APPENDIX B
Intersection Levels of Service

Intersection	North/South Street	East/West Street	Jurisdiction	2035 No Build Level of Service				2035 Wilshire/La Cienega (Phase 1) Level of Service and Impact Determination							
				AM Peak Hour		PM Peak Hour		AM Peak Hour				PM Peak Hour			
				Delay (sec)	LOS per Delay	Delay (sec)	LOS per Delay	Delay (sec)	LOS per Delay	Change in Delay	Impact	Delay (sec)	LOS per Delay	Change in Delay	Impact
1	Normandie Ave/Irolo St	Wilshire Blvd	LA	75.4	E	153.6	F	63.1	E	-12.3	NO	149.4	F	-4.2	NO
2	Western Ave	6th St	LA	43.4	D	63.6	E	32.2	C	-11.2	NO	67.4	E	3.8	NO
3	Western Ave	Wilshire Blvd	LA	134.8	F	207.1	F	112.3	F	-22.5	NO	205.2	F	-1.9	NO
4	Western Ave	8th St	LA	63.0	E	49.6	D	46.7	D	-16.3	NO	47.2	D	-2.4	NO
5	Western Ave	Olympic Blvd	LA	97.0	F	101.2	F	94.8	F	-2.2	NO	103.5	F	2.3	NO
6	Wilton Pl	Wilshire Blvd	LA	92.0	F	120.4	F	86.5	F	-5.5	NO	99.6	F	-20.8	NO
7	Norton Ave	Wilshire Blvd	LA	23.8	C	10.0	A	22.8	C	-1.0	NO	9.2	A	-0.8	NO
8	Crenshaw Blvd	Wilshire Blvd	LA	103.9	F	99.3	F	85.7	F	-18.2	NO	98.4	F	-0.9	NO
9	Crenshaw Blvd	8th St	LA	19.4	B	20.1	C	19.7	B	0.3	NO	21.3	C	1.2	NO
10	Crenshaw Blvd	Olympic Blvd	LA	235.2	F	208.3	F	227.0	F	-8.2	NO	201.7	F	-6.6	NO
11	Lucerne Ave	Wilshire Blvd	LA	24.2	C	37.9	D	22.8	C	-1.4	NO	34.4	C	-3.5	NO
12	Rossmore Ave	Wilshire Blvd	LA	47.9	D	45.2	D	47.6	D	-0.3	NO	34.2	C	-11.0	NO
13	Sycamore Ave	Wilshire Blvd	LA	6.6	A	7.3	A	6.3	A	-0.3	NO	7.1	A	-0.2	NO
14	La Brea Ave	Beverly Blvd	LA	235.4	F	233.8	F	227.0	F	-8.4	NO	230.1	F	-3.7	NO
15	La Brea Ave	3rd St	LA	81.9	F	77.2	E	72.9	E	-9.0	NO	63.3	E	-13.9	NO
16	La Brea Ave	6th St	LA	118.2	F	118.7	F	107.7	F	-10.5	NO	115.2	F	-3.5	NO
17	La Brea Ave	Wilshire Blvd	LA	123.4	F	150.5	F	112.9	F	-10.5	NO	135.6	F	-14.9	NO
18	La Brea Ave	8th St	LA	17.3	B	25.8	C	16.6	B	-0.7	NO	21.9	C	-3.9	NO
19	La Brea Ave	Olympic Blvd	LA	176.6	F	252.6	F	164.6	F	-12.0	NO	201.9	F	-50.7	NO
20	Detroit St	Wilshire Blvd	LA	7.8	A	43.1	D	6.8	A	-1.0	NO	48.6	D	5.5	NO
21	Curson Ave	Wilshire Blvd	LA	81.1	F	30.1	C	62.4	E	-18.7	NO	33.2	C	3.1	NO
22	Spaulding Ave	Wilshire Blvd	LA	15.5	B	15.8	B	15.3	B	-0.2	NO	15.6	B	-0.2	NO
23	Fairfax Ave	Beverly Blvd	LA	34.9	C	85.4	F	35.0	C	0.1	NO	74.9	E	-10.5	NO
24	Fairfax Ave	3rd St	LA	117.5	F	101.5	F	119.4	F	1.9	NO	97.4	F	-4.1	NO
25	Fairfax Ave	6th St	LA	18.0	B	33.4	C	18.9	B	0.9	NO	33.6	C	0.2	NO
26	Fairfax Ave	Wilshire Blvd	LA	143.0	F	226.6	F	145.6	F	2.6	NO	210.4	F	-16.2	NO
27	Fairfax Ave	Del Valle Dr/8th St	LA	14.9	B	15.3	B	16.1	B	1.2	NO	16.5	B	1.2	NO
28	San Vicente Blvd	Olympic Blvd	LA	331.9	F	298.6	F	315.3	F	-16.6	NO	297.4	F	-1.2	NO
29	Fairfax Ave	San Vicente Blvd	LA	188.2	F	98.3	F	179.0	F	-9.2	NO	92.3	F	-6.0	NO
30	Fairfax Ave	Olympic Blvd	LA	205.8	F	307.2	F	199.8	F	-6.0	NO	291.1	F	-16.1	NO
31	Fairfax Ave	Pico Blvd	LA	97.7	F	93.8	F	99.3	F	1.6	NO	90.3	F	-3.5	NO
32	Crescent Heights Blvd/McCarthy Vista	Wilshire Blvd	LA	71.3	E	40.5	D	61.4	E	-9.9	NO	28.4	C	-12.1	NO
33	San Vicente Blvd	Wilshire Blvd	LA	80.5	F	206.8	F	81.7	F	1.2	NO	198.5	F	-8.3	NO
34	Gale Dr	Wilshire Blvd	BH	15.5	B	11.2	B	15.2	B	-0.3	NO	11.2	B	0.0	NO
35	La Cienega Blvd	3rd St	LA	144.4	F	116.2	F	144.6	F	0.2	NO	109.5	F	-6.7	NO
36	San Vicente Blvd/Le Doux Rd	Burton Wy	LA	75.7	E	155.9	F	78.0	E	2.3	NO	81.7	F	-74.2	NO
37	La Cienega Blvd	San Vicente Blvd/Burton Wy	LA	73.0	E	38.6	D	65.4	E	-7.6	NO	34.0	C	-4.6	NO
38	La Cienega Blvd	Clifton Wy	LA	22.0	C	44.8	D	18.1	B	-3.9	NO	42.7	D	-2.1	NO
39	La Cienega Blvd	Wilshire Blvd	BH	138.5	F	165.2	F	136.9	F	-1.6	NO	164.9	F	-0.3	NO
40	La Cienega Blvd	Gregory Wy	BH	65.5	E	54.8	D	68.1	E	2.6	NO	49.7	D	-5.1	NO
41	La Cienega Blvd	Olympic Blvd	LA	139.5	F	249.7	F	130.0	F	-9.5	NO	240.5	F	-9.2	NO
42	La Cienega Blvd	Pico Blvd	LA	108.9	F	205.3	F	104.3	F	-4.6	NO	197.7	F	-7.6	NO
43	San Vicente Blvd	3rd St	LA	45.1	D	54.4	D	45.4	D	0.3	NO	48.3	D	-6.1	NO
44	Willaman Dr	Wilshire Blvd	BH	12.1	B	10.2	B	13.5	B	1.4	NO	10.7	B	0.5	NO
45	Robertson Blvd	Burton Wy	BH	54.9	D	92.9	F	53.8	D	-1.1	NO	84.4	F	-8.5	NO
46	Robertson Blvd	Wilshire Blvd	BH	81.8	F	92.1	F	78.3	E	-3.5	NO	93.5	F	1.4	NO
47	Robertson Blvd	Olympic Blvd	BH	105.3	F	180.6	F	96.6	F	-8.7	NO	155.3	F	-25.3	NO
48	Doheny Dr	Wilshire Blvd	BH	83.5	F	76.8	E	80.2	F	-3.3	NO	74.7	E	-2.1	NO
138	Orlando Ave	Beverly Blvd	LA	17.4	B	28.5	C	14.1	B	-3.3	NO	27.7	C	-0.8	NO
145	La Cienega Blvd	Oakwood Ave	LA	32.5	C	62.7	E	32.4	C	-0.1	NO	49.6	D	-13.1	NO
146	La Cienega Blvd	Beverly Blvd	LA	108.2	F	167.6	F	103.5	F	-4.7	NO	167.7	F	0.1	NO
147	San Vicente Blvd	Beverly Blvd	LA	36.6	D	73.4	E	38.2	D	1.6	NO	65.5	E	-7.9	NO
154	Robertson Blvd	Beverly Blvd	LA	88.9	F	89.8	F	91.2	F	2.3	NO	87.1	F	-2.7	NO

NOTE:

LA City of Los Angeles

BH City of Beverly Hills

APPENDIX C
Level of Service Worksheets

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00		0.95	1.00
Frt	1.00	0.97		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1583	4415		1583	4537			3145	1417		3148	1417
Flt Permitted	0.11	1.00		0.95	1.00			0.56	1.00		0.61	1.00
Satd. Flow (perm)	177	4415		1583	4537			1784	1417		1925	1417
Volume (vph)	63	1465	362	67	1691	33	114	711	127	103	776	376
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	66	1542	381	71	1780	35	120	748	134	108	817	396
RTOR Reduction (vph)	0	46	0	0	2	0	0	0	83	0	0	7
Lane Group Flow (vph)	66	1877	0	71	1813	0	0	868	51	0	925	389
Turn Type	Perm			Prot			Perm		Perm	Perm		Perm
Protected Phases		6		5	2			8			4	
Permitted Phases	6						8		8	4		4
Actuated Green, G (s)	37.6	37.6		6.4	48.0			33.5	33.5		33.5	33.5
Effective Green, g (s)	37.6	37.6		6.4	48.0			34.0	34.0		34.0	34.0
Actuated g/C Ratio	0.42	0.42		0.07	0.53			0.38	0.38		0.38	0.38
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	1844		113	2420			674	535		727	535
v/s Ratio Prot		c0.43		0.04	c0.40							
v/s Ratio Perm	0.37							c0.49	0.04		0.48	0.27
v/c Ratio	0.89	1.02		0.63	0.75			1.29	0.09		1.27	0.73
Uniform Delay, d1	24.3	26.2		40.6	16.3			28.0	18.1		28.0	24.0
Progression Factor	1.49	1.55		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	46.3	18.8		10.4	2.2			140.5	0.4		133.2	8.4
Delay (s)	82.6	59.4		51.1	18.5			168.5	18.4		161.2	32.4
Level of Service	F	E		D	B			F	B		F	C
Approach Delay (s)		60.1			19.7			148.5			122.6	
Approach LOS		E			B			F			F	

Intersection Summary			
HCM Average Control Delay	75.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	4.0
Lane Util. Factor		0.95			0.95			0.95			0.95	1.00
Frpb, ped/bikes		1.00			0.99			0.99			1.00	0.83
Flpb, ped/bikes		1.00			1.00			1.00			1.00	1.00
Frt		0.99			0.99			0.99			1.00	0.85
Flt Protected		1.00			1.00			1.00			1.00	1.00
Satd. Flow (prot)		3124			3088			3127			3167	1171
Flt Permitted		1.00			1.00			1.00			1.00	1.00
Satd. Flow (perm)		3124			3088			3127			3167	1171
Volume (vph)	0	970	59	0	1037	84	0	1259	58	0	1616	95
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	980	60	0	1047	85	0	1272	59	0	1632	96
RTOR Reduction (vph)	0	3	0	0	7	0	0	4	0	0	0	17
Lane Group Flow (vph)	0	1037	0	0	1125	0	0	1327	0	0	1632	79
Confl. Peds. (#/hr)	76		47	47		76	70		83	83		70
Confl. Bikes (#/hr)			7			7			12			9
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)		40.2			40.2			40.2			40.2	40.2
Effective Green, g (s)		41.0			41.0			41.0			41.0	41.0
Actuated g/C Ratio		0.46			0.46			0.46			0.46	0.46
Clearance Time (s)		4.8			4.8			4.8			4.8	4.8
Vehicle Extension (s)		3.0			3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		1423			1407			1425			1443	533
v/s Ratio Prot		0.33			c0.36			0.42			c0.52	
v/s Ratio Perm												0.07
v/c Ratio		0.73			0.80			0.93			1.13	0.15
Uniform Delay, d1		20.0			21.0			23.2			24.5	14.3
Progression Factor		1.00			1.00			0.61			1.00	1.00
Incremental Delay, d2		3.3			4.9			1.5			68.2	0.6
Delay (s)		23.3			25.8			15.7			92.7	14.9
Level of Service		C			C			B			F	B
Approach Delay (s)		23.3			25.8			15.7			88.4	
Approach LOS		C			C			B			F	

Intersection Summary			
HCM Average Control Delay	43.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4490		1583	4463		1583	3027		1583	3055	
Flt Permitted	0.14	1.00		0.14	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	228	4490		230	4463		230	3027		230	3055	
Volume (vph)	159	1229	47	121	1533	57	129	996	101	265	1243	140
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	171	1322	51	130	1648	61	139	1071	109	285	1337	151
RTOR Reduction (vph)	0	5	0	0	4	0	0	9	0	0	9	0
Lane Group Flow (vph)	171	1368	0	130	1705	0	139	1171	0	285	1479	0
Confl. Peds. (#/hr)	529		124	124		529	153		349	349		153
Confl. Bikes (#/hr)			4			6			8			9
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	35.9	27.9		35.3	27.6		35.8	27.8		35.8	27.8	
Effective Green, g (s)	37.3	29.3		36.7	29.0		37.0	29.0		37.0	29.0	
Actuated g/C Ratio	0.41	0.33		0.41	0.32		0.41	0.32		0.41	0.32	
Clearance Time (s)	4.0	5.4		4.0	5.4		4.0	5.2		4.0	5.2	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	215	1462		210	1438		215	975		215	984	
v/s Ratio Prot	c0.07	0.30		0.05	c0.38		0.06	0.39		c0.12	c0.48	
v/s Ratio Perm	0.26			0.20			0.21			0.43		
v/c Ratio	0.80	0.94		0.62	1.19		0.65	1.20		1.33	1.50	
Uniform Delay, d1	22.0	29.4		19.7	30.5		41.0	30.5		23.2	30.5	
Progression Factor	1.84	0.84		0.87	0.88		1.09	1.21		1.62	1.45	
Incremental Delay, d2	11.0	8.0		3.3	88.1		3.5	96.0		149.5	226.6	
Delay (s)	51.5	32.9		20.4	115.0		48.2	132.9		187.3	270.8	
Level of Service	D	C		C	F		D	F		F	F	
Approach Delay (s)		34.9			108.3			123.9			257.4	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	134.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	110.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3122		1583	3069		1583	3159		1583	3156	
Flt Permitted	0.32	1.00		0.32	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	530	3122		536	3069		163	3159		163	3156	
Volume (vph)	57	538	56	64	477	123	41	1135	19	158	1382	33
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	64	604	63	72	536	138	46	1275	21	178	1553	37
RTOR Reduction (vph)	0	5	0	0	13	0	0	1	0	0	2	0
Lane Group Flow (vph)	64	662	0	72	661	0	46	1295	0	178	1588	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	40.4	40.4		40.4	40.4		40.3	40.3		40.3	40.3	
Effective Green, g (s)	41.0	41.0		41.0	41.0		41.0	41.0		41.0	41.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.46	0.46		0.46	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	241	1422		244	1398		74	1439		74	1438	
v/s Ratio Prot		0.21			c0.22			0.41			0.50	
v/s Ratio Perm	0.12			0.13			0.28			c1.09		
v/c Ratio	0.27	0.47		0.30	0.47		0.62	0.90		2.41	1.10	
Uniform Delay, d1	15.2	16.9		15.4	17.0		18.6	22.6		24.5	24.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.67	0.66	
Incremental Delay, d2	2.7	1.1		3.1	1.1		33.4	9.3		636.2	48.2	
Delay (s)	17.9	18.0		18.5	18.1		52.0	31.9		652.7	64.4	
Level of Service	B	B		B	B		D	C		F	E	
Approach Delay (s)		18.0			18.2			32.6			123.6	
Approach LOS		B			B			C			F	

Intersection Summary			
HCM Average Control Delay	63.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4522		1583	4507		1583	3167	1417	1583	3167	1417
Flt Permitted	0.11	1.00		0.12	1.00		0.12	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	185	4522		192	4507		197	3167	1417	196	3167	1417
Volume (vph)	70	1800	77	64	1644	111	129	979	86	169	1207	130
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	1856	79	66	1695	114	133	1009	89	174	1244	134
RTOR Reduction (vph)	0	4	0	0	7	0	0	0	20	0	0	31
Lane Group Flow (vph)	72	1931	0	66	1802	0	133	1009	69	174	1244	103
Turn Type	pm+pt			pm+pt			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8	5	7	4	1
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	42.4	35.0		39.8	33.7		40.8	32.9	39.0	41.0	33.0	40.4
Effective Green, g (s)	43.4	36.0		40.8	34.7		41.8	33.9	40.0	42.0	34.0	41.4
Actuated g/C Ratio	0.43	0.36		0.41	0.35		0.42	0.34	0.40	0.42	0.34	0.41
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	184	1628		163	1564		192	1074	623	193	1077	643
v/s Ratio Prot	c0.03	c0.43		0.02	0.40		0.05	0.32	0.01	c0.07	c0.39	0.01
v/s Ratio Perm	0.14			0.14			0.24		0.04	0.31		0.06
v/c Ratio	0.39	1.19		0.40	1.15		0.69	0.94	0.11	0.90	1.16	0.16
Uniform Delay, d1	23.1	32.0		24.3	32.6		24.2	32.1	18.8	22.7	33.0	18.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	90.2		1.6	76.3		10.3	16.3	0.1	38.4	80.6	0.1
Delay (s)	24.4	122.2		25.9	108.9		34.5	48.3	18.9	61.2	113.6	18.5
Level of Service	C	F		C	F		C	D	B	E	F	B
Approach Delay (s)		118.7			106.0			44.7			99.5	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	97.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4508		1583	4525		1583	3134		1583	3065	
Flt Permitted	0.09	1.00		0.09	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	145	4508		145	4525		185	3134		185	3065	
Volume (vph)	173	1620	105	143	1767	68	113	996	73	77	1159	314
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	182	1705	111	151	1860	72	119	1048	77	81	1220	331
RTOR Reduction (vph)	0	8	0	0	4	0	0	6	0	0	4	0
Lane Group Flow (vph)	182	1808	0	151	1928	0	119	1119	0	81	1547	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		35.5	35.5		35.5	35.5	
Effective Green, g (s)	46.0	46.0		46.0	46.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	2304		74	2313		74	1254		74	1226	
v/s Ratio Prot		0.40			0.43			0.36			0.50	
v/s Ratio Perm	c1.26			1.04			c0.64			0.44		
v/c Ratio	2.46	0.78		2.04	0.83		1.61	0.89		1.09	1.26	
Uniform Delay, d1	22.0	18.0		22.0	18.7		27.0	25.2		27.0	27.0	
Progression Factor	1.50	1.57		1.33	1.36		1.00	1.00		1.00	1.00	
Incremental Delay, d2	683.9	1.9		472.5	0.3		327.4	9.9		132.8	124.4	
Delay (s)	716.8	30.1		501.7	25.8		354.4	35.1		159.8	151.4	
Level of Service	F	C		F	C		F	D		F	F	
Approach Delay (s)		92.6			60.3			65.6			151.9	
Approach LOS		F			E			E			F	

Intersection Summary			
HCM Average Control Delay	92.0	HCM Level of Service	F
HCM Volume to Capacity ratio	2.08		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	119.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		1.00	
Satd. Flow (prot)	1583	4534		1583	4536			1638	1417		1577	
Flt Permitted	0.07	1.00		0.07	1.00			0.65	1.00		0.96	
Satd. Flow (perm)	110	4534		110	4536			1078	1417		1519	
Volume (vph)	31	1722	42	86	2165	47	65	121	125	18	112	75
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	39	2180	53	109	2741	59	82	153	158	23	142	95
RTOR Reduction (vph)	0	2	0	0	2	0	0	0	5	0	1	0
Lane Group Flow (vph)	39	2231	0	109	2798	0	0	235	153	0	259	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	60.8	60.8		60.8	60.8			20.7	20.7		20.7	
Effective Green, g (s)	60.8	60.8		60.8	60.8			21.2	21.2		21.2	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.24	0.24		0.24	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	74	3063		74	3064			254	334		358	
v/s Ratio Prot		0.49			0.62							
v/s Ratio Perm	0.36			c0.99				c0.22	0.11		0.17	
v/c Ratio	0.53	0.73		1.47	0.91			0.93	0.46		0.72	
Uniform Delay, d1	7.4	9.3		14.6	12.4			33.6	29.5		31.7	
Progression Factor	1.00	1.00		1.20	1.21			1.00	1.00		1.00	
Incremental Delay, d2	24.3	1.6		254.1	3.7			36.6	1.0		7.1	
Delay (s)	31.7	10.9		271.5	18.7			70.2	30.5		38.8	
Level of Service	C	B		F	B			E	C		D	
Approach Delay (s)		11.2			28.1			54.3			38.8	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	23.8	HCM Level of Service	C
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	0.91
Frpb, ped/bikes	0.98		1.00	1.00	0.98	0.91
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	0.98	0.85
Flt Protected	1.00		0.95	1.00	0.96	1.00
Satd. Flow (prot)	4352		1583	4550	2955	1168
Flt Permitted	1.00		0.09	1.00	0.96	1.00
Satd. Flow (perm)	4352		148	4550	2955	1168
Volume (vph)	1354	245	552	1666	645	493
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1410	255	575	1735	672	514
RTOR Reduction (vph)	28	0	0	0	19	4
Lane Group Flow (vph)	1637	0	575	1735	784	379
Confl. Peds. (#/hr)		128	128			83
Confl. Bikes (#/hr)						2
Turn Type			pm+pt			pm+ov
Protected Phases	6		5	2	4	5
Permitted Phases			2			4
Actuated Green, G (s)	39.9		51.9	51.9	28.4	36.4
Effective Green, g (s)	40.9		52.9	52.9	29.1	37.1
Actuated g/C Ratio	0.45		0.59	0.59	0.32	0.41
Clearance Time (s)	5.0		4.0	5.0	4.7	4.0
Vehicle Extension (s)	3.0		2.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1978		215	2674	955	533
v/s Ratio Prot	0.38		c0.24	0.38	c0.27	0.06
v/s Ratio Perm			c1.33			0.26
v/c Ratio	0.83		2.67	0.65	0.82	0.71
Uniform Delay, d1	21.5		23.4	12.4	28.1	22.0
Progression Factor	1.00		1.00	1.00	0.37	0.30
Incremental Delay, d2	4.1		766.6	1.2	4.5	3.1
Delay (s)	25.6		790.1	13.6	14.9	9.6
Level of Service	C		F	B	B	A
Approach Delay (s)	25.6			206.9	13.2	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	103.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.98		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3078		1583	1667	1417	1583	3106		1583	3162	
Flt Permitted	0.43	1.00		0.51	1.00	1.00	0.32	1.00		0.17	1.00	
Satd. Flow (perm)	708	3078		858	1667	1417	532	3106		282	3162	
Volume (vph)	7	243	56	207	267	105	112	1010	148	26	733	7
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	253	58	216	278	109	117	1052	154	27	764	7
RTOR Reduction (vph)	0	0	0	0	0	76	0	13	0	0	1	0
Lane Group Flow (vph)	7	311	0	216	278	33	117	1193	0	27	770	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)	26.4	26.4		26.4	26.4	26.4	54.3	54.3		54.3	54.3	
Effective Green, g (s)	27.0	27.0		27.0	27.0	27.0	55.0	55.0		55.0	55.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	212	923		257	500	425	325	1898		172	1932	
v/s Ratio Prot		0.10			0.17			c0.38			0.24	
v/s Ratio Perm	0.01			c0.25		0.02	0.22			0.10		
v/c Ratio	0.03	0.34		0.84	0.56	0.08	0.36	0.63		0.16	0.40	
Uniform Delay, d1	22.3	24.5		29.5	26.5	22.6	8.7	11.1		7.5	9.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.49	1.79		0.19	0.28	
Incremental Delay, d2	0.3	1.0		26.9	4.4	0.4	0.3	0.1		0.2	0.1	
Delay (s)	22.6	25.5		56.3	30.9	22.9	13.3	19.9		1.6	2.6	
Level of Service	C	C		E	C	C	B	B		A	A	
Approach Delay (s)		25.5			38.6			19.3			2.6	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM Average Control Delay	19.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4489		1583	4527		1583	3142		1583	3167	1417
Flt Permitted	0.15	1.00		0.95	1.00		0.13	1.00		0.15	1.00	1.00
Satd. Flow (perm)	248	4489		1583	4527		223	3142		257	3167	1417
Volume (vph)	64	1569	153	140	2472	87	189	1134	61	56	1051	145
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	70	1724	168	154	2716	96	208	1246	67	62	1155	159
RTOR Reduction (vph)	0	13	0	0	4	0	0	4	0	0	0	113
Lane Group Flow (vph)	70	1879	0	154	2808	0	208	1309	0	62	1155	46
Turn Type	pm+pt			Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2						4			8		8
Actuated Green, G (s)	31.3	26.0		11.1	30.9		39.5	29.5		30.9	24.9	24.9
Effective Green, g (s)	32.6	26.9		10.6	31.8		40.5	30.5		31.9	25.9	25.9
Actuated g/C Ratio	0.36	0.30		0.12	0.35		0.45	0.34		0.35	0.29	0.29
Clearance Time (s)	4.4	4.9		3.5	4.9		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	174	1342		186	1600		261	1065		179	911	408
v/s Ratio Prot	0.03	0.42		c0.10	c0.62		c0.09	c0.42		0.02	0.36	
v/s Ratio Perm	0.12						0.27			0.10		0.03
v/c Ratio	0.40	1.40		0.83	1.76		0.80	1.23		0.35	1.27	0.11
Uniform Delay, d1	23.2	31.6		38.8	29.1		20.6	29.8		40.8	32.0	23.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.82	0.79	0.46
Incremental Delay, d2	1.5	184.8		25.1	342.4		15.4	111.5		1.1	128.8	0.5
Delay (s)	24.7	216.3		63.9	371.5		36.1	141.2		34.5	154.1	11.4
Level of Service	C	F		E	F		D	F		C	F	B
Approach Delay (s)		209.5			355.5			126.9			132.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	235.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	117.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	1.00
Satd. Flow (prot)	1583	4522		1583	4538			1626	1417		1644	1417
Flt Permitted	0.09	1.00		0.09	1.00			0.98	1.00		0.99	1.00
Satd. Flow (perm)	145	4522		148	4538			1626	1417		1644	1417
Volume (vph)	20	1505	64	18	2098	39	142	145	20	36	94	10
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	1552	66	19	2163	40	146	149	21	37	97	10
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	16	0	0	9
Lane Group Flow (vph)	21	1618	0	19	2201	0	0	295	5	0	134	1
Turn Type	Perm			Perm			Split		Perm	Split		Perm
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2					4			3
Actuated Green, G (s)	44.2	44.2		44.2	44.2			19.0	19.0		9.9	9.9
Effective Green, g (s)	46.1	46.1		46.1	46.1			20.5	20.5		11.4	11.4
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.23	0.23		0.13	0.13
Clearance Time (s)	5.9	5.9		5.9	5.9			5.5	5.5		5.5	5.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	2316		76	2324			370	323		208	179
v/s Ratio Prot		0.36			c0.49			c0.18			c0.08	
v/s Ratio Perm	0.15			0.13					0.00			0.00
v/c Ratio	0.28	0.70		0.25	0.95			0.80	0.01		0.64	0.01
Uniform Delay, d1	12.5	16.7		12.3	20.8			32.8	26.9		37.4	34.4
Progression Factor	0.62	0.54		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	6.7	1.3		7.7	9.8			11.3	0.0		6.7	0.0
Delay (s)	14.5	10.2		20.0	30.6			44.1	26.9		44.1	34.4
Level of Service	B	B		B	C			D	C		D	C
Approach Delay (s)		10.3			30.5			43.0			43.4	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	24.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.96			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	1.00
Satd. Flow (prot)	1583	4510		1583	4464			1562			1606	1417
Flt Permitted	0.10	1.00		0.13	1.00			0.98			0.96	1.00
Satd. Flow (perm)	161	4510		223	4464			1562			1606	1417
Volume (vph)	81	1203	74	17	1874	270	83	45	57	319	103	289
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	83	1228	76	17	1912	276	85	46	58	326	105	295
RTOR Reduction (vph)	0	8	0	0	21	0	0	18	0	0	0	64
Lane Group Flow (vph)	83	1296	0	17	2167	0	0	171	0	0	431	231
Turn Type	Perm			Perm			Split			Split		Perm
Protected Phases		6			2		3	3		4	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	39.8	39.8		39.8	39.8			9.6			24.7	24.7
Effective Green, g (s)	41.3	41.3		41.3	41.3			11.0			25.7	25.7
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.12			0.29	0.29
Clearance Time (s)	5.5	5.5		5.5	5.5			5.4			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	74	2070		102	2048			191			459	405
v/s Ratio Prot		0.29			0.49			c0.11			c0.27	
v/s Ratio Perm	c0.51			0.08								0.16
v/c Ratio	1.12	0.63		0.17	1.06			0.90			0.94	0.57
Uniform Delay, d1	24.4	18.5		14.3	24.4			38.9			31.4	27.4
Progression Factor	1.00	1.00		1.42	1.12			1.00			1.00	1.00
Incremental Delay, d2	141.5	1.4		1.2	30.9			37.5			27.0	1.8
Delay (s)	165.8	19.9		21.6	58.2			76.5			58.4	29.3
Level of Service	F	B		C	E			E			E	C
Approach Delay (s)		28.7			57.9			76.5			46.6	
Approach LOS		C			E			E			D	

Intersection Summary			
HCM Average Control Delay	47.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor		0.91		1.00	0.91			1.00			1.00	
Frpb, ped/bikes		1.00		1.00	1.00			0.98			0.99	
Flpb, ped/bikes		1.00		0.99	1.00			1.00			1.00	
Frt		0.99		1.00	1.00			0.92			0.94	
Flt Protected		1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)		4243		1473	4263			1409			1456	
Flt Permitted		1.00		0.17	1.00			0.95			0.98	
Satd. Flow (perm)		4243		266	4263			1352			1435	
Volume (vph)	0	1243	46	42	1871	37	10	17	37	9	67	59
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1322	49	45	1990	39	11	18	39	10	71	63
RTOR Reduction (vph)	0	3	0	0	1	0	0	32	0	0	7	0
Lane Group Flow (vph)	0	1368	0	45	2028	0	0	36	0	0	137	0
Confl. Peds. (#/hr)	25		36	36		25	8		5	5		8
Confl. Bikes (#/hr)			5			4						
Turn Type				Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases				2			8			4		
Actuated Green, G (s)		67.0		67.0	67.0			15.5			15.5	
Effective Green, g (s)		66.5		66.5	66.5			15.5			15.5	
Actuated g/C Ratio		0.74		0.74	0.74			0.17			0.17	
Clearance Time (s)		3.5		3.5	3.5			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		3135		197	3150			233			247	
v/s Ratio Prot		0.32			c0.48							
v/s Ratio Perm				0.17				0.03			c0.10	
v/c Ratio		0.44		0.23	0.64			0.15			0.56	
Uniform Delay, d1		4.5		3.7	5.9			31.7			34.1	
Progression Factor		0.36		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.0		2.7	1.0			0.3			2.7	
Delay (s)		1.7		6.4	6.9			32.0			36.8	
Level of Service		A		A	A			C			D	
Approach Delay (s)		1.7			6.9			32.0			36.8	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	6.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	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												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2965		1490	4260		1490	4204	
Flt Permitted	0.13	1.00	1.00	0.12	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	202	2980	1333	194	2965		216	4260		213	4204	
Volume (vph)	90	971	85	161	1608	58	90	1414	50	120	2076	288
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1022	89	169	1693	61	95	1488	53	126	2185	303
RTOR Reduction (vph)	0	0	22	0	3	0	0	4	0	0	19	0
Lane Group Flow (vph)	95	1022	67	169	1751	0	95	1537	0	126	2469	0
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	3	8	1	7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	35.6	30.0	36.5	38.4	31.4		34.5	28.0		35.5	28.5	
Effective Green, g (s)	36.6	31.0	37.5	39.4	32.4		35.5	29.0		36.5	29.5	
Actuated g/C Ratio	0.41	0.34	0.42	0.44	0.36		0.39	0.32		0.41	0.33	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.8	3.0	3.0	4.6		3.0	4.3		3.0	5.5	
Lane Grp Cap (vph)	162	1026	615	186	1067		177	1373		186	1378	
v/s Ratio Prot	0.04	0.34	0.01	c0.07	c0.59		0.04	0.36		c0.05	c0.59	
v/s Ratio Perm	0.20		0.04	0.33			0.17			0.22		
v/c Ratio	0.59	1.00	0.11	0.91	1.64		0.54	1.12		0.68	1.79	
Uniform Delay, d1	22.3	29.4	16.0	19.9	28.8		41.4	30.5		21.0	30.2	
Progression Factor	0.78	0.76	0.58	1.00	1.00		1.50	0.35		1.72	1.48	
Incremental Delay, d2	3.8	22.8	0.1	40.6	292.9		0.9	57.1		0.9	356.4	
Delay (s)	21.3	45.2	9.4	60.5	321.7		62.9	67.8		37.1	401.2	
Level of Service	C	D	A	E	F		E	E		D	F	
Approach Delay (s)		40.6			298.8			67.5			383.7	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM Average Control Delay	235.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	135.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2967		1490	4259		1490	4279	
Flt Permitted	0.11	1.00	1.00	0.10	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	179	2980	1333	161	2967		161	4259		161	4279	
Volume (vph)	33	1045	139	179	1454	44	104	1705	64	74	2119	10
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	34	1066	142	183	1484	45	106	1740	65	76	2162	10
RTOR Reduction (vph)	0	0	6	0	2	0	0	5	0	0	1	0
Lane Group Flow (vph)	34	1066	136	183	1527	0	106	1800	0	76	2171	0
Turn Type	Perm		Perm	pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	34.0	34.0	34.0	42.0	42.0		38.0	38.0		38.0	38.0	
Effective Green, g (s)	35.0	35.0	35.0	43.0	43.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.39	0.39	0.39	0.48	0.48		0.43	0.43		0.43	0.43	
Clearance Time (s)	5.0	5.0	5.0	3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	70	1159	518	136	1418		70	1846		70	1854	
v/s Ratio Prot		0.36		0.06	c0.51			0.42			0.51	
v/s Ratio Perm	0.19		0.10	c0.58			c0.66			0.47		
v/c Ratio	0.49	0.92	0.26	1.35	1.08		1.51	0.98		1.09	1.17	
Uniform Delay, d1	20.7	26.2	18.7	21.4	23.5		25.5	25.0		25.5	25.5	
Progression Factor	0.84	0.89	0.76	1.00	1.00		1.00	1.00		2.03	2.01	
Incremental Delay, d2	16.6	10.2	0.9	196.3	47.5		291.5	15.9		58.0	77.6	
Delay (s)	34.0	33.4	15.2	217.8	71.0		317.0	40.9		109.7	128.8	
Level of Service	C	C	B	F	E		F	D		F	F	
Approach Delay (s)		31.3			86.7			56.2			128.2	
Approach LOS		C			F			E			F	

Intersection Summary			
HCM Average Control Delay	81.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	128.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.91		1.00	0.91	
Frt		0.99			0.99		1.00	1.00		1.00	0.99	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2937			2948		1490	4267		1490	4236	
Flt Permitted		1.00			1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)		2937			2948		285	4267		285	4236	
Volume (vph)	0	639	69	0	1156	91	59	1747	43	176	2034	158
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	645	70	0	1168	92	60	1765	43	178	2055	160
RTOR Reduction (vph)	0	0	0	0	1	0	0	4	0	0	14	0
Lane Group Flow (vph)	0	715	0	0	1260	0	60	1804	0	178	2201	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		29.1			29.1		21.3	21.3		21.3	21.3	
Effective Green, g (s)		30.0			30.0		22.0	22.0		22.0	22.0	
Actuated g/C Ratio		0.50			0.50		0.37	0.37		0.37	0.37	
Clearance Time (s)		4.9			4.9		4.7	4.7		4.7	4.7	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1469			1474		105	1565		105	1553	
v/s Ratio Prot		0.24			c0.43			0.42			0.52	
v/s Ratio Perm							0.21			c0.62		
v/c Ratio		0.49			0.85		0.57	1.15		1.70	1.42	
Uniform Delay, d1		9.9			13.1		15.2	19.0		19.0	19.0	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3			5.1		20.6	76.6		350.2	191.6	
Delay (s)		10.2			18.2		35.9	95.6		369.2	210.6	
Level of Service		B			B		D	F		F	F	
Approach Delay (s)		10.2			18.2			93.7			222.4	
Approach LOS		B			B			F			F	

Intersection Summary			
HCM Average Control Delay	118.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4106		1488	4230		1490	4222		1490	4125	
Flt Permitted	0.14	1.00		0.14	1.00		0.13	1.00		0.95	1.00	
Satd. Flow (perm)	216	4106		215	4230		202	4222		1490	4125	
Volume (vph)	121	1084	175	195	1615	80	149	1570	110	215	1560	256
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	122	1095	177	197	1631	81	151	1586	111	217	1576	259
RTOR Reduction (vph)	0	24	0	0	6	0	0	9	0	0	25	0
Lane Group Flow (vph)	122	1248	0	197	1706	0	151	1688	0	217	1810	0
Confl. Peds. (#/hr)	86		120	120		86	89		48	48		89
Confl. Bikes (#/hr)			8			5			3			4
Turn Type	pm+pt			pm+pt			pm+pt			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					
Actuated Green, G (s)	36.4	29.0		36.6	29.1		38.5	31.0		7.5	31.0	
Effective Green, g (s)	35.9	29.0		36.1	29.1		38.0	31.0		7.0	31.0	
Actuated g/C Ratio	0.40	0.32		0.40	0.32		0.42	0.34		0.08	0.34	
Clearance Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	184	1323		185	1368		185	1454		116	1421	
v/s Ratio Prot	0.05	0.30		c0.08	c0.40		0.06	0.40		c0.15	c0.44	
v/s Ratio Perm	0.21			0.34			0.28					
v/c Ratio	0.66	0.94		1.06	1.25		0.82	1.16		1.87	1.27	
Uniform Delay, d1	22.3	29.7		22.4	30.4		42.6	29.5		41.5	29.5	
Progression Factor	1.42	0.76		1.37	0.81		1.78	0.74		1.00	1.00	
Incremental Delay, d2	8.3	14.0		76.1	116.0		18.0	78.6		422.7	128.9	
Delay (s)	39.9	36.5		106.9	140.8		93.7	100.3		464.2	158.4	
Level of Service	D	D		F	F		F	F		F	F	
Approach Delay (s)		36.8			137.3			99.8			190.7	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	123.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	114.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1455			1522		1490	4270		1489	4255	
Flt Permitted		0.91			0.90		0.07	1.00		0.08	1.00	
Satd. Flow (perm)		1344			1392		110	4270		127	4255	
Volume (vph)	29	59	57	58	161	26	91	1761	26	9	1880	67
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	61	59	60	166	27	94	1815	27	9	1938	69
RTOR Reduction (vph)	0	2	0	0	3	0	0	1	0	0	3	0
Lane Group Flow (vph)	0	148	0	0	250	0	94	1841	0	9	2004	0
Confl. Peds. (#/hr)	6		10	10		6	21		10	10		5
Confl. Bikes (#/hr)			2			2			2			
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		24.0			24.0		56.5	56.5		56.5	56.5	
Effective Green, g (s)		25.0			25.0		57.0	57.0		57.0	57.0	
Actuated g/C Ratio		0.28			0.28		0.63	0.63		0.63	0.63	
Clearance Time (s)		5.0			5.0		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		373			387		70	2704		80	2695	
v/s Ratio Prot								0.43			0.47	
v/s Ratio Perm		0.11			c0.18		c0.85			0.07		
v/c Ratio		0.40			0.65		1.34	0.68		0.11	0.74	
Uniform Delay, d1		26.4			28.6		16.5	10.6		6.5	11.4	
Progression Factor		1.00			1.00		1.00	1.00		0.55	0.78	
Incremental Delay, d2		0.7			3.7		223.7	1.4		0.3	0.2	
Delay (s)		27.1			32.3		240.2	12.0		3.9	9.1	
Level of Service		C			C		F	B		A	A	
Approach Delay (s)		27.1			32.3			23.1			9.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4252		1490	4247		1490	4266		1490	4212	
Flt Permitted	0.12	1.00		0.11	1.00		0.95	1.00		0.13	1.00	
Satd. Flow (perm)	188	4252		168	4247		1490	4266		208	4212	
Volume (vph)	91	1246	62	94	1586	92	131	1730	45	154	1778	220
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	97	1326	66	100	1687	98	139	1840	48	164	1891	234
RTOR Reduction (vph)	0	5	0	0	6	0	0	3	0	0	15	0
Lane Group Flow (vph)	97	1387	0	100	1779	0	139	1885	0	164	2110	0
Turn Type	Perm			pm+pt			Prot			pm+pt		
Protected Phases		8		7	4		5			1	6	
Permitted Phases	8			4				2		6		
Actuated Green, G (s)	32.0	32.0		43.9	43.9		12.6	29.0		41.0	28.7	
Effective Green, g (s)	33.4	33.4		45.3	45.3		12.6	30.4		42.4	30.1	
Actuated g/C Ratio	0.33	0.33		0.45	0.45		0.13	0.30		0.42	0.30	
Clearance Time (s)	5.4	5.4		4.0	5.4		4.0	5.4		4.0	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		4.0	3.0	
Lane Grp Cap (vph)	63	1420		181	1924		188	1297		246	1268	
v/s Ratio Prot		0.33		0.04	c0.42		c0.09			0.08	c0.50	
v/s Ratio Perm	c0.52			0.21				0.44		0.20		
v/c Ratio	1.54	0.98		0.55	0.92		0.74	1.45		0.67	1.66	
Uniform Delay, d1	33.3	32.9		20.2	25.7		42.1	34.8		23.2	35.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	307.3	18.9		3.6	9.1		14.1	208.4		7.3	302.2	
Delay (s)	340.6	51.8		23.9	34.8		56.2	243.2		30.5	337.1	
Level of Service	F	D		C	C		E	F		C	F	
Approach Delay (s)		70.6			34.2			230.4			315.2	
Approach LOS		E			C			F			F	

