5	967	15	987	12	0	69	81	2900
Apprch %	9.5	90.4	0.1		16.7	4.8	78.6		0.5	98	1.5		14.8	0	85.2		
Total %	5.9	55.8	0	61.7	0.2	0.1	1.1	1.4	0.2	33.3	0.5	34	0.4	0	2.4	2.8	

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				BROADWAY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	**48**	176	0	224	0	**1**	0	1	**2**	150	**4**	156	1	0	11	12	393
08:00	23	174	0	197	0	1	4	5	0	148	2	150	1	0	12	13	365
08:15	4	180	0	184	**4**	0	10	14	0	**173**	3	**176**	**2**	0	**17**	**19**	393
08:30	27	**238**	0	**265**	3	0	**17**	**20**	0	148	2	150	1	0	10	11	**446**
Total Volume	102	768	0	870	7	2	31	40	2	619	11	632	5	0	50	55	1597
% App. Total	11.7	88.3	0		17.5	5	77.5		0.3	97.9	1.7		9.1	0	90.9		
PHF	.531	.807	.000	.821	.438	.500	.456	.500	.250	.895	.688	.898	.625	.000	.735	.724	.895



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TOWN OF FAIRFAX

Latitude: 37.990165
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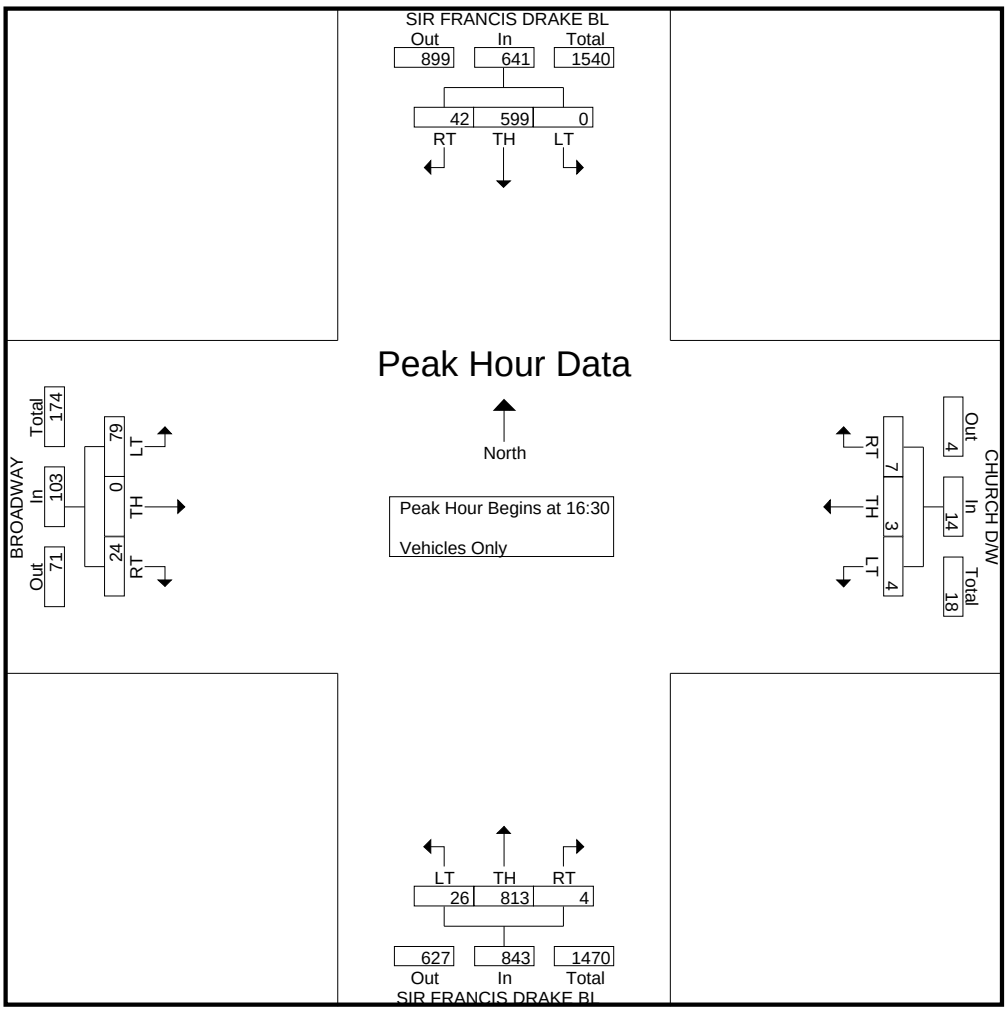
File Name : sir francis drake-broadway-p
Site Code : 8
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				BROADWAY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	16	135	0	151	3	0	0	3	0	210	9	219	3	0	27	30	403
16:15	10	132	0	142	1	0	0	1	0	175	4	179	1	0	17	18	340
16:30	16	140	0	156	0	0	0	0	1	190	9	200	5	0	18	23	379
16:45	5	137	0	142	1	1	3	5	1	195	3	199	8	0	21	29	375
Total	47	544	0	591	5	1	3	9	2	770	25	797	17	0	83	100	1497
17:00	11	160	0	171	3	1	1	5	0	217	8	225	6	0	16	22	423
17:15	10	162	0	172	3	1	0	4	2	211	6	219	5	0	24	29	424
17:30	6	155	0	161	0	0	5	5	1	176	3	180	4	0	22	26	372
17:45	8	131	0	139	0	0	1	1	0	191	7	198	4	0	21	25	363
Total	35	608	0	643	6	2	7	15	3	795	24	822	19	0	83	102	1582
Grand Total	82	1152	0	1234	11	3	10	24	5	1565	49	1619	36	0	166	202	3079
Apprch %	6.6	93.4	0		45.8	12.5	41.7		0.3	96.7	3		17.8	0	82.2		
Total %	2.7	37.4	0	40.1	0.4	0.1	0.3	0.8	0.2	50.8	1.6	52.6	1.2	0	5.4	6.6	

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				BROADWAY Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	**16**	140	0	156	0	0	0	0	1	190	**9**	200	5	0	18	23	379
16:45	5	137	0	142	1	**1**	**3**	**5**	1	195	3	199	**8**	0	21	**29**	375
17:00	11	160	0	171	**3**	1	1	5	0	**217**	8	**225**	6	0	16	22	423
17:15	10	**162**	0	**172**	3	1	0	4	**2**	211	6	219	5	0	**24**	29	**424**
Total Volume	42	599	0	641	7	3	4	14	4	813	26	843	24	0	79	103	1601
% App. Total	6.6	93.4	0		50	21.4	28.6		0.5	96.4	3.1		23.3	0	76.7		
PHF	.656	.924	.000	.932	.583	.750	.333	.700	.500	.937	.722	.937	.750	.000	.823	.888	.944



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TOWN OF FAIRFAX

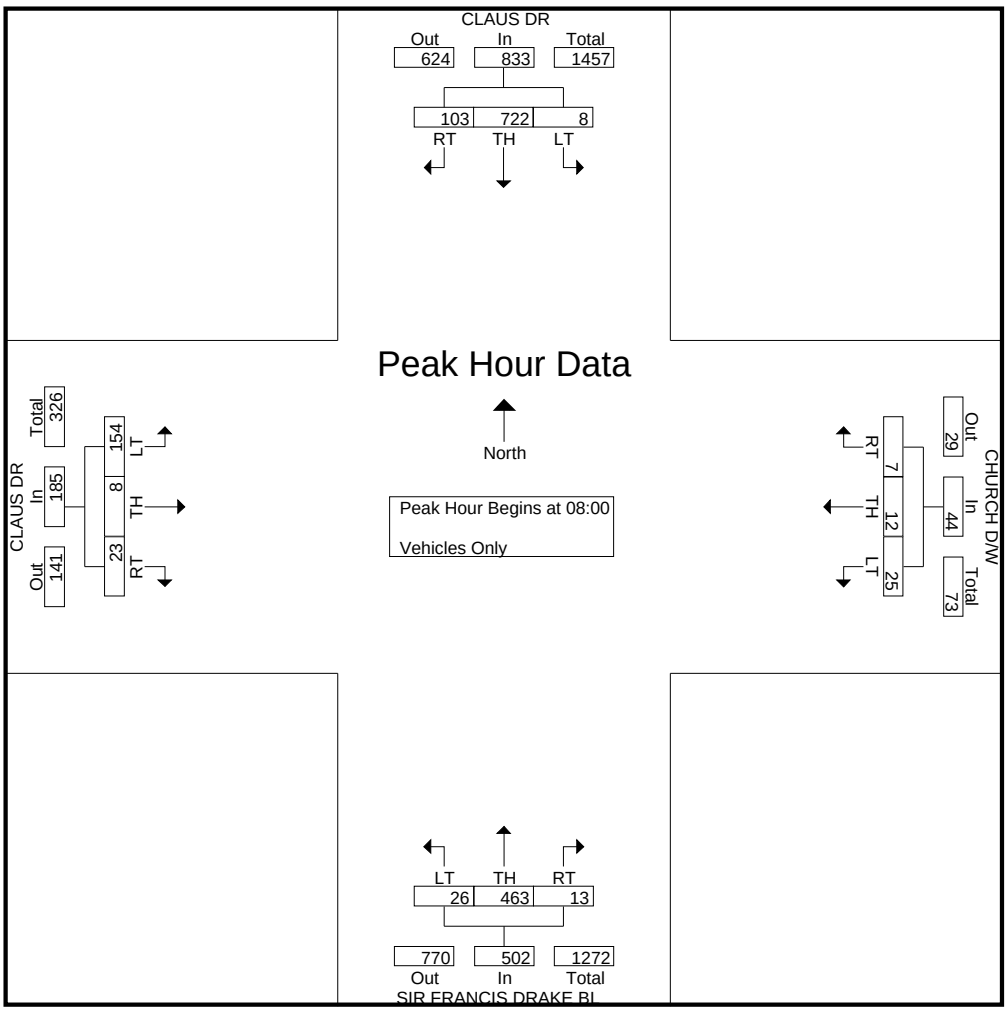
Latitude: 37.987407
Longitude: -122.589484

File Name : sir francis drake-claus-a
Site Code : 10
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	CLAUS DR Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				CLAUS DR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	13	184	1	198	0	1	4	5	1	41	4	46	3	0	8	11	260
07:15	16	186	1	203	0	3	6	9	0	49	7	56	6	1	16	23	291
07:30	25	180	0	205	4	4	4	12	1	92	6	99	5	3	25	33	349
07:45	21	146	1	168	1	3	2	6	2	122	4	128	8	2	44	54	356
Total	75	696	3	774	5	11	16	32	4	304	21	329	22	6	93	121	1256
08:00	25	165	2	192	2	2	6	10	5	104	5	114	5	2	38	45	361
08:15	21	166	2	189	1	4	7	12	2	130	6	138	6	1	61	68	407
08:30	26	197	4	227	3	3	5	11	4	124	7	135	7	0	31	38	411
08:45	31	194	0	225	1	3	7	11	2	105	8	115	5	5	24	34	385
Total	103	722	8	833	7	12	25	44	13	463	26	502	23	8	154	185	1564
Grand Total	178	1418	11	1607	12	23	41	76	17	767	47	831	45	14	247	306	2820
Apprch %	11.1	88.2	0.7		15.8	30.3	53.9		2	92.3	5.7		14.7	4.6	80.7		
Total %	6.3	50.3	0.4	57	0.4	0.8	1.5	2.7	0.6	27.2	1.7	29.5	1.6	0.5	8.8	10.9	

	CLAUS DR Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				CLAUS DR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00																	
08:00	25	165	2	192	2	2	6	10	**5**	104	5	114	5	2	38	45	361
08:15	21	166	2	189	1	**4**	**7**	**12**	2	**130**	6	**138**	6	1	**61**	**68**	407
08:30	26	**197**	**4**	**227**	**3**	3	5	11	4	124	7	135	**7**	0	31	38	**411**
08:45	**31**	194	0	225	1	3	7	11	2	105	**8**	115	5	**5**	24	34	385
Total Volume	103	722	8	833	7	12	25	44	13	463	26	502	23	8	154	185	1564
% App. Total	12.4	86.7	1		15.9	27.3	56.8		2.6	92.2	5.2		12.4	4.3	83.2		
PHF	.831	.916	.500	.917	.583	.750	.893	.917	.650	.890	.813	.909	.821	.400	.631	.680	.951



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TOWN OF FAIRFAX

Latitude: 37.987407
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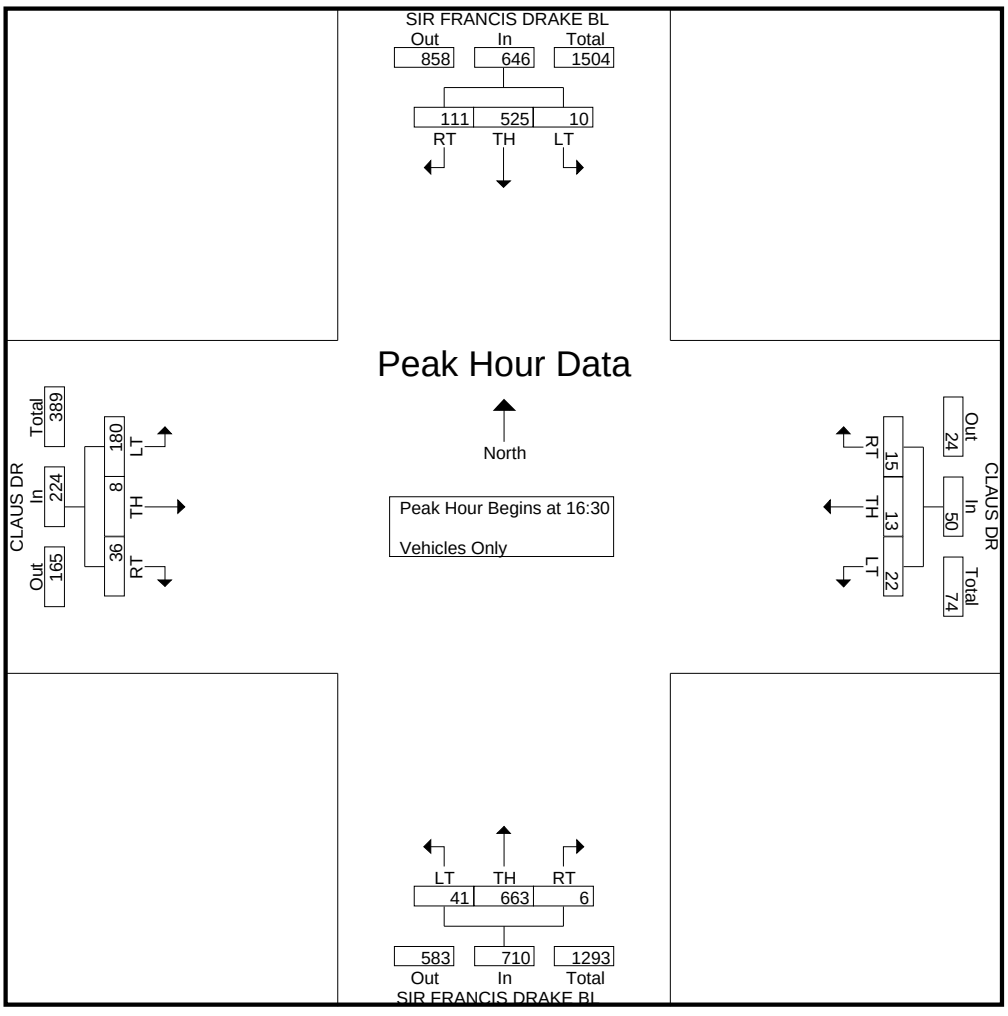
File Name : sir francis drake-claus-p
Site Code : 10
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				CLAUS DR Westbound				SIR FRANCIS DRAKE BL Northbound				CLAUS DR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	15	109	0	124	6	1	7	14	1	175	14	190	15	1	44	60	388
16:15	32	109	3	144	7	2	4	13	7	158	12	177	10	5	29	44	378
16:30	28	115	6	149	3	2	8	13	0	153	9	162	9	4	52	65	389
16:45	22	134	1	157	2	3	7	12	1	163	10	174	7	1	43	51	394
Total	97	467	10	574	18	8	26	52	9	649	45	703	41	11	168	220	1549
17:00	30	132	2	164	4	3	2	9	2	178	9	189	8	2	40	50	412
17:15	31	144	1	176	6	5	5	16	3	169	13	185	12	1	45	58	435
17:30	22	136	3	161	4	1	4	9	2	144	7	153	14	6	42	62	385
17:45	22	118	1	141	5	1	1	7	1	166	17	184	14	4	46	64	396
Total	105	530	7	642	19	10	12	41	8	657	46	711	48	13	173	234	1628
Grand Total	202	997	17	1216	37	18	38	93	17	1306	91	1414	89	24	341	454	3177
Apprch %	16.6	82	1.4		39.8	19.4	40.9		1.2	92.4	6.4		19.6	5.3	75.1		
Total %	6.4	31.4	0.5	38.3	1.2	0.6	1.2	2.9	0.5	41.1	2.9	44.5	2.8	0.8	10.7	14.3	

	SIR FRANCIS DRAKE BL Southbound				CLAUS DR Westbound				SIR FRANCIS DRAKE BL Northbound				CLAUS DR Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	28	115	**6**	149	3	2	**8**	13	0	153	9	162	9	**4**	**52**	**65**	389
16:45	22	134	1	157	2	3	7	12	1	163	10	174	7	1	43	51	394
17:00	30	132	2	164	4	3	2	9	2	**178**	9	**189**	8	2	40	50	412
17:15	**31**	**144**	1	**176**	**6**	**5**	5	**16**	**3**	169	**13**	185	**12**	1	45	58	**435**
Total Volume	111	525	10	646	15	13	22	50	6	663	41	710	36	8	180	224	1630
% App. Total	17.2	81.3	1.5		30	26	44		0.8	93.4	5.8		16.1	3.6	80.4		
PHF	.895	.911	.417	.918	.625	.650	.688	.781	.500	.931	.788	.939	.750	.500	.865	.862	.937



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TOWN OF FAIRFAX

Latitude: 37.998338
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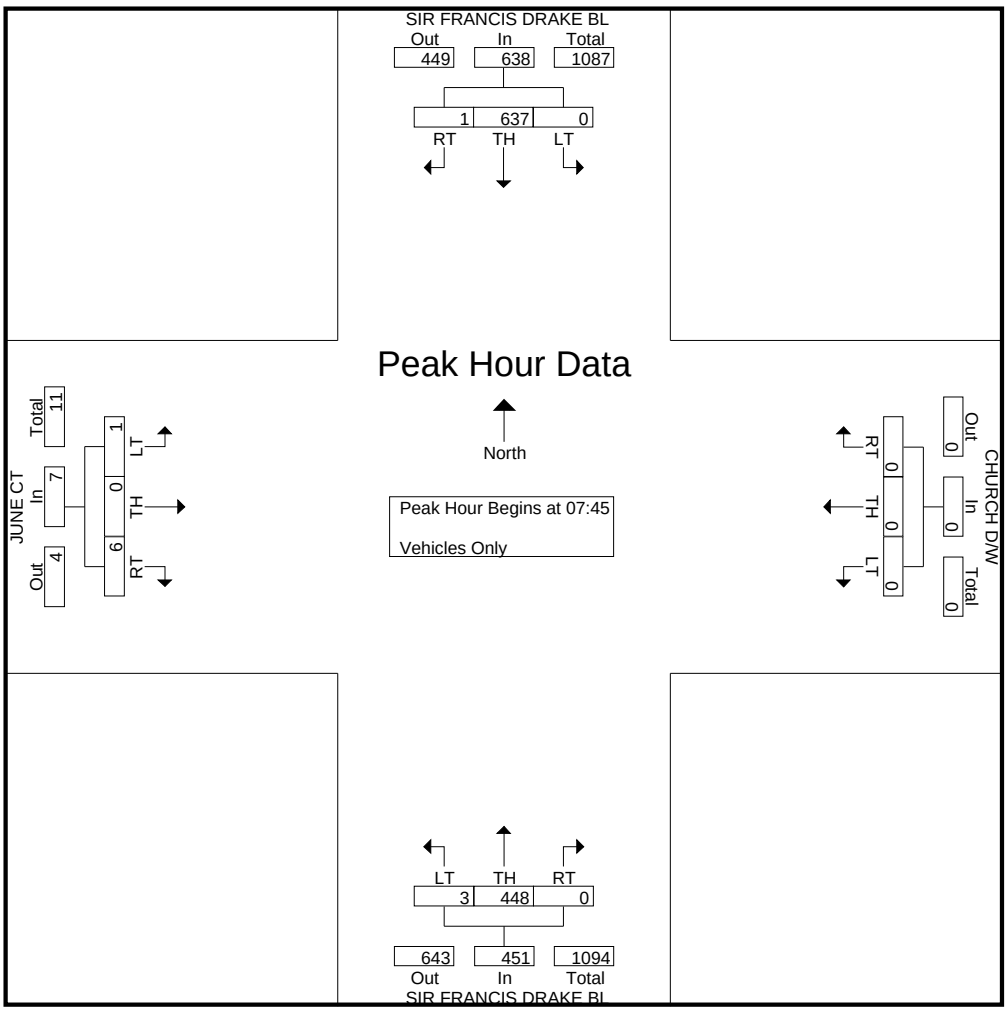
File Name : sir francis drake-june-a
Site Code : 2
Start Date : 9/22/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				JUNE CT Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	159	0	159	0	0	0	0	0	49	1	50	3	0	0	3	212
07:15	0	160	0	160	0	0	0	0	0	60	0	60	1	0	0	1	221
07:30	0	203	0	203	0	0	0	0	0	78	0	78	1	0	0	1	282
07:45	0	173	0	173	0	0	0	0	0	150	0	150	1	0	0	1	324
Total	0	695	0	695	0	0	0	0	0	337	1	338	6	0	0	6	1039
08:00	0	146	0	146	0	0	0	0	0	76	1	77	1	0	0	1	224
08:15	1	154	0	155	0	0	0	0	0	86	1	87	3	0	0	3	245
08:30	0	164	0	164	0	0	0	0	0	136	1	137	1	0	1	2	303
08:45	0	156	0	156	0	0	0	0	0	126	0	126	0	0	0	0	282
Total	1	620	0	621	0	0	0	0	0	424	3	427	5	0	1	6	1054
Grand Total	1	1315	0	1316	0	0	0	0	0	761	4	765	11	0	1	12	2093
Apprch %	0.1	99.9	0		0	0	0		0	99.5	0.5		91.7	0	8.3		
Total %	0	62.8	0	62.9	0	0	0	0	0	36.4	0.2	36.6	0.5	0	0	0.6	

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				JUNE CT Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	**173**	0	**173**	0	0	0	0	0	**150**	0	**150**	1	0	0	1	**324**
08:00	0	146	0	146	0	0	0	0	0	76	**1**	77	1	0	0	1	224
08:15	**1**	154	0	155	0	0	0	0	0	86	1	87	**3**	0	0	**3**	245
08:30	0	164	0	164	0	0	0	0	0	136	1	137	1	0	**1**	2	303
Total Volume	1	637	0	638	0	0	0	0	0	448	3	451	6	0	1	7	1096
% App. Total	0.2	99.8	0		0	0	0		0	99.3	0.7		85.7	0	14.3		
PHF	.250	.921	.000	.922	.000	.000	.000	.000	.000	.747	.750	.752	.500	.000	.250	.583	.846



TRAFFIC COUNTS PLUS
mietekm@comcast.net
925.305.4358

TOWN OF FAIRFAX

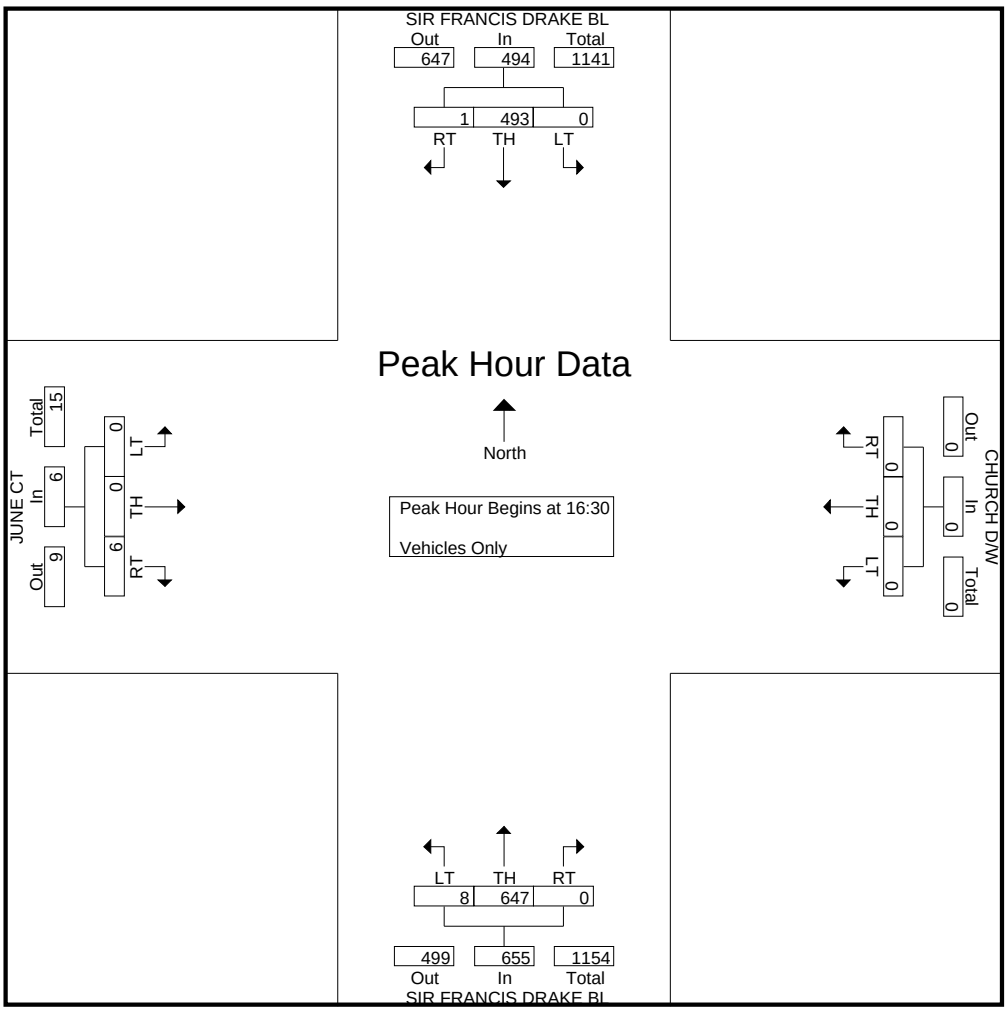
Latitude: 37.998338
Longitude: -122.599859

File Name : sir francis drake-june-p
Site Code : 2
Start Date : 9/22/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				JUNE CT Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	124	0	124	0	0	0	0	0	149	3	152	2	0	0	2	278
16:15	0	106	0	106	0	0	0	0	0	158	0	158	0	0	1	1	265
16:30	1	99	0	100	0	0	0	0	0	140	2	142	1	0	0	1	243
16:45	0	106	0	106	0	0	0	0	0	177	4	181	4	0	0	4	291
Total	1	435	0	436	0	0	0	0	0	624	9	633	7	0	1	8	1077
17:00	0	153	0	153	0	0	0	0	0	176	1	177	0	0	0	0	330
17:15	0	135	0	135	0	0	0	0	0	154	1	155	1	0	0	1	291
17:30	0	104	0	104	0	0	0	0	0	136	1	137	0	0	0	0	241
17:45	0	89	0	89	0	0	0	0	0	182	3	185	0	0	0	0	274
Total	0	481	0	481	0	0	0	0	0	648	6	654	1	0	0	1	1136
Grand Total	1	916	0	917	0	0	0	0	0	1272	15	1287	8	0	1	9	2213
Apprch %	0.1	99.9	0		0	0	0		0	98.8	1.2		88.9	0	11.1		
Total %	0	41.4	0	41.4	0	0	0	0	0	57.5	0.7	58.2	0.4	0	0	0.4	

	SIR FRANCIS DRAKE BL Southbound				CHURCH D/W Westbound				SIR FRANCIS DRAKE BL Northbound				JUNE CT Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	**1**	99	0	100	0	0	0	0	0	140	2	142	1	0	0	1	243
16:45	0	106	0	106	0	0	0	0	0	**177**	**4**	**181**	**4**	0	0	**4**	291
17:00	0	**153**	0	**153**	0	0	0	0	0	176	1	177	0	0	0	0	**330**
17:15	0	135	0	135	0	0	0	0	0	154	1	155	1	0	0	1	291
Total Volume	1	493	0	494	0	0	0	0	0	647	8	655	6	0	0	6	1155
% App. Total	0.2	99.8	0		0	0	0		0	98.8	1.2		100	0	0		
PHF	.250	.806	.000	.807	.000	.000	.000	.000	.000	.914	.500	.905	.375	.000	.000	.375	.875



TRAFFIC COUNTS PLUS
mietekm@comcast.net
925.305.4358

TOWN OF FAIRFAX

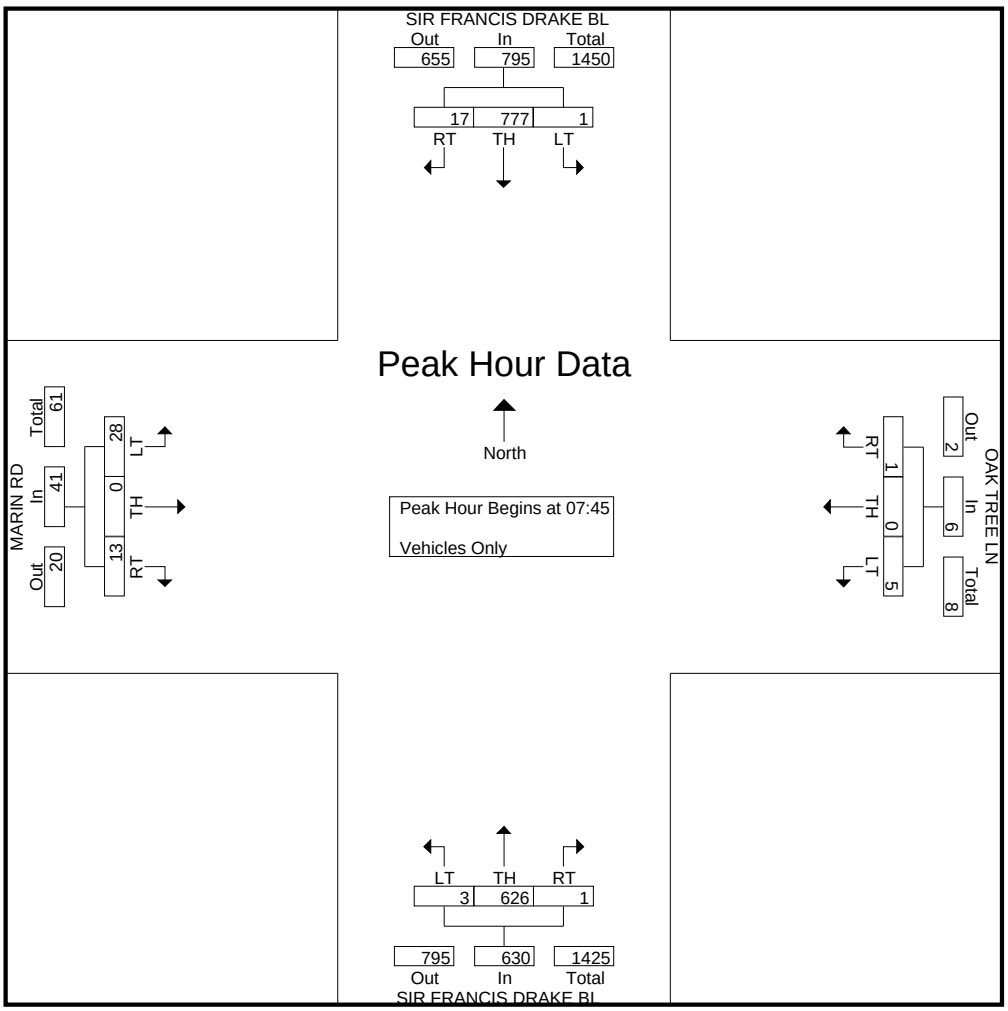
Latitude: 37.993737
Longitude: -122.594392

File Name : sir francis drake-marin-a
Site Code : 4
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				OAK TREE LN Westbound				SIR FRANCIS DRAKE BL Northbound				MARIN RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	158	0	158	0	0	3	3	0	45	0	45	5	0	1	6	212
07:15	1	198	1	200	0	0	2	2	0	56	0	56	5	0	4	9	267
07:30	2	248	0	250	0	0	3	3	1	113	1	115	5	0	1	6	374
07:45	8	186	0	194	0	0	1	1	0	159	1	160	4	0	1	5	360
Total	11	790	1	802	0	0	9	9	1	373	2	376	19	0	7	26	1213
08:00	0	171	0	171	1	0	1	2	1	147	0	148	5	0	4	9	330
08:15	4	173	0	177	0	0	1	1	0	159	0	159	3	0	21	24	361
08:30	5	247	1	253	0	0	2	2	0	161	2	163	1	0	2	3	421
08:45	1	222	0	223	0	0	1	1	1	126	1	128	3	0	0	3	355
Total	10	813	1	824	1	0	5	6	2	593	3	598	12	0	27	39	1467
Grand Total	21	1603	2	1626	1	0	14	15	3	966	5	974	31	0	34	65	2680
Apprch %	1.3	98.6	0.1		6.7	0	93.3		0.3	99.2	0.5		47.7	0	52.3		
Total %	0.8	59.8	0.1	60.7	0	0	0.5	0.6	0.1	36	0.2	36.3	1.2	0	1.3	2.4	

	SIR FRANCIS DRAKE BL Southbound				OAK TREE LN Westbound				SIR FRANCIS DRAKE BL Northbound				MARIN RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	**8**	186	0	194	0	0	1	1	0	159	1	160	4	0	1	5	360
08:00	0	171	0	171	**1**	0	1	**2**	**1**	147	0	148	**5**	0	4	9	330
08:15	4	173	0	177	0	0	1	1	0	159	0	159	3	0	**21**	**24**	361
08:30	5	**247**	**1**	**253**	0	0	**2**	2	0	**161**	**2**	**163**	1	0	2	3	**421**
Total Volume	17	777	1	795	1	0	5	6	1	626	3	630	13	0	28	41	1472
% App. Total	2.1	97.7	0.1		16.7	0	83.3		0.2	99.4	0.5		31.7	0	68.3		
PHF	.531	.786	.250	.786	.250	.000	.625	.750	.250	.972	.375	.966	.650	.000	.333	.427	.874



TRAFFIC COUNTS PLUS
mietekm@comcast.net
925.305.4358

TOWN OF FAIRFAX

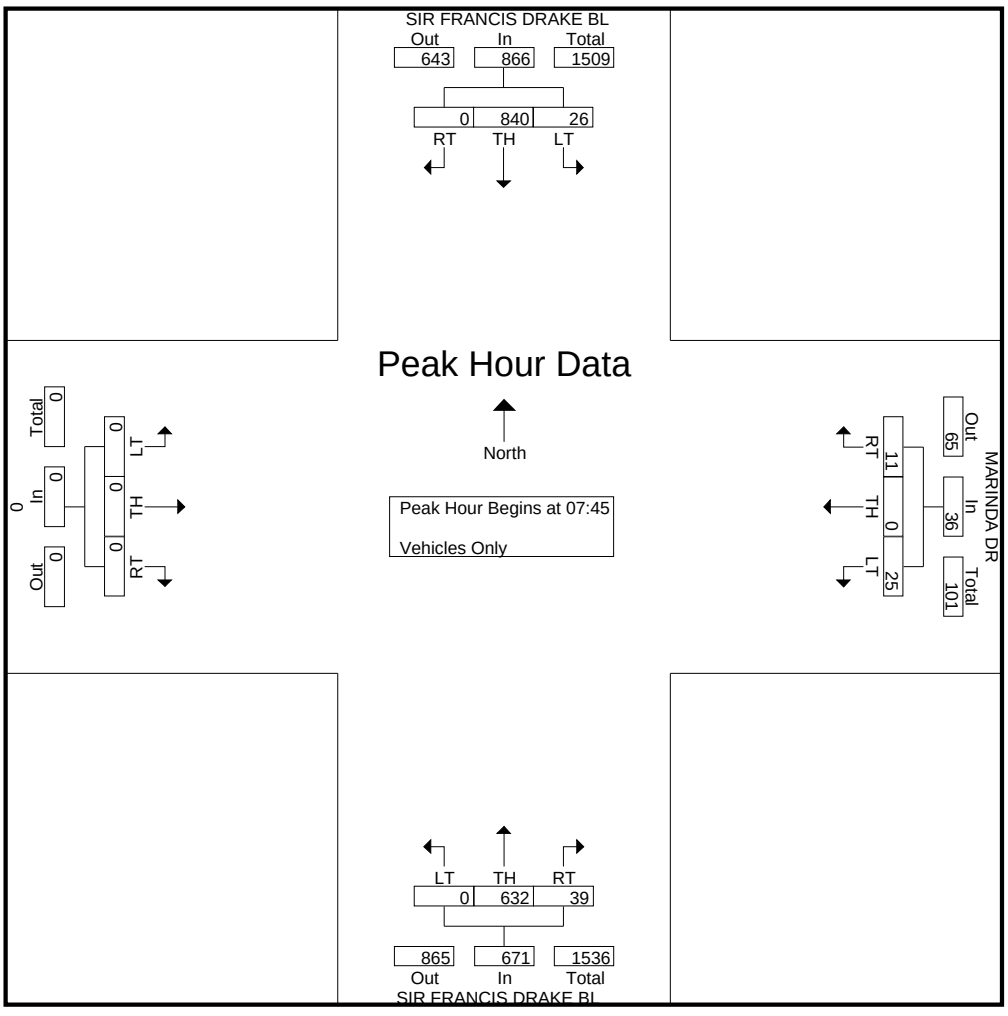
Latitude: 37.990607
Longitude: -122.591913

File Name : sir francis drake-marinda-a
Site Code : 7
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				MARINDA DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	186	0	186	2	0	11	13	1	47	0	48	0	0	0	0	247
07:15	0	213	3	216	1	0	11	12	3	60	0	63	0	0	0	0	291
07:30	0	248	1	249	1	0	12	13	1	114	0	115	0	0	0	0	377
07:45	0	214	3	217	4	0	6	10	6	156	0	162	0	0	0	0	389
Total	0	861	7	868	8	0	40	48	11	377	0	388	0	0	0	0	1304
08:00	0	193	3	196	3	0	4	7	7	151	0	158	0	0	0	0	361
08:15	0	179	13	192	3	0	5	8	19	173	0	192	0	0	0	0	392
08:30	0	254	7	261	1	0	10	11	7	152	0	159	0	0	0	0	431
08:45	0	238	1	239	2	0	6	8	9	131	0	140	0	0	0	0	387
Total	0	864	24	888	9	0	25	34	42	607	0	649	0	0	0	0	1571
Grand Total	0	1725	31	1756	17	0	65	82	53	984	0	1037	0	0	0	0	2875
Apprch %	0	98.2	1.8		20.7	0	79.3		5.1	94.9	0		0	0	0		
Total %	0	60	1.1	61.1	0.6	0	2.3	2.9	1.8	34.2	0	36.1	0	0	0	0	

	SIR FRANCIS DRAKE BL Southbound				MARINDA DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	214	3	217	**4**	0	6	10	6	156	0	162	0	0	0	0	389
08:00	0	193	3	196	3	0	4	7	7	151	0	158	0	0	0	0	361
08:15	0	179	**13**	192	3	0	5	8	**19**	**173**	0	**192**	0	0	0	0	392
08:30	0	**254**	7	**261**	1	0	**10**	**11**	7	152	0	159	0	0	0	0	**431**
Total Volume	0	840	26	866	11	0	25	36	39	632	0	671	0	0	0	0	1573
% App. Total	0	97	3		30.6	0	69.4		5.8	94.2	0		0	0	0		
PHF	.000	.827	.500	.830	.688	.000	.625	.818	.513	.913	.000	.874	.000	.000	.000	.000	.912