Intersection Summary			
HCM Average Control Delay	176.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91			0.91			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.97		0.99	
Flpb, ped/bikes	0.99	1.00			1.00			1.00	1.00		0.99	
Frt	1.00	1.00			0.99			1.00	0.85		0.96	
Flt Protected	0.95	1.00			1.00			0.99	1.00		0.97	
Satd. Flow (prot)	1468	4254			4198			1553	1287		1438	
Flt Permitted	0.08	1.00			1.00			0.96	1.00		0.79	
Satd. Flow (perm)	117	4254			4198			1496	1287		1168	
Volume (vph)	53	1077	24	0	1863	71	10	57	30	82	24	39
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	55	1110	25	0	1921	73	10	59	31	85	25	40
RTOR Reduction (vph)	0	2	0	0	3	0	0	0	25	0	4	0
Lane Group Flow (vph)	55	1133	0	0	1991	0	0	69	6	0	146	0
Confl. Peds. (#/hr)	151		56	56		151	25		19	19		25
Confl. Bikes (#/hr)			4			7			1			1
Turn Type	Perm						Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6						8		8	4		
Actuated Green, G (s)	65.3	65.3			65.3			17.2	17.2		17.2	
Effective Green, g (s)	64.8	64.8			64.8			17.2	17.2		17.2	
Actuated g/C Ratio	0.72	0.72			0.72			0.19	0.19		0.19	
Clearance Time (s)	3.5	3.5			3.5			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	84	3063			3023			286	246		223	
v/s Ratio Prot		0.27			c0.47							
v/s Ratio Perm	0.47							0.05	0.00		c0.12	
v/c Ratio	0.65	0.37			0.66			0.24	0.02		0.65	
Uniform Delay, d1	6.7	4.8			6.7			30.9	29.6		33.7	
Progression Factor	1.49	1.24			0.63			1.00	1.00		1.00	
Incremental Delay, d2	26.4	0.3			0.1			0.4	0.0		6.7	
Delay (s)	36.4	6.2			4.3			31.3	29.6		40.4	
Level of Service	D	A			A			C	C		D	
Approach Delay (s)		7.6			4.3			30.8			40.4	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	7.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.94			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.99	
Satd. Flow (prot)	1583	4542		1583	4300	1218		1555			1573	
Flt Permitted	0.08	1.00		0.17	1.00	1.00		0.91			0.66	
Satd. Flow (perm)	128	4542		283	4300	1218		1416			1051	
Volume (vph)	44	1093	12	67	1678	122	26	165	172	120	257	198
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	51	1256	14	77	1929	140	30	190	198	138	295	228
RTOR Reduction (vph)	0	1	0	0	0	59	0	36	0	0	7	0
Lane Group Flow (vph)	51	1269	0	77	1929	81	0	382	0	0	654	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	52.0	52.0		52.0	52.0	52.0		30.0			30.0	
Effective Green, g (s)	52.0	52.0		52.0	52.0	52.0		30.0			30.0	
Actuated g/C Ratio	0.58	0.58		0.58	0.58	0.58		0.33			0.33	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	74	2624		164	2484	704		472			350	
v/s Ratio Prot		0.28			c0.45							
v/s Ratio Perm	0.40			0.27		0.07		0.27			c0.62	
v/c Ratio	0.69	0.48		0.47	0.78	0.11		0.81			1.87	
Uniform Delay, d1	13.3	11.1		11.0	14.6	8.6		27.4			30.0	
Progression Factor	1.98	2.17		0.90	0.96	0.98		1.00			1.00	
Incremental Delay, d2	39.9	0.6		7.5	2.0	0.3		9.9			401.2	
Delay (s)	66.4	24.7		17.5	16.0	8.6		37.3			431.2	
Level of Service	E	C		B	B	A		D			F	
Approach Delay (s)		26.3			15.6			37.3			431.2	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM Average Control Delay	81.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	1.00		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	4534		1583	4550	1530	
Flt Permitted	1.00		0.21	1.00	0.97	
Satd. Flow (perm)	4534		344	4550	1530	
Volume (vph)	1067	26	106	2002	41	28
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1123	27	112	2107	43	29
RTOR Reduction (vph)	2	0	0	0	20	0
Lane Group Flow (vph)	1148	0	112	2107	52	0
Turn Type			Perm			
Protected Phases	6			2	8	
Permitted Phases			2			
Actuated Green, G (s)	54.8		54.8	54.8	26.0	
Effective Green, g (s)	55.3		55.3	55.3	26.7	
Actuated g/C Ratio	0.61		0.61	0.61	0.30	
Clearance Time (s)	4.5		4.5	4.5	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2786		211	2796	454	
v/s Ratio Prot	0.25			c0.46	c0.03	
v/s Ratio Perm			0.33			
v/c Ratio	0.41		0.53	0.75	0.11	
Uniform Delay, d1	9.0		9.9	12.5	23.0	
Progression Factor	1.00		1.28	1.41	1.00	
Incremental Delay, d2	0.5		4.3	0.9	0.1	
Delay (s)	9.4		17.0	18.4	23.1	
Level of Service	A		B	B	C	
Approach Delay (s)	9.4			18.4	23.1	
Approach LOS	A			B	C	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417	1583	3167	1417	1583	3128	
Flt Permitted	0.12	1.00	1.00	0.14	1.00	1.00	0.14	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	208	3167	1417	231	3167	1417	238	3167	1417	216	3128	
Volume (vph)	59	872	104	222	1482	150	86	811	134	129	1333	120
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	60	890	106	227	1512	153	88	828	137	132	1360	122
RTOR Reduction (vph)	0	0	26	0	0	13	0	0	94	0	8	0
Lane Group Flow (vph)	60	890	80	227	1512	140	88	828	43	132	1474	0
Turn Type	Perm		Perm	pm+pt		pm+ov	Perm		Perm	pm+pt		
Protected Phases		6		5	2	7		8		7	4	
Permitted Phases	6		6	2		2	8		8	4		
Actuated Green, G (s)	31.0	31.0	31.0	43.0	43.0	48.7	28.1	28.1	28.1	37.0	37.0	
Effective Green, g (s)	32.0	32.0	32.0	44.0	44.0	50.0	28.0	28.0	28.0	38.0	38.0	
Actuated g/C Ratio	0.36	0.36	0.36	0.49	0.49	0.56	0.31	0.31	0.31	0.42	0.42	
Clearance Time (s)	5.0	5.0	5.0	3.2	5.0	4.3	3.9	3.9	3.9	4.3	5.0	
Vehicle Extension (s)	4.7	4.7	4.7	3.0	4.2	3.0	4.3	4.3	4.3	3.0	4.5	
Lane Grp Cap (vph)	74	1126	504	233	1548	850	74	985	441	182	1321	
v/s Ratio Prot		0.28		0.09	c0.48	0.01		0.26		0.05	c0.47	
v/s Ratio Perm	0.29		0.06	0.39		0.09	0.37		0.03	0.26		
v/c Ratio	0.81	0.79	0.16	0.97	0.98	0.16	1.19	0.84	0.10	0.73	1.12	
Uniform Delay, d1	26.3	26.0	19.8	17.8	22.5	9.8	31.0	28.9	22.0	19.2	26.0	
Progression Factor	1.00	1.00	1.00	2.15	0.32	0.36	0.51	0.49	0.15	0.71	0.50	
Incremental Delay, d2	60.8	5.7	0.7	12.2	3.3	0.0	113.1	2.3	0.1	6.3	57.6	
Delay (s)	87.1	31.7	20.5	50.4	10.6	3.5	128.9	16.3	3.4	20.0	70.6	
Level of Service	F	C	C	D	B	A	F	B	A	B	E	
Approach Delay (s)		33.7			14.8			24.1			66.5	
Approach LOS		C			B			C			E	

Intersection Summary			
HCM Average Control Delay	34.9	HCM Level of Service	C
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	121.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3143		1583	3167	1417	1583	3112		1583	3138	
Flt Permitted	0.11	1.00		0.25	1.00	1.00	0.14	1.00		0.12	1.00	
Satd. Flow (perm)	190	3143		417	3167	1417	230	3112		202	3138	
Volume (vph)	102	636	33	162	1510	168	69	932	122	180	1340	87
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	113	707	37	180	1678	187	77	1036	136	200	1489	97
RTOR Reduction (vph)	0	4	0	0	0	32	0	12	0	0	5	0
Lane Group Flow (vph)	113	740	0	180	1678	155	77	1160	0	200	1581	0
Turn Type	pm+pt			pm+pt		pm+ov	Perm			pm+pt		
Protected Phases	1	6		5	2	7		8		7	4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	38.9	33.1		38.9	33.1	38.9	27.1	27.1		36.1	36.1	
Effective Green, g (s)	40.0	35.0		40.0	35.0	40.0	29.0	29.0		38.0	38.0	
Actuated g/C Ratio	0.44	0.39		0.44	0.39	0.44	0.32	0.32		0.42	0.42	
Clearance Time (s)	3.2	5.9		3.2	5.9	3.2	5.9	5.9		3.2	5.9	
Vehicle Extension (s)	3.0	4.6		3.0	4.7	3.0	4.7	4.7		3.0	4.7	
Lane Grp Cap (vph)	162	1222		250	1232	693	74	1003		162	1325	
v/s Ratio Prot	0.04	0.24		c0.04	c0.53	0.01		0.37		0.07	c0.50	
v/s Ratio Perm	0.27			0.28		0.10	0.33			c0.45		
v/c Ratio	0.70	0.61		0.72	1.36	0.22	1.04	1.16		1.23	1.19	
Uniform Delay, d1	43.2	22.0		18.8	27.5	15.4	30.5	30.5		25.5	26.0	
Progression Factor	1.00	1.00		0.64	0.82	0.73	1.46	1.48		0.93	0.54	
Incremental Delay, d2	12.3	2.2		4.7	165.5	0.1	114.2	81.7		118.8	89.0	
Delay (s)	55.5	24.2		16.6	188.0	11.3	158.8	126.9		142.4	103.0	
Level of Service	E	C		B	F	B	F	F		F	F	
Approach Delay (s)		28.3			156.8			128.8			107.4	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	117.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	119.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94	1.00	1.00	0.91	1.00	0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1551	1640		3072	1667	1337	1583	3167	1287	1548	3091	
Flt Permitted	0.41	1.00		0.95	1.00	1.00	0.09	1.00	1.00	0.29	1.00	
Satd. Flow (perm)	677	1640		3072	1667	1337	142	3167	1287	465	3091	
Volume (vph)	27	247	25	280	476	107	10	759	74	40	1327	115
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	28	257	26	292	496	111	10	791	77	42	1382	120
RTOR Reduction (vph)	0	4	0	0	0	68	0	0	0	0	7	0
Lane Group Flow (vph)	28	279	0	292	496	43	10	791	77	42	1495	0
Confl. Peds. (#/hr)	28		6	6		28	43		36	36		43
Confl. Bikes (#/hr)			4			1			5			7
Turn Type	Perm			Prot		Perm	Perm		pm+ov	Perm		
Protected Phases		8		7	4			6	7		2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	20.2	20.2		10.0	34.2	34.2	46.2	46.2	56.2	46.2	46.2	
Effective Green, g (s)	21.0	21.0		10.0	35.0	35.0	47.0	47.0	57.0	47.0	47.0	
Actuated g/C Ratio	0.23	0.23		0.11	0.39	0.39	0.52	0.52	0.63	0.52	0.52	
Clearance Time (s)	4.8	4.8		4.0	4.8	4.8	4.8	4.8	4.0	4.8	4.8	
Vehicle Extension (s)	5.9	5.9		3.0	5.2	5.2	4.8	4.8	3.0	4.4	4.4	
Lane Grp Cap (vph)	158	383		341	648	520	74	1654	872	243	1614	
v/s Ratio Prot		0.17		0.10	c0.30			0.25	0.01		c0.48	
v/s Ratio Perm	0.04					0.03	0.07		0.05	0.09		
v/c Ratio	0.18	0.73		0.86	0.77	0.08	0.14	0.48	0.09	0.17	0.93	
Uniform Delay, d1	27.6	31.9		39.3	23.9	17.4	11.1	13.7	6.4	11.3	19.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.27	0.24	0.20	0.24	0.43	
Incremental Delay, d2	2.4	11.5		18.6	8.4	0.3	0.3	0.1	0.0	0.1	1.2	
Delay (s)	30.0	43.4		57.9	32.3	17.7	3.3	3.3	1.3	2.8	9.7	
Level of Service	C	D		E	C	B	A	A	A	A	A	
Approach Delay (s)		42.2			38.8			3.1			9.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.98		1.00	1.00	0.88
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4467		1578	4510		1583	3085		1583	3167	1252
Flt Permitted	0.14	1.00		0.15	1.00		0.13	1.00		0.95	1.00	1.00
Satd. Flow (perm)	238	4467		252	4510		222	3085		1583	3167	1252
Volume (vph)	118	905	52	181	1699	33	291	1016	68	151	1514	263
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	126	963	55	193	1807	35	310	1081	72	161	1611	280
RTOR Reduction (vph)	0	7	0	0	2	0	0	5	0	0	0	116
Lane Group Flow (vph)	126	1011	0	193	1840	0	310	1148	0	161	1611	164
Confl. Peds. (#/hr)	227		147	147		227	96		135	135		96
Confl. Bikes (#/hr)			2			6			8			6
Turn Type	pm+pt			pm+pt			pm+pt			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					4
Actuated Green, G (s)	33.8	27.0		33.8	27.0		35.8	29.0		10.8	33.0	33.0
Effective Green, g (s)	34.0	28.0		34.0	28.0		36.0	30.0		10.0	34.0	34.0
Actuated g/C Ratio	0.38	0.31		0.38	0.31		0.40	0.33		0.11	0.38	0.38
Clearance Time (s)	3.2	5.0		3.2	5.0		3.2	5.0		3.2	5.0	5.0
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	180	1390		184	1403		180	1028		176	1196	473
v/s Ratio Prot	0.05	0.23		c0.07	c0.41		c0.12	0.37		0.10	c0.51	
v/s Ratio Perm	0.22			0.33			c0.57					0.13
v/c Ratio	0.70	0.73		1.05	1.31		1.72	1.12		0.91	1.35	0.35
Uniform Delay, d1	42.6	27.6		23.9	31.0		44.2	30.0		39.6	28.0	20.0
Progression Factor	1.12	1.13		1.00	1.00		1.62	0.85		0.84	1.32	2.07
Incremental Delay, d2	9.2	2.7		79.8	145.4		343.3	63.6		32.3	159.8	1.3
Delay (s)	56.7	33.9		103.7	176.4		414.9	89.0		65.6	196.6	42.8
Level of Service	E	C		F	F		F	F		E	F	D
Approach Delay (s)		36.5			169.5			158.1			165.4	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	143.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor			1.00	0.95	0.91	0.95		0.95		1.00	0.95	
Frpb, ped/bikes			0.98	1.00	0.98	0.97		0.99		1.00	1.00	
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Frt			0.86	1.00	0.92	0.85		0.98		1.00	1.00	
Flt Protected			1.00	0.95	0.98	1.00		1.00		0.95	1.00	
Satd. Flow (prot)			1412	1502	1338	1303		3068		1576	3167	
Flt Permitted			1.00	0.95	0.98	1.00		1.00		0.14	1.00	
Satd. Flow (perm)			1412	1502	1338	1303		3068		227	3167	
Volume (vph)	0	0	18	172	0	217	0	1098	177	121	1218	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	19	181	0	228	0	1156	186	127	1282	0
RTOR Reduction (vph)	0	0	18	0	49	118	0	12	0	0	0	0
Lane Group Flow (vph)	0	0	1	115	95	32	0	1330	0	127	1282	0
Confl. Peds. (#/hr)	11		1	1		11	8		23	23		8
Confl. Bikes (#/hr)						5			5			1
Turn Type			custom	Perm		Perm				Perm		
Protected Phases					3			2			2	
Permitted Phases			4	3		3				2		
Actuated Green, G (s)			2.2	18.4	18.4	18.4		55.0		55.0	55.0	
Effective Green, g (s)			3.1	19.3	19.3	19.3		55.6		55.6	55.6	
Actuated g/C Ratio			0.03	0.21	0.21	0.21		0.62		0.62	0.62	
Clearance Time (s)			4.9	4.9	4.9	4.9		4.6		4.6	4.6	
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)			49	322	287	279		1895		140	1957	
v/s Ratio Prot								0.43			0.40	
v/s Ratio Perm			c0.00	c0.08	0.07	0.02				c0.56		
v/c Ratio			0.01	0.36	0.33	0.12		0.70		0.91	0.66	
Uniform Delay, d1			42.0	30.1	29.9	28.5		11.6		15.0	11.0	
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.38	0.84	
Incremental Delay, d2			0.1	0.7	0.7	0.2		2.2		9.3	0.2	
Delay (s)			42.1	30.8	30.6	28.7		13.8		29.8	9.4	
Level of Service			D	C	C	C		B		C	A	
Approach Delay (s)		42.1			29.9			13.8			11.2	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.91		1.00	0.86			0.86	
Frt		0.99			0.96		1.00	1.00			1.00	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		4483			4372		1583	5733			5733	
Flt Permitted		1.00			1.00		0.17	1.00			1.00	
Satd. Flow (perm)		4483			4372		284	5733			5733	
Volume (vph)	0	1347	148	0	1762	623	221	1357	0	0	1301	0
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	1361	149	0	1780	629	223	1371	0	0	1314	0
RTOR Reduction (vph)	0	13	0	0	64	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1497	0	0	2345	0	223	1371	0	0	1314	0
Turn Type							Perm					
Protected Phases		6			6			2			2	
Permitted Phases							2					
Actuated Green, G (s)		22.1			22.1		24.5	24.5			24.5	
Effective Green, g (s)		23.0			23.0		23.5	23.5			23.5	
Actuated g/C Ratio		0.23			0.23		0.24	0.24			0.24	
Clearance Time (s)		4.9			4.9		3.0	3.0			3.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1031			1006		67	1347			1347	
v/s Ratio Prot		0.33			c0.54			0.24			0.23	
v/s Ratio Perm							c0.79					
v/c Ratio		1.45			2.33		3.33	1.02			0.98	
Uniform Delay, d1		38.5			38.5		38.2	38.2			38.0	
Progression Factor		0.69			1.00		1.00	1.00			0.54	
Incremental Delay, d2		203.9			602.1		1084.9	29.1			3.6	
Delay (s)		230.6			640.6		1123.1	67.3			24.0	
Level of Service		F			F		F	E			C	
Approach Delay (s)		230.6			640.6			215.0			24.0	
Approach LOS		F			F			F			C	

Intersection Summary			
HCM Average Control Delay	331.9	HCM Level of Service	F
HCM Volume to Capacity ratio	2.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	53.5
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86	1.00		0.91	1.00		0.95		1.00	0.95	
Frt	1.00	1.00	0.85		1.00	0.85		1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1583	5733	1417		4550	1417		3166		1583	3139	
Flt Permitted	0.17	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	284	5733	1417		4550	1417		3166		1583	3139	
Volume (vph)	93	1035	40	0	1709	306	0	877	2	222	1139	71
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	96	1067	41	0	1762	315	0	904	2	229	1174	73
RTOR Reduction (vph)	0	0	31	0	0	194	0	0	0	0	5	0
Lane Group Flow (vph)	96	1067	10	0	1762	121	0	906	0	229	1242	0
Turn Type	Perm		Perm			Perm				Prot		
Protected Phases		2			2			8		7	4	
Permitted Phases	2		2			2						
Actuated Green, G (s)	24.5	24.5	24.5		24.5	24.5		31.0		5.0	31.0	
Effective Green, g (s)	23.5	23.5	23.5		23.5	23.5		32.5		5.0	32.5	
Actuated g/C Ratio	0.24	0.24	0.24		0.24	0.24		0.32		0.05	0.32	
Clearance Time (s)	3.0	3.0	3.0		3.0	3.0		5.5		4.0	5.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		5.0		3.0	4.0	
Lane Grp Cap (vph)	67	1347	333		1069	333		1029		79	1020	
v/s Ratio Prot		0.19			c0.39			0.29		c0.14	c0.40	
v/s Ratio Perm	0.34		0.01			0.09						
v/c Ratio	1.43	0.79	0.03		1.65	0.36		0.88		2.90	1.22	
Uniform Delay, d1	38.2	36.0	29.5		38.2	32.0		31.9		47.5	33.8	
Progression Factor	1.00	1.00	1.00		0.94	1.33		0.20		1.00	1.00	
Incremental Delay, d2	261.1	4.8	0.2		292.1	0.3		5.9		887.9	107.1	
Delay (s)	299.4	40.8	29.6		327.9	43.0		12.2		935.4	140.8	
Level of Service	F	D	C		F	D		B		F	F	
Approach Delay (s)		61.0			284.7			12.2			264.1	
Approach LOS		E			F			B			F	

Intersection Summary			
HCM Average Control Delay	188.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	1.00		1.00	1.00		1.00	1.00			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4540		1583	4549		1583	3154			3038	
Flt Permitted	0.17	1.00		0.17	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	290	4540		290	4549		1583	3154			3038	
Volume (vph)	42	1455	23	39	1768	2	55	839	23	0	823	306
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	43	1485	23	40	1804	2	56	856	23	0	840	312
RTOR Reduction (vph)	0	2	0	0	0	0	0	2	0	0	38	0
Lane Group Flow (vph)	43	1506	0	40	1806	0	56	877	0	0	1114	0
Turn Type	Perm			Perm			Prot					
Protected Phases		6			6		3	8			4	
Permitted Phases	6			6								
Actuated Green, G (s)	22.1	22.1		22.1	22.1		5.0	31.0			31.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		5.0	32.5			32.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.05	0.32			0.32	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.0	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	5.0			4.0	
Lane Grp Cap (vph)	67	1044		67	1046		79	1025			987	
v/s Ratio Prot		0.33			c0.40		c0.04	0.28			c0.37	
v/s Ratio Perm	0.15			0.14								
v/c Ratio	0.64	1.44		0.60	1.73		0.71	0.86			1.13	
Uniform Delay, d1	34.8	38.5		34.4	38.5		46.8	31.6			33.8	
Progression Factor	1.00	1.00		0.70	0.69		1.00	1.00			0.27	
Incremental Delay, d2	38.8	204.8		3.5	327.3		25.1	9.1			59.1	
Delay (s)	73.6	243.3		27.6	353.8		71.9	40.7			68.3	
Level of Service	E	F		C	F		E	D			E	
Approach Delay (s)		238.6			346.7			42.6			68.3	
Approach LOS		F			F			D			E	

Intersection Summary			
HCM Average Control Delay	205.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.5
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	3136		1583	3154		1583	3167	1417	1583	3167	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	222	3136		222	3154		1583	3167	1417	1583	3167	1417
Volume (vph)	70	884	60	88	1471	40	148	923	134	43	889	83
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	911	62	91	1516	41	153	952	138	44	916	86
RTOR Reduction (vph)	0	5	0	0	2	0	0	0	73	0	0	27
Lane Group Flow (vph)	72	968	0	91	1555	0	153	952	65	44	916	59
Turn Type	Perm			Perm			Prot		Perm	Prot		Perm
Protected Phases		6			2		3	8		7	4	
Permitted Phases	6			2					8			4
Actuated Green, G (s)	29.0	29.0		29.0	29.0		10.0	41.6	41.6	5.4	37.0	37.0
Effective Green, g (s)	30.0	30.0		30.0	30.0		10.0	42.6	42.6	5.4	38.0	38.0
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.11	0.47	0.47	0.06	0.42	0.42
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	74	1045		74	1051		176	1499	671	95	1337	598
v/s Ratio Prot		0.31			c0.49		c0.10	0.30		0.03	c0.29	
v/s Ratio Perm	0.32			0.41					0.05			0.04
v/c Ratio	0.97	0.93		1.23	1.48		0.87	0.64	0.10	0.46	0.69	0.10
Uniform Delay, d1	29.6	28.9		30.0	30.0		39.4	17.8	13.1	40.9	21.1	15.7
Progression Factor	0.52	0.53		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	25.5	1.8		178.7	221.0		33.6	2.1	0.3	3.5	2.9	0.3
Delay (s)	40.9	17.2		208.7	251.0		73.0	19.9	13.4	44.4	24.0	16.0
Level of Service	D	B		F	F		E	B	B	D	C	B
Approach Delay (s)		18.9			248.6			25.7			24.2	
Approach LOS		B			F			C			C	

Intersection Summary			
HCM Average Control Delay	97.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1583	4499		1583	4541			3044			3082	
Flt Permitted	0.09	1.00		0.18	1.00			1.00			0.70	
Satd. Flow (perm)	152	4499		293	4541			3044			2181	
Volume (vph)	59	1006	81	229	1849	26	0	485	169	110	900	177
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	63	1082	87	246	1988	28	0	522	182	118	968	190
RTOR Reduction (vph)	0	10	0	0	2	0	0	32	0	0	2	0
Lane Group Flow (vph)	63	1159	0	246	2014	0	0	672	0	0	1274	0
Turn Type	Perm			Perm						Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2						4		
Actuated Green, G (s)	42.3	42.3		42.3	42.3			36.0			36.0	
Effective Green, g (s)	44.0	44.0		44.0	44.0			38.0			38.0	
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.42			0.42	
Clearance Time (s)	5.7	5.7		5.7	5.7			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	74	2200		143	2220			1285			921	
v/s Ratio Prot		0.26			0.44			0.22				
v/s Ratio Perm	0.42			c0.84							c0.58	
v/c Ratio	0.85	0.53		1.72	0.91			0.52			1.38	
Uniform Delay, d1	20.1	15.8		23.0	21.1			19.3			26.0	
Progression Factor	0.46	0.43		0.52	0.44			1.00			1.00	
Incremental Delay, d2	35.3	0.4		326.8	0.7			0.4			179.1	
Delay (s)	44.5	7.2		338.7	9.9			19.7			205.1	
Level of Service	D	A		F	A			B			F	
Approach Delay (s)		9.1			45.7			19.7			205.1	
Approach LOS		A			D			B			F	

Intersection Summary			
HCM Average Control Delay	71.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	120.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4475		1583	4469		1583	4504		1583	4550	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	215	4475		215	4469		1583	4504		1583	4550	1417
Volume (vph)	53	1167	145	51	1523	206	445	1288	92	236	1071	186
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	1255	156	55	1638	222	478	1385	99	254	1152	200
RTOR Reduction (vph)	0	17	0	0	20	0	0	9	0	0	0	5
Lane Group Flow (vph)	57	1394	0	55	1840	0	478	1475	0	254	1152	195
Turn Type	Perm			Perm			Prot			Prot		Perm
Protected Phases		4			8		5			1	6	
Permitted Phases	4			8				2				6
Actuated Green, G (s)	29.0	29.0		29.0	29.0		14.0	31.0		15.0	31.0	31.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		15.0	32.0		15.0	32.0	32.0
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.17	0.36		0.17	0.36	0.36
Clearance Time (s)	6.0	6.0		6.0	6.0		5.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	74	1541		74	1539		264	1601		264	1618	504
v/s Ratio Prot		0.31			c0.41		c0.30			0.16	0.25	
v/s Ratio Perm	0.27			0.26				c0.33				0.14
v/c Ratio	0.77	0.90		0.74	1.20		1.81	0.92		0.96	0.71	0.39
Uniform Delay, d1	26.3	28.1		26.0	29.5		37.5	27.8		37.2	25.0	21.7
Progression Factor	1.00	1.00		0.40	0.36		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	53.7	9.1		19.6	90.4		379.4	10.2		44.5	2.7	2.2
Delay (s)	80.0	37.2		30.1	101.0		416.9	38.0		81.7	27.7	23.9
Level of Service	F	D		C	F		F	D		F	C	C
Approach Delay (s)		38.9			98.9			130.3			35.8	
Approach LOS		D			F			F			D	

Intersection Summary			
HCM Average Control Delay	80.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.96
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	1.00
Satd. Flow (prot)	1577	4530		1565	4518			1589			1657	1364
Flt Permitted	0.07	1.00		0.16	1.00			0.94			0.97	1.00
Satd. Flow (perm)	112	4530		258	4518			1499			1614	1364
Volume (vph)	84	1242	21	26	1773	47	27	155	48	17	200	102
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	1380	23	29	1970	52	30	172	53	19	222	113
RTOR Reduction (vph)	0	2	0	0	3	0	0	9	0	0	0	13
Lane Group Flow (vph)	93	1401	0	29	2019	0	0	246	0	0	241	100
Confl. Peds. (#/hr)	47		44	44		47	18		31	31		18
Confl. Bikes (#/hr)			3			2			4			1
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	69.0	69.0		69.0	69.0			25.0			25.0	25.0
Effective Green, g (s)	68.0	68.0		68.0	68.0			24.0			24.0	24.0
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.24			0.24	0.24
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	3.0
Lane Grp Cap (vph)	76	3080		175	3072			360			387	327
v/s Ratio Prot		0.31			0.45							
v/s Ratio Perm	c0.83			0.11				c0.16			0.15	0.07
v/c Ratio	1.22	0.46		0.17	0.66			0.68			0.62	0.31
Uniform Delay, d1	16.0	7.4		5.8	9.3			34.5			34.0	31.2
Progression Factor	0.77	0.38		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	137.0	0.2		2.0	1.1			10.1			7.4	2.4
Delay (s)	149.3	3.0		7.8	10.4			44.6			41.3	33.6
Level of Service	F	A		A	B			D			D	C
Approach Delay (s)		12.1			10.3			44.6			38.8	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.91	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3167	1295	1570	3104		3072	4442		3072	4420	
Flt Permitted	0.11	1.00	1.00	0.33	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	191	3167	1295	542	3104		3072	4442		3072	4420	
Volume (vph)	165	446	43	301	1210	102	176	1209	88	63	1773	231
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)	179	485	47	327	1315	111	191	1314	96	68	1927	251
RTOR Reduction (vph)	0	0	33	0	5	0	0	7	0	0	14	0
Lane Group Flow (vph)	179	485	14	327	1421	0	191	1403	0	68	2164	0
Confl. Peds. (#/hr)	63		49	49		63	51		51	51		51
Confl. Bikes (#/hr)			3			3			6			3
Turn Type	pm+pt		Perm	pm+pt			Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								
Actuated Green, G (s)	47.4	33.5	33.5	49.6	34.6		12.8	47.4		6.7	41.3	
Effective Green, g (s)	47.8	34.9	34.9	50.0	36.0		12.8	48.4		6.7	42.3	
Actuated g/C Ratio	0.40	0.29	0.29	0.42	0.30		0.11	0.40		0.06	0.35	
Clearance Time (s)	3.0	5.4	5.4	3.0	5.4		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	226	921	377	346	931		328	1792		172	1558	
v/s Ratio Prot	0.09	0.15		c0.11	c0.46		0.06	c0.32		0.02	c0.49	
v/s Ratio Perm	0.23		0.01	0.28								
v/c Ratio	0.79	0.53	0.04	0.95	1.53		0.58	0.78		0.40	1.39	
Uniform Delay, d1	29.6	35.6	30.5	29.9	42.0		51.1	31.2		54.7	38.9	
Progression Factor	1.62	0.72	0.51	1.00	1.00		0.76	0.64		1.22	0.39	
Incremental Delay, d2	15.0	0.5	0.0	34.0	242.4		2.3	3.1		0.1	175.5	
Delay (s)	63.0	26.2	15.6	63.9	284.4		41.3	23.1		67.0	190.7	
Level of Service	E	C	B	E	F		D	C		E	F	
Approach Delay (s)		34.8			243.2			25.3			187.0	
Approach LOS		C			F			C			F	

Intersection Summary			
HCM Average Control Delay	144.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		0.91		1.00	0.86	0.86	1.00		1.00	0.97	
Frt	1.00		0.99		1.00	1.00	0.85	1.00		0.85	1.00	
Flt Protected	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (prot)	1583		4521		1583	4300	1218	1583		1417	3072	
Flt Permitted	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (perm)	1583		4521		1583	4300	1218	1583		1417	3072	
Volume (vph)	2	0	615	27	6	1417	813	16	0	13	657	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	2	0	661	29	6	1524	874	17	0	14	706	0
RTOR Reduction (vph)	0	0	2	0	0	0	327	0	0	13	0	0
Lane Group Flow (vph)	2	0	688	0	6	1524	547	17	0	1	706	0
Turn Type	Prot				Prot		Perm	Prot		custom	custom	
Protected Phases	5		2		1	6		7				
Permitted Phases							6			7	8	
Actuated Green, G (s)	3.2		71.2		1.4	68.5	68.5	4.6		4.6	21.0	
Effective Green, g (s)	5.1		72.2		3.3	70.4	70.4	5.6		5.6	22.9	
Actuated g/C Ratio	0.04		0.60		0.03	0.59	0.59	0.05		0.05	0.19	
Clearance Time (s)	5.9		5.0		5.9	5.9	5.9	5.0		5.0	5.9	
Vehicle Extension (s)	3.0		3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	67		2720		44	2523	715	74		66	586	
v/s Ratio Prot	0.00		c0.15		0.00	0.35		c0.01				
v/s Ratio Perm							c0.45			0.00	c0.23	
v/c Ratio	0.03		0.25		0.14	0.60	0.77	0.23		0.01	1.20	
Uniform Delay, d1	55.1		11.2		57.0	15.9	18.6	55.1		54.6	48.5	
Progression Factor	1.07		1.44		1.12	0.94	7.43	1.00		1.00	1.09	
Incremental Delay, d2	0.1		0.1		0.1	0.1	0.7	1.6		0.1	102.8	
Delay (s)	59.3		16.3		63.8	15.1	138.9	56.7		54.6	155.8	
Level of Service	E		B		E	B	F	E		D	F	
Approach Delay (s)			16.4			60.2			55.8			160.2
Approach LOS			B			E			E			F

Intersection Summary			
HCM Average Control Delay	75.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	211
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	227
RTOR Reduction (vph)	184
Lane Group Flow (vph)	43
Turn Type	custom
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	21.0
Effective Green, g (s)	22.9
Actuated g/C Ratio	0.19
Clearance Time (s)	5.9
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	270
v/s Ratio Prot	
v/s Ratio Perm	0.03
v/c Ratio	0.16
Uniform Delay, d1	40.5
Progression Factor	4.27
Incremental Delay, d2	0.8
Delay (s)	174.1
Level of Service	F
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor		0.86	1.00		0.86	1.00	1.00	0.91			0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00			0.98	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)		5733	1417		5733	1417	1583	4548			4450	
Flt Permitted		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)		5733	1417		5733	1417	1583	4548			4450	
Volume (vph)	0	995	253	0	1509	289	389	1243	4	0	1762	303
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1015	258	0	1540	295	397	1268	4	0	1798	309
RTOR Reduction (vph)	0	0	3	0	0	41	0	0	0	0	1	0
Lane Group Flow (vph)	0	1015	255	0	1540	254	397	1272	0	0	2106	0
Turn Type			pm+ov			Perm	Prot					
Protected Phases		8	1		4		1	6			2	
Permitted Phases		8	8			4						
Actuated Green, G (s)		39.0	49.0		39.0	39.0	10.0	69.0			53.5	
Effective Green, g (s)		41.0	52.5		41.0	41.0	11.5	71.0			55.5	
Actuated g/C Ratio		0.34	0.44		0.34	0.34	0.10	0.59			0.46	
Clearance Time (s)		6.0	5.5		6.0	6.0	5.5	6.0			6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)		1959	667		1959	484	152	2691			2058	
v/s Ratio Prot		0.18	0.04		c0.27		c0.25	0.28			c0.47	
v/s Ratio Perm			0.14			0.18						
v/c Ratio		0.52	0.38		0.79	0.53	2.61	0.47			1.02	
Uniform Delay, d1		31.6	22.8		35.6	31.7	54.2	13.9			32.2	
Progression Factor		1.24	1.78		1.00	1.00	1.23	0.78			0.26	
Incremental Delay, d2		0.7	0.2		3.3	4.0	741.5	0.5			13.2	
Delay (s)		39.8	40.9		38.8	35.7	808.5	11.4			21.7	
Level of Service		D	D		D	D	F	B			C	
Approach Delay (s)		40.0			38.3			201.0			21.7	
Approach LOS		D			D			F			C	

Intersection Summary			
HCM Average Control Delay	73.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.95			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1555			1628		1583	4533		1583	4486	
Flt Permitted		0.86			0.88		0.08	1.00		0.11	1.00	
Satd. Flow (perm)		1355			1451		131	4533		189	4486	
Volume (vph)	53	60	74	38	103	12	141	1528	40	71	1656	171
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	56	63	78	40	108	13	148	1608	42	75	1743	180
RTOR Reduction (vph)	0	20	0	0	2	0	0	2	0	0	10	0
Lane Group Flow (vph)	0	177	0	0	159	0	148	1648	0	75	1913	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0		83.4	83.4		83.4	83.4	
Effective Green, g (s)		29.0			29.0		83.0	83.0		83.0	83.0	
Actuated g/C Ratio		0.24			0.24		0.69	0.69		0.69	0.69	
Clearance Time (s)		3.0			3.0		3.6	3.6		3.6	3.6	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		327			351		91	3135		131	3103	
v/s Ratio Prot								0.36			0.43	
v/s Ratio Perm		c0.13			0.11		c1.13			0.40		
v/c Ratio		0.54			0.45		1.63	0.53		0.57	0.62	
Uniform Delay, d1		39.7			38.7		18.5	9.0		9.4	9.9	
Progression Factor		1.00			1.00		1.00	1.00		0.76	0.36	
Incremental Delay, d2		6.3			4.2		326.2	0.6		6.0	0.3	
Delay (s)		46.0			42.9		344.7	9.6		13.2	3.9	
Level of Service		D			D		F	A		B	A	
Approach Delay (s)		46.0			42.9			37.2			4.3	
Approach LOS		D			D			D			A	

Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4347		1583	4485		1583	4426		1583	4356	
Flt Permitted	0.11	1.00		0.11	1.00		0.11	1.00		0.12	1.00	
Satd. Flow (perm)	191	4347		191	4485		183	4426		193	4356	
Volume (vph)	113	1130	204	126	1832	94	341	1613	218	86	1491	261
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	119	1189	215	133	1928	99	359	1698	229	91	1569	275
RTOR Reduction (vph)	0	26	0	0	6	0	0	17	0	0	25	0
Lane Group Flow (vph)	119	1378	0	133	2021	0	359	1910	0	91	1819	0
Confl. Peds. (#/hr)	90		93	93		90	90		48	48		90
Confl. Bikes (#/hr)			4			7			3			1
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	43.9	35.4		43.9	35.4		44.5	36.5		40.7	34.6	
Effective Green, g (s)	42.4	34.9		42.4	34.9		43.5	36.5		39.7	34.6	
Actuated g/C Ratio	0.42	0.35		0.42	0.35		0.44	0.36		0.40	0.35	
Clearance Time (s)	3.0	3.5		3.0	3.5		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	185	1517		185	1565		178	1615		148	1507	
v/s Ratio Prot	0.05	0.32		c0.05	c0.45		c0.14	0.43		0.03	0.42	
v/s Ratio Perm	0.22			0.25			c0.74			0.21		
v/c Ratio	0.64	0.91		0.72	1.29		2.02	1.18		0.61	1.21	
Uniform Delay, d1	46.3	31.0		21.4	32.5		48.7	31.8		25.3	32.7	
Progression Factor	0.98	1.16		1.70	1.22		1.92	0.86		1.00	1.00	
Incremental Delay, d2	5.1	8.8		8.4	135.0		467.0	85.7		5.2	99.7	
Delay (s)	50.2	44.8		44.7	174.6		560.3	113.1		30.5	132.4	
Level of Service	D	D		D	F		F	F		C	F	
Approach Delay (s)		45.2			166.6			183.3			127.6	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	138.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	123.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.96			1.00		1.00	0.99		1.00	0.97	
Flpb, ped/bikes		1.00			0.98		0.99	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	0.99		1.00	0.98	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1500			1582		1565	4455		1583	4357	
Flt Permitted		0.84			0.54		0.08	1.00		0.06	1.00	
Satd. Flow (perm)		1278			871		139	4455		104	4357	
Volume (vph)	58	150	128	181	224	35	125	2094	194	20	1543	183
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	158	135	191	236	37	132	2204	204	21	1624	193
RTOR Reduction (vph)	0	16	0	0	3	0	0	11	0	0	15	0
Lane Group Flow (vph)	0	338	0	0	461	0	132	2397	0	21	1802	0
Confl. Peds. (#/hr)	39		76	76		39	104		34	34		104
Confl. Bikes (#/hr)			2			2			6			4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		64.2	64.2		64.2	64.2	
Effective Green, g (s)		28.0			28.0		64.0	64.0		64.0	64.0	
Actuated g/C Ratio		0.28			0.28		0.64	0.64		0.64	0.64	
Clearance Time (s)		3.0			3.0		3.8	3.8		3.8	3.8	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		358			244		89	2851		67	2788	
v/s Ratio Prot								0.54			0.41	
v/s Ratio Perm		0.26			c0.53		c0.95			0.20		
v/c Ratio		0.94			1.89		1.48	0.84		0.31	0.65	
Uniform Delay, d1		35.2			36.0		18.0	14.0		8.1	11.1	
Progression Factor		1.00			1.00		1.00	1.00		1.48	1.30	
Incremental Delay, d2		35.4			415.5		267.8	3.2		1.1	0.1	
Delay (s)		70.7			451.5		285.8	17.2		13.1	14.5	
Level of Service		E			F		F	B		B	B	
Approach Delay (s)		70.7			451.5			31.2			14.5	
Approach LOS		E			F			C			B	