TRAFFIC COUNTS PLUS
mietekm@comcast.net
925.305.4358

TOWN OF FAIRFAX

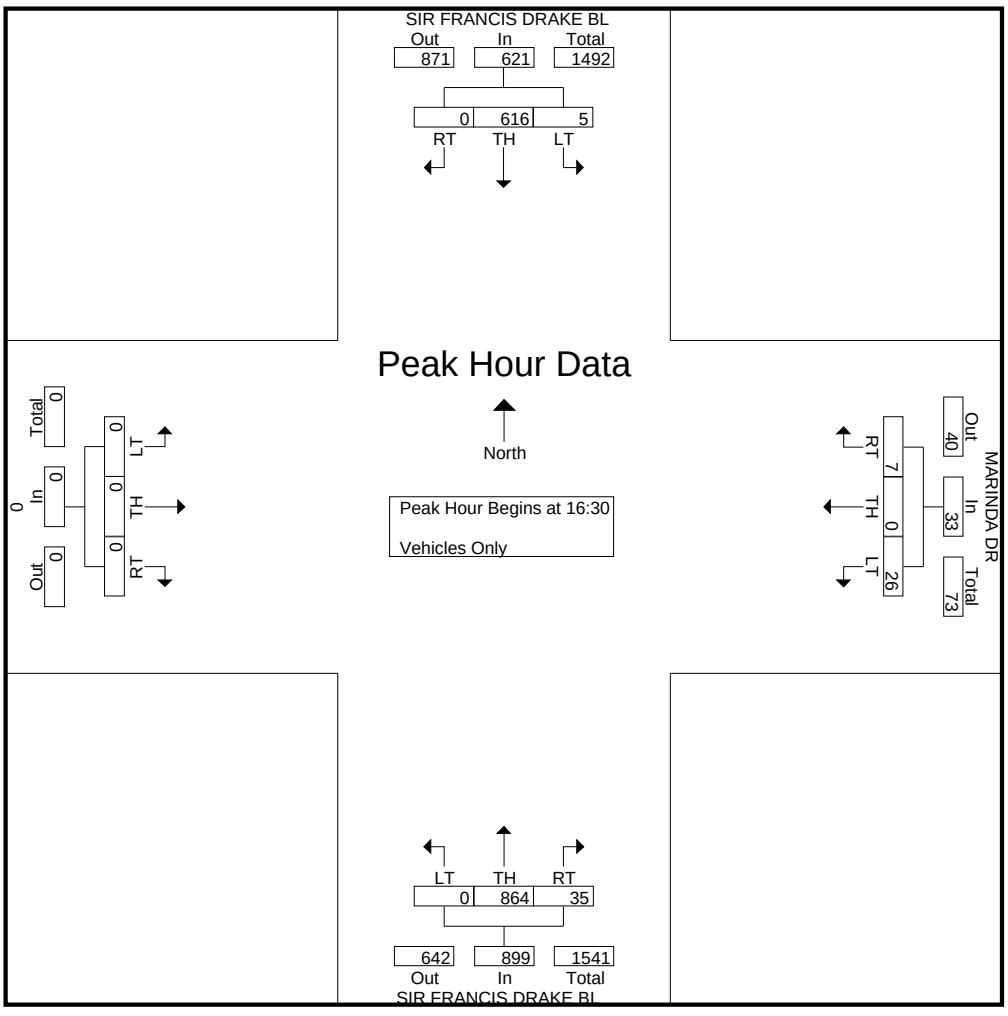
Latitude: 37.990607
Longitude: -122.591913

File Name : sir francis drake-marinda-p
Site Code : 7
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				MARINDA DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	145	0	145	1	0	4	5	15	226	0	241	0	0	0	0	391
16:15	0	141	1	142	2	0	2	4	10	186	0	196	0	0	0	0	342
16:30	0	148	2	150	0	0	7	7	10	199	0	209	0	0	0	0	366
16:45	0	137	1	138	4	0	5	9	9	207	0	216	0	0	0	0	363
Total	0	571	4	575	7	0	18	25	44	818	0	862	0	0	0	0	1462
17:00	0	167	1	168	1	0	5	6	5	230	0	235	0	0	0	0	409
17:15	0	164	1	165	2	0	9	11	11	228	0	239	0	0	0	0	415
17:30	0	158	3	161	2	0	4	6	9	190	0	199	0	0	0	0	366
17:45	0	136	2	138	2	0	5	7	9	205	0	214	0	0	0	0	359
Total	0	625	7	632	7	0	23	30	34	853	0	887	0	0	0	0	1549
Grand Total	0	1196	11	1207	14	0	41	55	78	1671	0	1749	0	0	0	0	3011
Apprch %	0	99.1	0.9		25.5	0	74.5		4.5	95.5	0		0	0	0		
Total %	0	39.7	0.4	40.1	0.5	0	1.4	1.8	2.6	55.5	0	58.1	0	0	0	0	

	SIR FRANCIS DRAKE BL Southbound				MARINDA DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:30																	
16:30	0	148	**2**	150	0	0	7	7	10	199	0	209	0	0	0	0	366
16:45	0	137	1	138	**4**	0	5	9	9	207	0	216	0	0	0	0	363
17:00	0	**167**	1	**168**	1	0	5	6	5	**230**	0	235	0	0	0	0	409
17:15	0	164	1	165	2	0	**9**	**11**	**11**	228	0	**239**	0	0	0	0	**415**
Total Volume	0	616	5	621	7	0	26	33	35	864	0	899	0	0	0	0	1553
% App. Total	0	99.2	0.8		21.2	0	78.8		3.9	96.1	0		0	0	0		
PHF	.000	.922	.625	.924	.438	.000	.722	.750	.795	.939	.000	.940	.000	.000	.000	.000	.936



TRAFFIC COUNTS PLUS
mietekm@comcast.net
925.305.4358

TOWN OF FAIRFAX

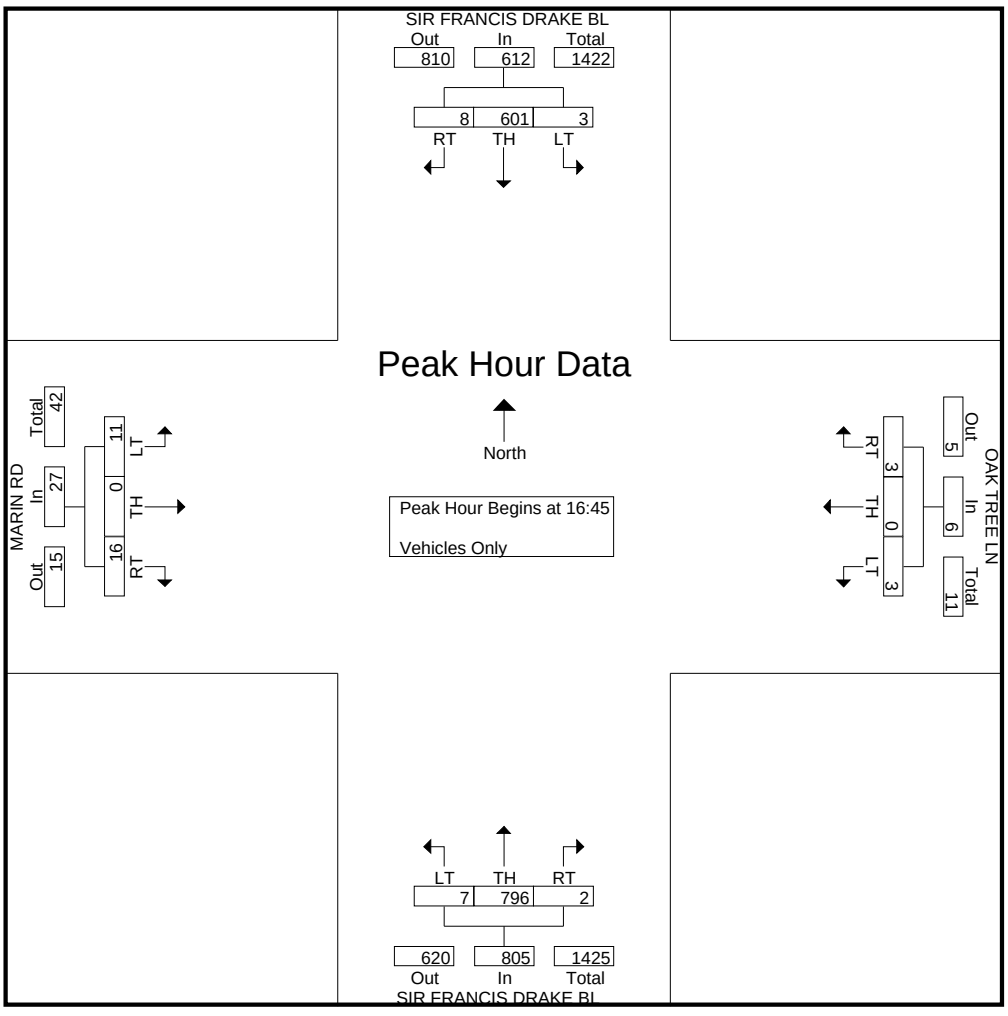
Latitude: 37.993737
Longitude: -122.594392

File Name : sir francis drake-marin-p
Site Code : 4
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				OAK TREE LN Westbound				SIR FRANCIS DRAKE BL Northbound				MARIN RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	1	142	0	143	0	0	1	1	0	199	3	202	3	0	2	5	351
16:15	3	119	0	122	0	0	0	0	2	177	2	181	5	0	4	9	312
16:30	5	134	0	139	0	0	2	2	1	188	2	191	3	0	3	6	338
16:45	2	122	1	125	2	0	0	2	0	198	0	198	5	0	2	7	332
Total	11	517	1	529	2	0	3	5	3	762	7	772	16	0	11	27	1333
17:00	1	172	0	173	1	0	2	3	0	217	3	220	3	0	7	10	406
17:15	1	153	0	154	0	0	1	1	1	207	2	210	4	0	1	5	370
17:30	4	154	2	160	0	0	0	0	1	174	2	177	4	0	1	5	342
17:45	1	121	0	122	0	0	1	1	0	195	0	195	3	0	0	3	321
Total	7	600	2	609	1	0	4	5	2	793	7	802	14	0	9	23	1439
Grand Total	18	1117	3	1138	3	0	7	10	5	1555	14	1574	30	0	20	50	2772
Apprch %	1.6	98.2	0.3		30	0	70		0.3	98.8	0.9		60	0	40		
Total %	0.6	40.3	0.1	41.1	0.1	0	0.3	0.4	0.2	56.1	0.5	56.8	1.1	0	0.7	1.8	

	SIR FRANCIS DRAKE BL Southbound				OAK TREE LN Westbound				SIR FRANCIS DRAKE BL Northbound				MARIN RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	2	122	1	125	**2**	0	0	2	0	198	0	198	**5**	0	2	7	332
17:00	1	**172**	0	**173**	1	0	**2**	**3**	0	**217**	**3**	**220**	3	0	**7**	**10**	**406**
17:15	1	153	0	154	0	0	1	1	**1**	207	2	210	4	0	1	5	370
17:30	**4**	154	**2**	160	0	0	0	0	1	174	2	177	4	0	1	5	342
Total Volume	8	601	3	612	3	0	3	6	2	796	7	805	16	0	11	27	1450
% App. Total	1.3	98.2	0.5		50	0	50		0.2	98.9	0.9		59.3	0	40.7		
PHF	.500	.874	.375	.884	.375	.000	.375	.500	.500	.917	.583	.915	.800	.000	.393	.675	.893



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

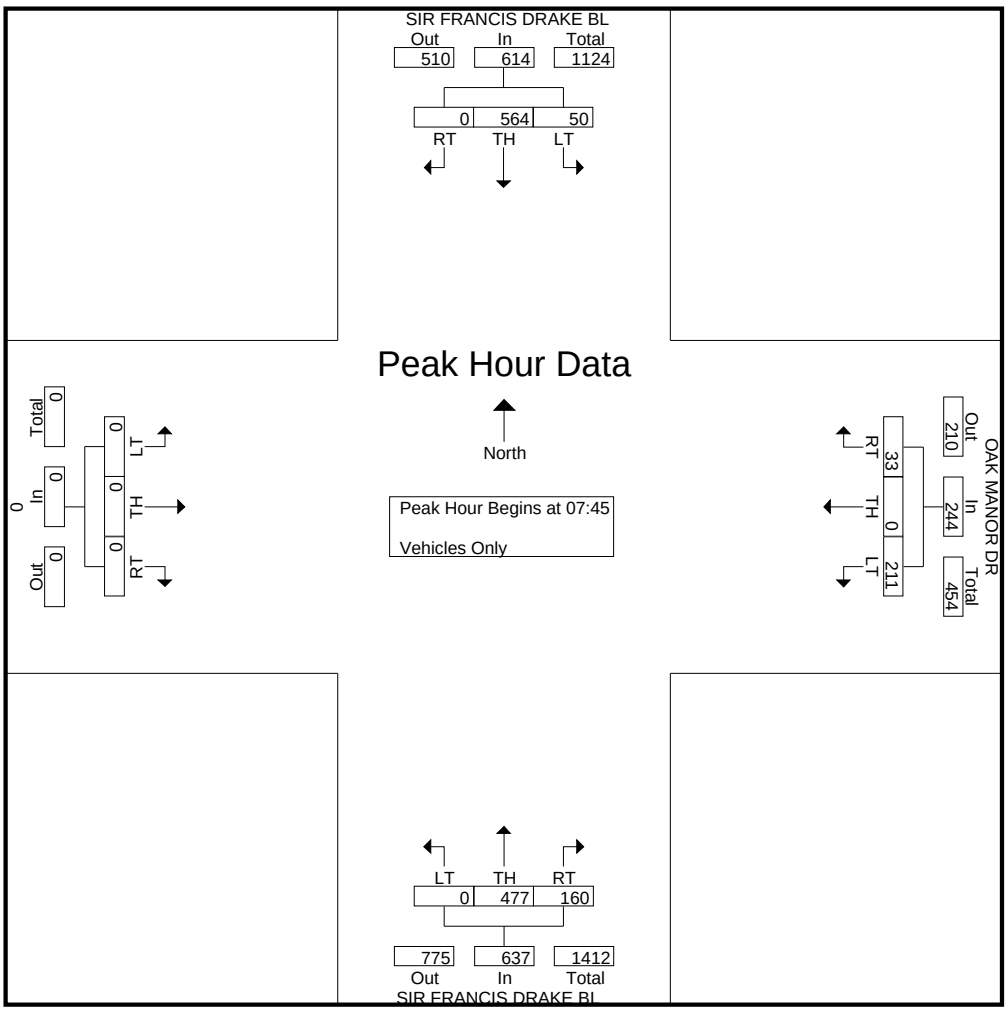
Latitude: 37.995358
Longitude: -122.596043

File Name : sir francis drake-oak manor-a
Site Code : 3
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				OAK MANOR DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	139	3	142	2	0	20	22	6	35	0	41	0	0	0	0	205
07:15	0	153	21	174	1	0	32	33	12	53	0	65	0	0	0	0	272
07:30	0	209	5	214	4	0	46	50	14	91	0	105	0	0	0	0	369
07:45	0	161	9	170	10	0	22	32	13	144	0	157	0	0	0	0	359
Total	0	662	38	700	17	0	120	137	45	323	0	368	0	0	0	0	1205
08:00	0	136	13	149	1	0	31	32	36	115	0	151	0	0	0	0	332
08:15	0	121	21	142	6	0	63	69	82	93	0	175	0	0	0	0	386
08:30	0	146	7	153	16	0	95	111	29	125	0	154	0	0	0	0	418
08:45	0	181	6	187	4	0	28	32	13	113	0	126	0	0	0	0	345
Total	0	584	47	631	27	0	217	244	160	446	0	606	0	0	0	0	1481
Grand Total	0	1246	85	1331	44	0	337	381	205	769	0	974	0	0	0	0	2686
Apprch %	0	93.6	6.4		11.5	0	88.5		21	79	0		0	0	0		
Total %	0	46.4	3.2	49.6	1.6	0	12.5	14.2	7.6	28.6	0	36.3	0	0	0	0	

	SIR FRANCIS DRAKE BL Southbound				OAK MANOR DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	**161**	9	**170**	10	0	22	32	13	**144**	0	157	0	0	0	0	359
08:00	0	136	13	149	1	0	31	32	36	115	0	151	0	0	0	0	332
08:15	0	121	**21**	142	6	0	63	69	**82**	93	0	**175**	0	0	0	0	386
08:30	0	146	7	153	**16**	0	**95**	**111**	29	125	0	154	0	0	0	0	**418**
Total Volume	0	564	50	614	33	0	211	244	160	477	0	637	0	0	0	0	1495
% App. Total	0	91.9	8.1		13.5	0	86.5		25.1	74.9	0		0	0	0		
PHF	.000	.876	.595	.903	.516	.000	.555	.550	.488	.828	.000	.910	.000	.000	.000	.000	.894



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

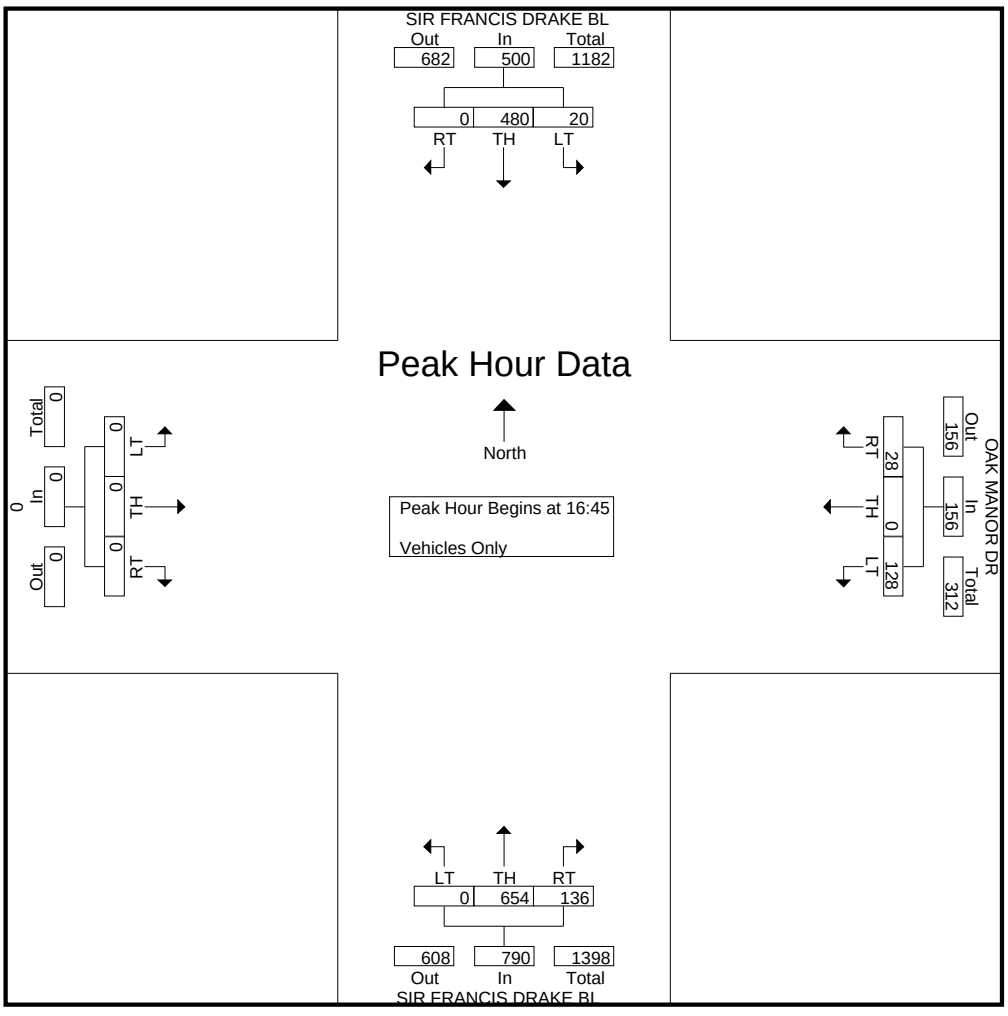
Latitude: 37.995358
Longitude: -122.596043