Intersection Summary			
HCM Average Control Delay	65.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4481		1583	4529		1583	4525		1583	4461	
Flt Permitted	0.15	1.00		0.13	1.00		0.11	1.00		0.12	1.00	
Satd. Flow (perm)	256	4481		222	4529		188	4525		196	4461	
Volume (vph)	213	1459	163	159	2236	72	179	2045	77	70	1534	230
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	220	1504	168	164	2305	74	185	2108	79	72	1581	237
RTOR Reduction (vph)	0	15	0	0	4	0	0	4	0	0	17	0
Lane Group Flow (vph)	220	1657	0	164	2375	0	185	2183	0	72	1801	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.0	25.0		36.0	36.0		41.5	34.5		38.5	33.0	
Effective Green, g (s)	26.0	26.0		37.0	37.0		42.5	35.5		39.5	34.0	
Actuated g/C Ratio	0.29	0.29		0.41	0.41		0.47	0.39		0.44	0.38	
Clearance Time (s)	5.0	5.0		3.5	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1295		197	1862		197	1785		171	1685	
v/s Ratio Prot		0.37		0.06	c0.52		c0.07	c0.48		0.03	0.40	
v/s Ratio Perm	c0.86			0.28			0.37			0.16		
v/c Ratio	2.97	1.28		0.83	1.28		0.94	1.22		0.42	1.07	
Uniform Delay, d1	32.0	32.0		42.7	26.5		20.2	27.2		41.6	28.0	
Progression Factor	0.70	0.70		1.00	1.00		1.72	0.28		1.00	1.00	
Incremental Delay, d2	904.9	128.8		24.9	128.4		8.6	100.8		1.7	42.9	
Delay (s)	927.4	151.1		67.6	154.9		43.2	108.5		43.2	70.9	
Level of Service	F	F		E	F		D	F		D	E	
Approach Delay (s)		241.3			149.3			103.4			69.8	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	139.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	127.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3066		1583	3119		1583	4514		1583	4477	
Flt Permitted	0.15	1.00		0.13	1.00		0.12	1.00		0.14	1.00	
Satd. Flow (perm)	252	3066		219	3119		202	4514		230	4477	
Volume (vph)	51	837	224	140	1361	151	312	2154	118	78	1612	193
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	53	863	231	144	1403	156	322	2221	122	80	1662	199
RTOR Reduction (vph)	0	27	0	0	1	0	0	7	0	0	16	0
Lane Group Flow (vph)	53	1067	0	144	1558	0	322	2336	0	80	1845	0
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		8		7	4		1	6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	25.5	25.5		38.0	38.0		42.0	42.0		28.0	28.0	
Effective Green, g (s)	26.5	26.5		39.0	39.0		43.0	43.0		29.0	29.0	
Actuated g/C Ratio	0.29	0.29		0.43	0.43		0.48	0.48		0.32	0.32	
Clearance Time (s)	5.0	5.0		3.0	5.0		4.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	903		224	1352		250	2157		74	1443	
v/s Ratio Prot		0.35		0.06	c0.50		c0.14	0.52			0.41	
v/s Ratio Perm	0.21			0.22			c0.47			0.35		
v/c Ratio	0.72	1.18		0.64	1.15		1.29	1.08		1.08	1.28	
Uniform Delay, d1	28.4	31.8		20.9	25.5		42.2	23.5		30.5	30.5	
Progression Factor	1.00	1.00		0.73	0.97		1.00	1.00		0.99	0.95	
Incremental Delay, d2	45.3	93.2		0.6	69.4		156.3	46.2		55.6	125.8	
Delay (s)	73.7	124.9		15.9	94.1		198.5	69.7		85.9	154.8	
Level of Service	E	F		B	F		F	E		F	F	
Approach Delay (s)		122.6			87.5			85.3			151.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	108.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	128.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		0.98	1.00		0.98	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3085		1556	3096		1558	3135		1568	3011	
Flt Permitted	0.06	1.00		0.32	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	100	3085		532	3096		229	3135		226	3011	
Volume (vph)	66	555	76	75	1371	129	119	810	37	86	690	152
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	74	624	85	84	1540	145	134	910	42	97	775	171
RTOR Reduction (vph)	0	9	0	0	6	0	0	2	0	0	12	0
Lane Group Flow (vph)	74	700	0	84	1679	0	134	950	0	97	934	0
Confl. Peds. (#/hr)	50		50	50		50	50		50	50		50
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	64.6	64.6		64.6	64.6		44.1	44.1		44.1	44.1	
Effective Green, g (s)	66.5	66.5		66.5	66.5		45.5	45.5		45.5	45.5	
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.38	0.38		0.38	0.38	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	55	1710		295	1716		87	1189		86	1142	
v/s Ratio Prot		0.23			0.54			0.30			0.31	
v/s Ratio Perm	c0.74			0.16			c0.59			0.43		
v/c Ratio	1.35	0.41		0.28	0.98		1.54	0.80		1.13	0.82	
Uniform Delay, d1	26.8	15.4		14.2	26.1		37.2	33.2		37.2	33.5	
Progression Factor	1.00	1.00		0.43	0.77		1.20	1.20		1.00	1.00	
Incremental Delay, d2	238.5	0.7		0.2	3.2		281.1	4.3		135.8	6.6	
Delay (s)	265.3	16.2		6.3	23.2		325.7	44.1		173.0	40.1	
Level of Service	F	B		A	C		F	D		F	D	
Approach Delay (s)		39.7			22.4			78.8			52.5	
Approach LOS		D			C			E			D	

Intersection Summary			
HCM Average Control Delay	45.1	HCM Level of Service	D
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	0.99		1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1583	4526		1583	4540			1609			1593	
Flt Permitted	0.06	1.00		0.15	1.00			0.83			0.92	
Satd. Flow (perm)	100	4526		254	4540			1347			1483	
Volume (vph)	21	1311	47	44	2221	32	81	181	52	22	100	48
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	22	1366	49	46	2314	33	84	189	54	23	104	50
RTOR Reduction (vph)	0	4	0	0	1	0	0	7	0	0	7	0
Lane Group Flow (vph)	22	1411	0	46	2346	0	0	320	0	0	170	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.0	68.0		68.0	68.0			26.0			26.0	
Effective Green, g (s)	67.0	67.0		67.0	67.0			25.0			25.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.25			0.25	
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	67	3032		170	3042			337			371	
v/s Ratio Prot		0.31			c0.52							
v/s Ratio Perm	0.22			0.18				c0.24			0.11	
v/c Ratio	0.33	0.47		0.27	0.77			0.95			0.46	
Uniform Delay, d1	7.0	7.9		6.7	11.3			36.9			31.8	
Progression Factor	0.56	0.21		0.31	0.68			1.00			1.00	
Incremental Delay, d2	8.4	0.3		0.4	0.2			37.9			4.0	
Delay (s)	12.3	2.0		2.4	7.8			74.8			35.8	
Level of Service	B	A		A	A			E			D	
Approach Delay (s)		2.1			7.7			74.8			35.8	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	4550	1417	1583	1667	1417	1583	1645	
Flt Permitted	0.23	1.00	1.00	0.23	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	388	3167	1417	388	4550	1417	1583	1667	1417	1583	1645	
Volume (vph)	86	679	67	108	1293	56	88	577	36	40	676	63
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	92	730	72	116	1390	60	95	620	39	43	727	68
RTOR Reduction (vph)	0	0	51	0	0	43	0	0	22	0	6	0
Lane Group Flow (vph)	92	730	21	116	1390	17	95	620	17	43	789	0
Turn Type	Perm		Perm	Perm		Perm	Prot		Perm	Prot		
Protected Phases		4			4		1	2		1	6	
Permitted Phases	4		4	4		4			2			
Actuated Green, G (s)	16.2	16.2	16.2	16.2	16.2	16.2	4.2	25.8	25.8	4.2	25.8	
Effective Green, g (s)	17.2	17.2	17.2	17.2	17.2	17.2	4.2	26.6	26.6	4.2	26.6	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.44	0.44	0.07	0.44	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.8	4.8	4.0	4.8	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	908	406	111	1304	406	111	739	628	111	729	
v/s Ratio Prot		0.23			c0.31		c0.06	0.37		0.03	c0.48	
v/s Ratio Perm	0.24		0.01	0.30		0.01			0.01			
v/c Ratio	0.83	0.80	0.05	1.05	1.07	0.04	0.86	0.84	0.03	0.39	1.08	
Uniform Delay, d1	20.0	19.8	15.5	21.4	21.4	15.5	27.6	14.8	9.4	26.7	16.7	
Progression Factor	1.00	1.00	1.00	1.18	1.24	1.47	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.3	7.5	0.2	91.3	42.8	0.2	43.7	11.0	0.1	2.2	58.0	
Delay (s)	68.3	27.3	15.7	116.5	69.4	22.9	71.3	25.8	9.5	28.9	74.7	
Level of Service	E	C	B	F	E	C	E	C	A	C	E	
Approach Delay (s)		30.6			71.1			30.7			72.4	
Approach LOS		C			E			C			E	

Intersection Summary			
HCM Average Control Delay	54.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4484		1583	4525		1583	3096		1583	3087	
Flt Permitted	0.10	1.00		0.09	1.00		0.13	1.00		0.15	1.00	
Satd. Flow (perm)	159	4484		155	4525		215	3096		253	3087	
Volume (vph)	84	1191	128	101	2018	78	212	659	114	53	662	133
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	90	1281	138	109	2170	84	228	709	123	57	712	143
RTOR Reduction (vph)	0	13	0	0	4	0	0	14	0	0	16	0
Lane Group Flow (vph)	90	1406	0	109	2250	0	228	818	0	57	839	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	49.2	42.8		51.6	44.0		40.0	32.0		35.2	29.6	
Effective Green, g (s)	47.2	41.8		49.6	43.0		38.0	31.0		33.2	28.6	
Actuated g/C Ratio	0.47	0.42		0.50	0.43		0.38	0.31		0.33	0.29	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	152	1874		171	1946		177	960		145	883	
v/s Ratio Prot	0.03	0.31		c0.04	c0.50		c0.09	0.26		0.02	0.27	
v/s Ratio Perm	0.25			0.27			c0.40			0.11		
v/c Ratio	0.59	0.75		0.64	1.16		1.29	0.85		0.39	0.95	
Uniform Delay, d1	23.5	24.7		17.0	28.5		26.7	32.4		24.5	35.0	
Progression Factor	2.29	2.00		1.42	1.59		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.2	2.2		3.5	74.3		165.3	9.5		0.6	20.3	
Delay (s)	57.0	51.6		27.6	119.5		192.1	41.8		25.2	55.3	
Level of Service	E	D		C	F		F	D		C	E	
Approach Delay (s)		51.9			115.3			74.1			53.4	
Approach LOS		D			F			E			D	

Intersection Summary			
HCM Average Control Delay	81.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4486		1583	4540		1583	3089		1583	3093	
Flt Permitted	0.10	1.00		0.10	1.00		0.17	1.00		0.17	1.00	
Satd. Flow (perm)	172	4486		162	4540		280	3089		290	3093	
Volume (vph)	69	1450	151	168	2298	34	103	943	185	53	742	136
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	73	1543	161	179	2445	36	110	1003	197	56	789	145
RTOR Reduction (vph)	0	14	0	0	2	0	0	18	0	0	16	0
Lane Group Flow (vph)	73	1690	0	179	2479	0	110	1182	0	56	918	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	45.2	39.7		50.2	42.2		31.1	24.8		29.5	24.0	
Effective Green, g (s)	43.2	38.7		48.2	41.2		29.1	23.8		27.5	23.0	
Actuated g/C Ratio	0.48	0.43		0.54	0.46		0.32	0.26		0.31	0.26	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	153	1929		197	2078		167	817		153	790	
v/s Ratio Prot	0.02	0.38		c0.07	c0.55		c0.04	c0.38		0.02	0.30	
v/s Ratio Perm	0.20			0.42			0.17			0.09		
v/c Ratio	0.48	0.88		0.91	1.19		0.66	1.45		0.37	1.16	
Uniform Delay, d1	42.6	23.5		19.3	24.4		24.9	33.1		42.1	33.5	
Progression Factor	1.00	1.00		1.96	0.40		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.9	6.0		5.9	87.4		7.0	208.1		0.5	86.5	
Delay (s)	43.4	29.4		43.6	97.0		31.9	241.2		42.6	120.0	
Level of Service	D	C		D	F		C	F		D	F	
Approach Delay (s)		30.0			93.4			223.6			115.6	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	105.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4509		1583	4535		1583	1667	1417	1583	3027	
Flt Permitted	0.09	1.00		0.11	1.00		0.12	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	156	4509		185	4535		206	1667	1417	367	3027	
Volume (vph)	118	1224	79	69	2117	48	149	431	98	53	577	240
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	124	1288	83	73	2228	51	157	454	103	56	607	253
RTOR Reduction (vph)	0	7	0	0	2	0	0	0	70	0	45	0
Lane Group Flow (vph)	124	1364	0	73	2277	0	157	454	33	56	815	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	50.8	43.8		48.0	42.4		40.3	33.3	33.3	36.9	31.6	
Effective Green, g (s)	48.8	42.8		46.0	41.4		38.3	32.3	32.3	34.9	30.6	
Actuated g/C Ratio	0.49	0.43		0.46	0.41		0.38	0.32	0.32	0.35	0.31	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	162	1930		149	1877		162	538	458	180	926	
v/s Ratio Prot	c0.05	0.30		0.02	c0.50		c0.06	0.27		0.01	0.27	
v/s Ratio Perm	0.33			0.20			c0.31		0.02	0.09		
v/c Ratio	0.77	0.71		0.49	1.21		0.97	0.84	0.07	0.31	0.88	
Uniform Delay, d1	47.9	23.5		17.1	29.3		26.3	31.5	23.5	23.5	33.0	
Progression Factor	0.89	1.14		2.02	1.67		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	15.3	1.9		0.1	96.3		60.5	14.9	0.3	0.4	11.7	
Delay (s)	57.7	28.7		34.6	145.3		86.7	46.4	23.8	23.9	44.7	
Level of Service	E	C		C	F		F	D	C	C	D	
Approach Delay (s)		31.1			141.9			52.0			43.4	
Approach LOS		C			F			D			D	

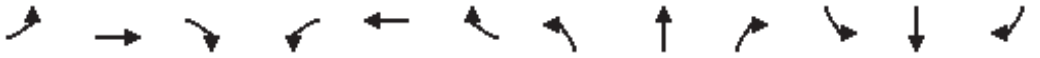
Intersection Summary			
HCM Average Control Delay	83.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	2226		1118	2231		1118	2175		1118	2231	
Flt Permitted	0.07	1.00		0.09	1.00		0.30	1.00		0.66	1.00	
Satd. Flow (perm)	77	2226		110	2231		348	2175		780	2231	
Volume (vph)	27	1548	47	68	1774	22	18	112	24	114	476	7
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	28	1596	48	70	1829	23	19	115	25	118	491	7
RTOR Reduction (vph)	0	2	0	0	1	0	0	19	0	0	1	0
Lane Group Flow (vph)	28	1642	0	70	1851	0	19	121	0	118	497	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	60.5	60.5		60.5	60.5		20.8	20.8		20.8	20.8	
Effective Green, g (s)	61.0	61.0		61.0	61.0		21.0	21.0		21.0	21.0	
Actuated g/C Ratio	0.68	0.68		0.68	0.68		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2		4.2	4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	52	1509		75	1512		81	508		182	521	
v/s Ratio Prot		0.74			c0.83			0.06			c0.22	
v/s Ratio Perm	0.36			0.64			0.05			0.15		
v/c Ratio	0.54	1.09		0.93	1.22		0.23	0.24		0.65	0.95	
Uniform Delay, d1	7.4	14.5		12.7	14.5		28.0	28.0		31.2	34.0	
Progression Factor	0.33	0.29		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.6	40.9		86.5	107.0		6.7	1.1		16.5	29.6	
Delay (s)	6.0	45.1		99.2	121.5		34.7	29.1		47.7	63.6	
Level of Service	A	D		F	F		C	C		D	E	
Approach Delay (s)		44.4			120.7			29.8			60.6	
Approach LOS		D			F			C			E	

Intersection Summary			
HCM Average Control Delay	79.7	HCM Level of Service	E
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	124.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			0.95	
Frpb, ped/bikes		1.00						1.00			1.00	
Flpb, ped/bikes		0.98						1.00			1.00	
Frt		0.99						0.97			1.00	
Flt Protected		0.98						1.00			0.99	
Satd. Flow (prot)		3009						3063			3145	
Flt Permitted		0.98						1.00			0.90	
Satd. Flow (perm)		3009						3063			2847	
Volume (vph)	159	143	17	0	0	0	0	109	26	38	265	0
Peak-hour factor, PHF	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Adj. Flow (vph)	206	186	22	0	0	0	0	142	34	49	344	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	410	0	0	0	0	0	151	0	0	393	0
Confl. Peds. (#/hr)	28		18	18		28	6		7	7		6
Confl. Bikes (#/hr)			1						1			1
Turn Type	Perm									Perm		
Protected Phases		2						8			4	
Permitted Phases	2									4		
Actuated Green, G (s)		37.0						17.0			17.0	
Effective Green, g (s)		36.0						16.0			16.0	
Actuated g/C Ratio		0.60						0.27			0.27	
Clearance Time (s)		3.0						3.0			3.0	
Vehicle Extension (s)		5.0						3.0			3.0	
Lane Grp Cap (vph)		1805						817			759	
v/s Ratio Prot								0.05				
v/s Ratio Perm		0.14									c0.14	
v/c Ratio		0.23						0.18			0.52	
Uniform Delay, d1		5.6						17.0			18.7	
Progression Factor		0.94						1.00			1.00	
Incremental Delay, d2		0.3						0.5			2.5	
Delay (s)		5.5						17.5			21.2	
Level of Service		A						B			C	
Approach Delay (s)		5.5			0.0			17.5			21.2	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	13.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00				0.97		1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00				1.00		0.98	1.00
Frt	1.00	1.00		1.00	0.99				0.86		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00		0.95	1.00
Satd. Flow (prot)	1583	4528		1583	4485				1396		1553	1371
Flt Permitted	0.95	1.00		0.95	1.00				1.00		0.95	1.00
Satd. Flow (perm)	1583	4528		1583	4485				1396		1553	1371
Volume (vph)	60	1364	26	79	2128	155	0	0	37	132	0	166
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	62	1421	27	82	2217	161	0	0	39	138	0	173
RTOR Reduction (vph)	0	2	0	0	7	0	0	0	30	0	0	133
Lane Group Flow (vph)	62	1446	0	82	2371	0	0	0	9	0	138	40
Confl. Peds. (#/hr)	18		42	42		18	15		14	14		15
Confl. Bikes (#/hr)			2			1			1			
Turn Type	Prot			Prot					custom	Perm		Perm
Protected Phases	5	2		1	6						4	
Permitted Phases									8	4		4
Actuated Green, G (s)	7.3	58.5		8.5	59.7				24.0		24.0	24.0
Effective Green, g (s)	6.3	57.5		7.5	58.7				23.0		23.0	23.0
Actuated g/C Ratio	0.06	0.58		0.08	0.59				0.23		0.23	0.23
Clearance Time (s)	3.0	3.0		3.0	3.0				3.0		3.0	3.0
Vehicle Extension (s)	2.0	5.0		2.0	5.0				3.0		3.0	3.0
Lane Grp Cap (vph)	100	2604		119	2633				321		357	315
v/s Ratio Prot	0.04	0.32		c0.05	c0.53							
v/s Ratio Perm									0.01		0.09	0.03
v/c Ratio	0.62	0.56		0.69	0.90				0.03		0.39	0.13
Uniform Delay, d1	45.7	13.3		45.1	18.1				29.8		32.5	30.5
Progression Factor	1.00	1.00		0.68	1.75				1.00		1.00	1.00
Incremental Delay, d2	7.8	0.9		1.2	0.5				0.2		3.1	0.8
Delay (s)	53.5	14.1		31.9	32.2				30.0		35.7	31.4
Level of Service	D	B		C	C				C		D	C
Approach Delay (s)		15.7			32.2			30.0			33.3	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM Average Control Delay	26.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	2231		1118	2232		1118	2174		1118	2200	
Flt Permitted	0.07	1.00		0.08	1.00		0.15	1.00		0.36	1.00	
Satd. Flow (perm)	84	2231		93	2232		181	2174		425	2200	
Volume (vph)	32	1574	22	128	1725	15	26	382	86	26	701	81
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	33	1606	22	131	1760	15	27	390	88	27	715	83
RTOR Reduction (vph)	0	1	0	0	1	0	0	21	0	0	10	0
Lane Group Flow (vph)	33	1627	0	131	1774	0	27	457	0	27	788	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	55.5	55.5		55.5	55.5		25.8	25.8		25.8	25.8	
Effective Green, g (s)	56.0	56.0		56.0	56.0		26.0	26.0		26.0	26.0	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2		4.2	4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	52	1388		58	1389		52	628		123	636	
v/s Ratio Prot		0.73			0.79			0.21			c0.36	
v/s Ratio Perm	0.39			c1.41			0.15			0.06		
v/c Ratio	0.63	1.17		2.26	1.28		0.52	0.73		0.22	1.24	
Uniform Delay, d1	10.6	17.0		17.0	17.0		26.8	28.8		24.3	32.0	
Progression Factor	1.00	1.00		0.62	0.59		0.32	0.25		1.00	1.00	
Incremental Delay, d2	46.8	85.4		571.3	125.3		20.5	4.4		4.1	120.7	
Delay (s)	57.4	102.4		581.8	135.5		29.2	11.8		28.4	152.7	
Level of Service	E	F		F	F		C	B		C	F	
Approach Delay (s)		101.6			166.1			12.7			148.6	
Approach LOS		F			F			B			F	

Intersection Summary			
HCM Average Control Delay	125.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	129.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00		0.95	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1118	2197		1118	2230		1118	2235	1000		2210	
Flt Permitted	0.07	1.00		0.32	1.00		0.15	1.00	1.00		1.00	
Satd. Flow (perm)	84	2197		372	2230		181	2235	1000		2210	
Volume (vph)	23	625	80	123	1567	24	65	447	98	0	766	63
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	26	694	89	137	1741	27	72	497	109	0	851	70
RTOR Reduction (vph)	0	8	0	0	1	0	0	0	78	0	6	0
Lane Group Flow (vph)	26	775	0	137	1767	0	72	497	31	0	915	0
Turn Type	Perm			Perm			Perm		Perm			
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8			
Actuated Green, G (s)	55.5	55.5		55.5	55.5		25.8	25.8	25.8		25.8	
Effective Green, g (s)	56.0	56.0		56.0	56.0		26.0	26.0	26.0		26.0	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29	0.29		0.29	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2	4.2		4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	52	1367		231	1388		52	646	289		638	
v/s Ratio Prot		0.35			c0.79			0.22			c0.41	
v/s Ratio Perm	0.31			0.37			0.40		0.03			
v/c Ratio	0.50	0.57		0.59	1.27		1.38	0.77	0.11		1.43	
Uniform Delay, d1	9.3	9.9		10.2	17.0		32.0	29.3	23.5		32.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		0.52	
Incremental Delay, d2	30.5	1.7		10.7	128.6		257.0	8.6	0.8		195.9	
Delay (s)	39.8	11.6		20.9	145.6		289.0	37.8	24.3		212.5	
Level of Service	D	B		C	F		F	D	C		F	
Approach Delay (s)		12.5			136.6			62.3			212.5	
Approach LOS		B			F			E			F	

Intersection Summary			
HCM Average Control Delay	117.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	133.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			0.95	
Frpb, ped/bikes		1.00						0.98			1.00	
Flpb, ped/bikes		0.99						1.00			1.00	
Frt		0.99						0.98			1.00	
Flt Protected		0.99						1.00			0.99	
Satd. Flow (prot)		3053						3051			3140	
Flt Permitted		0.99						1.00			0.70	
Satd. Flow (perm)		3053						3051			2222	
Volume (vph)	35	196	24	0	0	0	0	717	121	86	638	0
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	38	215	26	0	0	0	0	788	133	95	701	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	23	0	0	0	0
Lane Group Flow (vph)	0	266	0	0	0	0	0	898	0	0	796	0
Confl. Peds. (#/hr)	123		3	3		123	1		108	108		1
Confl. Bikes (#/hr)						6			4			2
Turn Type	Perm									Perm		
Protected Phases		4						2			6	
Permitted Phases	4									6		
Actuated Green, G (s)		27.0						27.0			27.0	
Effective Green, g (s)		26.0						26.0			26.0	
Actuated g/C Ratio		0.43						0.43			0.43	
Clearance Time (s)		3.0						3.0			3.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		1323						1322			963	
v/s Ratio Prot								0.29				
v/s Ratio Perm		0.09									c0.36	
v/c Ratio		0.20						0.68			0.83	
Uniform Delay, d1		10.6						13.7			15.0	
Progression Factor		0.55						1.00			1.00	
Incremental Delay, d2		0.3						2.8			8.1	
Delay (s)		6.1						16.5			23.1	
Level of Service		A						B			C	
Approach Delay (s)		6.1			0.0			16.5			23.1	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM Average Control Delay	17.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00		0.95	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00	0.86		1.00	0.86
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1583	4385		1583	4478		1583	3167	1219		3167	1220
Flt Permitted	0.09	1.00		0.08	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	152	4385		141	4478		1583	3167	1219		3167	1220
Volume (vph)	61	1235	196	237	1916	91	167	722	127	0	762	107
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	64	1286	204	247	1996	95	174	752	132	0	794	111
RTOR Reduction (vph)	0	22	0	0	5	0	0	0	86	0	0	86
Lane Group Flow (vph)	64	1468	0	247	2086	0	174	752	46	0	794	25
Confl. Peds. (#/hr)	144		81	81		144	96		97	97		96
Confl. Bikes (#/hr)						3			1			1
Turn Type	pm+pt			pm+pt			Prot		Perm			Perm
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6					8			4
Actuated Green, G (s)	50.4	45.0		57.0	48.6		8.9	34.9	34.9		22.9	22.9
Effective Green, g (s)	48.4	44.0		55.6	47.6		8.0	34.0	34.0		22.0	22.0
Actuated g/C Ratio	0.49	0.45		0.57	0.49		0.08	0.35	0.35		0.22	0.22
Clearance Time (s)	3.0	3.0		3.0	3.0		3.1	3.1	3.1		3.1	3.1
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	139	1969		198	2175		129	1099	423		711	274
v/s Ratio Prot	0.02	0.33		c0.10	0.47		c0.11	0.24			c0.25	
v/s Ratio Perm	0.21			c0.61					0.04			0.02
v/c Ratio	0.46	0.75		1.25	0.96		1.35	0.68	0.11		1.12	0.09
Uniform Delay, d1	18.3	22.4		24.8	24.3		45.0	27.4	21.7		38.0	30.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.9	2.6		146.3	11.8		199.4	3.5	0.5		70.6	0.7
Delay (s)	19.2	25.0		171.0	36.1		244.4	30.9	22.2		108.6	30.7
Level of Service	B	C		F	D		F	C	C		F	C
Approach Delay (s)		24.7			50.4			64.9			99.0	
Approach LOS		C			D			E			F	

Intersection Summary			
HCM Average Control Delay	53.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frt		0.95			0.98		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2986			3052		1583	3150		1583	3128	
Flt Permitted		0.87			0.77		0.19	1.00		0.21	1.00	
Satd. Flow (perm)		2613			2397		310	3150		344	3128	
Volume (vph)	29	107	69	131	217	55	112	958	36	44	881	78
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	110	71	135	224	57	115	988	37	45	908	80
RTOR Reduction (vph)	0	49	0	0	14	0	0	2	0	0	7	0
Lane Group Flow (vph)	0	162	0	0	402	0	115	1023	0	45	981	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		54.6	48.3		49.4	45.7	
Effective Green, g (s)		28.0			28.0		52.6	47.3		47.4	44.7	
Actuated g/C Ratio		0.31			0.31		0.58	0.53		0.53	0.50	
Clearance Time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)		3.0			3.0		2.0	5.0		2.0	5.0	
Lane Grp Cap (vph)		813			746		256	1656		218	1554	
v/s Ratio Prot							c0.03	c0.32		0.01	0.31	
v/s Ratio Perm		0.06			c0.17		0.24			0.10		
v/c Ratio		0.20			0.54		0.45	0.62		0.21	0.63	
Uniform Delay, d1		22.8			25.7		10.5	15.0		11.2	16.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.6			0.8		0.5	1.7		0.2	2.0	
Delay (s)		23.3			26.4		10.9	16.7		11.4	18.6	
Level of Service		C			C		B	B		B	B	
Approach Delay (s)		23.3			26.4			16.1			18.3	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.9%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.99			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4527		1583	4550		1583	3122			3052	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1583	4527		1583	4550		1583	3122			3052	
Volume (vph)	45	1820	64	10	2658	0	40	641	66	0	349	111
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	45	1838	65	10	2685	0	40	647	67	0	353	112
RTOR Reduction (vph)	0	4	0	0	0	0	0	8	0	0	34	0
Lane Group Flow (vph)	45	1899	0	10	2685	0	40	706	0	0	431	0
Turn Type	Prot			Prot			Split					
Protected Phases	1!	2!		5!	6!		8	8			7	
Permitted Phases												
Actuated Green, G (s)	5.6	33.4		4.8	33.2		14.0	14.0			22.0	
Effective Green, g (s)	5.1	32.9		4.8	33.2		14.0	14.0			22.0	
Actuated g/C Ratio	0.06	0.37		0.05	0.37		0.16	0.16			0.24	
Clearance Time (s)	3.5	3.5		4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	90	1655		84	1678		246	486			746	
v/s Ratio Prot	c0.03	0.42		0.01	c0.59		0.03	c0.23			c0.14	
v/s Ratio Perm												
v/c Ratio	0.50	1.15		0.12	1.60		0.16	1.45			0.58	
Uniform Delay, d1	41.2	28.6		40.6	28.4		32.9	38.0			29.9	
Progression Factor	1.25	0.98		1.50	0.39		1.00	1.00			1.00	
Incremental Delay, d2	0.4	67.1		0.1	270.3		0.3	214.6			3.2	
Delay (s)	51.8	95.2		61.0	281.4		33.2	252.6			33.2	
Level of Service	D	F		E	F		C	F			C	
Approach Delay (s)		94.2			280.6			240.9			33.2	
Approach LOS		F			F			F			C	

Intersection Summary			
HCM Average Control Delay	193.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt		0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		4520		1583	4519		1583	3154		1583	3167	
Flt Permitted		1.00		0.95	1.00		0.29	1.00		0.18	1.00	
Satd. Flow (perm)		4520		1583	4519		488	3154		303	3167	
Volume (vph)	0	1788	82	26	2429	116	240	735	21	91	489	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1882	86	27	2557	122	253	774	22	96	515	0
RTOR Reduction (vph)	0	5	0	0	5	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	1963	0	27	2674	0	253	794	0	96	515	0
Turn Type				Prot			Perm			Perm		
Protected Phases		2!		5!	6			7			7	
Permitted Phases							7			7		
Actuated Green, G (s)		33.4		4.8	33.2		22.0	22.0		22.0	22.0	
Effective Green, g (s)		32.9		4.8	33.2		22.0	22.0		22.0	22.0	
Actuated g/C Ratio		0.37		0.05	0.37		0.24	0.24		0.24	0.24	
Clearance Time (s)		3.5		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1652		84	1667		119	771		74	774	
v/s Ratio Prot		0.43		c0.02	c0.59			0.25			0.16	
v/s Ratio Perm							c0.52			0.32		
v/c Ratio		1.19		0.32	1.60		2.13	1.03		1.30	0.67	
Uniform Delay, d1		28.6		41.0	28.4		34.0	34.0		34.0	30.7	
Progression Factor		0.30		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		85.3		2.2	274.7		533.8	40.2		203.5	4.5	
Delay (s)		93.8		43.2	303.1		567.8	74.2		237.5	35.2	
Level of Service		F		D	F		F	E		F	D	
Approach Delay (s)		93.8			300.5			193.2			67.0	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	196.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	26.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.95						0.95		1.00	0.95	
Frpb, ped/bikes		1.00						0.97		1.00	1.00	
Flpb, ped/bikes		0.99						1.00		0.95	1.00	
Frt		1.00						0.94		1.00	1.00	
Flt Protected		1.00						1.00		0.95	1.00	
Satd. Flow (prot)		3119						2890		1507	3167	
Flt Permitted		1.00						1.00		0.64	1.00	
Satd. Flow (perm)		3119						2890		1013	3167	
Volume (vph)	16	210	5	0	0	0	0	93	62	59	356	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	19	244	6	0	0	0	0	108	72	69	414	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	53	0	0	0	0
Lane Group Flow (vph)	0	266	0	0	0	0	0	127	0	69	414	0
Confl. Peds. (#/hr)	51		52	52		51	5		55	55		
Confl. Bikes (#/hr)						3						5
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		17.0						17.0		17.0	17.0	
Effective Green, g (s)		16.0						16.0		16.0	16.0	
Actuated g/C Ratio		0.27						0.27		0.27	0.27	
Clearance Time (s)		3.0						3.0		3.0	3.0	
Vehicle Extension (s)		5.0						3.0		3.0	3.0	
Lane Grp Cap (vph)		832						771		270	845	
v/s Ratio Prot								0.04			c0.13	
v/s Ratio Perm		0.09								0.07		
v/c Ratio		0.32						0.16		0.26	0.49	
Uniform Delay, d1		17.6						16.9		17.3	18.6	
Progression Factor		1.00						1.00		1.00	1.00	
Incremental Delay, d2		1.0						0.5		2.3	2.0	
Delay (s)		18.7						17.3		19.6	20.6	
Level of Service		B						B		B	C	
Approach Delay (s)		18.7			0.0			17.3			20.4	
Approach LOS		B			A			B			C	

Intersection Summary			
HCM Average Control Delay	19.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00			0.99		1.00	0.90		1.00	1.00	0.78
Flpb, ped/bikes	1.00	1.00			1.00		0.83	1.00		1.00	1.00	1.00
Frt	1.00	1.00			1.00		1.00	0.95		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4525			4503		1311	1420		1583	1667	1102
Flt Permitted	0.08	1.00			1.00		0.66	1.00		0.95	1.00	1.00
Satd. Flow (perm)	131	4525			4503		908	1420		1583	1667	1102
Volume (vph)	39	1280	14	0	2055	47	105	76	42	80	150	110
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	41	1333	15	0	2141	49	109	79	44	83	156	115
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	41	1347	0	0	2188	0	109	123	0	83	156	115
Confl. Peds. (#/hr)	244		131	131		244	166		211	211		166
Confl. Bikes (#/hr)			3			5			2			3
Turn Type	Perm						Perm			Prot		custom
Protected Phases		2			6			8		7		
Permitted Phases	2						8				4	4
Actuated Green, G (s)	51.7	51.7			51.7		21.0	21.0		8.3	32.3	32.3
Effective Green, g (s)	50.7	50.7			50.7		20.0	20.0		7.3	31.3	31.3
Actuated g/C Ratio	0.56	0.56			0.56		0.22	0.22		0.08	0.35	0.35
Clearance Time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Vehicle Extension (s)	5.0	5.0			5.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	2549			2537		202	316		128	580	383
v/s Ratio Prot		0.30			c0.49			0.09		c0.05		
v/s Ratio Perm	0.31						c0.12				0.09	0.10
v/c Ratio	0.55	0.53			0.86		0.54	0.39		0.65	0.27	0.30
Uniform Delay, d1	12.5	12.2			16.7		30.9	29.8		40.1	21.1	21.4
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	26.7	0.8			4.2		10.0	3.6		10.8	1.1	2.0
Delay (s)	39.1	13.0			20.9		40.9	33.4		50.9	22.3	23.4
Level of Service	D	B			C		D	C		D	C	C
Approach Delay (s)		13.8			20.9			36.9			29.3	
Approach LOS		B			C			D			C	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBR2
Lane Configurations									
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00
Frpb, ped/bikes		1.00	1.00		1.00	0.99			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00
Frt		1.00	1.00		1.00	0.99			0.86
Flt Protected		0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)		1583	4522		1583	4479			1442
Flt Permitted		0.95	1.00		0.95	1.00			1.00
Satd. Flow (perm)		1583	4522		1583	4479			1442
Volume (vph)	343	124	1349	36	294	1814	42	41	131
Peak-hour factor, PHF	0.92	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.92
Adj. Flow (vph)	373	129	1405	38	306	1890	44	43	142
RTOR Reduction (vph)	0	0	3	0	0	2	0	0	125
Lane Group Flow (vph)	0	502	1440	0	306	1975	0	0	17
Confl. Peds. (#/hr)	63	81		28	28		63	81	35
Confl. Bikes (#/hr)				5			9	10	1
Turn Type	Prot	Prot			Prot				custom
Protected Phases	1	1	2		8	6			1
Permitted Phases									
Actuated Green, G (s)		13.0	55.2		22.8	81.0			13.0
Effective Green, g (s)		12.0	54.2		21.8	80.0			12.0
Actuated g/C Ratio		0.12	0.54		0.22	0.80			0.12
Clearance Time (s)		3.0	3.0		3.0	3.0			3.0
Vehicle Extension (s)		2.5	5.0		3.0	5.0			2.5
Lane Grp Cap (vph)		190	2451		345	3583			173
v/s Ratio Prot		c0.32	c0.32		c0.19	0.44			0.01
v/s Ratio Perm									
v/c Ratio		2.64	0.59		0.89	0.55			0.10
Uniform Delay, d1		44.0	15.4		37.9	3.6			39.2
Progression Factor		1.26	2.05		1.00	1.00			1.00
Incremental Delay, d2		740.3	0.1		22.8	0.6			0.2
Delay (s)		795.6	31.6		60.7	4.2			39.4
Level of Service		F	C		E	A			D
Approach Delay (s)			228.8			11.8			
Approach LOS			F			B			

Intersection Summary			
HCM Average Control Delay	109.3	HCM Level of Service	F
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	0.86	0.86		1.00	0.91			0.95	1.00		0.86	0.86
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (prot)	961	3014		1118	3196			2235	1000		3035	860
Flt Permitted	0.95	0.68		0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (perm)	961	2072		1118	3196			2235	1000		3035	860
Volume (vph)	693	1691	16	152	1608	54	0	863	121	0	1606	504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	722	1761	17	158	1675	56	0	899	126	0	1673	525
RTOR Reduction (vph)	0	1	0	0	4	0	0	0	89	0	0	320
Lane Group Flow (vph)	496	2003	0	158	1727	0	0	899	37	0	1673	205
Turn Type	Prot			Prot					Perm			Over
Protected Phases	7	4		3	8			2			6	7
Permitted Phases									2			
Actuated Green, G (s)	20.9	36.4		20.9	36.4			28.4	28.4		28.4	20.9
Effective Green, g (s)	22.0	37.0		22.0	37.0			29.0	29.0		29.0	22.0
Actuated g/C Ratio	0.22	0.37		0.22	0.37			0.29	0.29		0.29	0.22
Clearance Time (s)	5.1	4.6		5.1	4.6			4.6	4.6		4.6	5.1
Vehicle Extension (s)	3.0	3.0		5.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	211	974		246	1183			648	290		880	189
v/s Ratio Prot	c0.52	0.45		0.14	c0.54			0.40			c0.55	0.24
v/s Ratio Perm		c0.31							0.04			
v/c Ratio	2.35	2.06		0.64	1.46			1.39	0.13		1.90	1.09
Uniform Delay, d1	39.0	31.5		35.4	31.5			35.5	26.2		35.5	39.0
Progression Factor	1.00	1.00		1.08	0.54			1.00	1.00		1.00	1.00
Incremental Delay, d2	622.3	479.2		0.7	207.4			183.7	0.9		409.8	90.2
Delay (s)	661.3	510.7		39.0	224.6			219.2	27.1		445.3	129.2
Level of Service	F	F		D	F			F	C		F	F
Approach Delay (s)		540.5			209.0			195.6			369.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	362.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.99		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	172.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frt		1.00		1.00	1.00		1.00	1.00	0.85	1.00	0.96	
Flt Protected		0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3172		1118	3207		1118	2235	1000	1118	2150	
Flt Permitted		0.71		0.95	1.00		0.14	1.00	1.00	0.44	1.00	
Satd. Flow (perm)		2273		1118	3207		162	2235	1000	515	2150	
Volume (vph)	397	1293	9	274	1317	13	45	361	264	27	816	278
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	418	1361	9	288	1386	14	47	380	278	28	859	293
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	197	0	33	0
Lane Group Flow (vph)	0	1787	0	288	1399	0	47	380	81	28	1119	0
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)		36.4		20.9	36.4		28.4	28.4	28.4	28.4	28.4	
Effective Green, g (s)		37.0		22.0	37.0		29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio		0.37		0.22	0.37		0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)		4.6		5.1	4.6		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)		3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1039		246	1187		47	648	290	149	624	
v/s Ratio Prot		c0.38		0.26	c0.44			0.17			c0.52	
v/s Ratio Perm		c0.26					0.29		0.08	0.05		
v/c Ratio		1.72		1.17	1.18		1.00	0.59	0.28	0.19	1.79	
Uniform Delay, d1		31.5		39.0	31.5		35.5	30.4	27.4	26.7	35.5	
Progression Factor		0.61		0.93	1.40		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		324.5		107.1	88.0		131.3	3.9	2.4	2.8	363.1	
Delay (s)		343.6		143.4	131.9		166.8	34.2	29.8	29.4	398.6	
Level of Service		F		F	F		F	C	C	C	F	
Approach Delay (s)		343.6			133.9			41.3			389.9	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	248.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	162.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.86	1.00	0.97	0.86	0.97	0.88
Frpb, ped/bikes		1.00	0.97	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)		4047	968	2168	4047	2168	1760
Flt Permitted		1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)		4047	968	2168	4047	2168	1760
Volume (vph)	0	1576	558	997	2010	208	374
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1625	575	1028	2072	214	386
RTOR Reduction (vph)	0	0	50	0	0	0	277
Lane Group Flow (vph)	0	1625	525	1028	2072	214	109
Confl. Peds. (#/hr)			33	33			38
Confl. Bikes (#/hr)			14				1
Turn Type	Prot		pm+ov	Prot			Over
Protected Phases	1	6	4	3	2 3	4	3
Permitted Phases			6				
Actuated Green, G (s)		39.0	69.1	35.0	80.0	30.1	35.0
Effective Green, g (s)		41.0	74.0	34.0	79.0	33.0	34.0
Actuated g/C Ratio		0.34	0.62	0.28	0.66	0.28	0.28
Clearance Time (s)		6.0	6.9	3.0		6.9	3.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1383	629	614	2664	596	499
v/s Ratio Prot		c0.40	c0.23	c0.47	0.51	0.10	0.06
v/s Ratio Perm			0.31				
v/c Ratio		1.17	0.83	1.67	0.78	0.36	0.22
Uniform Delay, d1		39.5	18.2	43.0	14.4	35.0	32.9
Progression Factor		0.39	1.60	1.00	1.00	1.00	1.00
Incremental Delay, d2		81.7	3.5	310.5	1.5	0.4	0.2
Delay (s)		97.0	32.5	353.5	15.8	35.4	33.1
Level of Service		F	C	F	B	D	C
Approach Delay (s)		80.2			127.8	33.9	
Approach LOS		F			F	C	