File Name : sir francis drake-oak manor-p
Site Code : 3
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				OAK MANOR DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	110	2	112	4	0	25	29	37	163	0	200	0	0	0	0	341
16:15	0	97	2	99	0	0	27	27	35	142	0	177	0	0	0	0	303
16:30	0	105	4	109	4	0	30	34	34	145	0	179	0	0	0	0	322
16:45	0	104	7	111	7	0	26	33	33	165	0	198	0	0	0	0	342
Total	0	416	15	431	15	0	108	123	139	615	0	754	0	0	0	0	1308
17:00	0	133	3	136	10	0	33	43	42	180	0	222	0	0	0	0	401
17:15	0	122	6	128	5	0	27	32	37	166	0	203	0	0	0	0	363
17:30	0	121	4	125	6	0	42	48	24	143	0	167	0	0	0	0	340
17:45	0	93	4	97	1	0	23	24	21	168	0	189	0	0	0	0	310
Total	0	469	17	486	22	0	125	147	124	657	0	781	0	0	0	0	1414
Grand Total	0	885	32	917	37	0	233	270	263	1272	0	1535	0	0	0	0	2722
Apprch %	0	96.5	3.5		13.7	0	86.3		17.1	82.9	0		0	0	0		
Total %	0	32.5	1.2	33.7	1.4	0	8.6	9.9	9.7	46.7	0	56.4	0	0	0	0	

	SIR FRANCIS DRAKE BL Southbound				OAK MANOR DR Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	104	**7**	111	7	0	26	33	33	165	0	198	0	0	0	0	342
17:00	0	**133**	3	**136**	**10**	0	33	43	**42**	**180**	0	**222**	0	0	0	0	**401**
17:15	0	122	6	128	5	0	27	32	37	166	0	203	0	0	0	0	363
17:30	0	121	4	125	6	0	**42**	**48**	24	143	0	167	0	0	0	0	340
Total Volume	0	480	20	500	28	0	128	156	136	654	0	790	0	0	0	0	1446
% App. Total	0	96	4		17.9	0	82.1		17.2	82.8	0		0	0	0		
PHF	.000	.902	.714	.919	.700	.000	.762	.813	.810	.908	.000	.890	.000	.000	.000	.000	.901



TRAFFIC COUNTS PLUS
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925.305.4358

TOWN OF FAIRFAX

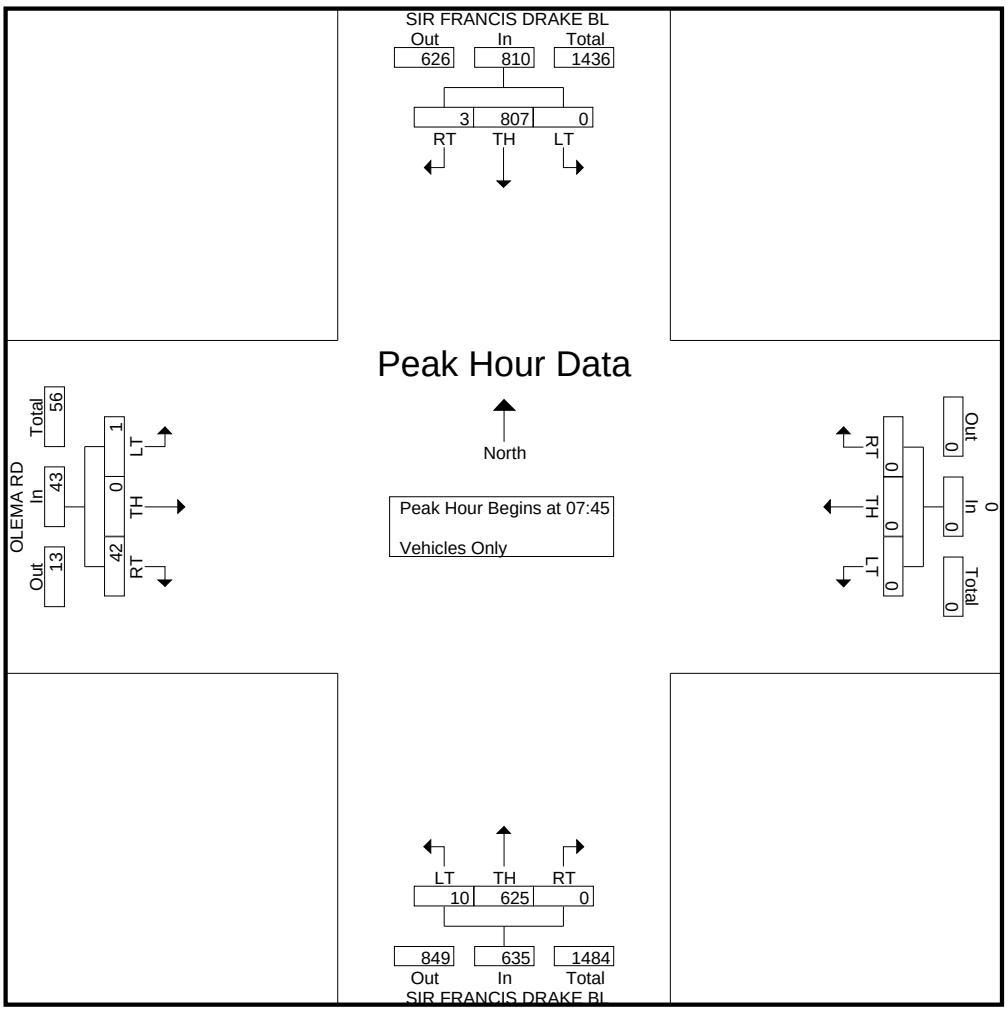
Latitude: 37.991296
Longitude: -122.592625

File Name : sir francis drake-olema-a
Site Code : 6
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				0 Westbound				SIR FRANCIS DRAKE BL Northbound				OLEMA RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	165	0	165	0	0	0	0	0	46	4	50	20	0	0	20	235
07:15	0	209	0	209	0	0	0	0	0	55	5	60	12	0	0	12	281
07:30	0	238	0	238	0	0	0	0	0	114	3	117	8	0	0	8	363
07:45	1	200	0	201	0	0	0	0	0	156	2	158	12	0	1	13	372
Total	1	812	0	813	0	0	0	0	0	371	14	385	52	0	1	53	1251
08:00	0	178	0	178	0	0	0	0	0	148	4	152	7	0	0	7	337
08:15	0	174	0	174	0	0	0	0	0	169	2	171	8	0	0	8	353
08:30	2	255	0	257	0	0	0	0	0	152	2	154	15	0	0	15	426
08:45	0	213	0	213	0	0	0	0	2	131	1	134	19	0	0	19	366
Total	2	820	0	822	0	0	0	0	2	600	9	611	49	0	0	49	1482
Grand Total	3	1632	0	1635	0	0	0	0	2	971	23	996	101	0	1	102	2733
Apprch %	0.2	99.8	0		0	0	0		0.2	97.5	2.3		99	0	1		
Total %	0.1	59.7	0	59.8	0	0	0	0	0.1	35.5	0.8	36.4	3.7	0	0	3.7	

	SIR FRANCIS DRAKE BL Southbound				0 Westbound				SIR FRANCIS DRAKE BL Northbound				OLEMA RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	1	200	0	201	0	0	0	0	0	156	2	158	12	0	**1**	13	372
08:00	0	178	0	178	0	0	0	0	0	148	**4**	152	7	0	0	7	337
08:15	0	174	0	174	0	0	0	0	0	**169**	2	**171**	8	0	0	8	353
08:30	**2**	**255**	0	**257**	0	0	0	0	0	152	2	154	**15**	0	0	**15**	**426**
Total Volume	3	807	0	810	0	0	0	0	0	625	10	635	42	0	1	43	1488
% App. Total	0.4	99.6	0		0	0	0		0	98.4	1.6		97.7	0	2.3		
PHF	.375	.791	.000	.788	.000	.000	.000	.000	.000	.925	.625	.928	.700	.000	.250	.717	.873



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

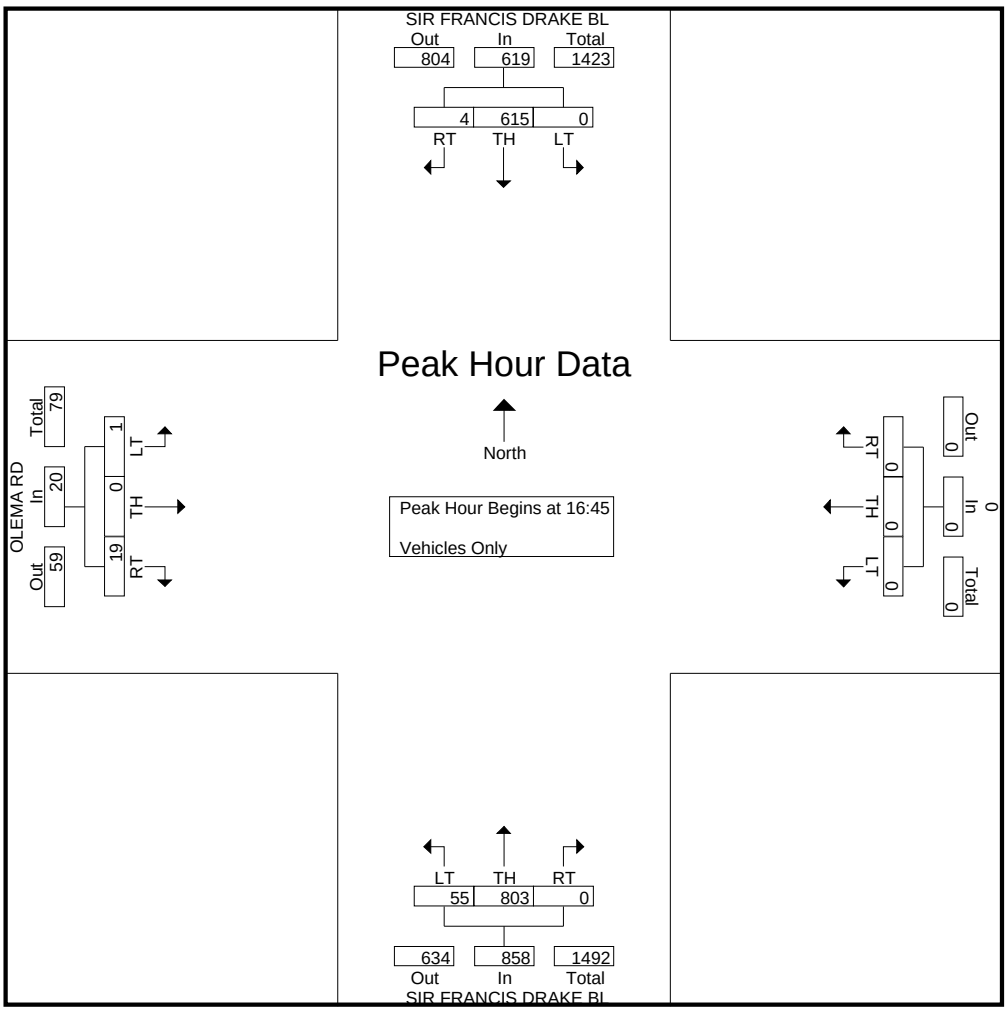
Latitude: 37.991296
Longitude: -122.592625

File Name : sir francis drake-olema-p
Site Code : 6
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				0 Westbound				SIR FRANCIS DRAKE BL Northbound				OLEMA RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	1	140	0	141	0	0	0	0	0	205	21	226	6	0	0	6	373
16:15	0	136	0	136	0	0	0	0	0	180	8	188	6	0	1	7	331
16:30	1	131	0	132	0	0	0	0	0	195	8	203	17	0	1	18	353
16:45	1	132	0	133	0	0	0	0	0	194	15	209	5	0	0	5	347
Total	3	539	0	542	0	0	0	0	0	774	52	826	34	0	2	36	1404
17:00	0	171	0	171	0	0	0	0	0	221	10	231	2	0	0	2	404
17:15	2	157	0	159	0	0	0	0	0	209	15	224	2	0	0	2	385
17:30	1	155	0	156	0	0	0	0	0	179	15	194	10	0	1	11	361
17:45	0	124	0	124	0	0	0	0	0	194	13	207	10	0	0	10	341
Total	3	607	0	610	0	0	0	0	0	803	53	856	24	0	1	25	1491
Grand Total	6	1146	0	1152	0	0	0	0	0	1577	105	1682	58	0	3	61	2895
Apprch %	0.5	99.5	0		0	0	0		0	93.8	6.2		95.1	0	4.9		
Total %	0.2	39.6	0	39.8	0	0	0	0	0	54.5	3.6	58.1	2	0	0.1	2.1	

	SIR FRANCIS DRAKE BL Southbound				0 Westbound				SIR FRANCIS DRAKE BL Northbound				OLEMA RD Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	1	132	0	133	0	0	0	0	0	194	**15**	209	5	0	0	5	347
17:00	0	**171**	0	**171**	0	0	0	0	0	**221**	10	**231**	2	0	0	2	**404**
17:15	**2**	157	0	159	0	0	0	0	0	209	15	224	2	0	0	2	385
17:30	1	155	0	156	0	0	0	0	0	179	15	194	**10**	0	**1**	**11**	361
Total Volume	4	615	0	619	0	0	0	0	0	803	55	858	19	0	1	20	1497
% App. Total	0.6	99.4	0		0	0	0		0	93.6	6.4		95	0	5		
PHF	.500	.899	.000	.905	.000	.000	.000	.000	.000	.908	.917	.929	.475	.000	.250	.455	.926



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

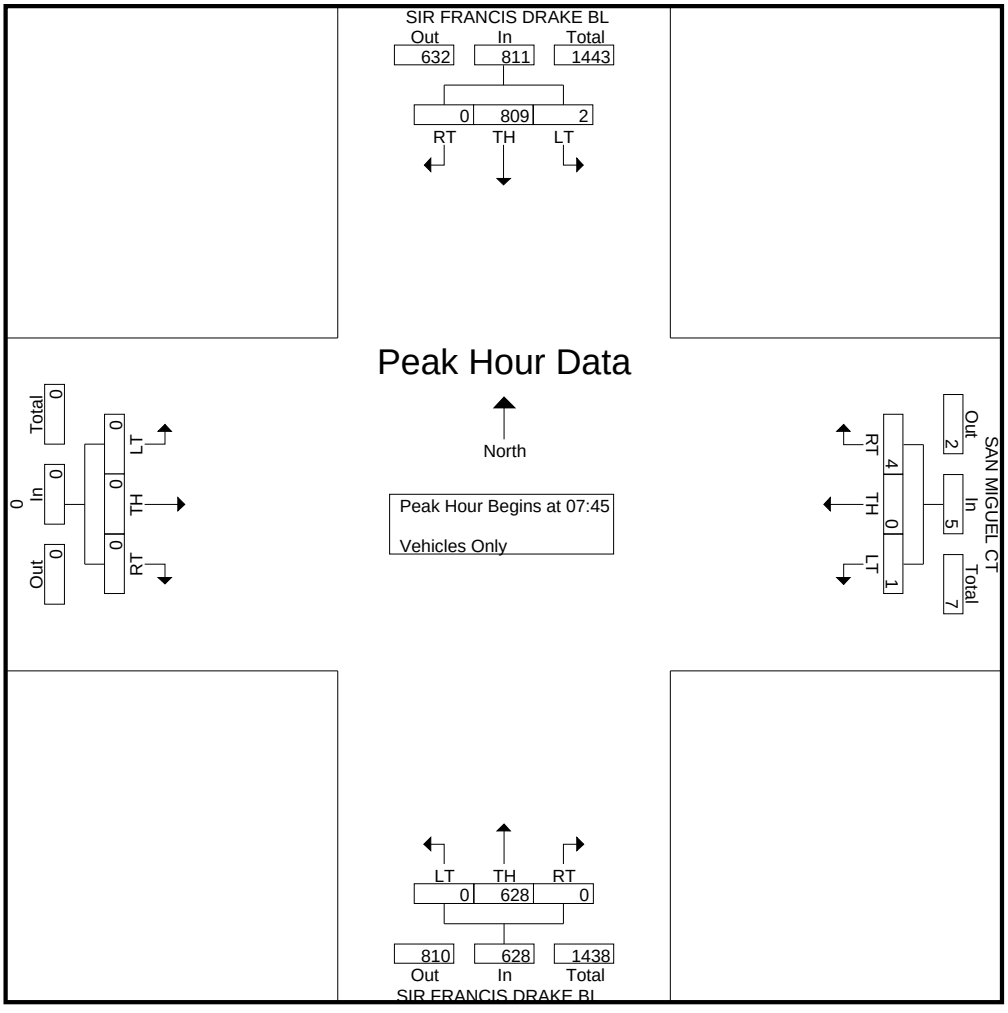
Latitude: 37.991847
Longitude: -122.592990

File Name : sir francis drake-san miguel-a
Site Code : 5
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				SAN MIGUEL CT Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
07:00	0	167	0	167	0	0	1	1	1	45	0	46	0	0	0	0	214
07:15	0	205	1	206	0	0	2	2	0	56	0	56	0	0	0	0	264
07:30	0	240	1	241	2	0	0	2	1	112	0	113	0	0	0	0	356
07:45	0	199	0	199	1	0	0	1	0	159	0	159	0	0	0	0	359
Total	0	811	2	813	3	0	3	6	2	372	0	374	0	0	0	0	1193
08:00	0	181	1	182	1	0	0	1	0	146	0	146	0	0	0	0	329
08:15	0	173	0	173	2	0	0	2	0	170	0	170	0	0	0	0	345
08:30	0	256	1	257	0	0	1	1	0	153	0	153	0	0	0	0	411
08:45	0	219	0	219	0	0	0	0	0	130	0	130	0	0	0	0	349
Total	0	829	2	831	3	0	1	4	0	599	0	599	0	0	0	0	1434
Grand Total	0	1640	4	1644	6	0	4	10	2	971	0	973	0	0	0	0	2627
Apprch %	0	99.8	0.2		60	0	40		0.2	99.8	0		0	0	0		
Total %	0	62.4	0.2	62.6	0.2	0	0.2	0.4	0.1	37	0	37	0	0	0	0	

	SIR FRANCIS DRAKE BL Southbound				SAN MIGUEL CT Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45																	
07:45	0	199	0	199	1	0	0	1	0	159	0	159	0	0	0	0	359
08:00	0	181	**1**	182	1	0	0	1	0	146	0	146	0	0	0	0	329
08:15	0	173	0	173	**2**	0	0	**2**	0	**170**	0	**170**	0	0	0	0	345
08:30	0	**256**	1	**257**	0	0	**1**	1	0	153	0	153	0	0	0	0	**411**
Total Volume	0	809	2	811	4	0	1	5	0	628	0	628	0	0	0	0	1444
% App. Total	0	99.8	0.2		80	0	20		0	100	0		0	0	0		
PHF	.000	.790	.500	.789	.500	.000	.250	.625	.000	.924	.000	.924	.000	.000	.000	.000	.878



TRAFFIC COUNTS PLUS
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TOWN OF FAIRFAX