Intersection Summary			
HCM Average Control Delay	100.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	110.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	0.95	0.95	0.88				1.00	0.91			0.95	1.00
Frt	1.00	1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95	0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1504	1504	2493				1583	4550			3167	1417
Flt Permitted	0.95	0.95	1.00				0.45	1.00			1.00	1.00
Satd. Flow (perm)	1504	1504	2493				746	4550			3167	1417
Volume (vph)	141	0	116	0	0	0	313	1071	0	0	403	263
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	160	0	132	0	0	0	356	1217	0	0	458	299
RTOR Reduction (vph)	0	0	110	0	0	0	0	0	0	0	0	242
Lane Group Flow (vph)	80	80	22	0	0	0	356	1217	0	0	458	57
Turn Type	Split		custom				pm+pt			Perm		Over
Protected Phases	4	4	7 1		3		5	2			6	4
Permitted Phases							2			6		
Actuated Green, G (s)	16.5	16.5	14.5				45.6	40.6			40.6	16.5
Effective Green, g (s)	17.1	17.1	15.1				46.8	41.8			41.8	17.1
Actuated g/C Ratio	0.19	0.19	0.17				0.52	0.46			0.46	0.19
Clearance Time (s)	4.6	4.6					4.0	5.2			5.2	4.6
Vehicle Extension (s)	3.0	3.0					3.0	3.2			3.4	3.0
Lane Grp Cap (vph)	286	286	418				434	2113			1471	269
v/s Ratio Prot	c0.05	0.05	c0.01				c0.05	0.27			0.14	0.04
v/s Ratio Perm							c0.38					
v/c Ratio	0.28	0.28	0.05				0.82	0.58			0.31	0.21
Uniform Delay, d1	31.2	31.2	31.4				17.1	17.6			15.1	30.8
Progression Factor	0.87	0.87	1.24				1.30	1.21			1.00	1.00
Incremental Delay, d2	1.4	1.4	0.0				11.1	1.1			0.6	1.8
Delay (s)	28.5	28.5	39.1				33.3	22.4			15.6	32.5
Level of Service	C	C	D				C	C			B	C
Approach Delay (s)		33.3			0.0			24.9			22.3	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.86		0.97	0.91		0.97	0.95	0.88
Frt		1.00	0.85		0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		4550	1417		5645		3072	4448		3072	3167	2493
Flt Permitted		1.00	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		4550	1417		5645		3072	4448		3072	3167	2493
Volume (vph)	0	2047	103	0	2732	314	349	469	82	453	527	459
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	2089	105	0	2788	320	356	479	84	462	538	468
RTOR Reduction (vph)	0	0	48	0	22	0	0	2	0	0	0	9
Lane Group Flow (vph)	0	2089	57	0	3086	0	356	561	0	462	538	459
Turn Type			pm+ov				Prot			Prot		Perm
Protected Phases		6	3		2		3	8		7	4	
Permitted Phases			6									4
Actuated Green, G (s)		35.5	47.5		35.5		12.0	27.7		12.0	27.7	27.7
Effective Green, g (s)		37.0	49.0		37.0		12.0	29.0		12.0	29.0	29.0
Actuated g/C Ratio		0.41	0.54		0.41		0.13	0.32		0.13	0.32	0.32
Clearance Time (s)		5.5	4.0		5.5		4.0	5.3		4.0	5.3	5.3
Vehicle Extension (s)		4.9	3.0		5.2		3.0	5.1		3.0	5.1	5.1
Lane Grp Cap (vph)		1871	834		2321		410	1433		410	1020	803
v/s Ratio Prot		0.46	0.01		c0.55		0.12	0.13		c0.15	0.17	
v/s Ratio Perm			0.03									c0.18
v/c Ratio		1.12	0.07		1.33		0.87	0.39		1.13	0.53	0.57
Uniform Delay, d1		26.5	9.7		26.5		38.2	23.7		39.0	24.9	25.3
Progression Factor		1.00	1.00		0.36		1.00	1.00		0.96	0.81	0.81
Incremental Delay, d2		60.4	0.0		148.6		17.4	0.8		83.6	1.0	1.6
Delay (s)		86.9	9.7		158.3		55.6	24.5		121.2	21.2	22.1
Level of Service		F	A		F		E	C		F	C	C
Approach Delay (s)		83.2			158.3			36.5			53.0	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM Average Control Delay	102.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86	1.00	0.97	0.91	0.94	0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1118	4047	1000	2168	3212	3152	1760
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1118	4047	1000	2168	3212	3152	1760
Volume (vph)	7	1676	720	455	1760	189	456
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	7	1693	727	460	1778	191	461
RTOR Reduction (vph)	0	0	463	0	0	0	341
Lane Group Flow (vph)	7	1693	264	460	1778	191	120
Confl. Peds. (#/hr)			55	55		1	111
Confl. Bikes (#/hr)			15				7
Turn Type	Prot		Over	Prot			Over
Protected Phases	1	6	8	5	2	8	5
Permitted Phases							
Actuated Green, G (s)	1.0	41.1	30.1	31.2	70.3	30.1	31.2
Effective Green, g (s)	2.0	43.8	33.0	31.2	73.0	33.0	31.2
Actuated g/C Ratio	0.02	0.36	0.28	0.26	0.61	0.28	0.26
Clearance Time (s)	5.0	6.7	6.9	4.0	6.7	6.9	4.0
Vehicle Extension (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0
Lane Grp Cap (vph)	19	1477	275	564	1954	867	458
v/s Ratio Prot	0.01	c0.42	c0.26	0.21	c0.55	0.06	0.07
v/s Ratio Perm							
v/c Ratio	0.37	1.15	0.96	0.82	0.91	0.22	0.26
Uniform Delay, d1	58.4	38.1	42.8	41.7	20.6	33.6	35.3
Progression Factor	0.50	1.34	5.43	0.97	1.11	1.00	1.00
Incremental Delay, d2	1.1	66.7	8.6	6.0	5.4	0.1	0.3
Delay (s)	30.3	117.8	241.3	46.6	28.4	33.7	35.6
Level of Service	C	F	F	D	C	C	D
Approach Delay (s)		154.5			32.1	35.0	
Approach LOS		F			C	D	

Intersection Summary			
HCM Average Control Delay	88.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.92	1.00	1.00	0.90	1.00	0.97	
Flpb, ped/bikes	0.98	1.00	1.00	0.98	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	0.85	1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1556	3167	1353	1547	3167	1307	3072	4550	1274	3072	4160	
Flt Permitted	0.45	1.00	1.00	0.45	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	734	3167	1353	731	3167	1307	3072	4550	1274	3072	4160	
Volume (vph)	102	484	95	32	239	75	258	955	588	244	324	185
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	115	544	107	36	269	84	290	1073	661	274	364	208
RTOR Reduction (vph)	0	0	48	0	0	64	0	0	91	0	96	0
Lane Group Flow (vph)	115	544	59	36	269	20	290	1073	570	274	476	0
Confl. Peds. (#/hr)	69		51	51		69	66		76	76		66
Confl. Bikes (#/hr)			2						2			5
Turn Type	pm+pt		pm+ov	Perm		Perm	Prot		Perm	Prot		
Protected Phases	1	6	3		2		3	8		7	4	
Permitted Phases	6		6	2		2			8			
Actuated Green, G (s)	29.8	29.8	40.9	19.5	19.5	19.5	11.1	35.2	35.2	11.0	35.1	
Effective Green, g (s)	31.3	31.3	42.4	21.0	21.0	21.0	11.1	35.7	35.7	11.0	35.6	
Actuated g/C Ratio	0.35	0.35	0.47	0.23	0.23	0.23	0.12	0.40	0.40	0.12	0.40	
Clearance Time (s)	3.5	5.5	4.0	5.5	5.5	5.5	4.0	4.5	4.5	4.0	4.5	
Vehicle Extension (s)	3.0	4.0	2.0	4.0	4.0	4.0	2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	313	1101	698	171	739	305	379	1805	505	375	1646	
v/s Ratio Prot	0.03	c0.17	0.01		0.08		0.09	0.24		c0.09	0.11	
v/s Ratio Perm	0.10		0.03	0.05		0.01			c0.45			
v/c Ratio	0.37	0.49	0.08	0.21	0.36	0.06	0.77	0.59	1.13	0.73	0.29	
Uniform Delay, d1	20.9	23.1	13.1	27.8	28.9	26.9	38.2	21.4	27.1	38.1	18.6	
Progression Factor	1.32	1.30	3.18	0.97	0.95	1.49	1.09	0.66	0.59	1.00	1.00	
Incremental Delay, d2	0.6	0.4	0.0	0.5	0.2	0.1	6.5	1.2	76.6	6.2	0.4	
Delay (s)	28.2	30.4	41.7	27.4	27.8	40.2	48.3	15.3	92.5	44.3	19.0	
Level of Service	C	C	D	C	C	D	D	B	F	D	B	
Approach Delay (s)		31.7			30.4			45.2			27.2	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	37.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor					1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt					1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected					0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1583	1417	1583	4550	1417	1583	4550	
Flt Permitted					0.76	1.00	0.43	1.00	1.00	0.10	1.00	
Satd. Flow (perm)					1262	1417	723	4550	1417	162	4550	
Volume (vph)	0	0	0	152	0	258	2	1563	43	15	494	0
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	171	0	290	2	1756	48	17	555	0
RTOR Reduction (vph)	0	0	0	0	0	15	0	0	16	0	0	0
Lane Group Flow (vph)	0	0	0	0	171	275	2	1756	32	17	555	0
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4		4	2		2	2		
Actuated Green, G (s)					21.1	21.1	58.9	58.9	58.9	58.9	58.9	
Effective Green, g (s)					22.1	22.1	59.9	59.9	59.9	59.9	59.9	
Actuated g/C Ratio					0.25	0.25	0.67	0.67	0.67	0.67	0.67	
Clearance Time (s)					5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)					3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					310	348	481	3028	943	108	3028	
v/s Ratio Prot								c0.39			0.12	
v/s Ratio Perm					0.14	c0.19	0.00		0.02	0.11		
v/c Ratio					0.55	0.79	0.00	0.58	0.03	0.16	0.18	
Uniform Delay, d1					29.6	31.8	5.0	8.2	5.1	5.6	5.7	
Progression Factor					1.00	1.00	0.49	0.64	0.34	2.17	1.84	
Incremental Delay, d2					2.1	11.3	0.0	0.7	0.1	3.0	0.1	
Delay (s)					31.7	43.1	2.5	5.9	1.8	15.3	10.7	
Level of Service					C	D	A	A	A	B	B	
Approach Delay (s)		0.0			38.9			5.8			10.8	
Approach LOS		A			D			A			B	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.3%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95	0.95	1.00	0.91		0.97	0.91	
Frt		0.92			0.93	0.85	1.00	0.99		1.00	0.96	
Flt Protected		0.98			0.98	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2855			1446	1346	1583	4526		3072	4387	
Flt Permitted		0.87			0.87	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		2540			1288	1346	1583	4526		3072	4387	
Volume (vph)	5	2	9	78	36	419	57	1146	42	39	477	150
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	6	2	10	89	41	476	65	1302	48	44	542	170
RTOR Reduction (vph)	0	8	0	0	41	8	0	3	0	0	46	0
Lane Group Flow (vph)	0	10	0	0	202	355	65	1347	0	44	666	0
Turn Type	Perm			Perm		pm+ov	Prot			Prot		
Protected Phases		8			4	5	1	6		5	2	
Permitted Phases	8			4		4						
Actuated Green, G (s)		18.5			18.5	26.3	7.9	49.5		7.8	49.4	
Effective Green, g (s)		20.0			20.0	27.8	7.9	50.2		7.8	50.1	
Actuated g/C Ratio		0.22			0.22	0.31	0.09	0.56		0.09	0.56	
Clearance Time (s)		5.5			5.5	4.0	4.0	4.7		4.0	4.7	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		564			286	476	139	2525		266	2442	
v/s Ratio Prot						c0.06	0.04	c0.30		0.01	0.15	
v/s Ratio Perm		0.00			0.16	0.20						
v/c Ratio		0.02			0.71	0.75	0.47	0.53		0.17	0.27	
Uniform Delay, d1		27.3			32.3	27.9	39.0	12.5		38.1	10.4	
Progression Factor		1.00			1.00	1.00	1.42	0.17		0.99	1.59	
Incremental Delay, d2		0.0			7.7	6.3	2.0	0.7		0.3	0.3	
Delay (s)		27.3			40.0	34.2	57.5	2.8		37.9	16.9	
Level of Service		C			D	C	E	A		D	B	
Approach Delay (s)		27.3			36.5			5.3			18.1	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM Average Control Delay	15.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	63.1%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97		1.00	1.00		1.00	0.97	0.91		1.00	0.91	
Frt	1.00		0.85	1.00		0.85	1.00	1.00		1.00	0.96	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3072		1417	1583		1417	3072	4530		1583	4349	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3072		1417	1583		1417	3072	4530		1583	4349	
Volume (vph)	14	0	12	24	0	95	210	1161	35	14	392	164
Peak-hour factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Adj. Flow (vph)	17	0	15	30	0	117	259	1433	43	17	484	202
RTOR Reduction (vph)	0	0	12	0	0	85	0	3	0	0	75	0
Lane Group Flow (vph)	17	0	3	30	0	32	259	1473	0	17	611	0
Turn Type	Prot		custom	Prot		custom	Prot			Prot		
Protected Phases	3		3 5	4		1 4	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	9.2		19.2	14.9		25.3	10.0	42.5		5.5	38.0	
Effective Green, g (s)	10.1		19.3	15.8		24.5	9.2	43.4		4.7	38.9	
Actuated g/C Ratio	0.11		0.21	0.18		0.27	0.10	0.48		0.05	0.43	
Clearance Time (s)	4.9			4.9			3.2	4.9		3.2	4.9	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	345		304	278		386	314	2184		83	1880	
v/s Ratio Prot	c0.01		0.00	c0.02		0.02	c0.08	c0.33		0.01	0.14	
v/s Ratio Perm												
v/c Ratio	0.05		0.01	0.11		0.08	0.82	0.67		0.20	0.33	
Uniform Delay, d1	35.7		27.8	31.2		24.4	39.6	17.9		40.9	16.9	
Progression Factor	1.00		1.00	1.00		1.00	1.50	0.49		1.25	0.56	
Incremental Delay, d2	0.1		0.0	0.2		0.1	1.7	0.2		1.2	0.4	
Delay (s)	35.7		27.8	31.3		24.5	61.1	9.0		52.5	10.0	
Level of Service	D		C	C		C	E	A		D	A	
Approach Delay (s)		32.0			25.9			16.8			11.0	
Approach LOS		C			C			B			B	

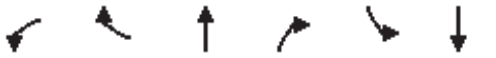
Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		0.97	0.88
Frt	1.00	1.00	0.97		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3072	4550	4424		3072	2493
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3072	4550	4424		3072	2493
Volume (vph)	1074	1718	1569	355	115	206
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1193	1909	1743	394	128	229
RTOR Reduction (vph)	0	0	36	0	0	165
Lane Group Flow (vph)	1193	1909	2101	0	128	64
Turn Type	Prot					Prot
Protected Phases	5	2 5	6		4	4
Permitted Phases						
Actuated Green, G (s)	12.0	55.5	38.5		24.0	24.0
Effective Green, g (s)	13.0	57.0	40.0		25.0	25.0
Actuated g/C Ratio	0.14	0.63	0.44		0.28	0.28
Clearance Time (s)	5.0		5.5		5.0	5.0
Vehicle Extension (s)	2.0		3.0		3.0	3.0
Lane Grp Cap (vph)	444	2882	1966		853	693
v/s Ratio Prot	c0.39	0.42	c0.47		c0.04	0.03
v/s Ratio Perm						
v/c Ratio	2.69	0.66	1.07		0.15	0.09
Uniform Delay, d1	38.5	10.4	25.0		24.5	24.1
Progression Factor	1.00	1.00	1.00		1.28	3.34
Incremental Delay, d2	765.5	1.2	41.5		0.1	0.1
Delay (s)	804.0	11.6	66.5		31.4	80.5
Level of Service	F	B	E		C	F
Approach Delay (s)		316.4	66.5		62.9	
Approach LOS		F	E		E	

Intersection Summary			
HCM Average Control Delay	204.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	0.98	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (prot)	3212	1000	2168	3212	2150	910
Flt Permitted	1.00	1.00	0.95	1.00	0.96	1.00
Satd. Flow (perm)	3212	1000	2168	3212	2150	910
Volume (vph)	2360	490	219	1668	156	115
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	2408	500	223	1702	159	117
RTOR Reduction (vph)	0	187	0	0	8	74
Lane Group Flow (vph)	2408	313	223	1702	171	25
Confl. Peds. (#/hr)		59	59		11	
Confl. Bikes (#/hr)		14				
Turn Type		Over	Prot			Perm
Protected Phases	6	4	5	2	4	
Permitted Phases						4
Actuated Green, G (s)	61.0	28.1	15.8	80.8	28.1	28.1
Effective Green, g (s)	62.2	30.0	15.8	82.0	30.0	30.0
Actuated g/C Ratio	0.52	0.25	0.13	0.68	0.25	0.25
Clearance Time (s)	5.2	5.9	4.0	5.2	5.9	5.9
Vehicle Extension (s)	3.7	3.8	1.0	3.5	3.8	3.8
Lane Grp Cap (vph)	1665	250	285	2195	538	228
v/s Ratio Prot	c0.75	c0.31	0.10	c0.53	0.08	
v/s Ratio Perm						0.03
v/c Ratio	1.45	1.25	0.78	0.78	0.32	0.11
Uniform Delay, d1	28.9	45.0	50.4	12.8	36.7	34.7
Progression Factor	1.78	0.64	1.32	0.58	1.00	1.00
Incremental Delay, d2	201.1	117.0	7.3	1.6	1.5	0.9
Delay (s)	252.6	145.8	73.9	9.0	38.2	35.6
Level of Service	F	F	E	A	D	D
Approach Delay (s)	234.2			16.5	37.3	
Approach LOS	F			B	D	

Intersection Summary			
HCM Average Control Delay	141.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.88	0.95	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	2493	3167	1417	1583	4550
Flt Permitted	0.95	1.00	1.00	1.00	0.58	1.00
Satd. Flow (perm)	3072	2493	3167	1417	971	4550
Volume (vph)	62	148	189	428	477	233
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	69	164	210	476	530	259
RTOR Reduction (vph)	0	151	0	40	0	0
Lane Group Flow (vph)	69	13	210	436	530	259
Turn Type		Perm		pm+ov	pm+pt	
Protected Phases	4		2	4	1	6
Permitted Phases		4		2	6	
Actuated Green, G (s)	6.8	6.8	60.2	67.0	73.2	73.2
Effective Green, g (s)	7.3	7.3	61.7	69.0	74.7	74.7
Actuated g/C Ratio	0.08	0.08	0.69	0.77	0.83	0.83
Clearance Time (s)	4.5	4.5	5.5	4.5	3.0	5.5
Vehicle Extension (s)	3.0	3.0	5.0	3.0	3.0	5.0
Lane Grp Cap (vph)	249	202	2171	1149	867	3777
v/s Ratio Prot	0.02		0.07	c0.03	c0.06	0.06
v/s Ratio Perm		0.01		0.28	c0.45	
v/c Ratio	0.28	0.07	0.10	0.38	0.61	0.07
Uniform Delay, d1	38.9	38.2	4.8	3.5	2.1	1.4
Progression Factor	0.90	1.58	0.12	4.21	1.00	1.00
Incremental Delay, d2	0.5	0.1	0.0	0.0	1.3	0.0
Delay (s)	35.5	60.7	0.6	14.6	3.4	1.4
Level of Service	D	E	A	B	A	A
Approach Delay (s)	53.2		10.3			2.8
Approach LOS	D		B			A

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	65.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	0.88
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	4550	4550	1417	3072	2493
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3072	4550	4550	1417	3072	2493
Volume (vph)	966	2842	2024	164	155	78
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	996	2930	2087	169	160	80
RTOR Reduction (vph)	0	0	0	91	0	0
Lane Group Flow (vph)	996	2930	2087	78	160	80
Turn Type	Prot			Perm		Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	15.0	55.1	36.1	36.1	25.0	25.0
Effective Green, g (s)	15.0	56.3	37.3	37.3	25.7	25.7
Actuated g/C Ratio	0.17	0.63	0.41	0.41	0.29	0.29
Clearance Time (s)	4.0	5.2	5.2	5.2	4.7	4.7
Vehicle Extension (s)	3.0	4.8	4.6	4.6	3.0	3.0
Lane Grp Cap (vph)	512	2846	1886	587	877	712
v/s Ratio Prot	c0.32	0.64	c0.46		c0.05	
v/s Ratio Perm				0.05		0.03
v/c Ratio	1.95	1.03	1.11	0.13	0.18	0.11
Uniform Delay, d1	37.5	16.9	26.4	16.3	24.2	23.7
Progression Factor	1.55	0.71	1.00	1.00	0.99	0.99
Incremental Delay, d2	426.0	15.0	56.4	0.5	0.1	0.1
Delay (s)	484.2	27.0	82.7	16.8	24.1	23.6
Level of Service	F	C	F	B	C	C
Approach Delay (s)		143.0	77.8		24.0	
Approach LOS		F	E		C	

Intersection Summary			
HCM Average Control Delay	115.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4550	1417	1583	4537		1583	3110		1583	3090	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.13	1.00		0.29	1.00	
Satd. Flow (perm)	1583	4550	1417	1583	4537		215	3110		489	3090	
Volume (vph)	102	2121	365	112	2265	46	130	667	91	122	838	161
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	103	2142	369	113	2288	46	131	674	92	123	846	163
RTOR Reduction (vph)	0	0	148	0	2	0	0	9	0	0	13	0
Lane Group Flow (vph)	103	2142	221	113	2332	0	131	757	0	123	996	0
Turn Type	Prot		Perm	Prot			pm+pt			Perm		
Protected Phases	1	6		5	2		3	8			4	
Permitted Phases			6				8			4		
Actuated Green, G (s)	11.6	54.1	54.1	12.1	54.6		39.8	39.8		26.0	26.0	
Effective Green, g (s)	11.6	55.1	55.1	12.1	55.6		40.8	40.8		27.0	27.0	
Actuated g/C Ratio	0.10	0.46	0.46	0.10	0.46		0.34	0.34		0.22	0.22	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0		3.5	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	4.0	4.0	2.0	4.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	153	2089	651	160	2102		185	1057		110	695	
v/s Ratio Prot	0.07	0.47		c0.07	c0.51		0.06	c0.24			c0.32	
v/s Ratio Perm			0.16				0.18			0.25		
v/c Ratio	0.67	1.03	0.34	0.71	1.11		0.71	0.72		1.12	1.43	
Uniform Delay, d1	52.4	32.5	20.8	52.2	32.2		32.5	34.6		46.5	46.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.53	1.50		1.00	1.00	
Incremental Delay, d2	8.8	26.4	1.4	11.0	56.8		4.4	0.8		121.1	203.0	
Delay (s)	61.2	58.9	22.2	63.2	89.0		54.0	52.7		167.6	249.5	
Level of Service	E	E	C	E	F		D	D		F	F	
Approach Delay (s)		53.8			87.9			52.9			240.6	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM Average Control Delay	95.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	109.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	3212	1000	2168	3212	1000	2168	2235	1000	2168	2235	1000
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	2168	3212	1000	2168	3212	1000	2168	2235	1000	2168	2235	1000
Volume (vph)	65	2115	106	106	1503	147	153	829	194	464	1230	200
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	66	2158	108	108	1534	150	156	846	198	473	1255	204
RTOR Reduction (vph)	0	0	45	0	0	48	0	0	125	0	0	101
Lane Group Flow (vph)	66	2158	63	108	1534	102	156	846	73	473	1255	103
Turn Type	Prot		Perm	Prot		pm+ov	Prot		Perm	Prot		Perm
Protected Phases	1	6		5	2	7	3	8		7	4	
Permitted Phases			6			2			8			4
Actuated Green, G (s)	6.2	26.7	26.7	11.8	32.3	54.3	11.1	39.6	39.6	22.0	50.5	50.5
Effective Green, g (s)	6.2	28.2	28.2	11.8	33.8	55.8	11.1	42.0	42.0	22.0	52.9	52.9
Actuated g/C Ratio	0.05	0.23	0.23	0.10	0.28	0.46	0.09	0.35	0.35	0.18	0.44	0.44
Clearance Time (s)	4.0	5.5	5.5	4.0	5.5	4.0	4.0	6.4	6.4	4.0	6.4	6.4
Vehicle Extension (s)	2.0	4.5	4.5	2.0	5.2	2.0	2.0	4.7	4.7	2.0	4.7	4.7
Lane Grp Cap (vph)	112	755	235	213	905	465	201	782	350	397	985	441
v/s Ratio Prot	0.03	c0.67		0.05	c0.48	0.04	0.07	c0.38		0.22	c0.56	
v/s Ratio Perm			0.06			0.06			0.07			0.10
v/c Ratio	0.59	2.86	0.27	0.51	1.70	0.22	0.78	1.08	0.21	1.19	1.27	0.23
Uniform Delay, d1	55.7	45.9	37.5	51.3	43.1	19.1	53.2	39.0	27.3	49.0	33.5	20.9
Progression Factor	1.18	1.67	2.61	0.86	0.85	0.47	1.00	1.00	1.00	0.78	0.68	0.08
Incremental Delay, d2	0.5	836.6	0.3	0.5	315.9	0.1	15.6	56.6	0.6	101.4	128.5	0.3
Delay (s)	66.4	913.0	98.0	44.6	352.5	9.1	68.8	95.6	27.9	139.7	151.4	2.0
Level of Service	E	F	F	D	F	A	E	F	C	F	F	A
Approach Delay (s)		851.3			305.2			81.0			132.7	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	397.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.72		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	142.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.86		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	1583	5694		1583	3167	1417	1583	3167	1417
Flt Permitted	0.12	1.00	1.00	0.12	1.00		0.29	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	197	4550	1417	202	5694		477	3167	1417	215	3167	1417
Volume (vph)	182	3034	69	17	2303	110	62	887	196	329	872	303
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	184	3065	70	17	2326	111	63	896	198	332	881	306
RTOR Reduction (vph)	0	0	27	0	8	0	0	0	3	0	0	0
Lane Group Flow (vph)	184	3065	43	17	2429	0	63	896	195	332	881	306
Turn Type	pm+pt		Perm	pm+pt			Perm		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2			8	5	7	4	1
Permitted Phases	6		6	2			8	8	8	4		4
Actuated Green, G (s)	40.4	33.4	33.4	38.6	32.5		25.5	25.5	31.6	36.5	36.5	43.5
Effective Green, g (s)	40.9	33.9	33.9	39.1	33.0		27.0	27.0	33.1	38.0	38.0	45.0
Actuated g/C Ratio	0.45	0.38	0.38	0.43	0.37		0.30	0.30	0.37	0.42	0.42	0.50
Clearance Time (s)	4.0	4.5	4.5	4.0	4.5		5.5	5.5	4.0	4.0	5.5	4.0
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		5.0	5.0	3.0	3.0	5.0	3.0
Lane Grp Cap (vph)	197	1714	534	181	2088		143	950	584	197	1337	771
v/s Ratio Prot	c0.07	c0.67		0.01	0.43			0.28	0.02	c0.13	0.28	0.03
v/s Ratio Perm	0.35		0.03	0.03			0.13		0.11	c0.58		0.19
v/c Ratio	0.93	1.79	0.08	0.09	1.16		0.44	0.94	0.33	1.69	0.66	0.40
Uniform Delay, d1	21.5	28.1	18.0	20.6	28.5		25.4	30.8	20.5	21.8	20.8	14.0
Progression Factor	1.51	0.67	0.19	0.25	0.30		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	354.9	0.0	0.1	75.6		4.5	17.5	0.3	329.4	1.6	0.3
Delay (s)	40.7	373.8	3.4	5.2	84.2		29.9	48.3	20.8	351.2	22.4	14.4
Level of Service	D	F	A	A	F		C	D	C	F	C	B
Approach Delay (s)		347.5			83.6			42.6			92.7	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	183.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	130.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.99	
Satd. Flow (prot)	1583	3088		1583	3157		1504	1568	1417		1575	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00		0.99	
Satd. Flow (perm)	1583	3088		1583	3157		1504	1568	1417		1575	
Volume (vph)	22	1199	237	533	1174	24	179	126	122	35	50	38
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	24	1332	263	592	1304	27	199	140	136	39	56	42
RTOR Reduction (vph)	0	13	0	0	1	0	0	0	84	0	0	0
Lane Group Flow (vph)	24	1582	0	592	1330	0	165	174	52	0	137	0
Turn Type	Prot			Prot			Split		pm+ov	Split		
Protected Phases	1	6		5	2		3	3	5	4	4	
Permitted Phases									3			
Actuated Green, G (s)	3.6	36.1		36.2	68.7		10.0	10.0	46.2		20.0	
Effective Green, g (s)	2.6	36.9		35.2	69.5		10.9	10.9	46.1		21.0	
Actuated g/C Ratio	0.02	0.31		0.29	0.58		0.09	0.09	0.38		0.18	
Clearance Time (s)	3.0	4.8		3.0	4.8		4.9	4.9	3.0		5.0	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	34	950		464	1828		137	142	592		276	
v/s Ratio Prot	0.02	c0.51		c0.37	0.42		0.11	c0.11	0.03		c0.09	
v/s Ratio Perm									0.01			
v/c Ratio	0.71	1.67		1.28	0.73		1.20	1.23	0.09		0.50	
Uniform Delay, d1	58.3	41.5		42.4	18.4		54.5	54.5	23.6		44.7	
Progression Factor	0.80	0.83		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	5.9	299.7		140.0	2.6		142.1	148.5	0.1		1.4	
Delay (s)	52.8	334.2		182.4	20.9		196.6	203.0	23.6		46.1	
Level of Service	D	F		F	C		F	F	C		D	
Approach Delay (s)		330.0			70.7			149.4			46.1	
Approach LOS		F			E			F			D	

Intersection Summary			
HCM Average Control Delay	179.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.89		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	0.96	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1504	1512	1417	1583	1491		1583	1659		1583	1667	1417
Flt Permitted	0.71	0.69	1.00	0.95	1.00		0.41	1.00		0.13	1.00	1.00
Satd. Flow (perm)	1125	1088	1417	1583	1491		680	1659		216	1667	1417
Volume (vph)	315	10	36	17	21	49	80	677	21	28	391	336
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	321	10	37	17	21	50	82	691	21	29	399	343
RTOR Reduction (vph)	0	0	32	0	38	0	0	2	0	0	0	188
Lane Group Flow (vph)	161	170	5	17	33	0	82	710	0	29	399	155
Turn Type	Perm		Perm	Split			Perm			Perm		Perm
Protected Phases		4		3	3			2			2	
Permitted Phases	4		4				2			2		2
Actuated Green, G (s)	10.0	10.0	10.0	17.0	17.0		32.6	32.6		32.6	32.6	32.6
Effective Green, g (s)	11.0	11.0	11.0	18.0	18.0		34.0	34.0		34.0	34.0	34.0
Actuated g/C Ratio	0.15	0.15	0.15	0.24	0.24		0.45	0.45		0.45	0.45	0.45
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.4	5.4		5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	165	160	208	380	358		308	752		98	756	642
v/s Ratio Prot				0.01	c0.02			c0.43			0.24	
v/s Ratio Perm	0.14	c0.16	0.00				0.12			0.13		0.11
v/c Ratio	0.98	1.06	0.03	0.04	0.09		0.27	0.94		0.30	0.53	0.24
Uniform Delay, d1	31.9	32.0	27.4	21.9	22.2		12.7	19.6		12.9	14.7	12.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	62.3	88.7	0.1	0.2	0.5		2.1	21.8		7.5	2.6	0.9
Delay (s)	94.2	120.7	27.5	22.1	22.7		14.9	41.4		20.5	17.4	13.5
Level of Service	F	F	C	C	C		B	D		C	B	B
Approach Delay (s)		99.7			22.6			38.6			15.8	
Approach LOS		F			C			D			B	

Intersection Summary			
HCM Average Control Delay	40.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SEL2	SEL	SET	SER
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1700	1700	1700	1700	1700
Total Lost time (s)			4.0	4.0		4.0				4.0	4.0	
Lane Util. Factor			1.00	1.00		0.95				1.00	0.95	
Frt			1.00	0.85		0.99				1.00	0.98	
Flt Protected			0.99	1.00		0.98				0.95	1.00	
Satd. Flow (prot)			1167	1000		2163				1583	3094	
Flt Permitted			0.87	1.00		0.65				0.48	1.00	
Satd. Flow (perm)			1018	1000		1440				805	3094	
Volume (vph)	19	36	301	20	191	268	32	16	4	24	128	23
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	20	37	310	21	197	276	33	16	4	25	132	24
RTOR Reduction (vph)	0	0	0	11	0	3	0	0	0	0	14	0
Lane Group Flow (vph)	0	0	367	10	0	519	0	0	0	29	142	0
Turn Type		Perm		Perm	Perm				Perm	Perm		
Protected Phases			6			2					4	
Permitted Phases		6		6	2				4	4		
Actuated Green, G (s)			34.0	34.0		34.0				30.0	30.0	
Effective Green, g (s)			36.0	36.0		36.0				31.0	31.0	
Actuated g/C Ratio			0.48	0.48		0.48				0.41	0.41	
Clearance Time (s)			6.0	6.0		6.0				5.0	5.0	
Vehicle Extension (s)			3.0	3.0		3.0				3.0	3.0	
Lane Grp Cap (vph)			489	480		691				333	1279	
v/s Ratio Prot											0.05	
v/s Ratio Perm			c0.36	0.01		0.36				0.04		
v/c Ratio			0.75	0.02		0.75				0.09	0.11	
Uniform Delay, d1			15.8	10.2		15.9				13.4	13.5	
Progression Factor			1.01	1.15		1.00				1.00	1.00	
Incremental Delay, d2			8.8	0.1		7.4				0.5	0.2	
Delay (s)			24.7	11.9		23.2				13.9	13.7	
Level of Service			C	B		C				B	B	
Approach Delay (s)			24.0			23.2					13.7	
Approach LOS			C			C					B	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	113.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	NWL	NWT	NWR	NWR2
Lane Configurations				
Ideal Flow (vphpl)	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	
Satd. Flow (prot)	1583	1667	1417	
Flt Permitted	0.65	1.00	1.00	
Satd. Flow (perm)	1089	1667	1417	
Volume (vph)	60	295	176	393
Peak-hour factor, PHF	0.97	0.97	0.97	0.97
Adj. Flow (vph)	62	304	181	405
RTOR Reduction (vph)	0	0	107	0
Lane Group Flow (vph)	62	304	479	0
Turn Type	Perm		Perm	
Protected Phases		8		
Permitted Phases	8		8	
Actuated Green, G (s)	30.0	30.0	30.0	
Effective Green, g (s)	31.0	31.0	31.0	
Actuated g/C Ratio	0.41	0.41	0.41	
Clearance Time (s)	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	
Lane Grp Cap (vph)	450	689	586	
v/s Ratio Prot		0.18		
v/s Ratio Perm	0.06		c0.34	
v/c Ratio	0.14	0.44	0.82	
Uniform Delay, d1	13.7	15.8	19.5	
Progression Factor	1.01	0.98	0.98	
Incremental Delay, d2	0.2	0.5	3.3	
Delay (s)	14.0	16.0	22.5	
Level of Service	B	B	C	
Approach Delay (s)		19.8		
Approach LOS		B		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		1.00	0.86			1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98			0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00		0.95	1.00	1.00
Satd. Flow (prot)	2168	4003		1118	3950			1156		1118	1176	1000
Flt Permitted	0.95	1.00		0.06	1.00			0.99		0.33	1.00	1.00
Satd. Flow (perm)	2168	4003		71	3950			1147		383	1176	1000
Volume (vph)	228	2099	163	71	2291	439	9	214	30	55	97	166
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	230	2120	165	72	2314	443	9	216	30	56	98	168
RTOR Reduction (vph)	0	8	0	0	16	0	0	3	0	0	0	0
Lane Group Flow (vph)	230	2277	0	72	2741	0	0	252	0	56	98	168
Turn Type	Prot			Perm			Perm			Perm		pm+ov
Protected Phases	5	2			6			4			4	5
Permitted Phases				6			4			4		4
Actuated Green, G (s)	20.4	109.0		84.6	84.6			32.0		32.0	32.0	52.4
Effective Green, g (s)	20.4	109.0		84.6	84.6			33.0		33.0	33.0	53.4
Actuated g/C Ratio	0.14	0.73		0.56	0.56			0.22		0.22	0.22	0.36
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0		5.0	5.0	4.0
Vehicle Extension (s)	1.5	4.0		4.0	4.0			3.0		3.0	3.0	1.5
Lane Grp Cap (vph)	295	2909		40	2228			252		84	259	383
v/s Ratio Prot	0.11	c0.57			0.69						0.08	0.06
v/s Ratio Perm				c1.02				c0.22		0.15		0.11
v/c Ratio	0.78	0.78		1.80	1.23			1.00		0.67	0.38	0.44
Uniform Delay, d1	62.6	13.0		32.7	32.7			58.5		53.5	49.8	36.9
Progression Factor	1.39	0.21		1.00	1.00			1.00		0.98	0.97	1.08
Incremental Delay, d2	1.1	0.2		442.4	107.8			56.1		16.5	0.8	0.3
Delay (s)	88.4	2.9		475.1	140.5			114.6		68.9	49.1	39.9
Level of Service	F	A		F	F			F		E	D	D
Approach Delay (s)		10.8			149.0			114.6			47.7	
Approach LOS		B			F			F			D	

Intersection Summary			
HCM Average Control Delay	83.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.47		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	117.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.56	1.00	1.00	0.88
Flpb, ped/bikes	0.96	1.00		0.99	1.00		0.93	1.00	1.00	0.85	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1520	1620		1573	1651		1474	3167	799	1339	3167	1248
Flt Permitted	0.62	1.00		0.38	1.00		0.55	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)	984	1620		637	1651		848	3167	799	375	3167	1248
Volume (vph)	6	278	46	102	216	10	44	702	128	55	308	62
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	6	284	47	104	220	10	45	716	131	56	314	63
RTOR Reduction (vph)	0	8	0	0	2	0	0	0	72	0	0	39
Lane Group Flow (vph)	6	323	0	104	228	0	45	716	59	56	314	24
Confl. Peds. (#/hr)	66		43	43		66	111		339	339		111
Confl. Bikes (#/hr)			4			6			18			1
Turn Type	Perm			pm+pt			Perm		pm+ov	Perm		Perm
Protected Phases		6		5	2			8	5		4	
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	27.6	27.6		37.5	37.5		27.1	27.1	33.5	27.1	27.1	27.1
Effective Green, g (s)	29.0	29.0		38.9	38.9		28.1	28.1	34.0	28.1	28.1	28.1
Actuated g/C Ratio	0.39	0.39		0.52	0.52		0.37	0.37	0.45	0.37	0.37	0.37
Clearance Time (s)	5.4	5.4		3.5	5.4		5.0	5.0	3.5	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	380	626		404	856		318	1187	405	141	1187	468
v/s Ratio Prot		c0.20		0.02	c0.14			c0.23	0.01		0.10	
v/s Ratio Perm	0.01			0.11			0.05		0.06	0.15		0.02
v/c Ratio	0.02	0.52		0.26	0.27		0.14	0.60	0.15	0.40	0.26	0.05
Uniform Delay, d1	14.2	17.6		10.1	10.1		15.5	18.9	12.0	17.2	16.3	14.9
Progression Factor	0.96	0.98		1.00	1.00		1.78	1.81	5.23	1.00	1.00	1.00
Incremental Delay, d2	0.1	2.8		0.3	0.8		0.7	1.7	0.1	8.2	0.5	0.2
Delay (s)	13.7	20.1		10.4	10.8		28.3	35.9	62.9	25.4	16.8	15.2
Level of Service	B	C		B	B		C	D	E	C	B	B
Approach Delay (s)		20.0			10.7			39.5			17.7	
Approach LOS		B			B			D			B	