Latitude: 37.991847
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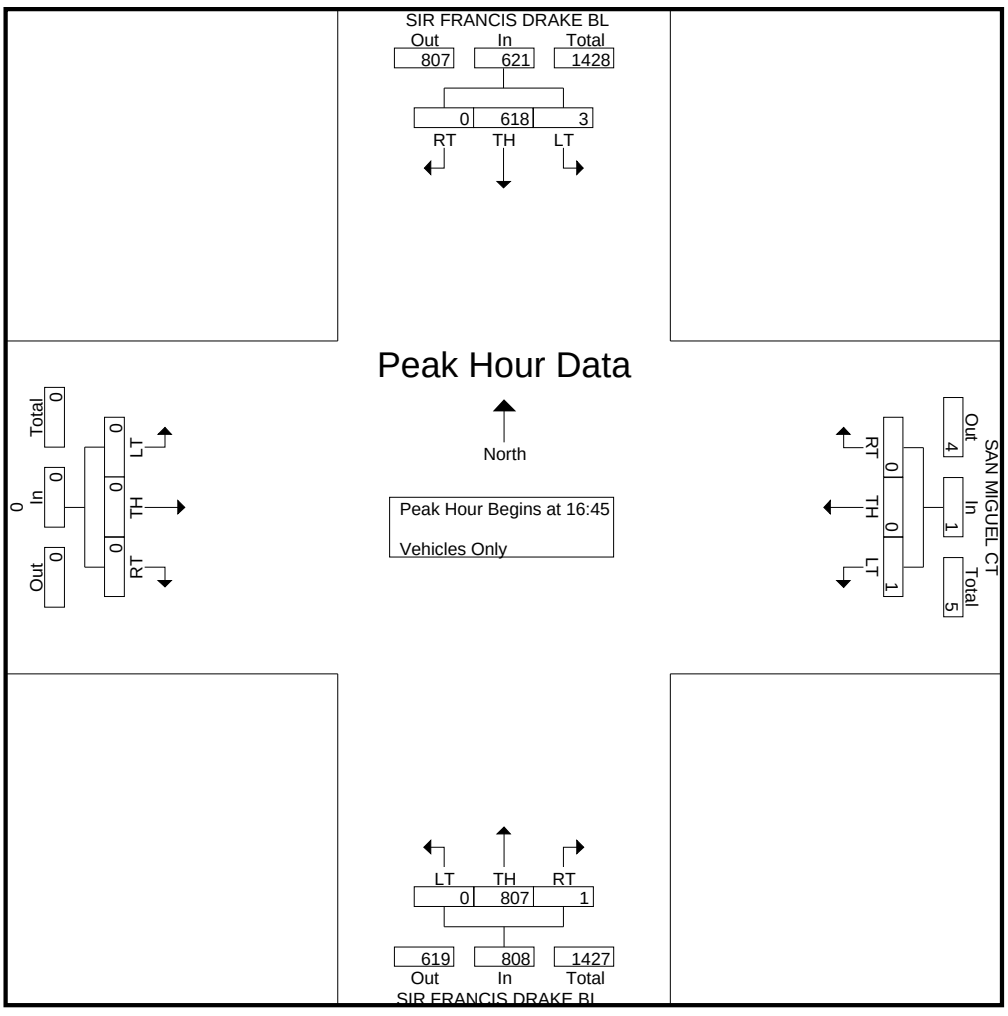
File Name : sir francis drake-san miguel-p
Site Code : 5
Start Date : 9/20/2016
Page No : 1

Groups Printed- Vehicles Only

	SIR FRANCIS DRAKE BL Southbound				SAN MIGUEL CT Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
16:00	0	141	2	143	0	0	0	0	0	205	0	205	0	0	0	0	348
16:15	0	134	0	134	1	0	2	3	1	180	0	181	0	0	0	0	318
16:30	0	135	0	135	0	0	0	0	0	192	0	192	0	0	0	0	327
16:45	0	130	0	130	0	0	0	0	0	196	0	196	0	0	0	0	326
Total	0	540	2	542	1	0	2	3	1	773	0	774	0	0	0	0	1319
17:00	0	172	2	174	0	0	0	0	0	222	0	222	0	0	0	0	396
17:15	0	159	1	160	0	0	1	1	0	210	0	210	0	0	0	0	371
17:30	0	157	0	157	0	0	0	0	1	179	0	180	0	0	0	0	337
17:45	0	126	0	126	0	0	1	1	1	192	0	193	0	0	0	0	320
Total	0	614	3	617	0	0	2	2	2	803	0	805	0	0	0	0	1424
Grand Total	0	1154	5	1159	1	0	4	5	3	1576	0	1579	0	0	0	0	2743
Apprch %	0	99.6	0.4		20	0	80		0.2	99.8	0		0	0	0		
Total %	0	42.1	0.2	42.3	0	0	0.1	0.2	0.1	57.5	0	57.6	0	0	0	0	

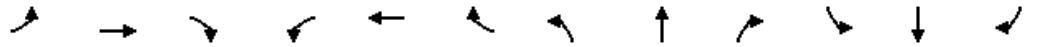
	SIR FRANCIS DRAKE BL Southbound				SAN MIGUEL CT Westbound				SIR FRANCIS DRAKE BL Northbound				0 Eastbound				
Start Time	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	RT	TH	LT	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 16:45																	
16:45	0	130	0	130	0	0	0	0	0	196	0	196	0	0	0	0	326
17:00	0	**172**	**2**	**174**	0	0	0	0	0	**222**	0	**222**	0	0	0	0	**396**
17:15	0	159	1	160	0	0	**1**	**1**	0	210	0	210	0	0	0	0	371
17:30	0	157	0	157	0	0	0	0	**1**	179	0	180	0	0	0	0	337
Total Volume	0	618	3	621	0	0	1	1	1	807	0	808	0	0	0	0	1430
% App. Total	0	99.5	0.5		0	0	100		0.1	99.9	0		0	0	0		
PHF	.000	.898	.375	.892	.000	.000	.250	.250	.250	.909	.000	.910	.000	.000	.000	.000	.903



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	622	0	0	445	3	1	0	5	10	0	1
Future Volume (Veh/h)	0	622	0	0	445	3	1	0	5	10	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	676	0	0	484	3	1	0	5	11	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	487			676			1161	1163	676	1165	1160	484
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	487			676			1161	1163	676	1165	1160	484
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	99	94	100	100
cM capacity (veh/h)	1076			915			172	195	453	169	195	583

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	0	676	0	484	3	6	12
Volume Left	0	0	0	0	0	1	11
Volume Right	0	0	0	0	3	5	1
cSH	1700	1700	1700	1700	1700	356	180
Volume to Capacity	0.00	0.40	0.00	0.28	0.00	0.02	0.07
Queue Length 95th (ft)	0	0	0	0	0	1	5
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	15.3	26.4
Lane LOS						C	D
Approach Delay (s)	0.0		0.0			15.3	26.4
Approach LOS						C	D

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	637	1	3	448	0	1	0	6	0	0	0
Future Volume (Veh/h)	0	637	1	3	448	0	1	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	692	1	3	487	0	1	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	487			693			1186	1186	692	1192	1186	487
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	487			693			1186	1186	692	1192	1186	487
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	98	100	100	100
cM capacity (veh/h)	1076			902			165	188	444	161	188	581

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	693	3	487	8	0
Volume Left	0	0	3	0	1	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	902	1700	366	1700
Volume to Capacity	0.00	0.41	0.00	0.29	0.02	0.00
Queue Length 95th (ft)	0	0	0	0	2	0
Control Delay (s)	0.0	0.0	9.0	0.0	15.0	0.0
Lane LOS			A		C	A
Approach Delay (s)	0.0		0.1		15.0	0.0
Approach LOS					C	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	43.6%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	50	564	477	160	211	0	33
Future Volume (vph)	50	564	477	160	211	0	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (prot)	1770	1863	1863	1583		1753	
Flt Permitted	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (perm)	1770	1863	1863	1583		1753	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	613	518	174	229	0	36
RTOR Reduction (vph)	0	0	0	102	0	9	0
Lane Group Flow (vph)	54	613	518	73	0	256	0
Turn Type	Prot	NA	NA	Perm	Perm	Perm	
Protected Phases	7	4	8				
Permitted Phases				8	6	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0		17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0		17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42		0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	162	1086	776	659		496	
v/s Ratio Prot	0.03	c0.33	c0.28				
v/s Ratio Perm				0.05		c0.15	
v/c Ratio	0.33	0.56	0.67	0.11		0.52	
Uniform Delay, d1	25.5	7.8	14.1	10.7		18.0	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.5	2.1	4.5	0.3		3.8	
Delay (s)	31.0	9.9	18.7	11.0		21.8	
Level of Service	C	A	B	B		C	
Approach Delay (s)		11.6	16.7			21.8	
Approach LOS		B	B			C	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	794	626	1	5	1
Future Volume (Veh/h)	1	794	626	1	5	1
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)	1	863	680	1	5	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.77	
vC, conflicting volume	681				1545	680
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	681				1558	680
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				95	100
cM capacity (veh/h)	912				96	451

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	864	680	1	6
Volume Left	1	0	0	5
Volume Right	0	0	1	1
cSH	912	1700	1700	110
Volume to Capacity	0.00	0.40	0.00	0.05
Queue Length 95th (ft)	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	39.5
Lane LOS	A			E
Approach Delay (s)	0.0	0.0		39.5
Approach LOS				E

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	777	17	3	627	28	13
Future Volume (Veh/h)	777	17	3	627	28	13
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)	845	18	3	682	30	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.78		0.78	0.78
vC, conflicting volume			863		1542	854
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			683		1554	672
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		69	96
cM capacity (veh/h)			710		97	356

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	863	685	30	14
Volume Left	0	3	30	0
Volume Right	18	0	0	14
cSH	1700	710	97	356
Volume to Capacity	0.51	0.00	0.31	0.04
Queue Length 95th (ft)	0	0	30	3
Control Delay (s)	0.0	0.1	58.1	15.5
Lane LOS		A	F	C
Approach Delay (s)	0.0	0.1	44.6	
Approach LOS			E	

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	809	628	0	1	4
Future Volume (Veh/h)	2	809	628	0	1	4
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)	2	879	683	0	1	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	683				1566	683
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	683				1566	683
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	910				122	449

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	881	683	5
Volume Left	2	0	1
Volume Right	0	0	4
cSH	910	1700	293
Volume to Capacity	0.00	0.40	0.02
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	17.5
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	17.5
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	807	3	10	625	1	42
Future Volume (Veh/h)	807	3	10	625	1	42
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)	877	3	11	679	1	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			880		1580	878
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			880		1580	878
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	87
cM capacity (veh/h)			768		118	347

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	880	11	679	47
Volume Left	0	11	0	1
Volume Right	3	0	0	46
cSH	1700	768	1700	354
Volume to Capacity	0.52	0.01	0.40	0.13
Queue Length 95th (ft)	0	1	0	11
Control Delay (s)	0.0	9.8	0.0	17.4
Lane LOS		A		C
Approach Delay (s)	0.0	0.2		17.4
Approach LOS				C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	840	632	39	25	11
Future Volume (Veh/h)	26	840	632	39	25	11
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)	28	913	687	42	27	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	729				1677	708
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	729				1677	708
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				73	97
cM capacity (veh/h)	875				101	435

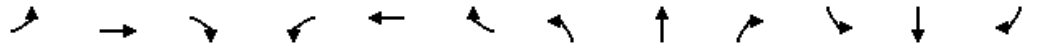
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	28	913	729	27	12
Volume Left	28	0	0	27	0
Volume Right	0	0	42	0	12
cSH	875	1700	1700	101	435
Volume to Capacity	0.03	0.54	0.43	0.27	0.03
Queue Length 95th (ft)	2	0	0	25	2
Control Delay (s)	9.3	0.0	0.0	53.0	13.5
Lane LOS	A			F	B
Approach Delay (s)	0.3		0.0	40.9	
Approach LOS				E	

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	54.2%	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)	0	768	102	11	619	2	50	0	5	31	2	7
Future Volume (Veh/h)	0	768	102	11	619	2	50	0	5	31	2	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	835	111	12	673	2	54	0	5	34	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.87						0.87	0.87		0.87	0.87	0.87
vC, conflicting volume	675			946			1596	1590	473	1118	1644	674
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	553			946			1611	1603	473	1061	1665	552
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			6	100	99	78	98	98
cM capacity (veh/h)	883			721			58	90	538	152	82	416

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	557	389	12	675	59	44
Volume Left	0	0	12	0	54	34
Volume Right	0	111	0	2	5	8
cSH	1700	1700	721	1700	62	164
Volume to Capacity	0.33	0.23	0.02	0.40	0.94	0.27
Queue Length 95th (ft)	0	0	1	0	112	26
Control Delay (s)	0.0	0.0	10.1	0.0	207.0	34.7
Lane LOS			B		F	D
Approach Delay (s)	0.0		0.2		207.0	34.7
Approach LOS					F	D

Intersection Summary				
Average Delay	8.0			
Intersection Capacity Utilization	48.3%	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)	5	773	71	24	596	1	6	0	41	7	0	2
Future Volume (Veh/h)	5	773	71	24	596	1	6	0	41	7	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	840	77	26	648	1	7	0	45	8	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	649			917			1591	1590	878	1634	1628	648
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	491			917			1608	1606	878	1659	1651	491
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			97			90	100	87	86	100	100
cM capacity (veh/h)	904			744			69	85	347	55	80	487

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	922	675	52	10
Volume Left	5	26	7	8
Volume Right	77	1	45	2
cSH	904	744	225	67
Volume to Capacity	0.01	0.03	0.23	0.15
Queue Length 95th (ft)	0	3	22	12
Control Delay (s)	0.2	0.9	25.8	67.7
Lane LOS	A	A	D	F
Approach Delay (s)	0.2	0.9	25.8	67.7
Approach LOS			D	F

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	58.1%	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 (vph)	8	722	103	26	463	13	154	8	23	25	12	7
Future Volume (vph)	8	722	103	26	463	13	154	8	23	25	12	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.97	
Satd. Flow (prot)	1770	1863	1583	1770	1855			1758			1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.73			0.84	
Satd. Flow (perm)	1770	1863	1583	1770	1855			1335			1522	
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)	9	785	112	28	503	14	167	9	25	27	13	8
RTOR Reduction (vph)	0	0	30	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	9	785	82	28	516	0	0	195	0	0	42	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1102			267			304	
v/s Ratio Prot	0.01	c0.42		c0.02	0.28							
v/s Ratio Perm			0.05					c0.15			0.03	
v/c Ratio	0.09	0.71	0.09	0.29	0.47			0.73			0.14	
Uniform Delay, d1	40.3	12.8	7.8	40.8	10.3			33.7			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	3.9	0.2	7.2	1.4			16.2			0.9	
Delay (s)	42.2	16.6	8.0	48.0	11.7			50.0			30.5	
Level of Service	D	B	A	D	B			D			C	
Approach Delay (s)		15.8			13.5			50.0			30.5	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	60.4%	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 (veh/h)	1	483	1	1	641	9	0	1	7	6	0	1
Future Volume (Veh/h)	1	483	1	1	641	9	0	1	7	6	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	1	525	1	1	697	10	0	1	8	7	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	707			526			1228	1236	526	1234	1227	697
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	707			526			1228	1236	526	1234	1227	697
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	99	95	100	100
cM capacity (veh/h)	891			1041			154	176	552	150	178	441

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	1	526	1	697	10	8	8
Volume Left	1	0	1	0	0	0	7
Volume Right	0	1	0	0	10	8	1
cSH	891	1700	1041	1700	1700	552	164
Volume to Capacity	0.00	0.31	0.00	0.41	0.01	0.01	0.05
Queue Length 95th (ft)	0	0	0	0	0	1	4
Control Delay (s)	9.0	0.0	8.5	0.0	0.0	11.6	28.1
Lane LOS	A		A			B	D
Approach Delay (s)	0.0		0.0			Err	28.1
Approach LOS						F	D

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	493	1	8	647	0	0	0	6	0	0	0
Future Volume (Veh/h)	0	493	1	8	647	0	0	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	536	1	9	703	0	0	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	703			537			1258	1258	536	1264	1258	703
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	703			537			1258	1258	536	1264	1258	703
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	99	100	100	100
cM capacity (veh/h)	895			1031			147	169	544	143	169	438

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	537	9	703	7	0
Volume Left	0	0	9	0	0	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	1031	1700	544	1700
Volume to Capacity	0.00	0.32	0.01	0.41	0.01	0.00
Queue Length 95th (ft)	0	0	1	0	1	0
Control Delay (s)	0.0	0.0	8.5	0.0	11.7	0.0
Lane LOS			A		B	A
Approach Delay (s)	0.0		0.1		11.7	0.0
Approach LOS					B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	44.1%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	480	654	136	128	28
Future Volume (vph)	20	480	654	136	128	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1770	1863	1863	1583	1746	
Flt Permitted	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	1770	1863	1863	1583	1746	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	522	711	148	139	30
RTOR Reduction (vph)	0	0	0	68	13	0
Lane Group Flow (vph)	22	522	711	80	156	0
Turn Type	Prot	NA	NA	Perm	Perm	
Protected Phases	7	4	8			
Permitted Phases				8	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0	17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0	17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42	0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	162	1086	776	659	494	
v/s Ratio Prot	0.01	c0.28	c0.38			
v/s Ratio Perm				0.05	c0.09	
v/c Ratio	0.14	0.48	0.92	0.12	0.32	
Uniform Delay, d1	25.1	7.2	16.5	10.8	16.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.5	17.4	0.4	1.7	
Delay (s)	26.8	8.8	33.9	11.1	18.6	
Level of Service	C	A	C	B	B	
Approach Delay (s)		9.5	30.0		18.6	
Approach LOS		A	C		B	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	609	796	2	3	3
Future Volume (Veh/h)	3	609	796	2	3	3
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)	3	662	865	2	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.84	
vC, conflicting volume	867				1533	865
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	867				1539	865
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				97	99
cM capacity (veh/h)	777				106	353

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	665	865	2	6
Volume Left	3	0	0	3
Volume Right	0	0	2	3
cSH	777	1700	1700	163
Volume to Capacity	0.00	0.51	0.00	0.04
Queue Length 95th (ft)	0	0	0	3
Control Delay (s)	0.1	0.0	0.0	27.9
Lane LOS	A			D
Approach Delay (s)	0.1	0.0		27.9
Approach LOS				D

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	601	8	7	798	11	16
Future Volume (Veh/h)	601	8	7	798	11	16
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)	653	9	8	867	12	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.85		0.85	0.85
vC, conflicting volume			662		1540	658
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			511		1548	506
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		89	96
cM capacity (veh/h)			893		106	480

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	662	875	12	17
Volume Left	0	8	12	0
Volume Right	9	0	0	17
cSH	1700	893	106	480
Volume to Capacity	0.39	0.01	0.11	0.04
Queue Length 95th (ft)	0	1	9	3
Control Delay (s)	0.0	0.2	43.4	12.8
Lane LOS		A	E	B
Approach Delay (s)	0.0	0.2	25.5	
Approach LOS			D	

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	618	807	1	1	0
Future Volume (Veh/h)	3	618	807	1	1	0
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)	3	672	877	1	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	878				1556	878
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	878				1556	878
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	769				124	347

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	675	878	1
Volume Left	3	0	1
Volume Right	0	1	0
cSH	769	1700	124
Volume to Capacity	0.00	0.52	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	34.3
Lane LOS	A		D
Approach Delay (s)	0.1	0.0	34.3
Approach LOS			D

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	615	4	55	803	1	19
Future Volume (Veh/h)	615	4	55	803	1	19
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)	668	4	60	873	1	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			672		1663	670
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			672		1663	670
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		99	95
cM capacity (veh/h)			919		100	457

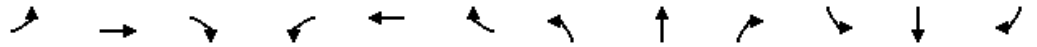
Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	672	60	873	22
Volume Left	0	60	0	1
Volume Right	4	0	0	21
cSH	1700	919	1700	479
Volume to Capacity	0.40	0.07	0.51	0.05
Queue Length 95th (ft)	0	5	0	4
Control Delay (s)	0.0	9.2	0.0	14.5
Lane LOS		A		B
Approach Delay (s)	0.0	0.6		14.5
Approach LOS				B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	616	864	35	26	7
Future Volume (Veh/h)	5	616	864	35	26	7
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)	5	670	939	38	28	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	977				1638	958
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	977				1638	958
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				74	97
cM capacity (veh/h)	706				110	312

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	5	670	977	28	8
Volume Left	5	0	0	28	0
Volume Right	0	0	38	0	8
cSH	706	1700	1700	110	312
Volume to Capacity	0.01	0.39	0.57	0.26	0.03
Queue Length 95th (ft)	1	0	0	24	2
Control Delay (s)	10.1	0.0	0.0	48.7	16.8
Lane LOS	B			E	C
Approach Delay (s)	0.1		0.0	41.6	
Approach LOS				E	

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	57.6%	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)	0	599	42	26	813	4	79	0	24	4	3	7
Future Volume (Veh/h)	0	599	42	26	813	4	79	0	24	4	3	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	651	46	28	884	4	86	0	26	4	3	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.75						0.75	0.75		0.75	0.75	0.75
vC, conflicting volume	888			697			1624	1618	348	1280	1639	886
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	684			697			1665	1657	348	1207	1685	681
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			0	100	96	96	96	97
cM capacity (veh/h)	679			895			44	70	648	98	68	295