Intersection Summary			
HCM Average Control Delay	26.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.95		1.00	0.96			1.00	0.30
Flpb, ped/bikes		0.95	1.00		0.91		0.70	1.00			1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.99			1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1565	1417		1390		1106	3018			3155	420
Flt Permitted		0.92	1.00		0.92		0.41	1.00			0.93	1.00
Satd. Flow (perm)		1457	1417		1290		475	3018			2945	420
Volume (vph)	39	154	37	31	96	23	89	853	50	10	488	21
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	42	166	40	33	103	25	96	917	54	11	525	23
RTOR Reduction (vph)	0	0	40	0	0	0	0	3	0	0	0	9
Lane Group Flow (vph)	0	208	0	0	161	0	96	968	0	0	536	14
Confl. Peds. (#/hr)	570		715	715		570	814		795	795		814
Confl. Bikes (#/hr)			9			12			43			28
Turn Type	Perm		NA	Perm			Perm			Perm		Perm
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		2
Actuated Green, G (s)		30.5	0.0		30.5		34.1	34.1			34.1	34.1
Effective Green, g (s)		32.0	0.0		32.0		35.0	35.0			35.0	35.0
Actuated g/C Ratio		0.43	0.00		0.43		0.47	0.47			0.47	0.47
Clearance Time (s)		5.5			5.5		4.9	4.9			4.9	4.9
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		622	0		550		222	1408			1374	196
v/s Ratio Prot								c0.32				
v/s Ratio Perm		c0.14			0.12		0.20				0.18	0.03
v/c Ratio		0.33	0.00		0.29		0.43	0.69			0.39	0.07
Uniform Delay, d1		14.4	37.5		14.1		13.4	15.7			13.0	11.0
Progression Factor		1.00	1.00		1.00		1.00	1.00			0.97	0.93
Incremental Delay, d2		1.4	0.0		1.3		6.0	2.8			0.8	0.7
Delay (s)		15.8	37.5		15.4		19.4	18.5			13.4	10.9
Level of Service		B	D		B		B	B			B	B
Approach Delay (s)		19.3			15.4			18.6			13.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	17.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor		0.95			0.95			0.95	1.00		0.95	
Frpb, ped/bikes		0.91			0.97			1.00	0.67		0.98	
Flpb, ped/bikes		0.98			0.88			1.00	1.00		1.00	
Frt		0.96			0.99			1.00	0.85		0.99	
Flt Protected		0.99			0.97			1.00	1.00		1.00	
Satd. Flow (prot)		1892			1832			2235	668		2183	
Flt Permitted		0.89			0.68			1.00	1.00		0.93	
Satd. Flow (perm)		1688			1286			2235	668		2028	
Volume (vph)	24	137	68	201	131	33	0	1064	278	9	431	20
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	24	140	69	205	134	34	0	1086	284	9	440	20
RTOR Reduction (vph)	0	26	0	0	5	0	0	0	111	0	2	0
Lane Group Flow (vph)	0	207	0	0	368	0	0	1086	173	0	467	0
Confl. Peds. (#/hr)	138		216	216		138	330		211	211		330
Confl. Bikes (#/hr)			2			2			16			3
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2	2		
Actuated Green, G (s)		68.5			68.5			71.0	71.0		71.0	
Effective Green, g (s)		70.0			70.0			72.0	72.0		72.0	
Actuated g/C Ratio		0.47			0.47			0.48	0.48		0.48	
Clearance Time (s)		5.5			5.5			5.0	5.0		5.0	
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)		788			600			1073	321		973	
v/s Ratio Prot								c0.49				
v/s Ratio Perm		0.12			c0.29				0.26		0.23	
v/c Ratio		0.26			0.61			1.01	0.54		0.48	
Uniform Delay, d1		24.3			29.9			39.0	27.3		26.3	
Progression Factor		1.10			1.35			1.52	3.22		1.00	
Incremental Delay, d2		0.8			3.8			11.5	0.6		1.7	
Delay (s)		27.5			44.3			70.6	88.6		28.0	
Level of Service		C			D			E	F		C	
Approach Delay (s)		27.5			44.3			74.4			28.0	
Approach LOS		C			D			E			C	

Intersection Summary			
HCM Average Control Delay	56.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	106.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.91		1.00	0.86	0.86
Frpb, ped/bikes	1.00	0.97		1.00	0.98		1.00	0.95		1.00	1.00	0.85
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.96	1.00		0.91	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	2168	3858		2168	3934		1077	2984		1021	3035	731
Flt Permitted	0.95	1.00		0.95	1.00		0.32	1.00		0.28	1.00	1.00
Satd. Flow (perm)	2168	3858		2168	3934		359	2984		301	3035	731
Volume (vph)	475	2377	280	82	2265	146	208	691	126	69	420	197
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	500	2502	295	86	2384	154	219	727	133	73	442	207
RTOR Reduction (vph)	0	13	0	0	6	0	0	18	0	0	0	13
Lane Group Flow (vph)	500	2784	0	86	2532	0	219	842	0	73	442	194
Confl. Peds. (#/hr)	197		162	162		197	210		216	216		210
Confl. Bikes (#/hr)			3			2			13			5
Turn Type	Prot			Prot			pm+pt			Perm		pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases							8			4		4
Actuated Green, G (s)	35.0	76.5		13.0	54.5		45.1	45.1		31.1	31.1	66.1
Effective Green, g (s)	35.0	78.0		13.0	56.0		47.0	47.0		33.0	33.0	68.0
Actuated g/C Ratio	0.23	0.52		0.09	0.37		0.31	0.31		0.22	0.22	0.45
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	5.9		5.9	5.9	4.0
Vehicle Extension (s)	2.0	4.0		2.0	4.0		3.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	506	2006		188	1469		160	935		66	668	351
v/s Ratio Prot	0.23	c0.72		0.04	c0.64		c0.09	0.28			0.15	0.13
v/s Ratio Perm							c0.34			0.24		0.14
v/c Ratio	0.99	1.39		0.46	1.72		1.37	0.90		1.11	0.66	0.55
Uniform Delay, d1	57.3	36.0		65.1	47.0		49.3	49.3		58.5	53.4	29.9
Progression Factor	1.32	1.05		0.79	0.71		1.00	1.00		0.97	0.96	1.61
Incremental Delay, d2	9.3	174.7		0.1	325.8		200.5	11.4		135.8	1.7	0.9
Delay (s)	84.9	212.6		51.7	359.3		249.8	60.7		192.6	53.2	49.0
Level of Service	F	F		D	F		F	E		F	D	D
Approach Delay (s)		193.2			349.2			99.1			66.1	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	221.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	135.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.97			0.96		1.00	0.97		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1134			1105		1118	2169		1118	2223	
Flt Permitted		0.93			0.81		0.40	1.00		0.12	1.00	
Satd. Flow (perm)		1059			915		469	2169		145	2223	
Volume (vph)	33	139	48	92	74	79	42	1206	298	57	564	21
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	34	143	49	95	76	81	43	1243	307	59	581	22
RTOR Reduction (vph)	0	20	0	0	15	0	0	29	0	0	4	0
Lane Group Flow (vph)	0	206	0	0	237	0	43	1521	0	59	599	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		18.6			18.6		32.0	32.0		32.0	32.0	
Effective Green, g (s)		19.6			19.6		32.4	32.4		32.4	32.4	
Actuated g/C Ratio		0.33			0.33		0.54	0.54		0.54	0.54	
Clearance Time (s)		5.0			5.0		4.4	4.4		4.4	4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		346			299		253	1171		78	1200	
v/s Ratio Prot								c0.70			0.27	
v/s Ratio Perm		0.19			c0.26		0.09			0.41		
v/c Ratio		0.60			0.79		0.17	1.30		0.76	0.50	
Uniform Delay, d1		16.9			18.4		7.0	13.8		10.7	8.7	
Progression Factor		1.00			1.00		0.34	0.38		1.00	1.00	
Incremental Delay, d2		2.8			13.4		0.1	134.9		49.4	1.5	
Delay (s)		19.7			31.8		2.5	140.2		60.1	10.2	
Level of Service		B			C		A	F		E	B	
Approach Delay (s)		19.7			31.8			136.5			14.6	
Approach LOS		B			C			F			B	

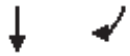
Intersection Summary			
HCM Average Control Delay	87.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	126.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.95		1.00	0.98		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	1123		1118	1159		1118	2220		1118	2213	
Flt Permitted	0.47	1.00		0.33	1.00		0.29	1.00		0.15	1.00	
Satd. Flow (perm)	549	1123		391	1159		347	2220		174	2213	
Volume (vph)	168	310	136	77	291	33	103	1223	58	22	675	47
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	175	323	142	80	303	34	107	1274	60	23	703	49
RTOR Reduction (vph)	0	26	0	0	7	0	0	5	0	0	8	0
Lane Group Flow (vph)	175	439	0	80	330	0	107	1329	0	23	744	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	23.3	23.3		23.3	23.3		26.6	26.6		26.6	26.6	
Effective Green, g (s)	24.9	24.9		24.9	24.9		27.1	27.1		27.1	27.1	
Actuated g/C Ratio	0.41	0.41		0.41	0.41		0.45	0.45		0.45	0.45	
Clearance Time (s)	5.6	5.6		5.6	5.6		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	228	466		162	481		157	1003		79	1000	
v/s Ratio Prot		c0.39			0.28			c0.60			0.34	
v/s Ratio Perm	0.32			0.20			0.31			0.13		
v/c Ratio	0.77	0.94		0.49	0.69		0.68	1.32		0.29	0.74	
Uniform Delay, d1	15.1	16.8		12.9	14.4		13.0	16.4		10.4	13.6	
Progression Factor	0.61	0.62		1.00	1.00		2.21	2.58		0.64	0.84	
Incremental Delay, d2	4.7	11.7		2.4	4.0		11.1	149.5		7.9	4.4	
Delay (s)	13.9	22.1		15.3	18.4		39.9	191.9		14.6	15.8	
Level of Service	B	C		B	B		D	F		B	B	
Approach Delay (s)		19.9			17.8			180.6			15.8	
Approach LOS		B			B			F			B	

Intersection Summary			
HCM Average Control Delay	89.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor		0.97	0.91	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.99		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		3072	4550	1417		3072	4550	1417	1583	3145		1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (perm)		3072	4550	1417		3072	4550	1417	1583	3145		1583
Volume (vph)	2	93	2139	131	41	226	1746	241	189	1102	51	197
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	2	96	2205	135	42	233	1800	248	195	1136	53	203
RTOR Reduction (vph)	0	0	0	55	0	0	0	105	0	3	0	0
Lane Group Flow (vph)	0	98	2205	80	0	275	1800	143	195	1187	0	203
Turn Type	Prot	Prot		pm+ov	Prot	Prot		pm+ov	Prot			Prot
Protected Phases	1	1	6	3	5	5	2	7	3	8		7
Permitted Phases				6				2				
Actuated Green, G (s)		9.1	29.7	41.7		15.8	36.4	48.4	12.0	42.3		12.0
Effective Green, g (s)		9.1	31.2	43.2		15.8	37.9	49.9	12.0	45.0		12.0
Actuated g/C Ratio		0.08	0.26	0.36		0.13	0.32	0.42	0.10	0.38		0.10
Clearance Time (s)		4.0	5.5	4.0		4.0	5.5	4.0	4.0	6.7		4.0
Vehicle Extension (s)		3.0	5.0	3.0		3.0	5.0	3.0	3.0	4.0		3.0
Lane Grp Cap (vph)		233	1183	557		404	1437	636	158	1179		158
v/s Ratio Prot		0.03	c0.48	0.01		c0.09	c0.40	0.02	0.12	c0.38		c0.13
v/s Ratio Perm				0.04				0.08				
v/c Ratio		0.42	1.86	0.14		0.68	1.25	0.23	1.23	1.01		1.28
Uniform Delay, d1		52.9	44.4	25.9		49.7	41.0	22.6	54.0	37.5		54.0
Progression Factor		0.56	1.31	3.16		0.56	0.87	1.95	1.00	1.00		1.04
Incremental Delay, d2		0.1	389.1	0.0		0.4	114.2	0.0	148.1	27.8		158.1
Delay (s)		29.5	447.3	82.0		28.3	149.9	44.1	202.1	65.3		214.4
Level of Service		C	F	F		C	F	D	F	E		F
Approach Delay (s)			410.2				124.2			84.5		
Approach LOS			F				F			F		

Intersection Summary			
HCM Average Control Delay	205.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	116.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBT	SBR
Lane Configurations		
Ideal Flow (vphpl)	1700	1700
Total Lost time (s)	4.0	4.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3167	1417
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3167	1417
Volume (vph)	701	92
Peak-hour factor, PHF	0.97	0.97
Adj. Flow (vph)	723	95
RTOR Reduction (vph)	0	59
Lane Group Flow (vph)	723	36
Turn Type		Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	42.3	42.3
Effective Green, g (s)	45.0	45.0
Actuated g/C Ratio	0.38	0.38
Clearance Time (s)	6.7	6.7
Vehicle Extension (s)	4.0	4.0
Lane Grp Cap (vph)	1188	531
v/s Ratio Prot	0.23	
v/s Ratio Perm		0.03
v/c Ratio	0.61	0.07
Uniform Delay, d1	30.4	24.0
Progression Factor	0.91	1.26
Incremental Delay, d2	0.7	0.1
Delay (s)	28.5	30.4
Level of Service	C	C
Approach Delay (s)	65.6	
Approach LOS	E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4534		1583	5678		1583	3095		1583	3129	
Flt Permitted	0.13	1.00		0.11	1.00		0.33	1.00		0.13	1.00	
Satd. Flow (perm)	211	4534		187	5678		554	3095		215	3129	
Volume (vph)	34	2413	59	86	2222	154	49	1027	181	146	734	64
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	36	2567	63	91	2364	164	52	1093	193	155	781	68
RTOR Reduction (vph)	0	3	0	0	12	0	0	16	0	0	1	0
Lane Group Flow (vph)	36	2627	0	91	2516	0	52	1270	0	155	848	0
Turn Type	Perm			pm+pt			Perm			pm+pt		
Protected Phases		2		1	6			8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	30.6	30.6		41.4	41.4		25.6	25.6		38.2	38.2	
Effective Green, g (s)	31.6	31.6		42.4	42.4		27.0	27.0		39.6	39.6	
Actuated g/C Ratio	0.35	0.35		0.47	0.47		0.30	0.30		0.44	0.44	
Clearance Time (s)	5.0	5.0		3.5	5.0		5.4	5.4		3.5	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1592		194	2675		166	929		225	1377	
v/s Ratio Prot		c0.58		0.04	c0.44			c0.41		0.07	c0.27	
v/s Ratio Perm	0.17			0.19			0.09			0.24		
v/c Ratio	0.49	1.65		0.47	0.94		0.31	1.37		0.69	0.62	
Uniform Delay, d1	22.9	29.2		20.4	22.6		24.3	31.5		21.0	19.4	
Progression Factor	0.58	0.66		2.16	1.79		0.77	0.84		1.00	1.00	
Incremental Delay, d2	2.1	292.9		0.2	0.9		3.0	169.4		8.5	2.1	
Delay (s)	15.3	312.2		44.2	41.5		21.8	195.8		29.5	21.4	
Level of Service	B	F		D	D		C	F		C	C	
Approach Delay (s)		308.1			41.6			189.0			22.7	
Approach LOS		F			D			F			C	

Intersection Summary			
HCM Average Control Delay	158.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4550	1417	1583	4550	1417	1583	3167	1417	1583	3112	
Flt Permitted	0.14	1.00	1.00	0.14	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	228	4550	1417	229	4550	1417	1583	3167	1417	1583	3112	
Volume (vph)	206	1878	78	74	1558	208	176	906	131	262	579	75
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	210	1916	80	76	1590	212	180	924	134	267	591	77
RTOR Reduction (vph)	0	0	45	0	0	31	0	0	1	0	12	0
Lane Group Flow (vph)	210	1916	35	76	1590	181	180	924	133	267	656	0
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	Prot		pm+ov	Prot		
Protected Phases	1	6	3	5	2	7	3	8	5	7	4	
Permitted Phases	6		6	2		2			8			
Actuated Green, G (s)	33.9	27.4	37.7	33.5	27.2	33.7	10.3	31.7	38.0	6.5	27.9	
Effective Green, g (s)	35.3	29.3	39.1	34.9	29.1	35.1	9.8	32.9	38.7	6.0	29.1	
Actuated g/C Ratio	0.39	0.33	0.43	0.39	0.32	0.39	0.11	0.37	0.43	0.07	0.32	
Clearance Time (s)	3.5	5.9	3.5	3.5	5.9	3.5	3.5	5.2	3.5	3.5	5.2	
Vehicle Extension (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	180	1481	616	176	1471	616	172	1158	672	106	1006	
v/s Ratio Prot	c0.08	c0.42	0.01	0.03	0.35	0.02	c0.11	c0.29	0.01	c0.17	0.21	
v/s Ratio Perm	0.38		0.02	0.14		0.11			0.08			
v/c Ratio	1.17	1.29	0.06	0.43	1.08	0.29	1.05	0.80	0.20	2.52	0.65	
Uniform Delay, d1	25.2	30.4	14.8	22.4	30.4	18.9	40.1	25.6	16.0	42.0	26.1	
Progression Factor	1.90	0.33	0.06	1.00	1.00	1.00	1.00	1.00	1.00	1.42	0.78	
Incremental Delay, d2	80.8	132.7	0.0	1.7	48.6	0.3	81.4	4.5	0.1	703.8	1.5	
Delay (s)	128.7	142.6	0.9	24.1	79.1	19.2	121.5	30.1	16.1	763.5	21.9	
Level of Service	F	F	A	C	E	B	F	C	B	F	C	
Approach Delay (s)		136.2			70.1			41.9			233.7	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM Average Control Delay	112.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.97		1.00	1.00	0.84	1.00	0.98		1.00	1.00	
Flpb, ped/bikes	0.86	1.00		0.90	1.00	1.00	0.93	1.00		0.98	1.00	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1363	1556		1428	1667	1196	1480	3021		1546	3141	
Flt Permitted	0.73	1.00		0.63	1.00	1.00	0.47	1.00		0.27	1.00	
Satd. Flow (perm)	1053	1556		949	1667	1196	730	3021		435	3141	
Volume (vph)	26	109	33	116	33	54	39	707	152	89	442	12
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	28	116	35	123	35	57	41	752	162	95	470	13
RTOR Reduction (vph)	0	14	0	0	0	41	0	24	0	0	3	0
Lane Group Flow (vph)	28	137	0	123	35	16	41	890	0	95	480	0
Confl. Peds. (#/hr)	130		66	66		130	66		85	85		66
Confl. Bikes (#/hr)			1			1			5			14
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4		4	2			2		
Actuated Green, G (s)	20.2	20.2		20.2	20.2	20.2	45.3	45.3		45.3	45.3	
Effective Green, g (s)	21.0	21.0		21.0	21.0	21.0	46.0	46.0		46.0	46.0	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.8	4.8		4.8	4.8	4.8	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	295	436		266	467	335	448	1853		267	1926	
v/s Ratio Prot		0.09			0.02			c0.29			0.15	
v/s Ratio Perm	0.03			c0.13		0.01	0.06			0.22		
v/c Ratio	0.09	0.31		0.46	0.07	0.05	0.09	0.48		0.36	0.25	
Uniform Delay, d1	20.0	21.3		22.3	19.9	19.7	5.9	7.9		7.2	6.6	
Progression Factor	1.00	1.00		0.94	1.01	1.15	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.6	1.9		5.6	0.3	0.3	0.4	0.9		3.7	0.3	
Delay (s)	20.6	23.2		26.7	20.4	22.9	6.3	8.8		10.8	6.9	
Level of Service	C	C		C	C	C	A	A		B	A	
Approach Delay (s)		22.8			24.7			8.7			7.6	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)				4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor				1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes				1.00	0.89		1.00	1.00	0.81	1.00	1.00	
Flpb, ped/bikes				1.00	1.00		0.98	1.00	1.00	0.96	1.00	
Frt				1.00	0.86		1.00	1.00	0.85	1.00	1.00	
Flt Protected				0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)				1118	901		1097	2235	807	1070	2233	
Flt Permitted				0.95	1.00		0.47	1.00	1.00	0.27	1.00	
Satd. Flow (perm)				1118	901		541	2235	807	302	2233	
Volume (vph)	0	0	0	70	4	69	3	876	164	78	464	2
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	0	0	72	4	71	3	903	169	80	478	2
RTOR Reduction (vph)	0	0	0	0	50	0	0	0	68	0	0	0
Lane Group Flow (vph)	0	0	0	72	25	0	3	903	101	80	480	0
Confl. Peds. (#/hr)	55					55	20		161	161		20
Confl. Bikes (#/hr)						1			14			
Turn Type	Split			Perm			Perm		Perm	custom		
Protected Phases	3	3			4			6				
Permitted Phases				4			6		6	2	2	
Actuated Green, G (s)				21.0	21.0		44.4	44.4	44.4	44.4	44.4	
Effective Green, g (s)				22.0	22.0		45.0	45.0	45.0	45.0	45.0	
Actuated g/C Ratio				0.29	0.29		0.60	0.60	0.60	0.60	0.60	
Clearance Time (s)				5.0	5.0		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)				3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)				328	264		325	1341	484	181	1340	
v/s Ratio Prot					0.03			c0.40				
v/s Ratio Perm				c0.06			0.01		0.13	0.26	0.21	
v/c Ratio				0.22	0.09		0.01	0.67	0.21	0.44	0.36	
Uniform Delay, d1				20.0	19.3		6.0	10.1	6.9	8.2	7.6	
Progression Factor				1.45	3.48		0.60	1.24	3.29	1.00	1.00	
Incremental Delay, d2				0.3	0.1		0.0	0.2	0.1	7.6	0.7	
Delay (s)				29.3	67.2		3.6	12.7	22.7	15.8	8.4	
Level of Service				C	E		A	B	C	B	A	
Approach Delay (s)		0.0			48.6			14.3			9.4	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.2%	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												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		1.00	0.86		1.00	0.95	1.00	1.00	1.00	0.88
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	0.67	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.94	1.00	1.00	0.83	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	3918		1115	3944		1045	2235	672	924	1176	1603
Flt Permitted	0.95	1.00		0.07	1.00		0.50	1.00	1.00	0.48	1.00	1.00
Satd. Flow (perm)	2168	3918		78	3944		551	2235	672	464	1176	1603
Volume (vph)	612	3082	183	43	2445	150	20	381	72	87	118	323
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	651	3279	195	46	2601	160	21	405	77	93	126	344
RTOR Reduction (vph)	0	5	0	0	6	0	0	0	0	0	0	0
Lane Group Flow (vph)	651	3469	0	46	2755	0	21	405	77	93	126	344
Confl. Peds. (#/hr)	165		141	141		165	128		258	258		128
Confl. Bikes (#/hr)			8			7			18			3
Turn Type	Prot			Perm			pm+pt		Perm	Perm		pm+ov
Protected Phases	1	6			2		3	8			4	1
Permitted Phases				2			8		8	4		4
Actuated Green, G (s)	38.2	101.7		59.5	59.5		37.5	37.5	37.5	28.8	28.8	67.0
Effective Green, g (s)	38.2	102.7		60.5	60.5		39.3	39.3	39.3	30.6	30.6	68.8
Actuated g/C Ratio	0.25	0.68		0.40	0.40		0.26	0.26	0.26	0.20	0.20	0.46
Clearance Time (s)	4.0	5.0		5.0	5.0		4.0	5.8	5.8	5.8	5.8	4.0
Vehicle Extension (s)	2.0	4.0		4.0	4.0		2.0	3.0	3.0	3.0	3.0	2.0
Lane Grp Cap (vph)	552	2683		31	1591		160	586	176	95	240	778
v/s Ratio Prot	0.30	c0.89			c0.70		0.00	c0.18			0.11	0.11
v/s Ratio Perm				0.59			0.03		0.11	c0.20		0.10
v/c Ratio	1.18	1.29		1.48	1.73		0.13	0.69	0.44	0.98	0.53	0.44
Uniform Delay, d1	55.9	23.6		44.8	44.8		42.0	49.9	46.1	59.4	53.2	27.6
Progression Factor	1.05	1.23		0.43	0.45		1.00	1.00	1.00	0.96	0.95	1.34
Incremental Delay, d2	82.6	132.1		232.7	329.5		0.1	3.5	1.7	82.6	2.0	0.1
Delay (s)	141.2	161.2		252.2	349.5		42.1	53.4	47.9	139.4	52.6	37.1
Level of Service	F	F		F	F		D	D	D	F	D	D
Approach Delay (s)		158.0			347.9			52.1			57.4	
Approach LOS		F			F			D			E	

Intersection Summary			
HCM Average Control Delay	210.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	134.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0			
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00			
Frt		0.99		1.00	1.00		1.00		0.85			
Flt Protected		1.00		0.95	1.00		0.95		1.00			
Satd. Flow (prot)		3128		1583	3167		1583		1417			
Flt Permitted		1.00		0.06	1.00		0.76		1.00			
Satd. Flow (perm)		3128		107	3167		1262		1417			
Volume (vph)	0	2122	188	600	1356	0	64	0	555	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	2188	194	619	1398	0	66	0	572	0	0	0
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	182	0	0	0
Lane Group Flow (vph)	0	2376	0	619	1398	0	66	0	390	0	0	0
Turn Type				pm+pt			custom		Over	Perm		
Protected Phases		2		1	6				1		4	
Permitted Phases				6			8			4		
Actuated Green, G (s)		57.2		100.8	100.8		10.2		39.6			
Effective Green, g (s)		58.2		101.8	101.8		10.2		39.6			
Actuated g/C Ratio		0.49		0.85	0.85		0.08		0.33			
Clearance Time (s)		5.0		4.0	5.0		4.0		4.0			
Vehicle Extension (s)		4.0		3.0	3.0		3.0		3.0			
Lane Grp Cap (vph)		1517		578	2687		107		468			
v/s Ratio Prot		c0.76		c0.35	0.44				0.28			
v/s Ratio Perm				0.55			c0.05					
v/c Ratio		1.57		1.07	0.52		0.62		0.83			
Uniform Delay, d1		30.9		36.5	2.5		53.0		37.2			
Progression Factor		1.00		1.23	0.71		1.00		1.00			
Incremental Delay, d2		258.2		54.3	0.6		10.1		12.1			
Delay (s)		289.1		99.1	2.3		63.1		49.3			
Level of Service		F		F	A		E		D			
Approach Delay (s)		289.1			32.0			50.7			0.0	
Approach LOS		F			C			D			A	

Intersection Summary			
HCM Average Control Delay	155.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	1.00	1.00	0.95	0.88
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.97	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	4000		2168	3982		1085	2235	955	1108	2235	1667
Flt Permitted	0.95	1.00		0.95	1.00		0.52	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	2168	4000		2168	3982		599	2235	955	230	2235	1667
Volume (vph)	506	4113	170	57	2619	250	294	641	64	288	160	296
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)	550	4471	185	62	2847	272	320	697	70	313	174	322
RTOR Reduction (vph)	0	4	0	0	10	0	0	0	0	0	0	5
Lane Group Flow (vph)	550	4652	0	62	3109	0	320	697	70	313	174	317
Confl. Peds. (#/hr)	13		43	43		13	53		19	19		53
Confl. Bikes (#/hr)			16			5			13			18
Turn Type	Prot			Prot			pm+pt		pm+ov	Perm		pm+ov
Protected Phases	5	2		1	6		3	8	1		4	5
Permitted Phases							8		8	4		4
Actuated Green, G (s)	30.0	91.5		5.0	66.5		37.1	37.1	42.1	28.1	28.1	58.1
Effective Green, g (s)	30.0	93.0		5.0	68.0		40.0	40.0	45.0	31.0	31.0	61.0
Actuated g/C Ratio	0.20	0.62		0.03	0.45		0.27	0.27	0.30	0.21	0.21	0.41
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	6.9	4.0	6.9	6.9	4.0
Vehicle Extension (s)	1.0	4.0		1.0	4.0		3.0	2.0	1.0	2.0	2.0	1.0
Lane Grp Cap (vph)	434	2480		72	1805		176	596	312	48	462	678
v/s Ratio Prot	0.25	c1.16		0.03	c0.78		c0.06	0.31	0.01		0.08	0.09
v/s Ratio Perm							0.42		0.07	c1.36		0.10
v/c Ratio	1.27	1.88		0.86	1.72		1.82	1.17	0.22	6.52	0.38	0.47
Uniform Delay, d1	60.0	28.5		72.2	41.0		55.9	55.0	39.4	59.5	51.2	32.6
Progression Factor	0.72	0.42		1.24	0.66		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	122.0	394.3		9.1	325.2		389.7	93.3	0.1	2527.9	0.2	0.2
Delay (s)	165.2	406.4		98.8	352.4		445.6	148.3	39.5	2587.4	51.4	32.8
Level of Service	F	F		F	F		F	F	D	F	D	C
Approach Delay (s)		380.9			347.5			228.8			1025.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	405.2	HCM Level of Service	F
HCM Volume to Capacity ratio	2.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	169.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86		0.97	0.81		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.94		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	4014		2168	4746		1118	2090		1118	2164	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1118	4014		2168	4746		1118	2090		1118	2164	
Volume (vph)	82	3169	185	117	3109	85	125	380	290	218	898	242
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	84	3234	189	119	3172	87	128	388	296	222	916	247
RTOR Reduction (vph)	0	6	0	0	3	0	0	92	0	0	0	0
Lane Group Flow (vph)	84	3417	0	119	3256	0	128	592	0	222	1163	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	68.5		15.0	71.5		17.0	33.0		14.0	30.0	
Effective Green, g (s)	12.0	70.0		15.0	73.0		17.0	35.0		14.0	32.0	
Actuated g/C Ratio	0.08	0.47		0.10	0.49		0.11	0.23		0.09	0.21	
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.0	4.0		1.0	4.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	89	1873		217	2310		127	488		104	462	
v/s Ratio Prot	0.08	c0.85		0.05	c0.69		0.11	c0.28		0.20	c0.54	
v/s Ratio Perm												
v/c Ratio	0.94	1.82		0.55	1.41		1.01	1.21		2.13	2.52	
Uniform Delay, d1	68.7	40.0		64.3	38.5		66.5	57.5		68.0	59.0	
Progression Factor	1.02	1.12		0.60	0.33		1.00	1.00		1.00	1.00	
Incremental Delay, d2	16.5	371.2		0.1	184.5		82.0	113.6		541.3	689.2	
Delay (s)	86.9	416.1		38.7	197.0		148.5	171.1		609.3	748.2	
Level of Service	F	F		D	F		F	F		F	F	
Approach Delay (s)		408.2			191.4			167.6			725.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	354.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.85		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	158.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4523		1583	4550	1417	1583	3167	1417	1583	3111	
Flt Permitted	0.11	1.00		0.95	1.00	1.00	0.17	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	190	4523		1583	4550	1417	278	3167	1417	189	3111	
Volume (vph)	55	2202	89	90	2226	129	148	1109	272	45	783	104
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	57	2294	93	94	2319	134	154	1155	283	47	816	108
RTOR Reduction (vph)	0	4	0	0	0	11	0	0	94	0	1	0
Lane Group Flow (vph)	57	2383	0	94	2319	123	154	1155	189	47	923	0
Turn Type	Perm			Prot		Perm	Perm		Perm	Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	34.1	34.1		8.1	45.7	45.7	34.3	34.3	34.3	34.3	34.3	
Effective Green, g (s)	35.1	35.1		7.6	46.7	46.7	35.3	35.3	35.3	35.3	35.3	
Actuated g/C Ratio	0.39	0.39		0.08	0.52	0.52	0.39	0.39	0.39	0.39	0.39	
Clearance Time (s)	5.0	5.0		3.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	74	1764		134	2361	735	109	1242	556	74	1220	
v/s Ratio Prot		c0.53		0.06	c0.51			0.36			0.30	
v/s Ratio Perm	0.30					0.09	c0.55		0.13	0.25		
v/c Ratio	0.77	1.35		0.70	0.98	0.17	1.41	0.93	0.34	0.64	0.76	
Uniform Delay, d1	23.9	27.4		40.1	21.2	11.4	27.4	26.2	19.2	22.1	23.6	
Progression Factor	0.86	0.80		0.89	1.71	2.18	0.70	0.69	0.35	1.00	1.00	
Incremental Delay, d2	42.0	160.6		6.8	8.5	0.2	198.2	4.0	0.4	34.9	4.4	
Delay (s)	62.6	182.5		42.6	44.9	25.1	217.4	22.1	7.2	57.1	28.0	
Level of Service	E	F		D	D	C	F	C	A	E	C	
Approach Delay (s)		179.7			43.7			38.4			29.4	
Approach LOS		F			D			D			C	

Intersection Summary			
HCM Average Control Delay	84.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	1583	4515		1583	3112		1583	3167	1417
Flt Permitted	0.14	1.00	1.00	0.12	1.00		0.95	1.00		0.14	1.00	1.00
Satd. Flow (perm)	228	4550	1417	201	4515		1583	3112		238	3167	1417
Volume (vph)	145	1944	107	102	1343	73	323	1291	167	130	749	113
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	148	1984	109	104	1370	74	330	1317	170	133	764	115
RTOR Reduction (vph)	0	0	45	0	6	0	0	11	0	0	0	16
Lane Group Flow (vph)	148	1984	64	104	1438	0	330	1476	0	133	764	99
Turn Type	Perm		pm+ov	pm+pt			Prot			Perm		Perm
Protected Phases		6	3	5	2		3	8			4	
Permitted Phases	6		6	2						4		4
Actuated Green, G (s)	27.7	27.7	41.2	35.5	35.5		13.5	44.5		27.5	27.5	27.5
Effective Green, g (s)	29.2	29.2	42.2	37.0	37.0		13.0	45.0		28.0	28.0	28.0
Actuated g/C Ratio	0.32	0.32	0.47	0.41	0.41		0.14	0.50		0.31	0.31	0.31
Clearance Time (s)	5.5	5.5	3.5	3.0	5.5		3.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0		2.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	1476	727	141	1856		229	1556		74	985	441
v/s Ratio Prot		0.44	0.01	0.03	c0.32		c0.21	0.47			0.24	
v/s Ratio Perm	c0.65		0.03	0.27						c0.56		0.07
v/c Ratio	2.00	1.34	0.09	0.74	0.77		1.44	0.95		1.80	0.78	0.22
Uniform Delay, d1	30.4	30.4	13.2	22.8	22.9		38.5	21.4		31.0	28.1	23.0
Progression Factor	1.00	1.00	1.00	2.03	1.47		1.00	1.00		0.75	0.73	0.58
Incremental Delay, d2	494.3	159.5	0.0	1.9	0.3		221.5	13.5		389.3	3.7	0.7
Delay (s)	524.7	189.9	13.3	48.1	34.0		260.0	34.9		412.6	24.2	13.9
Level of Service	F	F	B	D	C		F	C		F	C	B
Approach Delay (s)		203.4			34.9			75.8			74.1	
Approach LOS		F			C			E			E	

Intersection Summary			
HCM Average Control Delay	109.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	0.95	1.00	0.86	0.86	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1303	3723		1304	3747	1141	1304	2608	1144	2243	2265	
Flt Permitted	0.07	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	96	3723		1304	3747	1141	1304	2608	1144	2243	2265	
Volume (vph)	32	1729	60	141	1698	1027	122	193	283	1369	238	28
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	34	1839	64	150	1806	1093	130	205	301	1456	253	30
RTOR Reduction (vph)	0	2	0	0	0	436	0	0	0	0	2	0
Lane Group Flow (vph)	34	1901	0	150	1806	657	130	205	301	971	766	0
Confl. Peds. (#/hr)	5		9	9		5	56		6	6		56
Confl. Bikes (#/hr)			4			5			8			8
Turn Type	Perm			Prot		Perm	Split		pm+ov	Split		
Protected Phases		6		5	2		3	3	5	4	4	
Permitted Phases	6					2			3			
Actuated Green, G (s)	56.0	56.0		10.0	70.0	70.0	15.0	15.0	25.0	50.0	50.0	
Effective Green, g (s)	57.0	57.0		10.0	71.0	71.0	16.0	16.0	26.0	51.0	51.0	
Actuated g/C Ratio	0.38	0.38		0.07	0.47	0.47	0.11	0.11	0.17	0.34	0.34	
Clearance Time (s)	5.0	5.0		4.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0		2.0	4.0	4.0	2.0	2.0	2.0	4.0	4.0	
Lane Grp Cap (vph)	36	1415		87	1774	540	139	278	198	763	770	
v/s Ratio Prot		c0.51		c0.12	0.48		0.10	0.08	c0.10	c0.43	0.34	
v/s Ratio Perm	0.35					0.58			0.16			
v/c Ratio	0.94	1.34		1.72	1.02	1.22	0.94	0.74	1.52	1.27	1.19dl	
Uniform Delay, d1	45.0	46.5		70.0	39.5	39.5	66.5	65.0	62.0	49.5	49.4	
Progression Factor	1.41	1.41		1.08	1.11	5.88	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	108.4	157.7		330.2	11.7	99.1	56.0	8.5	258.2	132.8	31.0	
Delay (s)	171.9	223.2		406.0	55.5	331.2	122.5	73.4	320.2	182.3	80.3	
Level of Service	F	F		F	E	F	F	E	F	F	F	
Approach Delay (s)		222.3			171.6			200.2			137.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	179.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	0.99		1.00	1.00	0.85		0.99			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.99	
Satd. Flow (prot)	1583	4492		1583	3167	1417		1640			3068	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.41			0.57	
Satd. Flow (perm)	1583	4492		1583	3167	1417		675			1778	
Volume (vph)	153	1036	95	32	932	75	111	366	19	140	390	81
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	170	1151	106	36	1036	83	123	407	21	156	433	90
RTOR Reduction (vph)	0	9	0	0	0	46	0	1	0	0	15	0
Lane Group Flow (vph)	170	1248	0	36	1036	37	0	550	0	0	664	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Actuated Green, G (s)	11.6	48.1		3.6	40.1	40.1		26.0			26.0	
Effective Green, g (s)	11.6	48.4		3.6	40.4	40.4		26.0			26.0	
Actuated g/C Ratio	0.13	0.54		0.04	0.45	0.45		0.29			0.29	
Clearance Time (s)	4.0	4.3		4.0	4.3	4.3		4.0			4.0	
Vehicle Extension (s)	3.0	5.7		3.0	5.5	5.5		3.0			3.0	
Lane Grp Cap (vph)	204	2416		63	1422	636		195			514	
v/s Ratio Prot	c0.11	0.28		0.02	c0.33							
v/s Ratio Perm						0.03		c0.81			0.37	
v/c Ratio	0.83	0.52		0.57	0.73	0.06		2.82			7.43dl	
Uniform Delay, d1	38.3	13.3		42.4	20.3	14.0		32.0			32.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	24.3	0.8		11.9	3.3	0.2		832.3			145.4	
Delay (s)	62.5	14.1		54.4	23.6	14.2		864.3			177.4	
Level of Service	E	B		D	C	B		F			F	
Approach Delay (s)		19.9			23.9			864.3			177.4	
Approach LOS		B			C			F			F	

Intersection Summary			
HCM Average Control Delay	171.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	100.8%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.91	1.00	0.95	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.97	1.00	1.00	0.96	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	3718		1304	3693		1259	2608	1062	1247	2347	
Flt Permitted	0.08	1.00		0.10	1.00		0.27	1.00	1.00	0.48	1.00	
Satd. Flow (perm)	107	3718		136	3693		361	2608	1062	624	2347	
Volume (vph)	185	1538	48	110	1673	70	110	302	184	172	350	194
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	197	1636	51	117	1780	74	117	321	196	183	372	206
RTOR Reduction (vph)	0	2	0	0	3	0	0	0	19	0	13	0
Lane Group Flow (vph)	197	1685	0	117	1851	0	117	321	177	183	565	0
Confl. Peds. (#/hr)	67		48	48		67	40		47	47		40
Confl. Bikes (#/hr)			7			2			2			5
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	95.5	95.5		95.5	95.5		46.0	46.0	46.0	46.0	46.0	
Effective Green, g (s)	96.0	96.0		96.0	96.0		46.0	46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.64	0.64		0.64	0.64		0.31	0.31	0.31	0.31	0.31	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	68	2380		87	2364		111	800	326	191	720	
v/s Ratio Prot		0.45			0.50			0.12			0.24	
v/s Ratio Perm	c1.85			0.86			c0.32		0.17	0.29		
v/c Ratio	2.90	0.71		1.34	0.78		1.05	0.40	0.54	0.96	0.78	
Uniform Delay, d1	27.0	17.8		27.0	19.5		52.0	41.1	43.2	51.1	47.5	
Progression Factor	1.00	1.00		1.55	1.62		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	892.3	1.8		162.1	0.2		100.7	1.5	6.3	55.0	8.4	
Delay (s)	919.3	19.6		203.9	31.8		152.7	42.6	49.6	106.1	55.9	
Level of Service	F	B		F	C		F	D	D	F	E	
Approach Delay (s)		113.7			42.0			65.1			67.9	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM Average Control Delay	74.3	HCM Level of Service	E
HCM Volume to Capacity ratio	2.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt		0.93			0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1544			1606		1583	1647		1583	1667	1417
Flt Permitted		0.94			0.87		0.42	1.00		0.38	1.00	1.00
Satd. Flow (perm)		1459			1407		696	1647		634	1667	1417
Volume (vph)	36	89	123	33	107	35	181	486	42	43	477	31
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)	39	97	134	36	116	38	197	528	46	47	518	34
RTOR Reduction (vph)	0	68	0	0	17	0	0	4	0	0	0	12
Lane Group Flow (vph)	0	202	0	0	173	0	197	570	0	47	518	22
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		6
Actuated Green, G (s)		12.6			12.6		38.6	38.6		38.6	38.6	38.6
Effective Green, g (s)		13.1			13.1		38.9	38.9		38.9	38.9	38.9
Actuated g/C Ratio		0.22			0.22		0.65	0.65		0.65	0.65	0.65
Clearance Time (s)		4.5			4.5		4.3	4.3		4.3	4.3	4.3
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		319			307		451	1068		411	1081	919
v/s Ratio Prot								c0.35			0.31	
v/s Ratio Perm		c0.14			0.12		0.28			0.07		0.02
v/c Ratio		0.63			0.56		0.44	0.53		0.11	0.48	0.02
Uniform Delay, d1		21.3			20.9		5.2	5.7		4.0	5.4	3.8
Progression Factor		1.00			1.00		0.48	0.46		1.00	1.00	1.00
Incremental Delay, d2		4.1			2.4		0.9	0.6		0.6	1.5	0.0
Delay (s)		25.3			23.3		3.4	3.2		4.6	6.9	3.8
Level of Service		C			C		A	A		A	A	A
Approach Delay (s)		25.3			23.3			3.2			6.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	9.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	3710		1304	3701		1304	1373	1167	1304	1354	
Flt Permitted	0.17	1.00		0.17	1.00		0.29	1.00	1.00	0.23	1.00	
Satd. Flow (perm)	239	3710		239	3701		399	1373	1167	315	1354	
Volume (vph)	49	1220	86	67	1388	125	109	616	68	118	496	49
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	51	1271	90	70	1446	130	114	642	71	123	517	51
RTOR Reduction (vph)	0	13	0	0	17	0	0	0	6	0	3	0
Lane Group Flow (vph)	51	1348	0	70	1559	0	114	642	65	123	565	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		
Actuated Green, G (s)	22.4	22.4		22.4	22.4		28.0	28.0	28.0	28.0	28.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.48	0.48	0.48	0.48	0.48	
Clearance Time (s)	4.6	4.6		4.6	4.6		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)	92	1422		92	1419		193	664	564	152	654	
v/s Ratio Prot		0.36			c0.42			c0.47			0.42	
v/s Ratio Perm	0.21			0.29			0.29		0.06	0.39		
v/c Ratio	0.55	0.95		0.76	1.10		0.59	0.97	0.11	0.81	0.86	
Uniform Delay, d1	14.5	17.9		16.1	18.5		11.2	15.0	8.5	13.2	13.7	
Progression Factor	1.00	1.00		1.61	1.69		1.00	1.00	1.00	0.75	0.77	
Incremental Delay, d2	21.9	14.3		39.1	54.2		12.6	27.7	0.4	31.7	12.5	
Delay (s)	36.4	32.2		65.0	85.5		23.8	42.7	8.9	41.5	23.1	
Level of Service	D	C		E	F		C	D	A	D	C	
Approach Delay (s)		32.4			84.6			37.2			26.3	
Approach LOS		C			F			D			C	

Intersection Summary			
HCM Average Control Delay	51.1	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	127.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4493		1583	5733	1417	1583	3055		1583	3167	1417
Flt Permitted	0.10	1.00		0.14	1.00	1.00	0.34	1.00		0.12	1.00	1.00
Satd. Flow (perm)	167	4493		237	5733	1417	567	3055		208	3167	1417
Volume (vph)	22	1122	103	85	1667	272	409	903	278	331	549	82
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	22	1145	105	87	1701	278	417	921	284	338	560	84
RTOR Reduction (vph)	0	12	0	0	0	16	0	21	0	0	0	8
Lane Group Flow (vph)	22	1238	0	87	1701	262	417	1184	0	338	560	76
Turn Type	Perm			Perm		pm+ov	pm+pt			pm+pt		Perm
Protected Phases		6			2	7	3	8		7	4	
Permitted Phases	6			2		2	8			4		4
Actuated Green, G (s)	39.0	39.0		39.0	39.0	45.0	36.1	30.1		36.1	30.1	30.1
Effective Green, g (s)	40.0	40.0		40.0	40.0	46.0	38.0	32.0		38.0	32.0	32.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	0.51	0.42	0.36		0.42	0.36	0.36
Clearance Time (s)	5.0	5.0		5.0	5.0	4.0	4.0	5.9		4.0	5.9	5.9
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	1997		105	2548	787	307	1086		179	1126	504
v/s Ratio Prot		0.28			0.30	0.02	0.09	0.39		c0.13	0.18	
v/s Ratio Perm	0.13			c0.37		0.16	0.48			c0.67		0.05
v/c Ratio	0.30	0.62		0.83	0.67	0.33	1.36	1.09		1.89	0.50	0.15
Uniform Delay, d1	16.0	19.2		22.0	19.7	13.0	24.9	29.0		23.4	22.7	19.7
Progression Factor	1.00	1.00		1.24	1.26	1.90	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	10.0	1.5		6.8	0.1	0.0	181.0	55.4		420.1	1.6	0.6
Delay (s)	26.0	20.6		34.1	25.0	24.7	205.9	84.4		443.5	24.3	20.4
Level of Service	C	C		C	C	C	F	F		F	C	C
Approach Delay (s)		20.7			25.3			115.7			168.2	
Approach LOS		C			C			F			F	

Intersection Summary			
HCM Average Control Delay	72.6	HCM Level of Service	E
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	0.99		1.00	1.00	0.94	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	3728		1304	3747	1254	
Flt Permitted	1.00		0.10	1.00	0.97	
Satd. Flow (perm)	3728		131	3747	1254	
Volume (vph)	1651	59	43	1794	124	105
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1720	61	45	1869	129	109
RTOR Reduction (vph)	3	0	0	0	12	0
Lane Group Flow (vph)	1778	0	45	1869	226	0
Turn Type			Perm			
Protected Phases	6			2	4	
Permitted Phases			2			
Actuated Green, G (s)	60.9		60.9	60.9	20.3	
Effective Green, g (s)	61.0		61.0	61.0	21.0	
Actuated g/C Ratio	0.68		0.68	0.68	0.23	
Clearance Time (s)	4.1		4.1	4.1	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2527		89	2540	293	
v/s Ratio Prot	0.48			c0.50	c0.18	
v/s Ratio Perm			0.34			
v/c Ratio	0.70		0.51	0.74	0.77	
Uniform Delay, d1	8.9		7.1	9.3	32.2	
Progression Factor	0.37		1.00	1.00	1.00	
Incremental Delay, d2	1.4		19.1	1.9	11.8	
Delay (s)	4.7		26.2	11.3	44.1	
Level of Service	A		C	B	D	
Approach Delay (s)	4.7			11.6	44.1	
Approach LOS	A			B	D	

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.98			1.00	0.96
Flpb, ped/bikes	1.00	1.00		0.99	1.00			0.99			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.91			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	1.00
Satd. Flow (prot)	1299	3738		1294	3739			1202			1339	1123
Flt Permitted	0.09	1.00		0.12	1.00			0.92			0.93	1.00
Satd. Flow (perm)	117	3738		169	3739			1119			1269	1123
Volume (vph)	6	1547	14	33	1819	16	39	10	87	2	3	4
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	6	1611	15	34	1895	17	41	10	91	2	3	4
RTOR Reduction (vph)	0	1	0	0	1	0	0	16	0	0	0	3
Lane Group Flow (vph)	6	1625	0	34	1911	0	0	126	0	0	5	1
Confl. Peds. (#/hr)	30		38	38		30	24		15	15		24
Confl. Bikes (#/hr)			2			4			2			
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	65.5	65.5		65.5	65.5			16.5			16.5	16.5
Effective Green, g (s)	65.5	65.5		65.5	65.5			16.5			16.5	16.5
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.18			0.18	0.18
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	85	2720		123	2721			205			233	206
v/s Ratio Prot		0.43			c0.51							
v/s Ratio Perm	0.05			0.20				c0.11			0.00	0.00
v/c Ratio	0.07	0.60		0.28	0.70			0.61			0.02	0.00
Uniform Delay, d1	3.5	5.9		4.2	6.8			33.8			30.1	30.0
Progression Factor	2.59	2.84		0.68	0.59			1.00			1.00	1.00
Incremental Delay, d2	0.4	0.2		3.6	1.0			5.3			0.0	0.0
Delay (s)	9.5	17.0		6.4	5.1			39.2			30.2	30.0
Level of Service	A	B		A	A			D			C	C
Approach Delay (s)		17.0			5.1			39.2			30.1	
Approach LOS		B			A			D			C	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.95	
Flt Protected	1.00	1.00	0.95	1.00	0.97	
Satd. Flow (prot)	3167	1417	1583	3167	2978	
Flt Permitted	1.00	1.00	0.95	1.00	0.97	
Satd. Flow (perm)	3167	1417	1583	3167	2978	
Volume (vph)	1273	611	94	1216	210	97
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1369	657	101	1308	226	104
RTOR Reduction (vph)	0	75	0	0	65	0
Lane Group Flow (vph)	1369	582	101	1308	265	0
Turn Type		pt+ov	Prot			
Protected Phases	2	2 4	1	6	4	
Permitted Phases						
Actuated Green, G (s)	42.6	73.9	9.0	39.1	27.4	
Effective Green, g (s)	42.5	73.5	8.5	39.0	27.0	
Actuated g/C Ratio	0.47	0.82	0.09	0.43	0.30	
Clearance Time (s)	3.9		3.5	3.9	3.6	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1496	1157	150	1372	893	
v/s Ratio Prot	c0.43	c0.41	c0.06	0.41	0.09	
v/s Ratio Perm						
v/c Ratio	0.92	0.50	0.67	0.95	0.30	
Uniform Delay, d1	22.1	2.6	39.4	24.6	24.2	
Progression Factor	0.74	0.51	1.00	1.00	1.00	
Incremental Delay, d2	8.1	0.3	11.3	15.4	0.2	
Delay (s)	24.5	1.6	50.7	40.1	24.4	
Level of Service	C	A	D	D	C	
Approach Delay (s)	17.1			40.8	24.4	
Approach LOS	B			D	C	

Intersection Summary			
HCM Average Control Delay	26.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.97	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	3693		1304	3654		1302	2522		1298	2432	
Flt Permitted	0.14	1.00		0.14	1.00		0.13	1.00		0.28	1.00	
Satd. Flow (perm)	187	3693		187	3654		179	2522		381	2432	
Volume (vph)	101	1279	86	156	1484	90	194	578	101	95	604	223
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	104	1319	89	161	1530	93	200	596	104	98	623	230
RTOR Reduction (vph)	0	9	0	0	7	0	0	15	0	0	41	0
Lane Group Flow (vph)	104	1399	0	161	1616	0	200	685	0	98	812	0
Confl. Peds. (#/hr)	106		44	44		106	78		51	51		78
Confl. Bikes (#/hr)			5			5			5			3
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	34.4	28.4		34.4	28.4		41.5	29.6		33.7	25.7	
Effective Green, g (s)	35.4	29.4		35.4	29.4		42.5	30.6		34.7	26.7	
Actuated g/C Ratio	0.39	0.33		0.39	0.33		0.47	0.34		0.39	0.30	
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	148	1206		148	1194		233	857		228	721	
v/s Ratio Prot	0.05	0.38		c0.07	c0.44		c0.11	0.27		0.04	c0.33	
v/s Ratio Perm	0.23			0.36			0.29			0.13		
v/c Ratio	0.70	1.16		1.09	1.35		0.86	0.80		0.43	1.13	
Uniform Delay, d1	22.0	30.3		24.1	30.3		20.5	26.9		18.7	31.6	
Progression Factor	1.23	0.78		1.36	0.79		1.44	1.38		1.00	1.00	
Incremental Delay, d2	11.6	80.0		87.4	162.8		22.8	4.6		1.3	73.7	
Delay (s)	38.7	103.5		120.1	186.7		52.4	41.8		20.1	105.3	
Level of Service	D	F		F	F		D	D		C	F	
Approach Delay (s)		99.1			180.7			44.2			96.5	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	117.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	111.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.99			0.99			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.95			0.97			0.99			1.00	
Flt Protected		0.99			0.99			1.00			1.00	
Satd. Flow (prot)		1543			1579			3136			3143	
Flt Permitted		0.92			0.77			0.90			0.94	
Satd. Flow (perm)		1435			1234			2817			2942	
Volume (vph)	24	83	71	45	89	40	30	901	35	14	917	28
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	26	89	76	48	96	43	32	969	38	15	986	30
RTOR Reduction (vph)	0	31	0	0	14	0	0	2	0	0	2	0
Lane Group Flow (vph)	0	160	0	0	173	0	0	1037	0	0	1029	0
Confl. Peds. (#/hr)	10		8	8		10	19		14	14		19
Confl. Bikes (#/hr)			6			4			4			3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		15.4			15.4			66.2			66.2	
Effective Green, g (s)		15.4			15.4			66.6			66.6	
Actuated g/C Ratio		0.17			0.17			0.74			0.74	
Clearance Time (s)		4.0			4.0			4.4			4.4	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		246			211			2085			2177	
v/s Ratio Prot												
v/s Ratio Perm		0.11			c0.14			c0.37			0.35	
v/c Ratio		0.65			0.82			0.50			0.47	
Uniform Delay, d1		34.8			36.0			4.8			4.7	
Progression Factor		1.00			1.00			1.00			0.50	
Incremental Delay, d2		6.1			21.3			0.9			0.2	
Delay (s)		40.9			57.3			5.7			2.6	
Level of Service		D			E			A			A	
Approach Delay (s)		40.9			57.3			5.7			2.6	
Approach LOS		D			E			A			A	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00		0.91		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	2608	1167		3703		1304	2608	1167	1304	2602	
Flt Permitted	0.08	1.00	1.00		1.00		0.19	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	114	2608	1167		3703		260	2608	1167	295	2602	
Volume (vph)	35	881	85	0	1319	113	85	869	89	122	921	14
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	37	927	89	0	1388	119	89	915	94	128	969	15
RTOR Reduction (vph)	0	0	44	0	8	0	0	0	34	0	1	0
Lane Group Flow (vph)	37	927	45	0	1499	0	89	915	60	128	983	0
Turn Type	Perm		Perm				Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4				2		2	6		
Actuated Green, G (s)	52.0	52.0	52.0		52.0		58.0	58.0	58.0	58.0	58.0	
Effective Green, g (s)	53.0	53.0	53.0		53.0		59.0	59.0	59.0	59.0	59.0	
Actuated g/C Ratio	0.44	0.44	0.44		0.44		0.49	0.49	0.49	0.49	0.49	
Clearance Time (s)	5.0	5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	50	1152	515		1635		128	1282	574	145	1279	
v/s Ratio Prot		0.36			c0.40			0.35			0.38	
v/s Ratio Perm	0.32		0.04				0.34		0.05	c0.43		
v/c Ratio	0.74	0.80	0.09		0.92		0.70	0.71	0.11	0.88	0.77	
Uniform Delay, d1	27.8	29.0	19.5		31.4		23.6	23.9	16.4	27.4	24.9	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	65.6	6.0	0.3		9.6		26.8	3.4	0.4	48.6	4.5	
Delay (s)	93.4	35.0	19.8		41.1		50.4	27.3	16.7	76.0	29.4	
Level of Service	F	D	B		D		D	C	B	E	C	
Approach Delay (s)		35.8			41.1			28.3			34.8	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM Average Control Delay	35.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	3072	4550	1417	1583	3167	1417	1583	3167	1417
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1583	4550	1417	3072	4550	1417	1583	3167	1417	1583	3167	1417
Volume (vph)	152	1379	117	248	1683	209	406	1271	230	279	1072	131
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	155	1407	119	253	1717	213	414	1297	235	285	1094	134
RTOR Reduction (vph)	0	0	11	0	0	112	0	0	6	0	0	1
Lane Group Flow (vph)	155	1407	108	253	1717	101	414	1297	229	285	1094	133
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Actuated Green, G (s)	13.0	37.4	50.4	12.6	37.0	37.0	13.0	37.0	49.6	13.0	37.0	50.0
Effective Green, g (s)	13.0	39.4	52.4	12.6	39.0	39.0	13.0	39.0	51.6	13.0	39.0	52.0
Actuated g/C Ratio	0.11	0.33	0.44	0.10	0.32	0.32	0.11	0.32	0.43	0.11	0.32	0.43
Clearance Time (s)	4.0	6.0	4.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Vehicle Extension (s)	3.0	4.7	3.0	3.0	5.0	5.0	3.0	4.5	3.0	3.0	4.6	3.0
Lane Grp Cap (vph)	171	1494	666	323	1479	461	171	1029	657	171	1029	661
v/s Ratio Prot	c0.10	0.31	0.02	0.08	c0.38		c0.26	c0.41	0.04	0.18	0.35	0.02
v/s Ratio Perm			0.06			0.07			0.13			0.07
v/c Ratio	0.91	0.94	0.16	0.78	1.16	0.22	2.42	1.26	0.35	1.67	1.06	0.20
Uniform Delay, d1	52.9	39.2	20.5	52.4	40.5	29.4	53.5	40.5	22.9	53.5	40.5	21.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	42.6	12.4	0.1	11.7	80.3	0.5	656.9	125.1	0.3	324.3	46.4	0.2
Delay (s)	95.5	51.5	20.6	64.1	120.8	29.9	710.4	165.6	23.3	377.8	86.9	21.3
Level of Service	F	D	C	E	F	C	F	F	C	F	F	C
Approach Delay (s)		53.4			105.4			264.3			135.9	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	142.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	3104		1583	3103		1583	4464		1583	3167	1417
Flt Permitted	0.17	1.00		0.17	1.00		0.11	1.00		0.13	1.00	1.00
Satd. Flow (perm)	281	3104		281	3103		182	4464		212	3167	1417
Volume (vph)	161	951	145	175	758	118	182	1118	160	72	1044	78
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	163	961	146	177	766	119	184	1129	162	73	1055	79
RTOR Reduction (vph)	0	13	0	0	14	0	0	20	0	0	0	35
Lane Group Flow (vph)	163	1094	0	177	871	0	184	1271	0	73	1055	44
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	31.2	22.7		31.2	22.7		44.1	35.6		39.5	33.3	41.8
Effective Green, g (s)	31.7	23.7		31.7	23.7		44.6	36.6		40.0	34.3	42.3
Actuated g/C Ratio	0.35	0.26		0.35	0.26		0.50	0.41		0.44	0.38	0.47
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	5.0		3.5	5.0	3.5
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	4.3		3.0	4.6	3.0
Lane Grp Cap (vph)	215	817		215	817		215	1815		181	1207	729
v/s Ratio Prot	0.07	c0.35		c0.07	0.28		c0.08	0.28		0.03	0.33	0.01
v/s Ratio Perm	0.20			0.22			c0.35			0.15		0.03
v/c Ratio	0.76	1.34		0.82	1.07		0.86	0.70		0.40	0.87	0.06
Uniform Delay, d1	23.3	33.1		42.1	33.1		17.9	22.2		15.7	25.8	13.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	14.2	160.7		21.8	50.6		26.7	1.4		1.5	7.7	0.0
Delay (s)	37.5	193.8		63.9	83.8		44.6	23.5		17.2	33.6	13.0
Level of Service	D	F		E	F		D	C		B	C	B
Approach Delay (s)		173.8			80.5			26.2			31.2	
Approach LOS		F			F			C			C	

Intersection Summary			
HCM Average Control Delay	76.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	0.99		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2594		1304	2608	1304	1167
Flt Permitted	1.00		0.19	1.00	0.95	1.00
Satd. Flow (perm)	2594		256	2608	1304	1167
Volume (vph)	1054	37	186	1548	111	161
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	1158	41	204	1701	122	177
RTOR Reduction (vph)	2	0	0	0	0	57
Lane Group Flow (vph)	1197	0	204	1701	122	121
Turn Type			Perm			Perm
Protected Phases	5			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	59.8		59.8	59.8	22.2	22.2
Effective Green, g (s)	59.8		59.8	59.8	22.2	22.2
Actuated g/C Ratio	0.66		0.66	0.66	0.25	0.25
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	4.0		4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	1724		170	1733	322	288
v/s Ratio Prot	0.46			0.65	0.09	
v/s Ratio Perm			c0.80			c0.10
v/c Ratio	0.69		1.20	0.98	0.38	0.42
Uniform Delay, d1	9.4		15.1	14.6	28.2	28.5
Progression Factor	1.83		1.97	2.02	1.00	1.00
Incremental Delay, d2	1.7		95.4	3.5	0.7	1.0
Delay (s)	19.0		125.1	32.9	28.9	29.5
Level of Service	B		F	C	C	C
Approach Delay (s)	19.0			42.7	29.2	
Approach LOS	B			D	C	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.98		1.00	1.00			0.92			0.94	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1583	3105		1583	3160			1522			1566	
Flt Permitted	0.17	1.00		0.35	1.00			0.98			0.97	
Satd. Flow (perm)	281	3105		582	3160			1502			1530	
Volume (vph)	14	625	93	246	1261	19	6	27	53	10	65	55
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	15	672	100	265	1356	20	6	29	57	11	70	59
RTOR Reduction (vph)	0	7	0	0	1	0	0	49	0	0	38	0
Lane Group Flow (vph)	15	765	0	265	1375	0	0	43	0	0	102	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	69.2	69.2		69.2	69.2			11.6			11.6	
Effective Green, g (s)	69.5	69.5		69.5	69.5			12.5			12.5	
Actuated g/C Ratio	0.77	0.77		0.77	0.77			0.14			0.14	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	217	2398		449	2440			209			213	
v/s Ratio Prot		0.25			0.44							
v/s Ratio Perm	0.05			c0.46				0.03			c0.07	
v/c Ratio	0.07	0.32		0.59	0.56			0.21			0.48	
Uniform Delay, d1	2.5	3.1		4.3	4.1			34.3			35.7	
Progression Factor	0.37	0.38		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.6	0.3		5.6	0.9			0.5			1.7	
Delay (s)	1.5	1.5		9.9	5.1			34.8			37.4	
Level of Service	A	A		A	A			C			D	
Approach Delay (s)		1.5			5.9			34.8			37.4	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	7.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.9%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.84	1.00	1.00	0.76	1.00	0.99		1.00	0.97	
Flpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1578	3167	1195	1552	3167	1070	1583	4462		1583	4316	
Flt Permitted	0.13	1.00	1.00	0.35	1.00	1.00	0.14	1.00		0.13	1.00	
Satd. Flow (perm)	220	3167	1195	564	3167	1070	235	4462		216	4316	
Volume (vph)	143	534	10	220	910	133	21	1341	84	35	1365	258
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	147	551	10	227	938	137	22	1382	87	36	1407	266
RTOR Reduction (vph)	0	0	6	0	0	42	0	7	0	0	27	0
Lane Group Flow (vph)	147	551	4	227	938	95	22	1462	0	36	1646	0
Confl. Peds. (#/hr)	125		125	125		125	125		125	125		125
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases	7	4	5	3	4	1	5	2		1	6	
Permitted Phases	4		4	4		4	2			6		
Actuated Green, G (s)	37.5	30.5	34.5	37.5	30.5	36.9	31.1	27.1		35.9	29.5	
Effective Green, g (s)	39.0	31.8	36.0	39.0	31.8	38.4	32.6	28.4		37.4	30.8	
Actuated g/C Ratio	0.43	0.35	0.40	0.43	0.35	0.43	0.36	0.32		0.42	0.34	
Clearance Time (s)	4.2	5.3	4.2	4.2	5.3	4.2	4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	204	1119	531	323	1119	504	148	1408		190	1477	
v/s Ratio Prot	c0.06	0.17	0.00	0.06	c0.30	c0.01	0.01	0.33		c0.01	c0.38	
v/s Ratio Perm	0.25		0.00	0.25		0.08	0.05			0.06		
v/c Ratio	0.72	0.49	0.01	0.70	0.84	0.19	0.15	1.04		0.19	1.11	
Uniform Delay, d1	18.5	22.8	16.2	18.5	26.7	16.1	21.9	30.8		19.2	29.6	
Progression Factor	0.66	0.80	0.89	0.99	0.89	0.66	1.56	1.23		1.00	1.00	
Incremental Delay, d2	9.4	0.3	0.0	5.7	4.8	0.2	0.3	29.0		0.5	61.4	
Delay (s)	21.6	18.5	14.5	23.9	28.6	10.8	34.2	66.8		19.7	91.0	
Level of Service	C	B	B	C	C	B	C	E		B	F	
Approach Delay (s)		19.1			25.9			66.3			89.5	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM Average Control Delay	57.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.86			0.97		1.00	1.00		1.00	1.00	
Flt Protected		1.00			0.96		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1442			1557		1583	4540		1583	4549	
Flt Permitted		1.00			0.78		0.09	1.00		0.09	1.00	
Satd. Flow (perm)		1442			1256		142	4540		142	4549	
Volume (vph)	0	0	4	272	8	83	1	1671	25	62	1632	2
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	4	306	9	93	1	1878	28	70	1834	2
RTOR Reduction (vph)	0	2	0	0	5	0	0	1	0	0	0	0
Lane Group Flow (vph)	0	2	0	0	403	0	1	1905	0	70	1836	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		35.5			35.5		47.5	47.5		47.5	47.5	
Effective Green, g (s)		35.0			35.0		47.0	47.0		47.0	47.0	
Actuated g/C Ratio		0.39			0.39		0.52	0.52		0.52	0.52	
Clearance Time (s)		3.5			3.5		3.5	3.5		3.5	3.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		561			488		74	2371		74	2376	
v/s Ratio Prot		0.00						0.42			0.40	
v/s Ratio Perm					c0.32		0.01			c0.49		
v/c Ratio		0.00			0.83		0.01	0.80		0.95	0.77	
Uniform Delay, d1		16.8			24.8		10.3	17.7		20.3	17.2	
Progression Factor		1.00			1.00		1.00	1.00		0.87	0.63	
Incremental Delay, d2		0.0			14.7		0.3	3.0		59.3	1.2	
Delay (s)		16.8			39.5		10.7	20.7		77.0	12.1	
Level of Service		B			D		B	C		E	B	
Approach Delay (s)		16.8			39.5			20.7			14.5	
Approach LOS		B			D			C			B	

Intersection Summary			
HCM Average Control Delay	19.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4448		1583	4546		1583	4488		1583	4459	
Flt Permitted	0.13	1.00		0.14	1.00		0.13	1.00		0.12	1.00	
Satd. Flow (perm)	221	4448		233	4546		219	4488		207	4459	
Volume (vph)	261	1058	186	100	1735	10	82	1337	134	146	1261	195
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	275	1114	196	105	1826	11	86	1407	141	154	1327	205
RTOR Reduction (vph)	0	27	0	0	1	0	0	14	0	0	23	0
Lane Group Flow (vph)	275	1283	0	105	1836	0	86	1534	0	154	1509	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	37.2	29.2		34.0	27.6		35.6	29.4		39.2	31.2	
Effective Green, g (s)	37.2	30.2		34.0	28.6		35.6	30.4		39.2	32.2	
Actuated g/C Ratio	0.42	0.34		0.38	0.32		0.40	0.34		0.44	0.36	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	199	1509		171	1461		167	1533		199	1613	
v/s Ratio Prot	c0.11	0.29		0.04	0.40		0.03	c0.34		c0.06	0.34	
v/s Ratio Perm	c0.47			0.20			0.18			0.28		
v/c Ratio	1.38	0.85		0.61	1.26		0.51	1.00		0.77	0.94	
Uniform Delay, d1	23.4	27.3		20.0	30.2		19.5	29.3		19.6	27.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	200.0	4.8		6.4	121.3		2.7	23.2		16.9	11.6	
Delay (s)	223.4	32.1		26.3	151.5		22.2	52.5		36.5	39.0	
Level of Service	F	C		C	F		C	D		D	D	
Approach Delay (s)		65.3			144.8			50.9			38.8	
Approach LOS		E			F			D			D	

Intersection Summary			
HCM Average Control Delay	77.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3152		1583	3138		1583	4523		1583	4457	
Flt Permitted	0.11	1.00		0.14	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	190	3152		233	3138		185	4523		185	4457	
Volume (vph)	219	839	26	355	1490	97	105	1381	57	190	1495	236
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	249	953	30	403	1693	110	119	1569	65	216	1699	268
RTOR Reduction (vph)	0	2	0	0	6	0	0	5	0	0	23	0
Lane Group Flow (vph)	249	981	0	403	1798	0	119	1629	0	216	1944	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.1	34.1		42.1	34.1		35.2	35.2		35.2	35.2	
Effective Green, g (s)	42.0	35.0		42.0	35.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.47	0.39		0.47	0.39		0.40	0.40		0.40	0.40	
Clearance Time (s)	3.0	4.9		3.0	4.9		4.8	4.8		4.8	4.8	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	197	1226		214	1220		74	1809		74	1783	
v/s Ratio Prot	0.10	0.31		c0.15	0.57			0.36			0.44	
v/s Ratio Perm	0.49			c0.73			0.64			c1.17		
v/c Ratio	1.26	0.80		1.88	1.47		1.61	0.90		2.92	1.09	
Uniform Delay, d1	43.7	24.4		19.3	27.5		27.0	25.3		27.0	27.0	
Progression Factor	1.66	0.97		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	149.1	4.8		414.6	217.5		327.4	6.6		899.1	50.4	
Delay (s)	221.8	28.5		433.9	245.0		354.4	31.9		926.1	77.4	
Level of Service	F	C		F	F		F	C		F	E	
Approach Delay (s)		67.6			279.5			53.8			161.3	
Approach LOS		E			F			D			F	

Intersection Summary			
HCM Average Control Delay	155.5	HCM Level of Service	F
HCM Volume to Capacity ratio	2.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	122.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.90			0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417		1496			1568	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (perm)	1583	3167	1417	1583	3167	1417		1496			1568	
Volume (vph)	17	590	9	55	1246	44	12	20	86	25	18	18
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	18	634	10	59	1340	47	13	22	92	27	19	19
RTOR Reduction (vph)	0	0	7	0	0	26	0	70	0	0	15	0
Lane Group Flow (vph)	18	634	3	59	1340	21	0	57	0	0	50	0
Turn Type	Prot		Perm	Prot		Perm	Split			Split		
Protected Phases	1	6		5	2		3	3		4	4	
Permitted Phases			6			2						
Actuated Green, G (s)	3.1	25.4	25.4	7.2	29.5	29.5		21.0			21.0	
Effective Green, g (s)	2.1	25.6	25.6	6.2	29.7	29.7		21.6			20.6	
Actuated g/C Ratio	0.02	0.28	0.28	0.07	0.33	0.33		0.24			0.23	
Clearance Time (s)	3.0	4.2	4.2	3.0	4.2	4.2		4.6			3.6	
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0		3.0			3.0	
Lane Grp Cap (vph)	37	901	403	109	1045	468		359			359	
v/s Ratio Prot	0.01	0.20		c0.04	c0.42			c0.04			c0.03	
v/s Ratio Perm			0.00			0.01						
v/c Ratio	0.49	0.70	0.01	0.54	1.28	0.04		0.16			0.14	
Uniform Delay, d1	43.4	28.8	23.1	40.5	30.1	20.5		27.0			27.6	
Progression Factor	0.80	1.32	1.79	0.68	1.01	1.06		1.00			1.00	
Incremental Delay, d2	6.1	2.9	0.0	3.6	131.9	0.1		0.9			0.8	
Delay (s)	40.9	40.9	41.3	31.2	162.3	21.8		28.0			28.5	
Level of Service	D	D	D	C	F	C		C			C	
Approach Delay (s)		40.9			152.4			28.0			28.5	
Approach LOS		D			F			C			C	

Intersection Summary			
HCM Average Control Delay	109.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.1%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.93			0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1583	3156		1566	3153			1524			1527	
Flt Permitted	0.10	1.00		0.20	1.00			0.94			0.95	
Satd. Flow (perm)	161	3156		332	3153			1439			1460	
Volume (vph)	14	1086	15	57	1539	31	13	26	39	24	62	85
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	15	1193	16	63	1691	34	14	29	43	26	68	93
RTOR Reduction (vph)	0	1	0	0	1	0	0	36	0	0	14	0
Lane Group Flow (vph)	15	1208	0	63	1724	0	0	50	0	0	173	0
Confl. Peds. (#/hr)	18		27	27		18	4		5	5		4
Confl. Bikes (#/hr)			5			7			1			2
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	66.0	66.0		66.0	66.0			14.9			14.9	
Effective Green, g (s)	66.5	66.5		66.5	66.5			15.5			15.5	
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.17			0.17	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	119	2332		245	2330			248			251	
v/s Ratio Prot		0.38			c0.55							
v/s Ratio Perm	0.09			0.19				0.04			c0.12	
v/c Ratio	0.13	0.52		0.26	0.74			0.20			0.69	
Uniform Delay, d1	3.4	5.0		3.8	6.8			32.0			35.0	
Progression Factor	1.00	1.00		0.36	0.77			1.00			1.00	
Incremental Delay, d2	2.2	0.8		0.2	0.2			0.4			7.7	
Delay (s)	5.6	5.8		1.6	5.4			32.4			42.6	
Level of Service	A	A		A	A			C			D	
Approach Delay (s)		5.8			5.3			32.4			42.6	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	8.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	1.00		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2882		1490	2969		1490	2907		1490	2906	
Flt Permitted	0.17	1.00		0.22	1.00		0.10	1.00		0.17	1.00	
Satd. Flow (perm)	261	2882		348	2969		153	2907		261	2906	
Volume (vph)	376	475	134	418	769	20	81	818	159	27	1147	230
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	392	495	140	435	801	21	84	852	166	28	1195	240
RTOR Reduction (vph)	0	29	0	0	2	0	0	18	0	0	19	0
Lane Group Flow (vph)	392	606	0	435	820	0	84	1000	0	28	1416	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			2	
Permitted Phases	4			8			2			2		
Actuated Green, G (s)	37.0	23.0		37.0	23.0		40.0	40.0		40.0	40.0	
Effective Green, g (s)	37.0	24.0		37.0	24.0		41.0	41.0		41.0	41.0	
Actuated g/C Ratio	0.41	0.27		0.41	0.27		0.46	0.46		0.46	0.46	
Clearance Time (s)	3.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	5.1		3.0	4.1		5.7	5.7		5.7	5.7	
Lane Grp Cap (vph)	285	769		308	792		70	1324		119	1324	
v/s Ratio Prot	0.20	0.21		c0.20	0.28			0.34			0.49	
v/s Ratio Perm	0.37			c0.38			c0.55			0.11		
v/c Ratio	1.38	0.79		1.41	1.04		1.20	0.76		0.24	1.07	
Uniform Delay, d1	23.1	30.6		21.7	33.0		24.5	20.3		14.9	24.5	
Progression Factor	1.00	1.00		2.46	1.15		1.57	1.55		1.00	1.00	
Incremental Delay, d2	189.6	8.0		187.3	20.5		102.2	0.4		4.6	45.7	
Delay (s)	212.6	38.7		240.9	58.4		140.7	32.0		19.5	70.2	
Level of Service	F	D		F	E		F	C		B	E	
Approach Delay (s)		105.1			121.6			40.2			69.3	
Approach LOS		F			F			D			E	

Intersection Summary			
HCM Average Control Delay	83.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.91	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1490	4183		1490	4250		1490	2980	1333	1490	4207	
Flt Permitted	0.15	1.00		0.14	1.00		0.16	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	231	4183		216	4250		257	2980	1333	1490	4207	
Volume (vph)	104	1120	205	228	1543	82	96	885	195	156	1157	154
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)	113	1217	223	248	1677	89	104	962	212	170	1258	167
RTOR Reduction (vph)	0	29	0	0	6	0	0	0	34	0	19	0
Lane Group Flow (vph)	113	1411	0	248	1760	0	104	962	178	170	1406	0
Turn Type	pm+pt			pm+pt			Perm		pm+ov	Prot		
Protected Phases	3	8		7	4			2	7	1	6	
Permitted Phases	8			4			2		2			
Actuated Green, G (s)	34.0	26.0		40.0	29.0		24.4	24.4	35.4	10.0	23.0	
Effective Green, g (s)	36.4	27.2		40.0	29.0		24.4	24.4	35.4	11.4	24.4	
Actuated g/C Ratio	0.40	0.30		0.44	0.32		0.27	0.27	0.39	0.13	0.27	
Clearance Time (s)	5.2	5.2		4.0	4.0		4.0	4.0	4.0	5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.5	3.0		3.0	3.0	3.5	3.0	3.0	
Lane Grp Cap (vph)	222	1264		252	1369		70	808	584	189	1141	
v/s Ratio Prot	0.05	0.34		c0.12	c0.41			0.32	0.04	c0.11	0.33	
v/s Ratio Perm	0.15			0.32			c0.40		0.10			
v/c Ratio	0.51	1.12		0.98	1.29		1.49	1.19	0.30	0.90	1.23	
Uniform Delay, d1	39.2	31.4		23.1	30.5		32.8	32.8	18.8	38.7	32.8	
Progression Factor	1.24	1.19		1.00	1.00		0.72	0.72	1.00	0.83	1.21	
Incremental Delay, d2	1.6	62.3		52.0	134.2		263.5	94.5	0.2	5.6	105.3	
Delay (s)	50.1	99.8		75.1	164.7		287.0	118.1	19.1	37.9	145.0	
Level of Service	D	F		E	F		F	F	B	D	F	
Approach Delay (s)		96.2			153.6			115.4			133.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	127.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2941		1509	1587		1509	4314		1509	4252	
Flt Permitted	0.21	1.00		0.32	1.00		0.22	1.00		0.22	1.00	
Satd. Flow (perm)	334	2941		509	1587		353	4314		353	4252	
Volume (vph)	125	573	117	91	1378	10	89	1089	38	55	1436	213
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	130	597	122	95	1435	10	93	1134	40	57	1496	222
RTOR Reduction (vph)	0	3	0	0	1	0	0	8	0	0	6	0
Lane Group Flow (vph)	130	716	0	95	1444	0	93	1166	0	57	1712	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	19.0	19.0		19.0	19.0		18.0	18.0		18.0	18.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		18.0	18.0		18.0	18.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	141	1242		215	670		141	1726		141	1701	
v/s Ratio Prot		0.24			c0.91			0.27			c0.40	
v/s Ratio Perm	0.39			0.19			0.26			0.16		
v/c Ratio	0.92	0.58		0.44	2.16		0.66	0.68		0.40	1.01	
Uniform Delay, d1	12.3	9.9		9.2	13.0		11.0	11.1		9.7	13.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.30	1.44	
Incremental Delay, d2	52.6	0.7		1.4	525.1		21.7	2.1		0.8	8.2	
Delay (s)	64.9	10.6		10.7	538.1		32.7	13.2		13.4	27.6	
Level of Service	E	B		B	F		C	B		B	C	
Approach Delay (s)		18.9			505.6			14.7			27.1	
Approach LOS		B			F			B			C	

Intersection Summary			
HCM Average Control Delay	158.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.60		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	151.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2981		1509	3015		1509	4240		1509	4165	
Flt Permitted	0.10	1.00		0.15	1.00		0.15	1.00		0.15	1.00	
Satd. Flow (perm)	151	2981		239	3015		234	4240		235	4165	
Volume (vph)	111	877	46	384	1269	4	110	1136	132	89	1319	151
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	116	914	48	400	1322	4	115	1183	138	93	1374	157
RTOR Reduction (vph)	0	4	0	0	0	0	0	15	0	0	14	0
Lane Group Flow (vph)	116	958	0	400	1326	0	115	1306	0	93	1517	0
Confl. Peds. (#/hr)	87		55	55		87	151		33	33		151
Confl. Bikes (#/hr)			5			11			2			7
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	48.0	42.0		56.0	47.0		33.2	27.2		32.8	27.0	
Effective Green, g (s)	47.0	42.0		56.0	47.0		32.2	27.2		31.8	27.0	
Actuated g/C Ratio	0.47	0.42		0.56	0.47		0.32	0.27		0.32	0.27	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0		1.0	5.0	
Lane Grp Cap (vph)	139	1252		261	1417		139	1153		136	1125	
v/s Ratio Prot	0.04	0.32		c0.15	0.44		c0.04	0.31		0.03	c0.36	
v/s Ratio Perm	0.35			c0.70			0.23			0.18		
v/c Ratio	0.83	0.77		1.53	0.94		0.83	1.13		0.68	1.35	
Uniform Delay, d1	19.6	24.8		19.4	25.1		30.5	36.4		27.5	36.5	
Progression Factor	1.55	1.20		1.00	1.00		1.48	1.40		1.00	1.00	
Incremental Delay, d2	29.6	4.1		258.1	12.8		22.0	67.8		10.8	162.8	
Delay (s)	60.1	33.8		277.5	37.9		67.2	118.6		38.3	199.3	
Level of Service	E	C		F	D		E	F		D	F	
Approach Delay (s)		36.6			93.4			114.5			190.1	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	114.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	110.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	0.99	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.88			0.98		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1498	1380			1511		1509	2995		1509	2998	
Flt Permitted	0.61	1.00			0.86		0.06	1.00		0.12	1.00	
Satd. Flow (perm)	967	1380			1330		95	2995		188	2998	
Volume (vph)	16	12	41	52	56	20	97	1411	53	12	1656	56
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	17	13	43	55	59	21	102	1485	56	13	1743	59
RTOR Reduction (vph)	0	34	0	0	8	0	0	2	0	0	2	0
Lane Group Flow (vph)	17	22	0	0	127	0	102	1539	0	13	1800	0
Confl. Peds. (#/hr)	7		8	8		7	11		15	15		11
Confl. Bikes (#/hr)						1			2			1
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	20.4	20.4			20.4		71.6	67.4		63.8	62.6	
Effective Green, g (s)	20.4	20.4			20.4		71.6	67.4		62.8	62.6	
Actuated g/C Ratio	0.20	0.20			0.20		0.72	0.67		0.63	0.63	
Clearance Time (s)	4.0	4.0			4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	5.0	5.0			5.0		1.0	0.2		1.0	0.2	
Lane Grp Cap (vph)	197	282			271		139	2019		121	1877	
v/s Ratio Prot		0.02					c0.04	0.51		0.00	c0.60	
v/s Ratio Perm	0.02				c0.10		0.49			0.07		
v/c Ratio	0.09	0.08			0.47		0.73	0.76		0.11	0.96	
Uniform Delay, d1	32.2	32.2			35.0		20.1	10.9		11.4	17.5	
Progression Factor	1.00	1.00			1.00		1.00	1.00		0.46	1.18	
Incremental Delay, d2	0.4	0.2			2.7		15.8	2.8		0.0	1.8	
Delay (s)	32.6	32.4			37.7		35.8	13.7		5.3	22.6	
Level of Service	C	C			D		D	B		A	C	
Approach Delay (s)		32.5			37.7			15.1			22.4	
Approach LOS		C			D			B			C	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.95			0.98		1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1490			1529		1490	4251		1490	4268	
Flt Permitted		0.94			0.88		0.08	1.00		0.11	1.00	
Satd. Flow (perm)		1411			1356		118	4251		170	4268	
Volume (vph)	22	114	68	81	268	45	53	1494	75	31	1797	42
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	22	116	69	83	273	46	54	1524	77	32	1834	43
RTOR Reduction (vph)	0	9	0	0	5	0	0	6	0	0	2	0
Lane Group Flow (vph)	0	198	0	0	397	0	54	1595	0	32	1875	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		27.7			27.7		52.9	52.9		52.9	52.9	
Effective Green, g (s)		28.7			28.7		53.3	53.3		53.3	53.3	
Actuated g/C Ratio		0.32			0.32		0.59	0.59		0.59	0.59	
Clearance Time (s)		5.0			5.0		4.4	4.4		4.4	4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		450			432		70	2518		101	2528	
v/s Ratio Prot								0.38			0.44	
v/s Ratio Perm		0.14			c0.29		c0.46			0.19		
v/c Ratio		0.44			0.92		0.77	0.63		0.32	0.74	
Uniform Delay, d1		24.3			29.5		13.8	12.0		9.2	13.3	
Progression Factor		1.00			1.00		1.89	2.13		1.00	1.00	
Incremental Delay, d2		0.7			24.1		17.8	0.3		8.1	2.0	
Delay (s)		25.0			53.6		43.8	25.9		17.3	15.3	
Level of Service		C			D		D	C		B	B	
Approach Delay (s)		25.0			53.6			26.4			15.4	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	1.00		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2933		1490	2967		1490	4213		1490	4244	
Flt Permitted	0.13	1.00		0.12	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	209	2933		185	2967		161	4213		161	4244	
Volume (vph)	123	803	95	289	1306	41	84	1414	171	35	1796	114
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	131	854	101	307	1389	44	89	1504	182	37	1911	121
RTOR Reduction (vph)	0	10	0	0	3	0	0	16	0	0	8	0
Lane Group Flow (vph)	131	945	0	307	1430	0	89	1670	0	37	2024	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	28.6	28.6		41.6	41.6		37.6	37.6		37.6	37.6	
Effective Green, g (s)	30.0	30.0		43.0	43.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.33	0.33		0.48	0.48		0.43	0.43		0.43	0.43	
Clearance Time (s)	5.4	5.4		3.5	5.4		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	70	978		219	1418		70	1826		70	1839	
v/s Ratio Prot		0.32		c0.14	0.48			0.40			0.48	
v/s Ratio Perm	c0.63			0.53			c0.55			0.23		
v/c Ratio	1.87	0.97		1.40	1.01		1.27	0.91		0.53	1.10	
Uniform Delay, d1	30.0	29.5		22.4	23.5		25.5	23.9		18.7	25.5	
Progression Factor	0.76	0.76		1.00	1.00		0.23	0.19		0.95	0.80	
Incremental Delay, d2	433.2	18.3		206.0	26.1		132.2	0.9		18.3	51.8	
Delay (s)	456.0	40.8		228.4	49.6		138.0	5.5		36.2	72.1	
Level of Service	F	D		F	D		F	A		D	E	
Approach Delay (s)		90.8			81.1			12.2			71.4	
Approach LOS		F			F			B			E	