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	434	263	28	888	112	15
Volume Left	0	0	28	0	86	4
Volume Right	0	46	0	4	26	8
cSH	1700	1700	895	1700	56	133
Volume to Capacity	0.26	0.15	0.03	0.52	2.01	0.11
Queue Length 95th (ft)	0	0	2	0	272	9
Control Delay (s)	0.0	0.0	9.2	0.0	628.2	35.4
Lane LOS			A		F	E
Approach Delay (s)	0.0		0.3		628.2	35.4
Approach LOS					F	E

Intersection Summary				
Average Delay	40.9			
Intersection Capacity Utilization	60.7%	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)	9	614	33	39	767	1	8	3	36	10	10	44
Future Volume (Veh/h)	9	614	33	39	767	1	8	3	36	10	10	44
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	667	36	42	834	1	9	3	39	11	11	48
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.72						0.72	0.72		0.72	0.72	0.72
vC, conflicting volume	835			703			1677	1624	685	1664	1642	834
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	576			703			1746	1672	685	1728	1697	575
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			95			74	95	91	74	82	87
cM capacity (veh/h)	718			895			35	65	448	42	63	372

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	713	877	51	70
Volume Left	10	42	9	11
Volume Right	36	1	39	48
cSH	718	895	131	124
Volume to Capacity	0.01	0.05	0.39	0.57
Queue Length 95th (ft)	1	4	41	69
Control Delay (s)	0.4	1.3	49.2	66.7
Lane LOS	A	A	E	F
Approach Delay (s)	0.4	1.3	49.2	66.7
Approach LOS			E	F

Intersection Summary				
Average Delay	5.0			
Intersection Capacity Utilization	74.9%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	525	111	41	663	6	180	8	36	22	13	15
Future Volume (vph)	10	525	111	41	663	6	180	8	36	22	13	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1770	1863	1583	1770	1860			1752			1749	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.77			0.87	
Satd. Flow (perm)	1770	1863	1583	1770	1860			1406			1555	
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)	11	571	121	45	721	7	196	9	39	24	14	16
RTOR Reduction (vph)	0	0	30	0	0	0	0	8	0	0	13	0
Lane Group Flow (vph)	11	571	91	45	728	0	0	236	0	0	41	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1105			281			311	
v/s Ratio Prot	0.01	0.31		c0.03	c0.39							
v/s Ratio Perm			0.06					c0.17			0.03	
v/c Ratio	0.11	0.52	0.10	0.46	0.66			0.84			0.13	
Uniform Delay, d1	40.4	10.7	7.9	41.2	12.2			34.6			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.3	1.7	0.2	14.7	3.1			25.0			0.9	
Delay (s)	42.7	12.4	8.1	55.9	15.2			59.6			30.5	
Level of Service	D	B	A	E	B			E			C	
Approach Delay (s)		12.1			17.6			59.6			30.5	
Approach LOS		B			B			E			C	

Intersection Summary			
HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

HCM Unsignalized Intersection Capacity Analysis
1: Alhambra Cir/Mitchell Dr & Sir Francis Drake

10/12/2016

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	622	0	0	445	7	1	0	5	18	0	1
Future Volume (Veh/h)	0	622	0	0	445	7	1	0	5	18	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	676	0	0	484	8	1	0	5	20	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	492			676			1161	1168	676	1165	1160	484
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	492			676			1161	1168	676	1165	1160	484
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	99	88	100	100
cM capacity (veh/h)	1071			915			172	193	453	169	195	583

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	0	676	0	484	8	6	21
Volume Left	0	0	0	0	0	1	20
Volume Right	0	0	0	0	8	5	1
cSH	1700	1700	1700	1700	1700	356	175
Volume to Capacity	0.00	0.40	0.00	0.28	0.00	0.02	0.12
Queue Length 95th (ft)	0	0	0	0	0	1	10
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	15.3	28.3
Lane LOS						C	D
Approach Delay (s)	0.0		0.0			15.3	28.3
Approach LOS						C	D

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	645	1	3	452	0	1	0	6	0	0	0
Future Volume (Veh/h)	0	645	1	3	452	0	1	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	701	1	3	491	0	1	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	491			702			1198	1198	702	1205	1199	491
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	491			702			1198	1198	702	1205	1199	491
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	98	100	100	100
cM capacity (veh/h)	1072			895			162	185	438	158	185	578

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	702	3	491	8	0
Volume Left	0	0	3	0	1	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	895	1700	361	1700
Volume to Capacity	0.00	0.41	0.00	0.29	0.02	0.00
Queue Length 95th (ft)	0	0	0	0	2	0
Control Delay (s)	0.0	0.0	9.0	0.0	15.2	0.0
Lane LOS			A		C	A
Approach Delay (s)	0.0		0.1		15.2	0.0
Approach LOS					C	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	44.0%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	50	568	477	164	211	0	33
Future Volume (vph)	50	568	477	164	211	0	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (prot)	1770	1863	1863	1583		1753	
Flt Permitted	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (perm)	1770	1863	1863	1583		1753	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	617	518	178	229	0	36
RTOR Reduction (vph)	0	0	0	104	0	9	0
Lane Group Flow (vph)	54	617	518	74	0	256	0
Turn Type	Prot	NA	NA	Perm	Perm	Perm	
Protected Phases	7	4	8				
Permitted Phases				8	6	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0		17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0		17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42		0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	162	1086	776	659		496	
v/s Ratio Prot	0.03	c0.33	c0.28				
v/s Ratio Perm				0.05		c0.15	
v/c Ratio	0.33	0.57	0.67	0.11		0.52	
Uniform Delay, d1	25.5	7.8	14.1	10.7		18.0	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.5	2.2	4.5	0.3		3.8	
Delay (s)	31.0	9.9	18.7	11.1		21.8	
Level of Service	C	A	B	B		C	
Approach Delay (s)		11.6	16.7			21.8	
Approach LOS		B	B			C	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	804	630	1	5	1
Future Volume (Veh/h)	1	804	630	1	5	1
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)	1	874	685	1	5	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.77	
vC, conflicting volume	686				1561	685
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	686				1579	685
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				95	100
cM capacity (veh/h)	908				93	448

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	875	685	1	6
Volume Left	1	0	0	5
Volume Right	0	0	1	1
cSH	908	1700	1700	107
Volume to Capacity	0.00	0.40	0.00	0.06
Queue Length 95th (ft)	0	0	0	4
Control Delay (s)	0.0	0.0	0.0	40.8
Lane LOS	A			E
Approach Delay (s)	0.0	0.0		40.8
Approach LOS				E

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	785	17	3	631	28	13
Future Volume (Veh/h)	785	17	3	631	28	13
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)	853	18	3	686	30	14
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.78		0.78	0.78
vC, conflicting volume			871		1554	862
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			692		1569	680
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		68	96
cM capacity (veh/h)			703		94	351

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	871	689	30	14
Volume Left	0	3	30	0
Volume Right	18	0	0	14
cSH	1700	703	94	351
Volume to Capacity	0.51	0.00	0.32	0.04
Queue Length 95th (ft)	0	0	30	3
Control Delay (s)	0.0	0.1	60.0	15.7
Lane LOS		A	F	C
Approach Delay (s)	0.0	0.1	45.9	
Approach LOS			E	

Intersection Summary			
Average Delay	1.3		
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	817	732	0	1	4
Future Volume (Veh/h)	2	817	732	0	1	4
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)	2	888	796	0	1	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	796				1688	796
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	796				1688	796
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	826				103	387

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	890	796	5
Volume Left	2	0	1
Volume Right	0	0	4
cSH	826	1700	249
Volume to Capacity	0.00	0.47	0.02
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.1	0.0	19.7
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	19.7
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	815	3	10	629	1	42
Future Volume (Veh/h)	815	3	10	629	1	42
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)	886	3	11	684	1	46
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			889		1594	888
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			889		1594	888
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		99	87
cM capacity (veh/h)			762		116	343

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	889	11	684	47
Volume Left	0	11	0	1
Volume Right	3	0	0	46
cSH	1700	762	1700	350
Volume to Capacity	0.52	0.01	0.40	0.13
Queue Length 95th (ft)	0	1	0	11
Control Delay (s)	0.0	9.8	0.0	17.5
Lane LOS		A		C
Approach Delay (s)	0.0	0.2		17.5
Approach LOS				C

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	848	636	39	25	11
Future Volume (Veh/h)	26	848	636	39	25	11
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)	28	922	691	42	27	12
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	733				1690	712
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	733				1690	712
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				73	97
cM capacity (veh/h)	872				99	432

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	28	922	733	27	12
Volume Left	28	0	0	27	0
Volume Right	0	0	42	0	12
cSH	872	1700	1700	99	432
Volume to Capacity	0.03	0.54	0.43	0.27	0.03
Queue Length 95th (ft)	2	0	0	25	2
Control Delay (s)	9.3	0.0	0.0	54.2	13.6
Lane LOS	A			F	B
Approach Delay (s)	0.3		0.0	41.7	
Approach LOS				E	

Intersection Summary			
Average Delay	1.1		
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)	0	776	102	11	623	2	50	0	5	31	2	7
Future Volume (Veh/h)	0	776	102	11	623	2	50	0	5	31	2	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	843	111	12	677	2	54	0	5	34	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.87						0.87	0.87		0.87	0.87	0.87
vC, conflicting volume	679			954			1608	1602	477	1126	1656	678
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	555			954			1625	1617	477	1070	1680	554
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			4	100	99	77	98	98
cM capacity (veh/h)	879			716			56	88	534	149	80	414

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	562	392	12	679	59	44
Volume Left	0	0	12	0	54	34
Volume Right	0	111	0	2	5	8
cSH	1700	1700	716	1700	61	162
Volume to Capacity	0.33	0.23	0.02	0.40	0.97	0.27
Queue Length 95th (ft)	0	0	1	0	115	26
Control Delay (s)	0.0	0.0	10.1	0.0	218.5	35.4
Lane LOS			B		F	E
Approach Delay (s)	0.0		0.2		218.5	35.4
Approach LOS					F	E

Intersection Summary				
Average Delay	8.3			
Intersection Capacity Utilization	48.5%	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)	5	781	71	24	600	1	6	0	41	7	0	2
Future Volume (Veh/h)	5	781	71	24	600	1	6	0	41	7	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	849	77	26	652	1	7	0	45	8	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.84						0.84	0.84		0.84	0.84	0.84
vC, conflicting volume	653			926			1604	1602	888	1647	1640	652
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	494			926			1624	1622	888	1675	1667	493
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			90	100	87	85	100	100
cM capacity (veh/h)	901			738			67	83	343	54	78	485

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	931	679	52	10
Volume Left	5	26	7	8
Volume Right	77	1	45	2
cSH	901	738	220	65
Volume to Capacity	0.01	0.04	0.24	0.15
Queue Length 95th (ft)	0	3	22	13
Control Delay (s)	0.2	0.9	26.3	69.8
Lane LOS	A	A	D	F
Approach Delay (s)	0.2	0.9	26.3	69.8
Approach LOS			D	F

Intersection Summary				
Average Delay	1.7			
Intersection Capacity Utilization	58.3%	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 (vph)	8	728	105	26	466	13	155	8	23	25	12	7
Future Volume (vph)	8	728	105	26	466	13	155	8	23	25	12	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.97	
Satd. Flow (prot)	1770	1863	1583	1770	1855			1758			1771	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.73			0.84	
Satd. Flow (perm)	1770	1863	1583	1770	1855			1335			1522	
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)	9	791	114	28	507	14	168	9	25	27	13	8
RTOR Reduction (vph)	0	0	30	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	9	791	84	28	520	0	0	196	0	0	42	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1102			267			304	
v/s Ratio Prot	0.01	c0.42		c0.02	0.28							
v/s Ratio Perm			0.05					c0.15			0.03	
v/c Ratio	0.09	0.71	0.09	0.29	0.47			0.74			0.14	
Uniform Delay, d1	40.3	12.9	7.8	40.8	10.3			33.8			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	3.9	0.2	7.2	1.4			16.5			0.9	
Delay (s)	42.2	16.8	8.0	48.0	11.7			50.2			30.5	
Level of Service	D	B	A	D	B			D			C	
Approach Delay (s)		16.0			13.6			50.2			30.5	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	60.8%	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 (veh/h)	1	483	1	1	641	17	0	1	7	12	0	1
Future Volume (Veh/h)	1	483	1	1	641	17	0	1	7	12	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	1	525	1	1	697	18	0	1	8	13	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	715			526			1228	1244	526	1234	1227	697
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	715			526			1228	1244	526	1234	1227	697
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	99	91	100	100
cM capacity (veh/h)	885			1041			154	174	552	150	178	441

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	1	526	1	697	18	8	14
Volume Left	1	0	1	0	0	0	13
Volume Right	0	1	0	0	18	8	1
cSH	885	1700	1041	1700	1700	552	158
Volume to Capacity	0.00	0.31	0.00	0.41	0.01	0.01	0.09
Queue Length 95th (ft)	0	0	0	0	0	1	7
Control Delay (s)	9.1	0.0	8.5	0.0	0.0	11.6	30.1
Lane LOS	A		A			B	D
Approach Delay (s)	0.0		0.0			Err	30.1
Approach LOS						F	D

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	499	1	8	655	0	0	0	6	0	0	0
Future Volume (Veh/h)	0	499	1	8	655	0	0	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	542	1	9	712	0	0	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	712			543			1272	1272	542	1279	1273	712
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	712			543			1272	1272	542	1279	1273	712
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	99	100	100	100
cM capacity (veh/h)	888			1026			143	166	540	140	166	432

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	543	9	712	7	0
Volume Left	0	0	9	0	0	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	1026	1700	540	1700
Volume to Capacity	0.00	0.32	0.01	0.42	0.01	0.00
Queue Length 95th (ft)	0	0	1	0	1	0
Control Delay (s)	0.0	0.0	8.5	0.0	11.8	0.0
Lane LOS			A		B	A
Approach Delay (s)	0.0		0.1		11.8	0.0
Approach LOS					B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	44.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	486	662	136	128	28
Future Volume (vph)	20	486	662	136	128	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1770	1863	1863	1583	1746	
Flt Permitted	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	1770	1863	1863	1583	1746	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	528	720	148	139	30
RTOR Reduction (vph)	0	0	0	67	13	0
Lane Group Flow (vph)	22	528	720	82	156	0
Turn Type	Prot	NA	NA	Perm	Perm	
Protected Phases	7	4	8			
Permitted Phases				8	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0	17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0	17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42	0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	162	1086	776	659	494	
v/s Ratio Prot	0.01	c0.28	c0.39			
v/s Ratio Perm				0.05	c0.09	
v/c Ratio	0.14	0.49	0.93	0.12	0.32	
Uniform Delay, d1	25.1	7.3	16.6	10.8	16.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	1.6	18.9	0.4	1.7	
Delay (s)	26.8	8.8	35.5	11.1	18.6	
Level of Service	C	A	D	B	B	
Approach Delay (s)		9.5	31.4		18.6	
Approach LOS		A	C		B	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	615	804	2	3	3
Future Volume (Veh/h)	3	615	804	2	3	3
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)	3	668	874	2	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.83	
vC, conflicting volume	876				1548	874
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	876				1558	874
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				97	99
cM capacity (veh/h)	771				103	349

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	671	874	2	6
Volume Left	3	0	0	3
Volume Right	0	0	2	3
cSH	771	1700	1700	159
Volume to Capacity	0.00	0.51	0.00	0.04
Queue Length 95th (ft)	0	0	0	3
Control Delay (s)	0.1	0.0	0.0	28.6
Lane LOS	A			D
Approach Delay (s)	0.1	0.0		28.6
Approach LOS				D

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	52.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	607	8	7	806	11	16
Future Volume (Veh/h)	607	8	7	806	11	16
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)	660	9	8	876	12	17
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.84		0.84	0.84
vC, conflicting volume			669		1556	664
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			514		1567	509
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		88	96
cM capacity (veh/h)			886		102	476

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	669	884	12	17
Volume Left	0	8	12	0
Volume Right	9	0	0	17
cSH	1700	886	102	476
Volume to Capacity	0.39	0.01	0.12	0.04
Queue Length 95th (ft)	0	1	10	3
Control Delay (s)	0.0	0.3	44.9	12.8
Lane LOS		A	E	B
Approach Delay (s)	0.0	0.3	26.1	
Approach LOS			D	

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	624	815	1	1	0
Future Volume (Veh/h)	3	624	815	1	1	0
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)	3	678	886	1	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	887				1570	886
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	887				1570	886
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	763				121	343

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	681	887	1
Volume Left	3	0	1
Volume Right	0	1	0
cSH	763	1700	121
Volume to Capacity	0.00	0.52	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	35.0
Lane LOS	A		D
Approach Delay (s)	0.1	0.0	35.0
Approach LOS			D

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	53.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	621	4	55	811	1	19
Future Volume (Veh/h)	621	4	55	811	1	19
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)	675	4	60	882	1	21
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			679		1679	677
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			679		1679	677
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		99	95
cM capacity (veh/h)			913		97	453

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	679	60	882	22
Volume Left	0	60	0	1
Volume Right	4	0	0	21
cSH	1700	913	1700	474
Volume to Capacity	0.40	0.07	0.52	0.05
Queue Length 95th (ft)	0	5	0	4
Control Delay (s)	0.0	9.2	0.0	14.7
Lane LOS		A		B
Approach Delay (s)	0.0	0.6		14.7
Approach LOS				B

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	622	872	35	26	7
Future Volume (Veh/h)	5	622	872	35	26	7
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)	5	676	948	38	28	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	986				1653	967
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	986				1653	967
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				74	97
cM capacity (veh/h)	701				107	308

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	5	676	986	28	8
Volume Left	5	0	0	28	0
Volume Right	0	0	38	0	8
cSH	701	1700	1700	107	308
Volume to Capacity	0.01	0.40	0.58	0.26	0.03
Queue Length 95th (ft)	1	0	0	24	2
Control Delay (s)	10.2	0.0	0.0	49.9	17.0
Lane LOS	B			E	C
Approach Delay (s)	0.1		0.0	42.6	
Approach LOS				E	

Intersection Summary			
Average Delay	0.9		
Intersection Capacity Utilization	58.0%	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)	0	605	42	26	821	4	79	0	24	4	3	7
Future Volume (Veh/h)	0	605	42	26	821	4	79	0	24	4	3	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	658	46	28	892	4	86	0	26	4	3	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.74						0.74	0.74		0.74	0.74	0.74
vC, conflicting volume	896			704			1638	1633	352	1292	1654	894
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	689			704			1686	1679	352	1221	1707	686
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			0	100	96	96	95	97
cM capacity (veh/h)	671			890			42	68	644	95	65	290

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	439	265	28	896	112	15
Volume Left	0	0	28	0	86	4
Volume Right	0	46	0	4	26	8
cSH	1700	1700	890	1700	53	129
Volume to Capacity	0.26	0.16	0.03	0.53	2.10	0.12
Queue Length 95th (ft)	0	0	2	0	278	10
Control Delay (s)	0.0	0.0	9.2	0.0	674.2	36.4
Lane LOS			A		F	E
Approach Delay (s)	0.0		0.3		674.2	36.4
Approach LOS					F	E

Intersection Summary				
Average Delay	43.5			
Intersection Capacity Utilization	61.2%	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)	9	620	33	39	775	1	8	3	36	10	10	44
Future Volume (Veh/h)	9	620	33	39	775	1	8	3	36	10	10	44
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	674	36	42	842	1	9	3	39	11	11	48
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.72						0.72	0.72		0.72	0.72	0.72
vC, conflicting volume	843			710			1692	1639	692	1679	1656	842
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	581			710			1768	1694	692	1750	1719	581
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			95			73	95	91	73	82	87
cM capacity (veh/h)	710			889			33	62	444	40	60	367

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	720	885	51	70
Volume Left	10	42	9	11
Volume Right	36	1	39	48
cSH	710	889	125	119
Volume to Capacity	0.01	0.05	0.41	0.59
Queue Length 95th (ft)	1	4	43	72
Control Delay (s)	0.4	1.3	52.2	71.2
Lane LOS	A	A	F	F
Approach Delay (s)	0.4	1.3	52.2	71.2
Approach LOS			F	F

Intersection Summary				
Average Delay	5.2			
Intersection Capacity Utilization	75.4%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	530	113	41	669	6	182	8	36	22	13	15
Future Volume (vph)	10	530	113	41	669	6	182	8	36	22	13	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1770	1863	1583	1770	1860			1752			1749	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.77			0.87	
Satd. Flow (perm)	1770	1863	1583	1770	1860			1406			1556	
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)	11	576	123	45	727	7	198	9	39	24	14	16
RTOR Reduction (vph)	0	0	30	0	0	0	0	7	0	0	13	0
Lane Group Flow (vph)	11	576	93	45	734	0	0	239	0	0	41	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1105			281			311	
v/s Ratio Prot	0.01	0.31		c0.03	c0.39							
v/s Ratio Perm			0.06					c0.17			0.03	
v/c Ratio	0.11	0.52	0.10	0.46	0.66			0.85			0.13	
Uniform Delay, d1	40.4	10.7	7.9	41.2	12.2			34.7			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.3	1.7	0.2	14.7	3.2			26.1			0.9	
Delay (s)	42.7	12.5	8.1	55.9	15.4			60.8			30.5	
Level of Service	D	B	A	E	B			E			C	
Approach Delay (s)		12.2			17.7			60.8			30.5	
Approach LOS		B			B			E			C	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	62.4%	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 (veh/h)	0	705	0	0	515	3	1	0	5	10	0	1
Future Volume (Veh/h)	0	705	0	0	515	3	1	0	5	10	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	766	0	0	560	3	1	0	5	11	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	563			766			1327	1329	766	1331	1326	560
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	563			766			1327	1329	766	1331	1326	560
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	99	92	100	100
cM capacity (veh/h)	1008			847			132	155	403	130	156	528

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	0	766	0	560	3	6	12
Volume Left	0	0	0	0	0	1	11
Volume Right	0	0	0	0	3	5	1
cSH	1700	1700	1700	1700	1700	300	139
Volume to Capacity	0.00	0.45	0.00	0.33	0.00	0.02	0.09
Queue Length 95th (ft)	0	0	0	0	0	2	7
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.2	33.4
Lane LOS						C	D
Approach Delay (s)	0.0		0.0			17.2	33.4
Approach LOS						C	D

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	722	1	3	518	0	1	0	6	0	0	0
Future Volume (Veh/h)	0	722	1	3	518	0	1	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	785	1	3	563	0	1	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	563			786			1354	1354	786	1361	1355	563
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	563			786			1354	1354	786	1361	1355	563
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	98	100	100	100
cM capacity (veh/h)	1008			833			126	149	392	123	149	526

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	786	3	563	8	0
Volume Left	0	0	3	0	1	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	833	1700	311	1700
Volume to Capacity	0.00	0.46	0.00	0.33	0.03	0.00
Queue Length 95th (ft)	0	0	0	0	2	0
Control Delay (s)	0.0	0.0	9.3	0.0	16.9	0.0
Lane LOS			A		C	A
Approach Delay (s)	0.0		0.0		16.9	0.0
Approach LOS					C	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	48.1%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	53	642	549	173	252	0	35
Future Volume (vph)	53	642	549	173	252	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (prot)	1770	1863	1863	1583		1755	
Flt Permitted	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (perm)	1770	1863	1863	1583		1755	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	698	597	188	274	0	38
RTOR Reduction (vph)	0	0	0	102	0	9	0
Lane Group Flow (vph)	58	698	597	86	0	303	0
Turn Type	Prot	NA	NA	Perm	Perm	Perm	
Protected Phases	7	4	8				
Permitted Phases				8	6	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0		17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0		17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42		0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	162	1086	776	659		497	
v/s Ratio Prot	0.03	c0.37	c0.32				
v/s Ratio Perm				0.05		c0.17	
v/c Ratio	0.36	0.64	0.77	0.13		0.61	
Uniform Delay, d1	25.6	8.3	15.0	10.8		18.6	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	6.1	2.9	7.2	0.4		5.5	
Delay (s)	31.7	11.3	22.3	11.2		24.1	
Level of Service	C	B	C	B		C	
Approach Delay (s)		12.8	19.6			24.1	
Approach LOS		B	B			C	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	896	714	1	5	1
Future Volume (Veh/h)	1	896	714	1	5	1
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)	1	974	776	1	5	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.71	
vC, conflicting volume	777				1752	776
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777				1856	776
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	100
cM capacity (veh/h)	839				57	397

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	975	776	1	6
Volume Left	1	0	0	5
Volume Right	0	0	1	1
cSH	839	1700	1700	67
Volume to Capacity	0.00	0.46	0.00	0.09
Queue Length 95th (ft)	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	64.1
Lane LOS	A			F
Approach Delay (s)	0.0	0.0		64.1
Approach LOS				F

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	58.0%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	878	18	3	715	29	14
Future Volume (Veh/h)	878	18	3	715	29	14
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)	954	20	3	777	32	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.71		0.71	0.71
vC, conflicting volume			974		1747	964
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			758		1848	744
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		45	95
cM capacity (veh/h)			605		58	294

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	974	780	32	15
Volume Left	0	3	32	0
Volume Right	20	0	0	15
cSH	1700	605	58	294
Volume to Capacity	0.57	0.00	0.55	0.05
Queue Length 95th (ft)	0	0	55	4
Control Delay (s)	0.0	0.1	126.9	17.9
Lane LOS		A	F	C
Approach Delay (s)	0.0	0.1	92.1	
Approach LOS			F	

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	914	718	0	1	4
Future Volume (Veh/h)	2	914	718	0	1	4
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)	2	993	780	0	1	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	780				1777	780
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	780				1777	780
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	837				90	395

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	995	780	5
Volume Left	2	0	1
Volume Right	0	0	4
cSH	837	1700	236
Volume to Capacity	0.00	0.46	0.02
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.1	0.0	20.6
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	20.6
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	913	3	10	716	2	57
Future Volume (Veh/h)	913	3	10	716	2	57
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)	992	3	11	778	2	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			995		1794	994
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			995		1794	994
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	79
cM capacity (veh/h)			695		87	298

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	995	11	778	64
Volume Left	0	11	0	2
Volume Right	3	0	0	62
cSH	1700	695	1700	307
Volume to Capacity	0.59	0.02	0.46	0.21
Queue Length 95th (ft)	0	1	0	19
Control Delay (s)	0.0	10.3	0.0	21.1
Lane LOS		B		C
Approach Delay (s)	0.0	0.1		21.1
Approach LOS				C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	949	718	41	26	12
Future Volume (Veh/h)	27	949	718	41	26	12
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)	29	1032	780	45	28	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	825				1892	802
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	825				1892	802
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				62	97
cM capacity (veh/h)	805				74	384

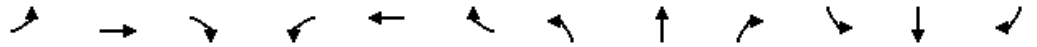
Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	29	1032	825	28	13
Volume Left	29	0	0	28	0
Volume Right	0	0	45	0	13
cSH	805	1700	1700	74	384
Volume to Capacity	0.04	0.61	0.49	0.38	0.03
Queue Length 95th (ft)	3	0	0	36	3
Control Delay (s)	9.6	0.0	0.0	80.5	14.7
Lane LOS	A			F	B
Approach Delay (s)	0.3		0.0	59.7	
Approach LOS				F	

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	59.9%	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)	0	870	107	12	700	2	53	0	5	33	2	7
Future Volume (Veh/h)	0	870	107	12	700	2	53	0	5	33	2	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	946	116	13	761	2	58	0	5	36	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.83						0.83	0.83		0.83	0.83	0.83
vC, conflicting volume	763			1062			1800	1793	531	1264	1850	762
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	611			1062			1862	1853	531	1215	1922	610
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			0	100	99	68	96	98
cM capacity (veh/h)	799			652			35	59	493	111	54	363

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	631	431	13	763	63	46
Volume Left	0	0	13	0	58	36
Volume Right	0	116	0	2	5	8
cSH	1700	1700	652	1700	38	120
Volume to Capacity	0.37	0.25	0.02	0.45	1.67	0.38
Queue Length 95th (ft)	0	0	2	0	167	40
Control Delay (s)	0.0	0.0	10.6	0.0	558.9	52.6
Lane LOS			B		F	F
Approach Delay (s)	0.0		0.2		558.9	52.6
Approach LOS					F	F

Intersection Summary				
Average Delay	19.4			
Intersection Capacity Utilization	52.7%	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)	5	875	75	25	670	1	6	0	41	7	0	2
Future Volume (Veh/h)	5	875	75	25	670	1	6	0	41	7	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	951	82	27	728	1	7	0	45	8	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.81						0.81	0.81		0.81	0.81	0.81
vC, conflicting volume	729			1033			1786	1785	992	1830	1826	728
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	544			1033			1855	1853	992	1909	1904	543
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			84	100	85	77	100	100
cM capacity (veh/h)	827			673			44	57	298	34	53	435

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1038	756	52	10
Volume Left	5	27	7	8
Volume Right	82	1	45	2
cSH	827	673	167	42
Volume to Capacity	0.01	0.04	0.31	0.24
Queue Length 95th (ft)	0	3	31	20
Control Delay (s)	0.2	1.1	35.9	115.8
Lane LOS	A	A	E	F
Approach Delay (s)	0.2	1.1	35.9	115.8
Approach LOS			E	F

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	62.9%	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 (vph)	8	817	113	52	519	14	162	8	27	26	13	7
Future Volume (vph)	8	817	113	52	519	14	162	8	27	26	13	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.97	
Satd. Flow (prot)	1770	1863	1583	1770	1856			1756			1773	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.75			0.84	
Satd. Flow (perm)	1770	1863	1583	1770	1856			1375			1524	
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)	9	888	123	57	564	15	176	9	29	28	14	8
RTOR Reduction (vph)	0	0	30	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	9	888	93	57	578	0	0	208	0	0	44	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1103			275			304	
v/s Ratio Prot	0.01	c0.48		c0.03	0.31							
v/s Ratio Perm			0.06					c0.15			0.03	
v/c Ratio	0.09	0.80	0.10	0.58	0.52			0.75			0.14	
Uniform Delay, d1	40.3	14.1	7.9	41.5	10.7			33.9			29.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	6.2	0.2	22.8	1.8			17.4			1.0	
Delay (s)	42.2	20.3	8.1	64.3	12.5			51.3			30.6	
Level of Service	D	C	A	E	B			D			C	
Approach Delay (s)		19.0			17.2			51.3			30.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	66.5%	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 (veh/h)	1	534	1	1	706	9	0	1	7	6	0	1
Future Volume (Veh/h)	1	534	1	1	706	9	0	1	7	6	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	1	580	1	1	767	10	0	1	8	7	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	777			581			1352	1362	580	1360	1352	767
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	777			581			1352	1362	580	1360	1352	767
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	98	94	100	100
cM capacity (veh/h)	839			993			127	148	514	123	150	402

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	1	581	1	767	10	8	8
Volume Left	1	0	1	0	0	0	7
Volume Right	0	1	0	0	10	8	1
cSH	839	1700	993	1700	1700	514	135
Volume to Capacity	0.00	0.34	0.00	0.45	0.01	0.02	0.06
Queue Length 95th (ft)	0	0	0	0	0	1	5
Control Delay (s)	9.3	0.0	8.6	0.0	0.0	12.1	33.4
Lane LOS	A		A			B	D
Approach Delay (s)	0.0		0.0			Err	33.4
Approach LOS						F	D

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	545	1	8	713	0	0	0	6	0	0	0
Future Volume (Veh/h)	0	545	1	8	713	0	0	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	592	1	9	775	0	0	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	775			593			1386	1386	592	1392	1386	775
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	775			593			1386	1386	592	1392	1386	775
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	99	100	100	100
cM capacity (veh/h)	841			983			120	142	506	117	142	398

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	593	9	775	7	0
Volume Left	0	0	9	0	0	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	983	1700	506	1700
Volume to Capacity	0.00	0.35	0.01	0.46	0.01	0.00
Queue Length 95th (ft)	0	0	1	0	1	0
Control Delay (s)	0.0	0.0	8.7	0.0	12.2	0.0
Lane LOS			A		B	A
Approach Delay (s)	0.0		0.1		12.2	0.0
Approach LOS					B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	47.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	529	720	143	134	29
Future Volume (vph)	21	529	720	143	134	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1770	1863	1863	1583	1746	
Flt Permitted	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	1770	1863	1863	1583	1746	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	575	783	155	146	32
RTOR Reduction (vph)	0	0	0	64	13	0
Lane Group Flow (vph)	23	575	783	91	165	0
Turn Type	Prot	NA	NA	Perm	Perm	
Protected Phases	7	4	8			
Permitted Phases				8	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0	17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0	17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42	0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	162	1086	776	659	494	
v/s Ratio Prot	0.01	c0.31	c0.42			
v/s Ratio Perm				0.06	c0.09	
v/c Ratio	0.14	0.53	1.01	0.14	0.33	
Uniform Delay, d1	25.1	7.5	17.5	10.8	17.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	1.8	34.5	0.4	1.8	
Delay (s)	26.9	9.4	52.0	11.3	18.8	
Level of Service	C	A	D	B	B	
Approach Delay (s)		10.1	45.3		18.8	
Approach LOS		B	D		B	

Intersection Summary			
HCM 2000 Control Delay	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	53.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	669	876	2	3	3
Future Volume (Veh/h)	3	669	876	2	3	3
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)	3	727	952	2	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.80	
vC, conflicting volume	954				1685	952
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	954				1731	952
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	99
cM capacity (veh/h)	720				77	315

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	730	952	2	6
Volume Left	3	0	0	3
Volume Right	0	0	2	3
cSH	720	1700	1700	124
Volume to Capacity	0.00	0.56	0.00	0.05
Queue Length 95th (ft)	0	0	0	4
Control Delay (s)	0.1	0.0	0.0	35.5
Lane LOS	A			E
Approach Delay (s)	0.1	0.0		35.5
Approach LOS				E

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	56.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	661	8	7	876	12	17
Future Volume (Veh/h)	661	8	7	876	12	17
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)	718	9	8	952	13	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.81		0.81	0.81
vC, conflicting volume			727		1690	722
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			545		1735	539
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		83	96
cM capacity (veh/h)			829		77	439

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	727	960	13	18
Volume Left	0	8	13	0
Volume Right	9	0	0	18
cSH	1700	829	77	439
Volume to Capacity	0.43	0.01	0.17	0.04
Queue Length 95th (ft)	0	1	14	3
Control Delay (s)	0.0	0.3	60.9	13.6
Lane LOS		A	F	B
Approach Delay (s)	0.0	0.3	33.4	
Approach LOS			D	

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	680	888	1	1	0
Future Volume (Veh/h)	3	680	888	1	1	0
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)	3	739	965	1	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	966				1710	966
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	966				1710	966
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	713				99	309

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	742	966	1
Volume Left	3	0	1
Volume Right	0	1	0
cSH	713	1700	99
Volume to Capacity	0.00	0.57	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	41.6
Lane LOS	A		E
Approach Delay (s)	0.1	0.0	41.6
Approach LOS			E

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	56.8%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	677	6	58	883	8	22
Future Volume (Veh/h)	677	6	58	883	8	22
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)	736	7	63	960	9	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			743		1826	740
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			743		1826	740
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		89	94
cM capacity (veh/h)			864		78	417

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	743	63	960	33
Volume Left	0	63	0	9
Volume Right	7	0	0	24
cSH	1700	864	1700	288
Volume to Capacity	0.44	0.07	0.56	0.11
Queue Length 95th (ft)	0	6	0	10
Control Delay (s)	0.0	9.5	0.0	25.8
Lane LOS		A		D
Approach Delay (s)	0.0	0.6		25.8
Approach LOS				D

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	678	961	37	27	7
Future Volume (Veh/h)	5	678	961	37	27	7
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)	5	737	1045	40	29	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1085				1812	1065
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1085				1812	1065
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				66	97
cM capacity (veh/h)	643				86	270

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	5	737	1085	29	8
Volume Left	5	0	0	29	0
Volume Right	0	0	40	0	8
cSH	643	1700	1700	86	270
Volume to Capacity	0.01	0.43	0.64	0.34	0.03
Queue Length 95th (ft)	1	0	0	32	2
Control Delay (s)	10.6	0.0	0.0	67.2	18.7
Lane LOS	B			F	C
Approach Delay (s)	0.1		0.0	56.8	
Approach LOS				F	

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	62.8%	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)	0	661	44	27	906	4	83	0	25	4	3	7
Future Volume (Veh/h)	0	661	44	27	906	4	83	0	25	4	3	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	718	48	29	985	4	90	0	27	4	3	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.67						0.67	0.67		0.67	0.67	0.67
vC, conflicting volume	989			766			1794	1789	383	1418	1811	987
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	738			766			1939	1931	383	1377	1963	735
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			0	100	96	94	93	97
cM capacity (veh/h)	579			843			23	42	615	65	40	243

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	479	287	29	989	117	15
Volume Left	0	0	29	0	90	4
Volume Right	0	48	0	4	27	8
cSH	1700	1700	843	1700	30	89
Volume to Capacity	0.28	0.17	0.03	0.58	3.88	0.17
Queue Length 95th (ft)	0	0	3	0	Err	14
Control Delay (s)	0.0	0.0	9.4	0.0	Err	53.5
Lane LOS			A		F	F
Approach Delay (s)	0.0		0.3		Err	53.5
Approach LOS					F	F

Intersection Summary				
Average Delay	611.1			
Intersection Capacity Utilization	65.9%	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)	9	680	35	41	857	1	8	3	38	11	11	46
Future Volume (Veh/h)	9	680	35	41	857	1	8	3	38	11	11	46
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	739	38	45	932	1	9	3	41	12	12	50
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.64						0.64	0.64		0.64	0.64	0.64
vC, conflicting volume	933			777			1856	1801	758	1843	1820	932
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	619			777			2054	1968	758	2033	1997	618
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			95			42	92	90	45	67	84
cM capacity (veh/h)	619			839			16	38	407	22	36	315

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	787	978	53	74
Volume Left	10	45	9	12
Volume Right	38	1	41	50
cSH	619	839	70	71
Volume to Capacity	0.02	0.05	0.76	1.04
Queue Length 95th (ft)	1	4	88	137
Control Delay (s)	0.5	1.5	145.4	220.1
Lane LOS	A	A	F	F
Approach Delay (s)	0.5	1.5	145.4	220.1
Approach LOS			F	F

Intersection Summary				
Average Delay	13.7			
Intersection Capacity Utilization	81.8%	ICU Level of Service	D	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	586	118	43	743	10	190	8	38	23	14	16
Future Volume (vph)	11	586	118	43	743	10	190	8	38	23	14	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1770	1863	1583	1770	1859			1752			1749	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.77			0.87	
Satd. Flow (perm)	1770	1863	1583	1770	1859			1409			1561	
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)	12	637	128	47	808	11	207	9	41	25	15	17
RTOR Reduction (vph)	0	0	30	0	0	0	0	7	0	0	14	0
Lane Group Flow (vph)	12	637	98	47	819	0	0	250	0	0	43	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1105			281			312	
v/s Ratio Prot	0.01	0.34		c0.03	c0.44							
v/s Ratio Perm			0.06					c0.18			0.03	
v/c Ratio	0.12	0.58	0.10	0.48	0.74			0.89			0.14	
Uniform Delay, d1	40.4	11.2	7.9	41.2	13.2			35.0			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.5	2.2	0.2	15.9	4.5			31.5			0.9	
Delay (s)	43.0	13.4	8.1	57.1	17.7			66.5			30.6	
Level of Service	D	B	A	E	B			E			C	
Approach Delay (s)		13.0			19.8			66.5			30.6	
Approach LOS		B			B			E			C	

Intersection Summary			
HCM 2000 Control Delay	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	67.1%	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 (veh/h)	0	705	0	0	515	7	1	0	5	18	0	1
Future Volume (Veh/h)	0	705	0	0	515	7	1	0	5	18	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	766	0	0	560	8	1	0	5	20	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	568			766			1327	1334	766	1331	1326	560
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	568			766			1327	1334	766	1331	1326	560
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	99	85	100	100
cM capacity (veh/h)	1004			847			132	154	403	130	156	528