Intersection Summary			
HCM Average Control Delay	61.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00			1.00	0.96		0.98	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			0.99	1.00		1.00	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.93	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.99	
Satd. Flow (prot)	1491	2975		1505	3009			1522	1292		1433	
Flt Permitted	0.15	1.00		0.24	1.00			0.62	1.00		0.95	
Satd. Flow (perm)	229	2975		373	3009			984	1292		1374	
Volume (vph)	24	940	54	72	1495	14	38	14	30	20	43	71
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	25	969	56	74	1541	14	39	14	31	21	44	73
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	27	0	25	0
Lane Group Flow (vph)	25	1023	0	74	1555	0	0	53	4	0	113	0
Confl. Peds. (#/hr)	45		31	31		45	9		19	19		9
Confl. Bikes (#/hr)			4			12			2			4
Turn Type	Perm			pm+pt			Perm		Perm	Perm		
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	71.9	71.9		78.2	78.2			13.8	13.8		13.8	
Effective Green, g (s)	71.9	71.9		78.2	78.2			13.8	13.8		13.8	
Actuated g/C Ratio	0.72	0.72		0.78	0.78			0.14	0.14		0.14	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	0.2	0.2		1.0	0.2			4.0	4.0		3.0	
Lane Grp Cap (vph)	165	2139		318	2353			136	178		190	
v/s Ratio Prot		0.34		0.01	c0.52							
v/s Ratio Perm	0.11			0.18				0.05	0.00		c0.08	
v/c Ratio	0.15	0.48		0.23	0.66			0.39	0.02		0.59	
Uniform Delay, d1	4.4	6.0		3.4	4.9			39.3	37.3		40.5	
Progression Factor	2.19	1.78		0.36	0.54			1.00	1.00		1.00	
Incremental Delay, d2	1.9	0.7		0.0	0.5			2.5	0.1		4.9	
Delay (s)	11.6	11.5		1.3	3.2			41.8	37.4		45.4	
Level of Service	B	B		A	A			D	D		D	
Approach Delay (s)		11.5			3.1			40.1			45.4	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.89	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1509	3018	3001		1399	
Flt Permitted	0.14	1.00	1.00		0.99	
Satd. Flow (perm)	227	3018	3001		1399	
Volume (vph)	27	850	1430	54	33	151
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	27	859	1444	55	33	153
RTOR Reduction (vph)	0	0	2	0	62	0
Lane Group Flow (vph)	27	859	1497	0	124	0
Turn Type	Perm					
Protected Phases		2	6		4	
Permitted Phases	2					
Actuated Green, G (s)	78.0	78.0	78.0		14.0	
Effective Green, g (s)	77.5	77.5	77.5		14.5	
Actuated g/C Ratio	0.78	0.78	0.78		0.14	
Clearance Time (s)	3.5	3.5	3.5		4.5	
Vehicle Extension (s)	0.2	0.2	0.2		3.0	
Lane Grp Cap (vph)	176	2339	2326		203	
v/s Ratio Prot		0.28	c0.50		c0.09	
v/s Ratio Perm	0.12					
v/c Ratio	0.15	0.37	0.64		0.61	
Uniform Delay, d1	2.9	3.5	5.1		40.1	
Progression Factor	0.29	0.22	0.35		1.00	
Incremental Delay, d2	1.8	0.4	1.0		5.4	
Delay (s)	2.6	1.2	2.8		45.5	
Level of Service	A	A	A		D	
Approach Delay (s)		1.2	2.8		45.5	
Approach LOS		A	A		D	

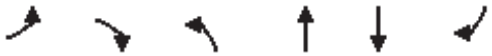
Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4458		1583	4530		1583	3167	1417	1583	3167	1417
Flt Permitted	0.10	1.00		0.25	1.00		0.13	1.00	1.00	0.31	1.00	1.00
Satd. Flow (perm)	171	4458		425	4530		215	3167	1417	511	3167	1417
Volume (vph)	197	676	105	246	1466	45	102	536	133	250	923	289
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	221	760	118	276	1647	51	115	602	149	281	1037	325
RTOR Reduction (vph)	0	23	0	0	3	0	0	0	61	0	0	140
Lane Group Flow (vph)	221	855	0	276	1695	0	115	602	88	281	1037	185
Turn Type	pm+pt			pm+pt			Perm		pm+ov	Perm		Perm
Protected Phases	1	6		5	2			8	5		4	
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	47.0	38.0		47.0	38.0		29.1	29.1	38.1	29.1	29.1	29.1
Effective Green, g (s)	47.0	39.0		47.0	39.0		31.0	31.0	39.0	31.0	31.0	31.0
Actuated g/C Ratio	0.52	0.43		0.52	0.43		0.34	0.34	0.43	0.34	0.34	0.34
Clearance Time (s)	3.0	5.0		3.0	5.0		5.9	5.9	3.0	5.9	5.9	5.9
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	215	1932		325	1963		74	1091	677	176	1091	488
v/s Ratio Prot	c0.09	0.19		0.08	0.37			0.19	0.01		0.33	
v/s Ratio Perm	c0.45			0.37			0.53		0.05	c0.55		0.13
v/c Ratio	1.03	0.44		0.85	0.86		1.55	0.55	0.13	1.60	0.95	0.38
Uniform Delay, d1	22.0	17.9		14.0	23.1		29.5	23.9	15.3	29.5	28.8	22.3
Progression Factor	1.00	1.00		2.49	1.34		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	68.8	0.7		2.0	0.5		305.1	2.0	0.1	293.5	17.7	2.2
Delay (s)	90.9	18.6		37.0	31.4		334.6	25.9	15.4	323.0	46.4	24.5
Level of Service	F	B		D	C		F	C	B	F	D	C
Approach Delay (s)		33.1			32.2			65.1			89.4	
Approach LOS		C			C			E			F	

Intersection Summary			
HCM Average Control Delay	54.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

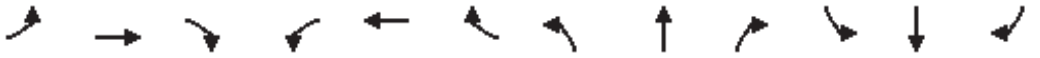
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2980		1509	3003		1509	2956		1509	2940	
Flt Permitted	0.08	1.00		0.39	1.00		0.11	1.00		0.18	1.00	
Satd. Flow (perm)	126	2980		625	3003		176	2956		282	2940	
Volume (vph)	69	498	45	183	1350	45	78	677	106	44	1018	210
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	74	535	48	197	1452	48	84	728	114	47	1095	226
RTOR Reduction (vph)	0	7	0	0	2	0	0	12	0	0	17	0
Lane Group Flow (vph)	74	576	0	197	1498	0	84	830	0	47	1304	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	71	1669		350	1682		63	1064		102	1058	
v/s Ratio Prot		0.19			0.50			0.28			0.44	
v/s Ratio Perm	c0.59			0.32			c0.48			0.17		
v/c Ratio	1.04	0.35		0.56	0.89		1.33	0.78		0.46	1.23	
Uniform Delay, d1	22.0	12.0		14.1	19.3		32.0	28.5		24.6	32.0	
Progression Factor	1.00	1.00		1.00	1.00		1.22	1.25		1.00	1.00	
Incremental Delay, d2	119.0	0.6		6.4	7.5		223.4	5.4		14.2	112.9	
Delay (s)	141.0	12.6		20.5	26.9		262.6	41.0		38.8	144.9	
Level of Service	F	B		C	C		F	D		D	F	
Approach Delay (s)		27.0			26.1			61.1			141.2	
Approach LOS		C			C			E			F	

Intersection Summary			
HCM Average Control Delay	67.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frpb, ped/bikes	0.97		1.00	1.00	1.00	
Flpb, ped/bikes	1.00		1.00	1.00	1.00	
Frt	0.89		1.00	1.00	1.00	
Flt Protected	0.99		0.95	1.00	1.00	
Satd. Flow (prot)	1368		1509	3018	2991	
Flt Permitted	0.99		0.16	1.00	1.00	
Satd. Flow (perm)	1368		255	3018	2991	
Volume (vph)	33	124	90	783	1265	41
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	33	125	91	791	1278	41
RTOR Reduction (vph)	62	0	0	0	2	0
Lane Group Flow (vph)	96	0	91	791	1317	0
Confl. Peds. (#/hr)			32			32
Confl. Bikes (#/hr)		21				3
Turn Type			Perm			
Protected Phases	4			2	2	
Permitted Phases			2			
Actuated Green, G (s)	23.4		69.0	69.0	69.0	
Effective Green, g (s)	23.4		68.6	68.6	68.6	
Actuated g/C Ratio	0.23		0.69	0.69	0.69	
Clearance Time (s)	4.0		3.6	3.6	3.6	
Vehicle Extension (s)	3.0		0.2	0.2	0.2	
Lane Grp Cap (vph)	320		175	2070	2052	
v/s Ratio Prot	c0.07			0.26	c0.44	
v/s Ratio Perm			0.36			
v/c Ratio	0.30		0.52	0.38	0.64	
Uniform Delay, d1	31.6		7.7	6.7	8.8	
Progression Factor	1.00		0.82	0.10	0.30	
Incremental Delay, d2	2.4		5.7	0.3	0.1	
Delay (s)	33.9		12.0	1.0	2.8	
Level of Service	C		B	A	A	
Approach Delay (s)	33.9			2.1	2.8	
Approach LOS	C			A	A	

Intersection Summary			
HCM Average Control Delay	4.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.1%	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												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00		0.91	0.91
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00	0.78		1.00	0.82
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1509	2867		1509	2977		1509	3018	1056		2873	1004
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.71	1.00
Satd. Flow (perm)	1509	2867		1509	2977		1509	3018	1056		2060	1004
Volume (vph)	38	749	164	231	1306	56	113	852	78	65	990	235
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	40	780	171	241	1360	58	118	888	81	68	1031	245
RTOR Reduction (vph)	0	4	0	0	3	0	0	0	53	0	0	106
Lane Group Flow (vph)	40	947	0	241	1415	0	118	888	28	0	1099	139
Confl. Peds. (#/hr)	144		116	116		144	115		139	139		116
Confl. Bikes (#/hr)			6			2			3			
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	4.0	47.0		7.0	50.0		7.0	35.0	35.0		25.0	25.0
Effective Green, g (s)	3.0	47.0		6.0	50.0		6.0	35.0	35.0		25.0	25.0
Actuated g/C Ratio	0.03	0.47		0.06	0.50		0.06	0.35	0.35		0.25	0.25
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	45	1347		91	1489		91	1056	370		515	251
v/s Ratio Prot	0.03	0.33		c0.16	c0.48		c0.08	0.29				
v/s Ratio Perm									0.03		c0.53	0.14
v/c Ratio	0.89	0.70		2.65	0.95		1.30	0.84	0.08		2.13	0.55
Uniform Delay, d1	48.3	21.0		47.0	23.8		47.0	29.9	21.7		37.5	32.7
Progression Factor	0.62	2.02		1.05	0.93		1.00	1.00	1.00		0.58	0.42
Incremental Delay, d2	74.1	2.3		765.4	11.7		193.2	8.1	0.4		515.4	6.8
Delay (s)	104.1	44.6		814.8	33.8		240.2	38.0	22.1		537.3	20.4
Level of Service	F	D		F	C		F	D	C		F	C
Approach Delay (s)		47.0			147.2			58.8			443.1	
Approach LOS		D			F			E			F	

Intersection Summary			
HCM Average Control Delay	187.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	126.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.98			0.98		1.00	1.00		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1596			1611		1583	4541		1583	4506	
Flt Permitted		0.60			0.82		0.13	1.00		0.27	1.00	
Satd. Flow (perm)		976			1344		212	4541		444	4506	
Volume (vph)	117	95	37	99	208	53	54	901	12	29	1355	94
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	121	98	38	102	214	55	56	929	12	30	1397	97
RTOR Reduction (vph)	0	9	0	0	9	0	0	1	0	0	6	0
Lane Group Flow (vph)	0	248	0	0	362	0	56	940	0	30	1488	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		26.9			26.9		53.3	53.3		53.3	53.3	
Effective Green, g (s)		28.3			28.3		53.7	53.7		53.7	53.7	
Actuated g/C Ratio		0.31			0.31		0.60	0.60		0.60	0.60	
Clearance Time (s)		5.4			5.4		4.4	4.4		4.4	4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		307			423		126	2709		265	2689	
v/s Ratio Prot								0.21			c0.33	
v/s Ratio Perm		0.25			c0.27		0.26			0.07		
v/c Ratio		0.81			0.86		0.44	0.35		0.11	0.55	
Uniform Delay, d1		28.4			28.9		10.0	9.2		7.9	10.9	
Progression Factor		1.00			1.00		1.27	0.55		1.00	1.00	
Incremental Delay, d2		14.4			15.5		8.3	0.3		0.9	0.8	
Delay (s)		42.7			44.5		21.0	5.4		8.7	11.8	
Level of Service		D			D		C	A		A	B	
Approach Delay (s)		42.7			44.5			6.3			11.7	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3111		1583	3145		1583	4485		1583	4466	
Flt Permitted	0.11	1.00		0.22	1.00		0.12	1.00		0.20	1.00	
Satd. Flow (perm)	188	3111		364	3145		208	4485		326	4466	
Volume (vph)	80	664	88	249	1354	66	57	833	88	128	1246	174
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	83	692	92	259	1410	69	59	868	92	133	1298	181
RTOR Reduction (vph)	0	11	0	0	4	0	0	14	0	0	20	0
Lane Group Flow (vph)	83	773	0	259	1475	0	59	946	0	133	1459	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	35.7	35.7		48.7	48.7		31.1	31.1		31.1	31.1	
Effective Green, g (s)	37.0	37.0		50.0	50.0		32.0	32.0		32.0	32.0	
Actuated g/C Ratio	0.41	0.41		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.3	5.3		3.5	5.3		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	77	1279		324	1747		74	1595		116	1588	
v/s Ratio Prot		0.25		0.08	c0.47			0.21			0.33	
v/s Ratio Perm	c0.44			0.36			0.28			c0.41		
v/c Ratio	1.08	0.60		0.80	0.84		0.80	0.59		1.15	0.92	
Uniform Delay, d1	26.5	20.8		13.1	16.7		26.1	23.7		29.0	27.8	
Progression Factor	1.00	1.00		1.97	1.77		1.08	1.09		1.24	1.21	
Incremental Delay, d2	125.5	2.1		4.6	1.8		42.5	1.1		121.5	8.7	
Delay (s)	152.0	22.9		30.3	31.3		70.6	27.0		157.5	42.2	
Level of Service	F	C		C	C		E	C		F	D	
Approach Delay (s)		35.2			31.2			29.5			51.7	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM Average Control Delay	37.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1509	2991		1509	3018	1350		2987		1509	3018	1350
Flt Permitted	0.08	1.00		0.19	1.00	1.00		0.71		0.28	1.00	1.00
Satd. Flow (perm)	134	2991		306	3018	1350		2136		449	3018	1350
Volume (vph)	138	879	55	131	1368	182	20	553	34	76	1130	202
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	142	906	57	135	1410	188	21	570	35	78	1165	208
RTOR Reduction (vph)	0	4	0	0	0	72	0	4	0	0	0	121
Lane Group Flow (vph)	142	959	0	135	1410	116	0	622	0	78	1165	87
Turn Type	pm+pt			pm+pt		Perm	Perm			Perm		Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6		6	8			4		4
Actuated Green, G (s)	55.0	47.3		55.0	47.3	47.3		34.0		34.0	34.0	34.0
Effective Green, g (s)	54.0	47.3		54.0	47.3	47.3		34.0		34.0	34.0	34.0
Actuated g/C Ratio	0.54	0.47		0.54	0.47	0.47		0.34		0.34	0.34	0.34
Clearance Time (s)	3.0	4.0		3.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	1.0	3.0		1.0	3.0	3.0		3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	164	1415		246	1428	639		726		153	1026	459
v/s Ratio Prot	c0.06	0.32		0.04	c0.47						c0.39	
v/s Ratio Perm	0.41			0.26		0.09		0.29		0.17		0.06
v/c Ratio	0.87	0.68		0.55	0.99	0.18		0.86		0.51	1.14	0.19
Uniform Delay, d1	21.0	20.4		13.6	26.1	15.2		30.7		26.3	33.0	23.3
Progression Factor	1.00	1.00		1.63	0.63	0.99		1.00		1.00	1.00	1.00
Incremental Delay, d2	33.9	2.6		0.5	12.2	0.2		12.4		11.6	73.2	0.9
Delay (s)	54.9	23.1		22.6	28.7	15.3		43.2		38.0	106.2	24.2
Level of Service	D	C		C	C	B		D		D	F	C
Approach Delay (s)		27.2			26.8			43.2			90.8	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM Average Control Delay	47.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	123.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1583	3157		1583	3150			1615			1626	
Flt Permitted	0.13	1.00		0.24	1.00			0.96			0.94	
Satd. Flow (perm)	216	3157		398	3150			1551			1535	
Volume (vph)	29	886	17	94	1372	50	11	86	24	62	301	52
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	913	18	97	1414	52	11	89	25	64	310	54
RTOR Reduction (vph)	0	2	0	0	3	0	0	16	0	0	5	0
Lane Group Flow (vph)	30	929	0	97	1463	0	0	109	0	0	423	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	30.6	30.6		30.6	30.6			20.2			20.2	
Effective Green, g (s)	30.9	30.9		30.9	30.9			21.1			21.1	
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.35			0.35	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	111	1626		205	1622			545			540	
v/s Ratio Prot		0.29			c0.46							
v/s Ratio Perm	0.14			0.24				0.07			c0.28	
v/c Ratio	0.27	0.57		0.47	0.90			0.20			0.78	
Uniform Delay, d1	8.2	10.0		9.3	13.2			13.6			17.4	
Progression Factor	0.79	0.66		1.00	1.00			1.00			1.00	
Incremental Delay, d2	5.5	1.4		7.6	8.5			0.2			7.3	
Delay (s)	12.0	8.0		17.0	21.7			13.7			24.7	
Level of Service	B	A		B	C			B			C	
Approach Delay (s)		8.1			21.4			13.7			24.7	
Approach LOS		A			C			B			C	

Intersection Summary			
HCM Average Control Delay	17.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95	1.00		1.00		0.95	0.95	
Frt		1.00			1.00	0.85		0.96		1.00	0.98	
Flt Protected		1.00			1.00	1.00		0.98		0.95	0.97	
Satd. Flow (prot)		3014			3018	1350		1499		1433	1427	
Flt Permitted		1.00			1.00	1.00		0.98		0.95	0.97	
Satd. Flow (perm)		3014			3018	1350		1499		1433	1427	
Volume (vph)	0	731	7	0	1619	544	16	19	15	313	28	25
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	778	7	0	1722	579	17	20	16	333	30	27
RTOR Reduction (vph)	0	0	0	0	0	99	0	15	0	0	6	0
Lane Group Flow (vph)	0	785	0	0	1722	480	0	38	0	195	189	0
Turn Type						pm+ov	Split			Split		
Protected Phases		2			6	4	3	3		4	4	
Permitted Phases						6						
Actuated Green, G (s)		62.7			62.7	81.9		6.1		19.2	19.2	
Effective Green, g (s)		62.7			62.7	81.9		6.1		19.2	19.2	
Actuated g/C Ratio		0.63			0.63	0.82		0.06		0.19	0.19	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Vehicle Extension (s)		4.5			4.5	4.0		3.0		4.0	4.0	
Lane Grp Cap (vph)		1890			1892	1160		91		275	274	
v/s Ratio Prot		0.26			c0.57	0.08		c0.03		c0.14	0.13	
v/s Ratio Perm						0.28						
v/c Ratio		0.42			0.91	0.41		0.42		0.71	0.69	
Uniform Delay, d1		9.4			16.2	2.5		45.2		37.8	37.6	
Progression Factor		1.36			1.00	1.00		1.00		1.46	1.48	
Incremental Delay, d2		0.3			8.0	0.3		3.1		8.1	7.4	
Delay (s)		13.1			24.2	2.8		48.3		63.3	63.0	
Level of Service		B			C	A		D		E	E	
Approach Delay (s)		13.1			18.8			48.3			63.2	
Approach LOS		B			B			D			E	

Intersection Summary			
HCM Average Control Delay	22.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.98		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.99	
Satd. Flow (prot)	1509	2959		1509	3007			1520	1350		1494	
Flt Permitted	0.10	1.00		0.18	1.00			0.96	1.00		0.99	
Satd. Flow (perm)	153	2959		280	3007			1520	1350		1494	
Volume (vph)	148	732	108	382	1724	43	113	12	429	10	17	15
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	156	771	114	402	1815	45	119	13	452	11	18	16
RTOR Reduction (vph)	0	9	0	0	2	0	0	0	372	0	14	0
Lane Group Flow (vph)	156	876	0	402	1858	0	0	132	80	0	31	0
Turn Type	Perm			pm+pt			Split		pm+ov	Split		
Protected Phases		6		5 7	2		4	4	5 7	8	8	
Permitted Phases	6			2					4			
Actuated Green, G (s)	41.4	41.4		49.4	47.4			13.8	18.8		14.0	
Effective Green, g (s)	41.4	41.4		49.4	47.4			13.8	17.8		14.0	
Actuated g/C Ratio	0.41	0.41		0.49	0.47			0.14	0.18		0.14	
Clearance Time (s)	4.0	4.0			4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0			3.0			4.0			3.0	
Lane Grp Cap (vph)	63	1225		187	1425			210	240		209	
v/s Ratio Prot		0.30		c0.09	0.62			c0.09	0.01		c0.02	
v/s Ratio Perm	c1.02			0.97					0.05			
v/c Ratio	2.48	0.71		2.15	1.30			0.63	0.34		0.15	
Uniform Delay, d1	29.3	24.4		26.2	26.3			40.7	35.9		37.8	
Progression Factor	1.00	1.00		1.00	1.00			1.40	8.44		1.00	
Incremental Delay, d2	709.2	3.6		534.8	142.1			4.9	0.2		1.5	
Delay (s)	738.5	28.0		561.0	168.4			62.0	303.5		39.3	
Level of Service	F	C		F	F			E	F		D	
Approach Delay (s)		134.4			238.2			248.9			39.3	
Approach LOS		F			F			F			D	

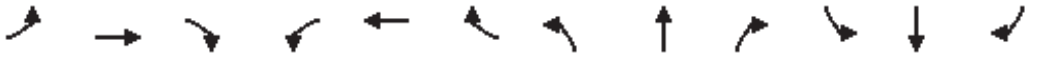
Intersection Summary			
HCM Average Control Delay	210.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.67		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	26.8
Intersection Capacity Utilization	107.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)			4.0	4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95	0.95			0.95	1.00		0.95	
Frpb, ped/bikes			1.00	1.00	0.99			1.00	1.00		1.00	
Flpb, ped/bikes			1.00	1.00	1.00			1.00	1.00		1.00	
Frt			0.86	1.00	0.97			1.00	0.85		1.00	
Flt Protected			1.00	0.95	0.96			1.00	1.00		1.00	
Satd. Flow (prot)			1374	1433	1398			3015	1350		3011	
Flt Permitted			1.00	0.95	0.96			0.95	1.00		1.00	
Satd. Flow (perm)			1374	1433	1398			2868	1350		3011	
Volume (vph)	0	0	10	1680	9	153	5	534	454	0	508	4
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	10	1714	9	156	5	545	463	0	518	4
RTOR Reduction (vph)	0	0	4	0	8	0	0	0	296	0	1	0
Lane Group Flow (vph)	0	0	6	1006	865	0	0	550	167	0	521	0
Confl. Peds. (#/hr)	22					22	22					22
Confl. Bikes (#/hr)						2						1
Turn Type			custom	Prot			Perm		Perm			
Protected Phases				4	8			2			2	
Permitted Phases			4				2		2			
Actuated Green, G (s)			56.0	56.0	56.0			35.0	35.0		35.0	
Effective Green, g (s)			56.0	56.0	56.0			36.0	36.0		36.0	
Actuated g/C Ratio			0.56	0.56	0.56			0.36	0.36		0.36	
Clearance Time (s)			4.0	4.0	4.0			5.0	5.0		5.0	
Vehicle Extension (s)			7.0	7.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)			769	802	783			1032	486		1084	
v/s Ratio Prot				c0.70	0.62						0.17	
v/s Ratio Perm			0.00					c0.19	0.12			
v/c Ratio			0.01	1.25	1.10			0.53	0.34		0.48	
Uniform Delay, d1			9.7	22.0	22.0			25.3	23.4		24.8	
Progression Factor			1.00	1.00	1.00			0.70	2.69		1.46	
Incremental Delay, d2			0.0	124.6	64.8			1.6	1.6		0.1	
Delay (s)			9.7	146.6	86.8			19.5	64.4		36.2	
Level of Service			A	F	F			B	E		D	
Approach Delay (s)		9.7			118.8			40.0			36.2	
Approach LOS		A			F			D			D	

Intersection Summary			
HCM Average Control Delay	82.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	0.99		1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1509	1588	1268	1489	1516		1509	2977		1500	3018	1288
Flt Permitted	0.12	1.00	1.00	0.48	1.00		0.09	1.00		0.28	1.00	1.00
Satd. Flow (perm)	198	1588	1268	757	1516		143	2977		439	3018	1288
Volume (vph)	71	237	117	67	373	100	128	720	37	30	1608	555
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	76	255	126	72	401	108	138	774	40	32	1729	597
RTOR Reduction (vph)	0	0	86	0	10	0	0	3	0	0	0	95
Lane Group Flow (vph)	76	255	40	72	499	0	138	811	0	32	1729	502
Confl. Peds. (#/hr)	31		29	29		31	16		30	30		16
Confl. Bikes (#/hr)			2			4			2			1
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4			8		8
Actuated Green, G (s)	38.2	31.6	31.6	36.5	31.0		50.9	45.1		43.2	40.4	40.4
Effective Green, g (s)	37.7	32.1	32.1	35.5	31.0		51.4	45.6		42.2	40.4	40.4
Actuated g/C Ratio	0.38	0.32	0.32	0.36	0.31		0.51	0.46		0.42	0.40	0.40
Clearance Time (s)	3.0	4.5	4.5	3.0	4.0		3.0	4.5		3.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	1.0	2.5		1.0	5.0		1.0	5.0	5.0
Lane Grp Cap (vph)	148	510	407	302	470		169	1358		204	1219	520
v/s Ratio Prot	c0.03	0.16		0.01	c0.33		c0.06	0.27		0.00	c0.57	
v/s Ratio Perm	0.16		0.03	0.07			0.36			0.06		0.39
v/c Ratio	0.51	0.50	0.10	0.24	1.06		0.82	0.60		0.16	1.42	0.97
Uniform Delay, d1	23.7	27.5	23.8	22.1	34.5		47.6	20.3		17.4	29.8	29.1
Progression Factor	1.00	1.00	1.00	0.97	0.99		1.89	1.47		0.85	0.78	0.71
Incremental Delay, d2	3.0	0.8	0.1	0.1	57.0		18.2	1.4		0.0	189.7	14.2
Delay (s)	26.7	28.2	23.9	21.5	91.2		108.3	31.3		14.7	213.0	34.9
Level of Service	C	C	C	C	F		F	C		B	F	C
Approach Delay (s)		26.8			82.5			42.5			165.2	
Approach LOS		C			F			D			F	

Intersection Summary			
HCM Average Control Delay	112.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	109.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95			0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.98			1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	2927	2966		2927	3015		2927	2880			3018	1290
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)	2927	2966		2927	3015		2927	2880			3018	1290
Volume (vph)	256	762	52	412	1342	4	204	615	143	0	1269	641
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	272	811	55	438	1428	4	217	654	152	0	1350	682
RTOR Reduction (vph)	0	5	0	0	0	0	0	20	0	0	0	142
Lane Group Flow (vph)	272	861	0	438	1432	0	217	786	0	0	1350	540
Confl. Peds. (#/hr)	75		79	79		75	30		64	64		30
Confl. Bikes (#/hr)			8			23			2			3
Turn Type	Prot			Prot			Prot					Perm
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases												4
Actuated Green, G (s)	9.0	29.7		9.0	29.7		8.8	47.8			34.0	34.0
Effective Green, g (s)	9.0	30.2		9.0	30.2		9.8	48.8			35.0	35.0
Actuated g/C Ratio	0.09	0.30		0.09	0.30		0.10	0.49			0.35	0.35
Clearance Time (s)	4.0	4.5		4.0	4.5		5.0	5.0			5.0	5.0
Vehicle Extension (s)	1.0	5.0		1.0	5.0		2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	263	896		263	911		287	1405			1056	452
v/s Ratio Prot	0.09	0.29		c0.15	c0.47		c0.07	0.27			c0.45	
v/s Ratio Perm												0.42
v/c Ratio	1.03	0.96		1.67	1.57		0.76	0.56			1.28	1.20
Uniform Delay, d1	45.5	34.3		45.5	34.9		43.9	18.0			32.5	32.5
Progression Factor	0.82	1.09		1.27	0.92		1.00	1.00			0.71	0.98
Incremental Delay, d2	61.2	20.3		308.0	260.1		9.7	0.6			126.0	90.1
Delay (s)	98.5	57.7		365.7	292.2		53.6	18.6			148.9	121.8
Level of Service	F	E		F	F		D	B			F	F
Approach Delay (s)		67.5			309.4			26.0			139.8	
Approach LOS		E			F			C			F	

Intersection Summary			
HCM Average Control Delay	159.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	113.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2981		1509	3007		1509	2917		1509	2973	
Flt Permitted	0.28	1.00		0.95	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	440	2981		1509	3007		159	2917		159	2973	
Volume (vph)	40	494	44	400	916	21	71	863	246	83	1463	158
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)	43	537	48	435	996	23	77	938	267	90	1590	172
RTOR Reduction (vph)	0	6	0	0	2	0	0	29	0	0	9	0
Lane Group Flow (vph)	43	579	0	435	1017	0	77	1176	0	90	1753	0
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8						6			2		
Actuated Green, G (s)	25.0	25.0		13.0	41.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	26.0	26.0		12.0	42.0		40.0	40.0		40.0	40.0	
Actuated g/C Ratio	0.29	0.29		0.13	0.47		0.44	0.44		0.44	0.44	
Clearance Time (s)	5.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	127	861		201	1403		71	1296		71	1321	
v/s Ratio Prot		0.19		c0.29	c0.34			0.40			c0.59	
v/s Ratio Perm	0.10						0.48			0.57		
v/c Ratio	0.34	0.67		2.16	0.73		1.08	0.91		1.27	1.33	
Uniform Delay, d1	25.2	28.2		39.0	19.3		25.0	23.3		25.0	25.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.1	4.2		540.0	3.3		131.9	10.8		194.7	152.5	
Delay (s)	32.3	32.4		579.0	22.6		156.9	34.1		219.7	177.5	
Level of Service	C	C		F	C		F	C		F	F	
Approach Delay (s)		32.4			189.1			41.5			179.6	
Approach LOS		C			F			D			F	

Intersection Summary			
HCM Average Control Delay	130.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0			4.0		4.0	4.0	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frpb, ped/bikes					1.00			1.00		1.00	1.00	
Flpb, ped/bikes					1.00			1.00		1.00	1.00	
Frt					0.94			1.00		1.00	1.00	
Flt Protected					0.97			1.00		0.95	1.00	
Satd. Flow (prot)					1528			3145		1583	3167	
Flt Permitted					0.82			1.00		0.18	1.00	
Satd. Flow (perm)					1291			3145		297	3167	
Volume (vph)	0	0	0	142	0	103	0	1070	27	72	1844	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	151	0	110	0	1138	29	77	1962	0
RTOR Reduction (vph)	0	0	0	0	26	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	235	0	0	1165	0	77	1962	0
Confl. Peds. (#/hr)							10		32	32		10
Confl. Bikes (#/hr)			1						2			4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)					30.5			61.0		61.0	61.0	
Effective Green, g (s)					31.0			61.0		61.0	61.0	
Actuated g/C Ratio					0.31			0.61		0.61	0.61	
Clearance Time (s)					4.5			4.0		4.0	4.0	
Vehicle Extension (s)					3.0			5.0		5.0	5.0	
Lane Grp Cap (vph)					400			1918		181	1932	
v/s Ratio Prot								0.37			c0.62	
v/s Ratio Perm					c0.18					0.26		
v/c Ratio					0.59			0.61		0.43	1.02	
Uniform Delay, d1					29.1			12.1		10.3	19.5	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					6.2			1.4		7.2	24.4	
Delay (s)					35.3			13.5		17.4	43.9	
Level of Service					D			B		B	D	
Approach Delay (s)		0.0			35.3			13.5			42.9	
Approach LOS		A			D			B			D	

Intersection Summary			
HCM Average Control Delay	32.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00		1.00	1.00	0.95	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	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		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3072	3167	1325	3072	3145		1583	3167	1352	1583	4382	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.09	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	3072	3167	1325	3072	3145		156	3167	1352	168	4382	
Volume (vph)	83	591	71	287	1135	30	99	1038	264	27	1627	264
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	86	609	73	296	1170	31	102	1070	272	28	1677	272
RTOR Reduction (vph)	0	0	1	0	2	0	0	0	80	0	19	0
Lane Group Flow (vph)	86	609	72	296	1199	0	102	1070	192	28	1930	0
Confl. Peds. (#/hr)	73		41	41		73	67		26	26		67
Confl. Bikes (#/hr)			3			4			1			4
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2				8		8	4		
Actuated Green, G (s)	8.0	48.0	55.0	8.0	48.0		48.2	41.2	49.2	42.4	38.3	
Effective Green, g (s)	8.0	49.3	56.3	8.0	49.3		49.6	42.6	50.6	43.8	39.7	
Actuated g/C Ratio	0.07	0.41	0.47	0.07	0.41		0.41	0.36	0.42	0.36	0.33	
Clearance Time (s)	4.0	5.3	4.0	4.0	5.3		4.0	5.4	4.0	4.0	5.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	205	1301	666	205	1292		148	1124	615	110	1450	
v/s Ratio Prot	0.03	c0.19	0.01	c0.10	c0.38		c0.04	0.34	0.02	0.01	c0.44	
v/s Ratio Perm			0.05				0.24		0.12	0.08		
v/c Ratio	0.42	0.47	0.11	1.44	0.93		0.69	0.95	0.31	0.25	1.33	
Uniform Delay, d1	53.8	25.8	17.8	56.0	33.7		56.9	37.7	23.1	28.1	40.1	
Progression Factor	0.75	0.40	0.41	0.92	1.30		1.25	1.27	2.44	1.00	1.00	
Incremental Delay, d2	1.2	1.1	0.1	211.8	6.7		7.0	11.2	0.2	1.2	153.9	
Delay (s)	41.3	11.3	7.3	263.5	50.3		78.0	59.1	56.5	29.4	194.0	
Level of Service	D	B	A	F	D		E	E	E	C	F	
Approach Delay (s)		14.3			92.5			60.0			191.7	
Approach LOS		B			F			E			F	

Intersection Summary			
HCM Average Control Delay	108.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	102.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3103		1583	3167	1417	1583	3082	
Flt Permitted	0.08	1.00	1.00	0.30	1.00		0.14	1.00	1.00	0.27	1.00	
Satd. Flow (perm)	135	3167	1417	498	3103		236	3167	1417	444	3082	
Volume (vph)	64	670	130	217	1070	166	124	727	36	133	844	183
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	705	137	228	1126	175	131	765	38	140	888	193
RTOR Reduction (vph)	0	0	45	0	10	0	0	0	20	0	16	0
Lane Group Flow (vph)	67	705	92	228	1291	0	131	765	18	140	1065	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6		6	2			8		8	4		
Actuated Green, G (s)	54.6	54.6	54.6	54.6	54.6		54.0	54.0	54.0	54.0	54.0	
Effective Green, g (s)	56.5	56.5	56.5	56.5	56.5		55.5	55.5	55.5	55.5	55.5	
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47		0.46	0.46	0.46	0.46	0.46	
Clearance Time (s)	5.9	5.9	5.9	5.9	5.9		5.5	5.5	5.5	5.5	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	64	1491	667	234	1461		109	1465	655	205	1425	
v/s Ratio Prot		0.22			0.42			0.24			0.35	
v/s Ratio Perm	c0.50		0.06	0.46			c0.56		0.01	0.32		
v/c Ratio	1.05	0.47	0.14	0.97	0.88		1.20	0.52	0.03	0.68	0.75	
Uniform Delay, d1	31.8	21.6	18.0	31.0	28.8		32.2	22.9	17.6	25.3	26.5	
Progression Factor	1.21	1.16	1.68	1.03	1.02		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	108.1	0.8	0.3	24.3	2.3		150.3	1.3	0.1	16.9	3.6	
Delay (s)	146.5	25.9	30.5	56.2	31.7		182.5	24.2	17.6	42.2	30.1	
Level of Service	F	C	C	E	C		F	C	B	D	C	
Approach Delay (s)		35.5			35.4			46.1			31.5	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00		0.95		0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85		1.00		1.00	1.00	0.85		0.94	
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.95	1.00		0.99	
Satd. Flow (prot)	1509	3018	1350		3012		1433	1437	1350		1467	
Flt Permitted	0.06	1.00	1.00		1.00		0.95	0.95	1.00		0.99	
Satd. Flow (perm)	97	3018	1350		3012		1433	1437	1350		1467	
Volume (vph)	101	852	276	0	1517	17	635	2	47	22	17	34
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	104	878	285	0	1564	18	655	2	48	23	18	35
RTOR Reduction (vph)	0	0	62	0	0	0	0	0	38	0	26	0
Lane Group Flow (vph)	104	878	223	0	1582	0	328	329	10	0	50	0
Turn Type	pm+pt		Perm				Split		Perm	Split		
Protected Phases	1	6			2		4	4		3	3	
Permitted Phases	6		6						4			
Actuated Green, G (s)	73.0	65.2	65.2		65.2		26.0	26.0	26.0		6.0	
Effective Green, g (s)	72.0	65.2	65.2		65.2		26.0	26.0	26.0		6.0	
Actuated g/C Ratio	0.60	0.54	0.54		0.54		0.22	0.22	0.22		0.05	
Clearance Time (s)	3.0	4.0	4.0		4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	1.0	6.0	6.0		6.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	138	1640	734		1637		310	311	293		73	
v/s Ratio Prot	c0.04	0.29			c0.52		0.23	c0.23			c0.03	
v/s Ratio Perm	0.41		0.17						0.01			
v/c Ratio	0.75	0.54	0.30		0.97		1.06	1.06	0.04		0.69	
Uniform Delay, d1	24.2	17.6	15.0		26.3		47.0	47.0	37.1		56.1	
Progression Factor	1.63	0.48	0.22		1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	14.3	0.9	0.8		15.5		67.2	67.1	0.0		23.8	
Delay (s)	53.7	9.5	4.0		41.9		114.2	114.1	37.2		79.9	
Level of Service	D	A	A		D		F	F	D		E	
Approach Delay (s)		11.9			41.9			108.9			79.9	
Approach LOS		B			D			F			E	