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	0	766	0	560	8	6	21
Volume Left	0	0	0	0	0	1	20
Volume Right	0	0	0	0	8	5	1
cSH	1700	1700	1700	1700	1700	300	135
Volume to Capacity	0.00	0.45	0.00	0.33	0.00	0.02	0.16
Queue Length 95th (ft)	0	0	0	0	0	2	13
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	17.2	36.6
Lane LOS						C	E
Approach Delay (s)	0.0		0.0			17.2	36.6
Approach LOS						C	E

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	730	1	3	522	0	1	0	6	0	0	0
Future Volume (Veh/h)	0	730	1	3	522	0	1	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	793	1	3	567	0	1	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	567			794			1366	1366	794	1373	1367	567
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	567			794			1366	1366	794	1373	1367	567
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			99	100	98	100	100	100
cM capacity (veh/h)	1005			827			124	146	388	120	146	523

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	794	3	567	8	0
Volume Left	0	0	3	0	1	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	827	1700	307	1700
Volume to Capacity	0.00	0.47	0.00	0.33	0.03	0.00
Queue Length 95th (ft)	0	0	0	0	2	0
Control Delay (s)	0.0	0.0	9.4	0.0	17.1	0.0
Lane LOS			A		C	A
Approach Delay (s)	0.0		0.0		17.1	0.0
Approach LOS					C	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	48.5%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBU	SBL	SBR
Lane Configurations							
Traffic Volume (vph)	53	650	553	173	252	0	35
Future Volume (vph)	53	650	553	173	252	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00		1.00	
Frt	1.00	1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (prot)	1770	1863	1863	1583		1755	
Flt Permitted	0.95	1.00	1.00	1.00		0.96	
Satd. Flow (perm)	1770	1863	1863	1583		1755	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	58	707	601	188	274	0	38
RTOR Reduction (vph)	0	0	0	102	0	9	0
Lane Group Flow (vph)	58	707	601	87	0	303	0
Turn Type	Prot	NA	NA	Perm	Perm	Perm	
Protected Phases	7	4	8				
Permitted Phases				8	6	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0		17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0		17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42		0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	162	1086	776	659		497	
v/s Ratio Prot	0.03	c0.38	c0.32				
v/s Ratio Perm				0.05		c0.17	
v/c Ratio	0.36	0.65	0.77	0.13		0.61	
Uniform Delay, d1	25.6	8.4	15.1	10.8		18.6	
Progression Factor	1.00	1.00	1.00	1.00		1.00	
Incremental Delay, d2	6.1	3.0	7.4	0.4		5.5	
Delay (s)	31.7	11.4	22.5	11.2		24.1	
Level of Service	C	B	C	B		C	
Approach Delay (s)		13.0	19.8			24.1	
Approach LOS		B	B			C	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	59.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	1	904	718	1	5	1
Future Volume (Veh/h)	1	904	718	1	5	1
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)	1	983	780	1	5	1
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.70	
vC, conflicting volume	781				1765	780
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	781				1878	780
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				91	100
cM capacity (veh/h)	837				55	395

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	984	780	1	6
Volume Left	1	0	0	5
Volume Right	0	0	1	1
cSH	837	1700	1700	64
Volume to Capacity	0.00	0.46	0.00	0.09
Queue Length 95th (ft)	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	66.9
Lane LOS	A			F
Approach Delay (s)	0.0	0.0		66.9
Approach LOS				F

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	886	18	3	719	29	14
Future Volume (Veh/h)	886	18	3	719	29	14
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)	963	20	3	782	32	15
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.70		0.70	0.70
vC, conflicting volume			983		1761	973
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			763		1872	748
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		42	95
cM capacity (veh/h)			596		55	289

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	983	785	32	15
Volume Left	0	3	32	0
Volume Right	20	0	0	15
cSH	1700	596	55	289
Volume to Capacity	0.58	0.01	0.58	0.05
Queue Length 95th (ft)	0	0	58	4
Control Delay (s)	0.0	0.1	136.8	18.1
Lane LOS		A	F	C
Approach Delay (s)	0.0	0.1	98.9	
Approach LOS			F	

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	922	722	0	1	4
Future Volume (Veh/h)	2	922	722	0	1	4
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)	2	1002	785	0	1	4
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	785				1791	785
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	785				1791	785
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	99
cM capacity (veh/h)	834				89	393

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	1004	785	5
Volume Left	2	0	1
Volume Right	0	0	4
cSH	834	1700	233
Volume to Capacity	0.00	0.46	0.02
Queue Length 95th (ft)	0	0	2
Control Delay (s)	0.1	0.0	20.8
Lane LOS	A		C
Approach Delay (s)	0.1	0.0	20.8
Approach LOS			C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	921	3	10	720	2	57
Future Volume (Veh/h)	921	3	10	720	2	57
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)	1001	3	11	783	2	62
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			1004		1808	1002
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1004		1808	1002
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			98		98	79
cM capacity (veh/h)			690		85	294

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	1004	11	783	64
Volume Left	0	11	0	2
Volume Right	3	0	0	62
cSH	1700	690	1700	304
Volume to Capacity	0.59	0.02	0.46	0.21
Queue Length 95th (ft)	0	1	0	20
Control Delay (s)	0.0	10.3	0.0	21.3
Lane LOS		B		C
Approach Delay (s)	0.0	0.1		21.3
Approach LOS				C

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	957	722	41	26	12
Future Volume (Veh/h)	27	957	722	41	26	12
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)	29	1040	785	45	28	13
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	830				1906	808
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	830				1906	808
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				61	97
cM capacity (veh/h)	802				73	381

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	29	1040	830	28	13
Volume Left	29	0	0	28	0
Volume Right	0	0	45	0	13
cSH	802	1700	1700	73	381
Volume to Capacity	0.04	0.61	0.49	0.39	0.03
Queue Length 95th (ft)	3	0	0	37	3
Control Delay (s)	9.7	0.0	0.0	82.7	14.8
Lane LOS	A			F	B
Approach Delay (s)	0.3		0.0	61.1	
Approach LOS				F	

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	60.4%	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)	0	878	107	12	704	2	53	0	5	33	2	7
Future Volume (Veh/h)	0	878	107	12	704	2	53	0	5	33	2	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	954	116	13	765	2	58	0	5	36	2	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.83						0.83	0.83		0.83	0.83	0.83
vC, conflicting volume	767			1070			1812	1805	535	1272	1862	766
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	614			1070			1877	1869	535	1224	1938	612
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			0	100	99	67	96	98
cM capacity (veh/h)	795			647			34	58	490	109	52	360

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	636	434	13	767	63	46
Volume Left	0	0	13	0	58	36
Volume Right	0	116	0	2	5	8
cSH	1700	1700	647	1700	37	118
Volume to Capacity	0.37	0.26	0.02	0.45	1.72	0.39
Queue Length 95th (ft)	0	0	2	0	170	41
Control Delay (s)	0.0	0.0	10.7	0.0	586.4	54.0
Lane LOS			B		F	F
Approach Delay (s)	0.0		0.2		586.4	54.0
Approach LOS					F	F

Intersection Summary				
Average Delay	20.2			
Intersection Capacity Utilization	52.9%	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)	5	883	75	25	674	1	6	0	41	7	0	2
Future Volume (Veh/h)	5	883	75	25	674	1	6	0	41	7	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	5	960	82	27	733	1	7	0	45	8	0	2
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.80						0.80	0.80		0.80	0.80	0.80
vC, conflicting volume	734			1042			1800	1799	1001	1844	1840	734
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	548			1042			1873	1872	1001	1927	1922	547
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			96			83	100	85	76	100	100
cM capacity (veh/h)	822			667			42	55	295	33	51	432

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	1047	761	52	10
Volume Left	5	27	7	8
Volume Right	82	1	45	2
cSH	822	667	164	41
Volume to Capacity	0.01	0.04	0.32	0.25
Queue Length 95th (ft)	0	3	32	20
Control Delay (s)	0.2	1.1	36.9	120.7
Lane LOS	A	A	E	F
Approach Delay (s)	0.2	1.1	36.9	120.7
Approach LOS			E	F

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	63.1%	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 (vph)	8	823	115	52	522	14	163	8	27	26	13	7
Future Volume (vph)	8	823	115	52	522	14	163	8	27	26	13	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.97	
Satd. Flow (prot)	1770	1863	1583	1770	1856			1757			1773	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.75			0.84	
Satd. Flow (perm)	1770	1863	1583	1770	1856			1375			1525	
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)	9	895	125	57	567	15	177	9	29	28	14	8
RTOR Reduction (vph)	0	0	30	0	1	0	0	6	0	0	6	0
Lane Group Flow (vph)	9	895	95	57	581	0	0	209	0	0	44	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1103			275			305	
v/s Ratio Prot	0.01	c0.48		c0.03	0.31							
v/s Ratio Perm			0.06					c0.15			0.03	
v/c Ratio	0.09	0.81	0.10	0.58	0.53			0.76			0.14	
Uniform Delay, d1	40.3	14.2	7.9	41.5	10.8			34.0			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	6.4	0.2	22.8	1.8			17.7			1.0	
Delay (s)	42.2	20.6	8.1	64.3	12.6			51.6			30.6	
Level of Service	D	C	A	E	B			D			C	
Approach Delay (s)		19.3			17.2			51.6			30.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	66.7%	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 (veh/h)	1	534	1	1	706	17	0	1	7	12	0	1
Future Volume (Veh/h)	1	534	1	1	706	17	0	1	7	12	0	1
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	1	580	1	1	767	18	0	1	8	13	0	1
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	785			581			1352	1370	580	1360	1352	767
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	785			581			1352	1370	580	1360	1352	767
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	99	98	89	100	100
cM capacity (veh/h)	834			993			127	146	514	123	150	402

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	1	581	1	767	18	8	14
Volume Left	1	0	1	0	0	0	13
Volume Right	0	1	0	0	18	8	1
cSH	834	1700	993	1700	1700	514	129
Volume to Capacity	0.00	0.34	0.00	0.45	0.01	0.02	0.11
Queue Length 95th (ft)	0	0	0	0	0	1	9
Control Delay (s)	9.3	0.0	8.6	0.0	0.0	12.1	36.2
Lane LOS	A		A			B	E
Approach Delay (s)	0.0		0.0			Err	36.2
Approach LOS						F	E

Intersection Summary				
Average Delay	Err			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	551	1	8	721	0	0	0	6	0	0	0
Future Volume (Veh/h)	0	551	1	8	721	0	0	0	6	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	599	1	9	784	0	0	0	7	0	0	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	784			600			1402	1402	600	1408	1402	784
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	784			600			1402	1402	600	1408	1402	784
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			99			100	100	99	100	100	100
cM capacity (veh/h)	834			977			117	139	501	114	139	393

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	0	600	9	784	7	0
Volume Left	0	0	9	0	0	0
Volume Right	0	1	0	0	7	0
cSH	1700	1700	977	1700	501	1700
Volume to Capacity	0.00	0.35	0.01	0.46	0.01	0.00
Queue Length 95th (ft)	0	0	1	0	1	0
Control Delay (s)	0.0	0.0	8.7	0.0	12.3	0.0
Lane LOS			A		B	A
Approach Delay (s)	0.0		0.1		12.3	0.0
Approach LOS					B	A

Intersection Summary				
Average Delay	0.1			
Intersection Capacity Utilization	47.9%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	21	535	728	143	134	29
Future Volume (vph)	21	535	728	143	134	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	1.00	0.85	0.98	
Flt Protected	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (prot)	1770	1863	1863	1583	1746	
Flt Permitted	0.95	1.00	1.00	1.00	0.96	
Satd. Flow (perm)	1770	1863	1863	1583	1746	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	582	791	155	146	32
RTOR Reduction (vph)	0	0	0	64	13	0
Lane Group Flow (vph)	23	582	791	91	165	0
Turn Type	Prot	NA	NA	Perm	Perm	
Protected Phases	7	4	8			
Permitted Phases				8	6	
Actuated Green, G (s)	5.5	35.0	25.0	25.0	17.0	
Effective Green, g (s)	5.5	35.0	25.0	25.0	17.0	
Actuated g/C Ratio	0.09	0.58	0.42	0.42	0.28	
Clearance Time (s)	4.5	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	162	1086	776	659	494	
v/s Ratio Prot	0.01	c0.31	c0.42			
v/s Ratio Perm				0.06	c0.09	
v/c Ratio	0.14	0.54	1.02	0.14	0.33	
Uniform Delay, d1	25.1	7.6	17.5	10.8	17.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	1.9	37.3	0.4	1.8	
Delay (s)	26.9	9.5	54.8	11.3	18.8	
Level of Service	C	A	D	B	B	
Approach Delay (s)		10.1	47.6		18.8	
Approach LOS		B	D		B	

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.5
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	675	884	2	3	3
Future Volume (Veh/h)	3	675	884	2	3	3
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)	3	734	961	2	3	3
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		730				
pX, platoon unblocked					0.80	
vC, conflicting volume	963				1701	961
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	963				1753	961
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				96	99
cM capacity (veh/h)	715				74	311

Direction, Lane #	EB 1	WB 1	WB 2	SB 1
Volume Total	737	961	2	6
Volume Left	3	0	0	3
Volume Right	0	0	2	3
cSH	715	1700	1700	120
Volume to Capacity	0.00	0.57	0.00	0.05
Queue Length 95th (ft)	0	0	0	4
Control Delay (s)	0.1	0.0	0.0	36.5
Lane LOS	A			E
Approach Delay (s)	0.1	0.0		36.5
Approach LOS				E

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	667	8	7	884	12	17
Future Volume (Veh/h)	667	8	7	884	12	17
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)	725	9	8	961	13	18
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	863					
pX, platoon unblocked			0.80		0.80	0.80
vC, conflicting volume			734		1706	730
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			547		1757	542
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		83	96
cM capacity (veh/h)			822		74	435

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	734	969	13	18
Volume Left	0	8	13	0
Volume Right	9	0	0	18
cSH	1700	822	74	435
Volume to Capacity	0.43	0.01	0.17	0.04
Queue Length 95th (ft)	0	1	15	3
Control Delay (s)	0.0	0.3	63.4	13.6
Lane LOS		A	F	B
Approach Delay (s)	0.0	0.3	34.5	
Approach LOS			D	

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	3	686	896	1	1	0
Future Volume (Veh/h)	3	686	896	1	1	0
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)	3	746	974	1	1	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	975				1726	974
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	975				1726	974
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				99	100
cM capacity (veh/h)	707				97	305

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	749	975	1
Volume Left	3	0	1
Volume Right	0	1	0
cSH	707	1700	97
Volume to Capacity	0.00	0.57	0.01
Queue Length 95th (ft)	0	0	1
Control Delay (s)	0.1	0.0	42.5
Lane LOS	A		E
Approach Delay (s)	0.1	0.0	42.5
Approach LOS			E

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	683	6	58	891	8	22
Future Volume (Veh/h)	683	6	58	891	8	22
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)	742	7	63	968	9	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						1
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			749		1840	746
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			749		1840	746
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			93		88	94
cM capacity (veh/h)			860		77	414

Direction, Lane #	EB 1	WB 1	WB 2	NB 1
Volume Total	749	63	968	33
Volume Left	0	63	0	9
Volume Right	7	0	0	24
cSH	1700	860	1700	282
Volume to Capacity	0.44	0.07	0.57	0.12
Queue Length 95th (ft)	0	6	0	10
Control Delay (s)	0.0	9.5	0.0	26.2
Lane LOS		A		D
Approach Delay (s)	0.0	0.6		26.2
Approach LOS				D

Intersection Summary			
Average Delay	0.8		
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	684	969	37	27	7
Future Volume (Veh/h)	5	684	969	37	27	7
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)	5	743	1053	40	29	8
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1093				1826	1073
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1093				1826	1073
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				65	97
cM capacity (veh/h)	638				84	268

Direction, Lane #	EB 1	EB 2	WB 1	SB 1	SB 2
Volume Total	5	743	1093	29	8
Volume Left	5	0	0	29	0
Volume Right	0	0	40	0	8
cSH	638	1700	1700	84	268
Volume to Capacity	0.01	0.44	0.64	0.35	0.03
Queue Length 95th (ft)	1	0	0	33	2
Control Delay (s)	10.7	0.0	0.0	69.1	18.9
Lane LOS	B			F	C
Approach Delay (s)	0.1		0.0	58.2	
Approach LOS				F	

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	63.2%	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)	0	667	44	27	914	4	83	0	25	4	3	7
Future Volume (Veh/h)	0	667	44	27	914	4	83	0	25	4	3	7
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	0	725	48	29	993	4	90	0	27	4	3	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)									1			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					1263							
pX, platoon unblocked	0.66						0.66	0.66		0.66	0.66	0.66
vC, conflicting volume	997			773			1810	1804	386	1429	1826	995
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	742			773			1966	1958	386	1393	1991	739
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			97			0	100	96	94	92	97
cM capacity (veh/h)	571			838			22	40	612	63	38	239

Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1
Volume Total	483	290	29	997	117	15
Volume Left	0	0	29	0	90	4
Volume Right	0	48	0	4	27	8
cSH	1700	1700	838	1700	28	85
Volume to Capacity	0.28	0.17	0.03	0.59	4.13	0.18
Queue Length 95th (ft)	0	0	3	0	Err	15
Control Delay (s)	0.0	0.0	9.4	0.0	Err	55.9
Lane LOS			A		F	F
Approach Delay (s)	0.0		0.3		Err	55.9
Approach LOS					F	F

Intersection Summary				
Average Delay	606.4			
Intersection Capacity Utilization	66.3%	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)	9	686	35	41	865	1	8	3	38	11	11	46
Future Volume (Veh/h)	9	686	35	41	865	1	8	3	38	11	11	46
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			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
Hourly flow rate (vph)	10	746	38	45	940	1	9	3	41	12	12	50
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					865							
pX, platoon unblocked	0.64						0.64	0.64		0.64	0.64	0.64
vC, conflicting volume	941			784			1872	1816	765	1858	1834	940
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	621			784			2084	1997	765	2063	2026	620
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			95			37	92	90	41	65	84
cM capacity (veh/h)	610			834			14	36	403	20	34	310

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	794	986	53	74
Volume Left	10	45	9	12
Volume Right	38	1	41	50
cSH	610	834	65	67
Volume to Capacity	0.02	0.05	0.81	1.10
Queue Length 95th (ft)	1	4	94	143
Control Delay (s)	0.5	1.5	166.9	246.0
Lane LOS	A	A	F	F
Approach Delay (s)	0.5	1.5	166.9	246.0
Approach LOS			F	F

Intersection Summary				
Average Delay	15.2			
Intersection Capacity Utilization	82.3%	ICU Level of Service	E	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	11	591	120	43	752	10	192	8	38	23	14	16
Future Volume (vph)	11	591	120	43	752	10	192	8	38	23	14	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.96			0.98	
Satd. Flow (prot)	1770	1863	1583	1770	1859			1752			1749	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.77			0.87	
Satd. Flow (perm)	1770	1863	1583	1770	1859			1409			1562	
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)	12	642	130	47	817	11	209	9	41	25	15	17
RTOR Reduction (vph)	0	0	30	0	0	0	0	7	0	0	14	0
Lane Group Flow (vph)	12	642	100	47	828	0	0	252	0	0	43	0
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA		Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2			6		
Actuated Green, G (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Effective Green, g (s)	5.0	53.5	53.5	5.0	53.5			18.0			18.0	
Actuated g/C Ratio	0.06	0.59	0.59	0.06	0.59			0.20			0.20	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5			4.5			4.5	
Lane Grp Cap (vph)	98	1107	941	98	1105			281			312	
v/s Ratio Prot	0.01	0.34		c0.03	c0.45							
v/s Ratio Perm			0.06					c0.18			0.03	
v/c Ratio	0.12	0.58	0.11	0.48	0.75			0.90			0.14	
Uniform Delay, d1	40.4	11.3	7.9	41.2	13.3			35.1			29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.5	2.2	0.2	15.9	4.7			32.6			0.9	
Delay (s)	43.0	13.5	8.1	57.1	18.0			67.7			30.6	
Level of Service	D	B	A	E	B			E			C	
Approach Delay (s)		13.1			20.1			67.7			30.6	
Approach LOS		B			C			E			C	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	13.5
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			