Intersection Summary			
HCM Average Control Delay	45.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00	0.93	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2975		1504	2986		1509	3018	1254	1485	2915	
Flt Permitted	0.06	1.00		0.24	1.00		0.17	1.00	1.00	0.17	1.00	
Satd. Flow (perm)	98	2975		376	2986		276	3018	1254	272	2915	
Volume (vph)	55	861	53	10	2119	77	1	563	113	16	852	139
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	990	61	11	2436	89	1	647	130	18	979	160
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	100	0	13	0
Lane Group Flow (vph)	63	1048	0	11	2523	0	1	647	30	18	1126	0
Confl. Peds. (#/hr)	83		60	60		83	58		40	40		58
Confl. Bikes (#/hr)			3			8						
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	68.8	64.7		61.7	60.9		23.0	23.0	23.0	23.0	23.0	
Effective Green, g (s)	68.8	64.7		61.2	60.9		23.0	23.0	23.0	23.0	23.0	
Actuated g/C Ratio	0.69	0.65		0.61	0.61		0.23	0.23	0.23	0.23	0.23	
Clearance Time (s)	4.0	4.0		3.5	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	1.0	5.0		1.0	5.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	125	1925		233	1818		63	694	288	63	670	
v/s Ratio Prot	c0.02	0.35		0.00	c0.84			0.21			c0.39	
v/s Ratio Perm	0.32			0.03			0.00		0.02	0.07		
v/c Ratio	0.50	0.54		0.05	1.39		0.02	0.93	0.10	0.29	1.68	
Uniform Delay, d1	26.0	9.6		7.9	19.6		29.8	37.7	30.4	31.7	38.5	
Progression Factor	2.38	0.67		0.63	0.76		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	0.9		0.0	174.7		0.5	21.1	0.7	11.0	312.7	
Delay (s)	62.8	7.4		5.0	189.7		30.2	58.8	31.1	42.8	351.2	
Level of Service	E	A		A	F		C	E	C	D	F	
Approach Delay (s)		10.5			188.9			54.2			346.4	
Approach LOS		B			F			D			F	

Intersection Summary			
HCM Average Control Delay	167.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1509	2992		1509	1588	1350	1509	2948		1509	3018	1350
Flt Permitted	0.13	1.00		0.42	1.00	1.00	0.27	1.00		0.21	1.00	1.00
Satd. Flow (perm)	205	2992		674	1588	1350	427	2948		341	3018	1350
Volume (vph)	21	436	26	306	721	155	91	751	138	174	768	183
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	459	27	322	759	163	96	791	145	183	808	193
RTOR Reduction (vph)	0	6	0	0	0	73	0	20	0	0	0	49
Lane Group Flow (vph)	22	480	0	322	759	90	96	916	0	183	808	144
Turn Type	Perm			Perm		Perm	Perm			Perm		Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Actuated Green, G (s)	31.0	31.0		31.0	31.0	31.0	36.0	36.0		36.0	36.0	36.0
Effective Green, g (s)	31.0	31.0		31.0	31.0	31.0	36.0	36.0		36.0	36.0	36.0
Actuated g/C Ratio	0.41	0.41		0.41	0.41	0.41	0.48	0.48		0.48	0.48	0.48
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lane Grp Cap (vph)	85	1237		279	656	558	205	1415		164	1449	648
v/s Ratio Prot		0.16			c0.48			0.31			0.27	
v/s Ratio Perm	0.11			0.48		0.07	0.22			c0.54		0.11
v/c Ratio	0.26	0.39		1.15	1.16	0.16	0.47	0.65		1.12	0.56	0.22
Uniform Delay, d1	14.5	15.4		22.0	22.0	13.8	13.1	14.7		19.5	13.8	11.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.2	0.9		102.2	87.1	0.6	7.5	2.3		104.7	1.6	0.8
Delay (s)	21.7	16.3		124.2	109.1	14.5	20.6	17.0		124.2	15.4	12.1
Level of Service	C	B		F	F	B	C	B		F	B	B
Approach Delay (s)		16.5			100.6			17.3			31.7	
Approach LOS		B			F			B			C	

Intersection Summary			
HCM Average Control Delay	47.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.96		1.00	1.00		1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.98	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2895		1509	3015		1433	1416	1282	1509	1496	
Flt Permitted	0.06	1.00		0.14	1.00		0.95	0.98	1.00	0.95	1.00	
Satd. Flow (perm)	88	2895		229	3015		1433	1416	1282	1509	1496	
Volume (vph)	6	859	319	637	1940	10	261	106	236	16	18	11
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	6	904	336	671	2042	11	275	112	248	17	19	12
RTOR Reduction (vph)	0	32	0	0	0	0	0	0	150	0	10	0
Lane Group Flow (vph)	6	1208	0	671	2053	0	194	193	98	17	21	0
Turn Type	Perm			pm+pt			Split		pm+ov	Split		
Protected Phases		6		5	2		4	4	5	3	3	
Permitted Phases	6			2					4			
Actuated Green, G (s)	72.0	72.0		81.0	81.0		7.0	7.0	13.0	21.0	21.0	
Effective Green, g (s)	72.0	72.0		81.0	81.0		7.0	7.0	12.0	20.0	20.0	
Actuated g/C Ratio	0.60	0.60		0.68	0.68		0.06	0.06	0.10	0.17	0.17	
Clearance Time (s)	4.0	4.0		3.0	4.0		4.0	4.0	3.0	3.0	3.0	
Vehicle Extension (s)	4.5	4.5		1.0	4.5		2.0	2.0	1.0	2.0	2.0	
Lane Grp Cap (vph)	53	1737		208	2035		84	83	171	252	249	
v/s Ratio Prot		0.42		c0.13	0.68		0.14	c0.14	0.02	0.01	c0.01	
v/s Ratio Perm	0.07			c2.04					0.05			
v/c Ratio	0.11	0.70		3.23	1.01		2.31	2.33	0.57	0.07	0.08	
Uniform Delay, d1	10.3	16.5		19.3	19.5		56.5	56.5	51.5	42.1	42.3	
Progression Factor	1.00	1.00		1.61	0.89		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	4.3	2.3		1008.5	16.9		624.9	632.3	2.8	0.5	0.7	
Delay (s)	14.6	18.8		1039.5	34.2		681.4	688.8	54.4	42.7	42.9	
Level of Service	B	B		F	C		F	F	D	D	D	
Approach Delay (s)		18.8			281.8			438.8			42.8	
Approach LOS		B			F			F			D	

Intersection Summary			
HCM Average Control Delay	230.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.55		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.90			0.97		1.00	0.98		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1419			1508		1509	2967		1509	3002	
Flt Permitted		0.94			0.86		0.22	1.00		0.43	1.00	
Satd. Flow (perm)		1343			1322		353	2967		678	3002	
Volume (vph)	23	15	108	74	91	57	216	460	58	13	859	31
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	24	16	112	77	95	59	225	479	60	14	895	32
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	152	0	0	231	0	225	539	0	14	927	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		19.4			19.4		24.0	24.0		24.0	24.0	
Effective Green, g (s)		20.0			20.0		23.0	23.0		23.0	23.0	
Actuated g/C Ratio		0.39			0.39		0.45	0.45		0.45	0.45	
Clearance Time (s)		4.6			4.6		3.0	3.0		3.0	3.0	
Vehicle Extension (s)		4.5			4.5		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		527			518		159	1338		306	1354	
v/s Ratio Prot								0.18			0.31	
v/s Ratio Perm		0.11			c0.17		c0.64			0.02		
v/c Ratio		0.29			0.45		1.42	0.40		0.05	0.68	
Uniform Delay, d1		10.6			11.4		14.0	9.4		7.8	11.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.4			2.8		219.6	0.2		0.1	1.5	
Delay (s)		12.0			14.2		233.6	9.6		7.9	12.6	
Level of Service		B			B		F	A		A	B	
Approach Delay (s)		12.0			14.2			75.6			12.5	
Approach LOS		B			B			E			B	

Intersection Summary			
HCM Average Control Delay	35.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	51.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.96			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	0.99		1.00	1.00			0.92			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1509	2986		1504	3005			1366			1539	
Flt Permitted	0.08	1.00		0.24	1.00			0.81			0.95	
Satd. Flow (perm)	123	2986		382	3005			1120			1464	
Volume (vph)	22	746	33	240	2064	28	56	56	183	19	187	24
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	24	802	35	258	2219	30	60	60	197	20	201	26
RTOR Reduction (vph)	0	3	0	0	1	0	0	60	0	0	5	0
Lane Group Flow (vph)	24	834	0	258	2248	0	0	257	0	0	242	0
Confl. Peds. (#/hr)	48		34	34		48	40		40	40		40
Confl. Bikes (#/hr)			3			4						2
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	57.6	51.5		67.6	58.0			23.9			23.9	
Effective Green, g (s)	57.1	51.5		67.6	58.0			24.4			24.4	
Actuated g/C Ratio	0.57	0.52		0.68	0.58			0.24			0.24	
Clearance Time (s)	3.5	4.0		3.5	4.0			4.5			4.5	
Vehicle Extension (s)	1.0	5.0		1.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	148	1538		394	1743			273			357	
v/s Ratio Prot	0.01	0.28		c0.08	c0.75							
v/s Ratio Perm	0.08			0.36				c0.23			0.17	
v/c Ratio	0.16	0.54		0.65	1.29			0.94			0.68	
Uniform Delay, d1	22.6	16.3		8.7	21.0			37.1			34.3	
Progression Factor	1.00	1.00		1.89	0.44			1.00			1.00	
Incremental Delay, d2	2.3	1.4		0.8	130.8			38.0			5.1	
Delay (s)	25.0	17.7		17.3	140.1			75.1			39.3	
Level of Service	C	B		B	F			E			D	
Approach Delay (s)		17.9			127.4			75.1			39.3	
Approach LOS		B			F			E			D	

Intersection Summary			
HCM Average Control Delay	93.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	120.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3116		1583	3127		1583	1667	1417	1583	1596	
Flt Permitted	0.20	1.00		0.20	1.00		0.17	1.00	1.00	0.45	1.00	
Satd. Flow (perm)	327	3116		327	3127		283	1667	1417	749	1596	
Volume (vph)	51	718	86	112	1246	112	55	377	117	41	508	201
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)	55	780	93	122	1354	122	60	410	127	45	552	218
RTOR Reduction (vph)	0	15	0	0	11	0	0	0	24	0	2	0
Lane Group Flow (vph)	55	858	0	122	1465	0	60	410	103	45	768	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	20.1	20.1		20.1	20.1		31.0	31.0	31.0	31.0	31.0	
Effective Green, g (s)	20.4	20.4		20.4	20.4		31.6	31.6	31.6	31.6	31.6	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.53	0.53	0.53	0.53	0.53	
Clearance Time (s)	4.3	4.3		4.3	4.3		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	1059		111	1063		149	878	746	394	841	
v/s Ratio Prot		0.28			c0.47			0.25			c0.48	
v/s Ratio Perm	0.17			0.37			0.21		0.07	0.06		
v/c Ratio	0.50	0.81		1.10	1.38		0.40	0.47	0.14	0.11	0.91	
Uniform Delay, d1	15.7	18.0		19.8	19.8		8.5	8.9	7.3	7.2	13.0	
Progression Factor	1.00	1.00		0.94	0.97		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.9	6.7		92.6	173.4		7.9	1.8	0.4	0.6	16.0	
Delay (s)	30.7	24.8		111.2	192.7		16.4	10.7	7.6	7.7	28.9	
Level of Service	C	C		F	F		B	B	A	A	C	
Approach Delay (s)		25.1			186.5			10.6			27.8	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM Average Control Delay	88.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	111.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)				4.0	4.0			4.0			4.0	4.0
Lane Util. Factor				1.00	0.95			0.95			0.95	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			1.00			1.00	1.00
Satd. Flow (prot)				1509	3010			3006			3018	1350
Flt Permitted				0.95	1.00			0.92			1.00	1.00
Satd. Flow (perm)				1509	3010			2764			3018	1350
Volume (vph)	0	0	0	195	1856	30	27	328	0	0	284	102
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	207	1974	32	29	349	0	0	302	109
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	207	2005	0	0	378	0	0	302	109
Turn Type				custom			custom					Free
Protected Phases				2	2		3	3			1	
Permitted Phases				4	4		6	6				Free
Actuated Green, G (s)				34.9	34.9			27.5			20.0	100.0
Effective Green, g (s)				33.5	33.5			26.5			20.0	100.0
Actuated g/C Ratio				0.34	0.34			0.26			0.20	1.00
Clearance Time (s)				3.0	3.0			3.0			4.0	
Vehicle Extension (s)				1.0	1.0			1.0			4.0	
Lane Grp Cap (vph)				566	1129			742			604	1350
v/s Ratio Prot				0.05	c0.25			c0.02			c0.10	
v/s Ratio Perm				0.09	0.42			c0.11				0.08
v/c Ratio				0.37	1.78			0.51			0.50	0.08
Uniform Delay, d1				25.6	33.2			31.2			35.6	0.0
Progression Factor				1.00	1.00			0.35			1.00	1.00
Incremental Delay, d2				1.8	352.6			0.2			2.9	0.1
Delay (s)				27.4	385.9			11.1			38.5	0.1
Level of Service				C	F			B			D	A
Approach Delay (s)		0.0			352.4			11.1			28.3	
Approach LOS		A			F			B			C	

Intersection Summary			
HCM Average Control Delay	265.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.99	
Satd. Flow (prot)	1304	2599		1304	2608	1167		1314			1330	
Flt Permitted	0.14	1.00		0.19	1.00	1.00		0.82			0.88	
Satd. Flow (perm)	188	2599		257	2608	1167		1103			1183	
Volume (vph)	24	1179	28	41	1421	26	64	82	34	33	78	17
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	25	1215	29	42	1465	27	66	85	35	34	80	18
RTOR Reduction (vph)	0	1	0	0	0	8	0	10	0	0	7	0
Lane Group Flow (vph)	25	1243	0	42	1465	19	0	176	0	0	125	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	63.7	63.7		63.7	63.7	63.7		17.2			17.2	
Effective Green, g (s)	64.3	64.3		64.3	64.3	64.3		17.7			17.7	
Actuated g/C Ratio	0.71	0.71		0.71	0.71	0.71		0.20			0.20	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6		4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0			2.0	
Lane Grp Cap (vph)	134	1857		184	1863	834		217			233	
v/s Ratio Prot		0.48			c0.56							
v/s Ratio Perm	0.13			0.16		0.02		c0.16			0.11	
v/c Ratio	0.19	0.67		0.23	0.79	0.02		0.81			0.54	
Uniform Delay, d1	4.2	7.0		4.4	8.4	3.7		34.5			32.5	
Progression Factor	0.18	0.53		0.71	0.53	0.89		1.00			1.00	
Incremental Delay, d2	0.3	0.2		1.0	1.2	0.0		18.5			1.2	
Delay (s)	1.0	3.9		4.1	5.6	3.3		53.0			33.6	
Level of Service	A	A		A	A	A		D			C	
Approach Delay (s)		3.8			5.6			53.0			33.6	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	8.9	HCM Level of Service	A
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1304	2597		1304	2597			1318			1320	
Flt Permitted	0.15	1.00		0.17	1.00			0.92			0.90	
Satd. Flow (perm)	211	2597		232	2597			1228			1203	
Volume (vph)	21	950	26	146	1235	34	33	102	39	54	127	45
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	22	990	27	152	1286	35	34	106	41	56	132	47
RTOR Reduction (vph)	0	3	0	0	3	0	0	18	0	0	11	0
Lane Group Flow (vph)	22	1014	0	152	1318	0	0	163	0	0	224	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	25.5	25.5		25.5	25.5			25.5			25.5	
Effective Green, g (s)	26.0	26.0		26.0	26.0			26.0			26.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.43			0.43	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	91	1125		101	1125			532			521	
v/s Ratio Prot		0.39			0.51							
v/s Ratio Perm	0.10			c0.65				0.13			c0.19	
v/c Ratio	0.24	0.90		1.50	1.17			0.31			0.43	
Uniform Delay, d1	10.8	15.8		17.0	17.0			11.1			11.8	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	6.2	11.6		271.7	86.8			1.5			2.6	
Delay (s)	17.0	27.4		288.7	103.8			12.6			14.4	
Level of Service	B	C		F	F			B			B	
Approach Delay (s)		27.1			122.8			12.6			14.4	
Approach LOS		C			F			B			B	

Intersection Summary			
HCM Average Control Delay	73.4	HCM Level of Service	E
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	1630		1583	1667	1417	1583	1667	1417	1583	1667	1417
Flt Permitted	0.41	1.00		0.23	1.00	1.00	0.25	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	685	1630		388	1667	1417	425	1667	1417	608	1667	1417
Volume (vph)	89	470	80	49	376	50	56	419	43	104	527	68
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	95	500	85	52	400	53	60	446	46	111	561	72
RTOR Reduction (vph)	0	10	0	0	0	53	0	0	26	0	0	41
Lane Group Flow (vph)	95	575	0	52	400	0	60	446	20	111	561	31
Turn Type	Perm			Perm		NA	Perm		Perm	Perm		custom
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2	2		4
Actuated Green, G (s)	25.5	25.5		25.5	25.5	0.0	25.5	25.5	25.5	25.5	25.5	25.5
Effective Green, g (s)	26.0	26.0		26.0	26.0	0.0	26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.43	0.43		0.43	0.43	0.00	0.43	0.43	0.43	0.43	0.43	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	297	706		168	722	0	184	722	614	263	722	614
v/s Ratio Prot		c0.35			0.24			0.27			c0.34	
v/s Ratio Perm	0.14			0.13			0.14		0.01	0.18		0.02
v/c Ratio	0.32	0.81		0.31	0.55	0.00	0.33	0.62	0.03	0.42	0.78	0.05
Uniform Delay, d1	11.2	14.9		11.1	12.7	30.0	11.2	13.2	9.8	11.8	14.5	9.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.8	10.0		4.7	3.1	0.0	4.7	3.9	0.1	4.9	8.0	0.2
Delay (s)	14.0	24.9		15.9	15.7	30.0	15.9	17.1	9.9	16.7	22.6	10.0
Level of Service	B	C		B	B	C	B	B	A	B	C	B
Approach Delay (s)		23.3			17.2			16.4			20.5	
Approach LOS		C			B			B			C	

Intersection Summary			
HCM Average Control Delay	19.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.82	1.00	1.00	0.96	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2577		1304	2608	961	1304	1373	1117	1302	1373	1111
Flt Permitted	0.12	1.00		0.12	1.00	1.00	0.13	1.00	1.00	0.17	1.00	1.00
Satd. Flow (perm)	171	2577		160	2608	961	177	1373	1117	239	1373	1111
Volume (vph)	40	1097	66	121	1165	132	78	483	68	99	601	90
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	1167	70	129	1239	140	83	514	72	105	639	96
RTOR Reduction (vph)	0	5	0	0	0	87	0	0	47	0	0	63
Lane Group Flow (vph)	43	1232	0	129	1239	53	83	514	25	105	639	33
Confl. Peds. (#/hr)	72		37	37		72	34		29	29		34
Confl. Bikes (#/hr)			4			6			4			4
Turn Type	pm+pt			pm+pt		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6		6	8		8	4		4
Actuated Green, G (s)	34.7	31.5		39.1	33.7	33.7	34.9	30.5	30.5	34.9	30.5	30.5
Effective Green, g (s)	35.9	32.1		40.3	34.3	34.3	35.9	31.0	31.0	35.9	31.0	31.0
Actuated g/C Ratio	0.40	0.36		0.45	0.38	0.38	0.40	0.34	0.34	0.40	0.34	0.34
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	116	919		148	994	366	132	473	385	153	473	383
v/s Ratio Prot	0.02	c0.48		c0.06	0.48		0.03	0.37		c0.04	c0.47	
v/s Ratio Perm	0.13			0.33		0.06	0.22		0.02	0.24		0.03
v/c Ratio	0.37	1.34		0.87	1.25	0.15	0.63	1.09	0.06	0.69	1.35	0.09
Uniform Delay, d1	20.6	28.9		21.0	27.9	18.2	22.0	29.5	19.8	20.2	29.5	19.9
Progression Factor	0.83	0.65		1.03	1.04	1.93	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	158.1		26.7	116.1	0.5	9.0	66.8	0.1	12.0	171.4	0.1
Delay (s)	18.3	177.1		48.3	145.0	35.8	31.1	96.3	19.8	32.3	200.9	20.0
Level of Service	B	F		D	F	D	C	F	B	C	F	C
Approach Delay (s)		171.7			126.6			80.0			159.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	139.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	115.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	0.95		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00		0.99	1.00		0.99	1.00	
Frt		1.00	0.85		0.99		1.00	0.99		1.00	1.00	
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1653	1352		1621		1572	1650		1569	1658	
Flt Permitted		0.91	1.00		0.92		0.23	1.00		0.32	1.00	
Satd. Flow (perm)		1519	1352		1499		382	1650		533	1658	
Volume (vph)	24	147	115	35	162	21	66	609	32	11	774	19
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	26	158	124	38	174	23	71	655	34	12	832	20
RTOR Reduction (vph)	0	0	100	0	7	0	0	3	0	0	1	0
Lane Group Flow (vph)	0	184	24	0	228	0	71	686	0	12	851	0
Confl. Peds. (#/hr)	12		25	25		12	21		16	16		21
Confl. Bikes (#/hr)			4			4			4			3
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)		11.0	11.0		11.0		40.0	40.0		40.0	40.0	
Effective Green, g (s)		11.5	11.5		11.5		40.5	40.5		40.5	40.5	
Actuated g/C Ratio		0.19	0.19		0.19		0.68	0.68		0.68	0.68	
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		0.2	0.2		0.2		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		291	259		287		258	1114		360	1119	
v/s Ratio Prot								0.42			c0.51	
v/s Ratio Perm		0.12	0.02		c0.15		0.19			0.02		
v/c Ratio		0.63	0.09		0.79		0.28	0.62		0.03	0.76	
Uniform Delay, d1		22.3	20.0		23.1		3.9	5.4		3.2	6.5	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		3.3	0.1		13.1		2.6	2.6		0.2	4.9	
Delay (s)		25.6	20.0		36.2		6.5	8.0		3.4	11.4	
Level of Service		C	C		D		A	A		A	B	
Approach Delay (s)		23.3			36.2			7.8			11.3	
Approach LOS		C			D			A			B	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	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	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2608	1167	1304	2608	1167	1304	1373	1167	1304	1373	1167
Flt Permitted	0.17	1.00	1.00	0.25	1.00	1.00	0.18	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	230	2608	1167	346	2608	1167	241	1373	1167	416	1373	1167
Volume (vph)	69	769	31	92	964	188	85	479	60	193	618	104
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	73	809	33	97	1015	198	89	504	63	203	651	109
RTOR Reduction (vph)	0	0	18	0	0	108	0	0	34	0	0	30
Lane Group Flow (vph)	73	809	15	97	1015	90	89	504	29	203	651	79
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	105	1188	532	158	1188	532	110	625	532	190	625	532
v/s Ratio Prot		0.31			c0.39			0.37			0.47	
v/s Ratio Perm	0.32		0.01	0.28		0.08	0.37		0.02	c0.49		0.07
v/c Ratio	0.70	0.68	0.03	0.61	0.85	0.17	0.81	0.81	0.05	1.07	1.04	0.15
Uniform Delay, d1	19.5	19.3	13.5	18.5	21.8	14.5	21.1	21.1	13.7	24.5	24.5	14.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	31.8	3.2	0.1	16.5	7.9	0.7	33.8	7.5	0.0	84.6	47.3	0.1
Delay (s)	51.3	22.5	13.6	35.1	29.8	15.1	55.0	28.6	13.7	109.1	71.8	14.4
Level of Service	D	C	B	D	C	B	D	C	B	F	E	B
Approach Delay (s)		24.5			28.0			30.7			73.2	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM Average Control Delay	38.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.90	1.00	1.00	0.88	1.00	1.00	0.94	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1289	2608	1050	1292	2608	1022	1296	1373	1100	1276	1358	
Flt Permitted	0.16	1.00	1.00	0.15	1.00	1.00	0.17	1.00	1.00	0.40	1.00	
Satd. Flow (perm)	214	2608	1050	209	2608	1022	238	1373	1100	540	1358	
Volume (vph)	29	1111	106	109	1099	74	80	353	136	95	539	32
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	30	1134	108	111	1121	76	82	360	139	97	550	33
RTOR Reduction (vph)	0	0	53	0	0	37	0	0	28	0	2	0
Lane Group Flow (vph)	30	1134	55	111	1121	39	82	360	111	97	581	0
Confl. Peds. (#/hr)	43		34	34		43	23		40	40		23
Confl. Bikes (#/hr)			2			7			5			2
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		
Actuated Green, G (s)	45.4	45.4	45.4	45.4	45.4	45.4	35.5	35.5	35.5	35.5	35.5	
Effective Green, g (s)	46.0	46.0	46.0	46.0	46.0	46.0	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	109	1333	537	107	1333	522	95	549	440	216	543	
v/s Ratio Prot		0.43			0.43			0.26			c0.43	
v/s Ratio Perm	0.14		0.05	c0.53		0.04	0.34		0.10	0.18		
v/c Ratio	0.28	0.85	0.10	1.04	0.84	0.07	0.86	0.66	0.25	0.45	1.07	
Uniform Delay, d1	12.5	19.0	11.4	22.0	18.9	11.2	24.7	22.0	18.0	19.7	27.0	
Progression Factor	1.32	1.02	2.58	1.11	0.94	1.57	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	2.6	0.1	36.3	0.6	0.0	50.8	2.8	0.3	1.5	58.4	
Delay (s)	18.6	21.9	29.4	60.7	18.4	17.6	75.6	24.8	18.3	21.2	85.4	
Level of Service	B	C	C	E	B	B	E	C	B	C	F	
Approach Delay (s)		22.5			22.0			30.4			76.3	
Approach LOS		C			C			C			E	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2586		1304	2533		1304	2551		1304	2535	
Flt Permitted	0.14	1.00		0.23	1.00		0.28	1.00		0.19	1.00	
Satd. Flow (perm)	193	2586		310	2533		388	2551		262	2535	
Volume (vph)	54	848	49	102	1008	238	83	754	127	85	572	131
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	56	874	51	105	1039	245	86	777	131	88	590	135
RTOR Reduction (vph)	0	7	0	0	34	0	0	23	0	0	33	0
Lane Group Flow (vph)	56	918	0	105	1250	0	86	885	0	88	692	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.0	28.0		28.0	28.0		23.0	23.0		23.0	23.0	
Effective Green, g (s)	28.5	28.5		28.5	28.5		23.5	23.5		23.5	23.5	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.39	0.39		0.39	0.39	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	92	1228		147	1203		152	999		103	993	
v/s Ratio Prot		0.36			c0.49			c0.35			0.27	
v/s Ratio Perm	0.29			0.34			0.22			0.34		
v/c Ratio	0.61	0.75		0.71	1.04		0.57	0.89		0.85	0.70	
Uniform Delay, d1	11.6	12.8		12.5	15.8		14.3	17.0		16.7	15.3	
Progression Factor	0.56	0.65		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	20.4	3.2		25.5	36.6		14.4	11.5		55.5	4.1	
Delay (s)	26.9	11.5		38.1	52.4		28.6	28.5		72.2	19.3	
Level of Service	C	B		D	D		C	C		E	B	
Approach Delay (s)		12.4			51.3			28.5			25.0	
Approach LOS		B			D			C			C	

Intersection Summary			
HCM Average Control Delay	31.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		0.99	1.00		0.99	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1293	2562		1304	2575		1291	1315		1288	1343	
Flt Permitted	0.17	1.00		0.10	1.00		0.27	1.00		0.30	1.00	
Satd. Flow (perm)	236	2562		139	2575		363	1315		411	1343	
Volume (vph)	29	1109	100	67	919	50	14	248	70	103	302	39
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	35	1336	120	81	1107	60	17	299	84	124	364	47
RTOR Reduction (vph)	0	6	0	0	4	0	0	13	0	0	6	0
Lane Group Flow (vph)	35	1450	0	81	1163	0	17	370	0	124	405	0
Confl. Peds. (#/hr)	31		38	38		31	20		23	23		20
Confl. Bikes (#/hr)						2			2			4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	52.5	52.5		52.5	52.5		28.4	28.4		28.4	28.4	
Effective Green, g (s)	53.1	53.1		53.1	53.1		28.9	28.9		28.9	28.9	
Actuated g/C Ratio	0.59	0.59		0.59	0.59		0.32	0.32		0.32	0.32	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2		0.2	0.2	
Lane Grp Cap (vph)	139	1512		82	1519		117	422		132	431	
v/s Ratio Prot		0.57			0.45			0.28			0.30	
v/s Ratio Perm	0.15			c0.58			0.05			c0.30		
v/c Ratio	0.25	0.96		0.99	0.77		0.15	0.88		0.94	0.94	
Uniform Delay, d1	8.9	17.4		18.1	13.8		21.8	28.9		29.7	29.7	
Progression Factor	0.87	1.05		1.23	1.27		0.69	0.81		1.00	1.00	
Incremental Delay, d2	3.8	14.1		68.1	2.0		0.2	17.2		58.6	27.9	
Delay (s)	11.6	32.3		90.4	19.4		15.3	40.5		88.3	57.6	
Level of Service	B	C		F	B		B	D		F	E	
Approach Delay (s)		31.8			24.0			39.4			64.8	
Approach LOS		C			C			D			E	

Intersection Summary			
HCM Average Control Delay	34.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1661	1417		1655	1417	1583	1667	1417	1583	1645	
Flt Permitted		0.93	1.00		0.83	1.00	0.42	1.00	1.00	0.53	1.00	
Satd. Flow (perm)		1555	1417		1390	1417	703	1667	1417	883	1645	
Volume (vph)	15	189	61	32	201	36	60	288	59	16	389	36
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	18	225	73	38	239	43	71	343	70	19	463	43
RTOR Reduction (vph)	0	0	56	0	0	33	0	0	22	0	2	0
Lane Group Flow (vph)	0	243	17	0	277	10	71	343	48	19	504	0
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4		4	4		4	2		2	2		
Actuated Green, G (s)		20.1	20.1		20.1	20.1	60.9	60.9	60.9	60.9	60.9	
Effective Green, g (s)		20.6	20.6		20.6	20.6	61.4	61.4	61.4	61.4	61.4	
Actuated g/C Ratio		0.23	0.23		0.23	0.23	0.68	0.68	0.68	0.68	0.68	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		356	324		318	324	480	1137	967	602	1122	
v/s Ratio Prot								0.21			c0.31	
v/s Ratio Perm		0.16	0.01		c0.20	0.01	0.10		0.03	0.02		
v/c Ratio		0.68	0.05		0.87	0.03	0.15	0.30	0.05	0.03	0.45	
Uniform Delay, d1		31.7	27.1		33.4	26.9	5.1	5.7	4.7	4.6	6.6	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.93	0.74	
Incremental Delay, d2		5.3	0.1		22.0	0.0	0.6	0.7	0.1	0.0	0.4	
Delay (s)		37.0	27.1		55.4	27.0	5.7	6.4	4.8	4.4	5.2	
Level of Service		D	C		E	C	A	A	A	A	A	
Approach Delay (s)		34.8			51.6			6.1			5.2	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	20.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2584		1304	2586		1304	1302		1304	1349	
Flt Permitted	0.21	1.00		0.29	1.00		0.33	1.00		0.29	1.00	
Satd. Flow (perm)	292	2584		393	2586		453	1302		401	1349	
Volume (vph)	37	694	46	164	851	49	68	290	152	80	362	47
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	40	746	49	176	915	53	73	312	163	86	389	51
RTOR Reduction (vph)	0	7	0	0	6	0	0	36	0	0	9	0
Lane Group Flow (vph)	40	788	0	176	962	0	73	439	0	86	431	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.6	28.6		28.6	28.6		22.4	22.4		22.4	22.4	
Effective Green, g (s)	29.1	29.1		29.1	29.1		22.9	22.9		22.9	22.9	
Actuated g/C Ratio	0.49	0.49		0.49	0.49		0.38	0.38		0.38	0.38	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	142	1253		191	1254		173	497		153	515	
v/s Ratio Prot		0.31			0.37			c0.34			0.32	
v/s Ratio Perm	0.14			c0.45			0.16			0.21		
v/c Ratio	0.28	0.63		0.92	0.77		0.42	0.88		0.56	0.84	
Uniform Delay, d1	9.2	11.5		14.4	12.7		13.7	17.3		14.6	16.8	
Progression Factor	1.00	1.00		0.54	0.52		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.9	2.4		20.0	1.3		0.6	16.3		2.8	10.8	
Delay (s)	14.1	13.9		27.9	7.9		14.3	33.6		17.4	27.7	
Level of Service	B	B		C	A		B	C		B	C	
Approach Delay (s)		13.9			11.0			31.0			26.0	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM Average Control Delay	17.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	19	1097	89	62	907	63	26	10	71	15	2	44
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Hourly flow rate (vph)	22	1276	103	72	1055	73	30	12	83	17	2	51
Pedestrians		20			26			28			31	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			2			3	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)		801			400							
pX, platoon unblocked	0.73			0.82			0.82	0.82	0.82	0.82	0.82	0.73
vC, conflicting volume	1159			1407			2143	2703	744	2063	2718	615
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	847			1274			1504	2184	461	1406	2203	102
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 %	96			83			35	59	81	50	92	92
cM capacity (veh/h)	559			431			47	28	427	35	28	653

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	22	850	529	72	703	425	42	83	20	51
Volume Left	22	0	0	72	0	0	30	0	17	0
Volume Right	0	0	103	0	0	73	0	83	0	51
cSH	559	1700	1700	431	1700	1700	39	427	34	653
Volume to Capacity	0.04	0.50	0.31	0.17	0.41	0.25	1.06	0.19	0.58	0.08
Queue Length 95th (ft)	3	0	0	15	0	0	103	18	49	6
Control Delay (s)	11.7	0.0	0.0	15.0	0.0	0.0	318.7	15.4	206.9	11.0
Lane LOS	B			C			F	C	F	B
Approach Delay (s)	0.2			0.9			117.5		65.6	
Approach LOS							F		F	

Intersection Summary			
Average Delay	7.4		
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.91	1.00	1.00	0.77	1.00	1.00	0.94	1.00	1.00	0.94
Flpb, ped/bikes	0.97	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1268	2608	1062	1287	2608	902	1277	1373	1094	1269	1373	1098
Flt Permitted	0.26	1.00	1.00	0.22	1.00	1.00	0.29	1.00	1.00	0.40	1.00	1.00
Satd. Flow (perm)	343	2608	1062	294	2608	902	384	1373	1094	533	1373	1098
Volume (vph)	32	909	57	39	808	39	48	268	74	108	342	39
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	36	1033	65	44	918	44	55	305	84	123	389	44
RTOR Reduction (vph)	0	0	26	0	0	18	0	0	37	0	0	30
Lane Group Flow (vph)	36	1033	39	44	918	26	55	305	47	123	389	14
Confl. Peds. (#/hr)	55		55	55		88	47		49	49		47
Confl. Bikes (#/hr)			3			5			4			1
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	53.3	53.3	53.3	53.3	53.3	53.3	27.7	27.7	27.7	27.7	27.7	27.7
Effective Green, g (s)	53.8	53.8	53.8	53.8	53.8	53.8	28.2	28.2	28.2	28.2	28.2	28.2
Actuated g/C Ratio	0.60	0.60	0.60	0.60	0.60	0.60	0.31	0.31	0.31	0.31	0.31	0.31
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	205	1559	635	176	1559	539	120	430	343	167	430	344
v/s Ratio Prot		c0.40			0.35			0.22			c0.28	
v/s Ratio Perm	0.10		0.04	0.15		0.03	0.14		0.04	0.23		0.01
v/c Ratio	0.18	0.66	0.06	0.25	0.59	0.05	0.46	0.71	0.14	0.74	0.90	0.04
Uniform Delay, d1	8.1	12.1	7.6	8.6	11.2	7.5	24.8	27.3	22.2	27.6	29.6	21.5
Progression Factor	1.39	1.12	2.33	0.60	0.63	0.45	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	1.6	0.1	2.4	1.2	0.1	1.0	4.3	0.1	13.5	21.6	0.0
Delay (s)	12.7	15.2	17.8	7.5	8.2	3.5	25.8	31.6	22.2	41.1	51.3	21.5
Level of Service	B	B	B	A	A	A	C	C	C	D	D	C
Approach Delay (s)		15.2			8.0			29.1			46.7	
Approach LOS		B			A			C			D	

Intersection Summary			
HCM Average Control Delay	20.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected		0.99	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1658	1417		1648	1417	1583	1614		1583	1661	
Flt Permitted		0.96	1.00		0.90	1.00	0.52	1.00		0.47	1.00	
Satd. Flow (perm)		1595	1417		1505	1417	859	1614		785	1661	
Volume (vph)	14	113	67	36	124	64	24	345	93	43	367	9
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	14	116	69	37	128	66	25	356	96	44	378	9
RTOR Reduction (vph)	0	0	56	0	0	53	0	11	0	0	1	0
Lane Group Flow (vph)	0	130	13	0	165	13	25	441	0	44	386	0
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4		4	4		4	2			2		
Actuated Green, G (s)		10.9	10.9		10.9	10.9	40.1	40.1		40.1	40.1	
Effective Green, g (s)		11.4	11.4		11.4	11.4	40.6	40.6		40.6	40.6	
Actuated g/C Ratio		0.19	0.19		0.19	0.19	0.68	0.68		0.68	0.68	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	0.2	0.2		0.2	0.2	
Lane Grp Cap (vph)		303	269		286	269	581	1092		531	1124	
v/s Ratio Prot								c0.27			0.23	
v/s Ratio Perm		0.08	0.01		c0.11	0.01	0.03			0.06		
v/c Ratio		0.43	0.05		0.58	0.05	0.04	0.40		0.08	0.34	
Uniform Delay, d1		21.4	19.9		22.1	19.9	3.2	4.3		3.3	4.1	
Progression Factor		1.00	1.00		1.00	1.00	1.87	2.21		1.00	1.00	
Incremental Delay, d2		0.4	0.0		1.8	0.0	0.1	0.7		0.3	0.8	
Delay (s)		21.8	19.9		23.9	19.9	6.1	10.3		3.6	4.9	
Level of Service		C	B		C	B	A	B		A	A	
Approach Delay (s)		21.1			22.7			10.1			4.8	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	12.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	60.5%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2585		1304	2556		1304	1373	1167	1304	1373	1167
Flt Permitted	0.42	1.00		0.31	1.00		0.41	1.00	1.00	0.35	1.00	1.00
Satd. Flow (perm)	571	2585		431	2556		561	1373	1167	481	1373	1167
Volume (vph)	29	661	41	123	453	69	82	360	100	56	317	40
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)	32	718	45	134	492	75	89	391	109	61	345	43
RTOR Reduction (vph)	0	6	0	0	16	0	0	0	66	0	0	28
Lane Group Flow (vph)	32	757	0	134	551	0	89	391	43	61	345	15
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	31.0	31.0		31.0	31.0		20.0	20.0	20.0	20.0	20.0	20.0
Effective Green, g (s)	31.5	31.5		31.5	31.5		20.5	20.5	20.5	20.5	20.5	20.5
Actuated g/C Ratio	0.52	0.52		0.52	0.52		0.34	0.34	0.34	0.34	0.34	0.34
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	300	1357		226	1342		192	469	399	164	469	399
v/s Ratio Prot		0.29			0.22			c0.28			0.25	
v/s Ratio Perm	0.06			c0.31			0.16		0.04	0.13		0.01
v/c Ratio	0.11	0.56		0.59	0.41		0.46	0.83	0.11	0.37	0.74	0.04
Uniform Delay, d1	7.2	9.6		9.8	8.6		15.4	18.2	13.5	14.9	17.4	13.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.76	0.84	0.60
Incremental Delay, d2	0.7	1.7		10.9	0.9		0.6	11.6	0.0	0.5	4.9	0.0
Delay (s)	7.9	11.2		20.8	9.6		16.1	29.7	13.5	11.8	19.6	8.0
Level of Service	A	B		C	A		B	C	B	B	B	A
Approach Delay (s)		11.1			11.7			24.7			17.4	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2608	1167	1304	2591		1304	1373	1167	1304	1373	1167
Flt Permitted	0.21	1.00	1.00	0.19	1.00		0.30	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	289	2608	1167	255	2591		410	1373	1167	521	1373	1167
Volume (vph)	40	957	41	78	852	38	61	265	100	113	314	33
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	48	1139	49	93	1014	45	73	315	119	135	374	39
RTOR Reduction (vph)	0	0	19	0	2	0	0	0	26	0	0	27
Lane Group Flow (vph)	48	1139	30	93	1057	0	73	315	93	135	374	12
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8		8	4		4
Actuated Green, G (s)	53.7	53.7	53.7	53.7	53.7		27.2	27.2	27.2	27.2	27.2	27.2
Effective Green, g (s)	54.3	54.3	54.3	54.3	54.3		27.7	27.7	27.7	27.7	27.7	27.7
Actuated g/C Ratio	0.60	0.60	0.60	0.60	0.60		0.31	0.31	0.31	0.31	0.31	0.31
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	174	1573	704	154	1563		126	423	359	160	423	359
v/s Ratio Prot		c0.44			0.41			0.23			c0.27	
v/s Ratio Perm	0.17		0.03	0.36			0.18		0.08	0.26		0.01
v/c Ratio	0.28	0.72	0.04	0.60	0.68		0.58	0.74	0.26	0.84	0.88	0.03
Uniform Delay, d1	8.5	12.6	7.3	11.1	12.0		26.2	28.0	23.4	29.1	29.6	21.8
Progression Factor	1.29	1.41	1.64	0.96	0.87		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	2.9	0.1	14.6	2.1		4.0	6.1	0.1	30.2	18.7	0.0
Delay (s)	14.9	20.6	12.0	25.3	12.5		30.2	34.1	23.6	59.4	48.4	21.8
Level of Service	B	C	B	C	B		C	C	C	E	D	C
Approach Delay (s)		20.1			13.6			31.1			49.2	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM Average Control Delay	24.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	2608	1167	1304	2608	1167	1304	1373	1167	1304	2506	
Flt Permitted	0.42	1.00	1.00	0.45	1.00	1.00	0.16	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	571	2608	1167	622	2608	1167	226	1373	1167	153	2506	
Volume (vph)	106	429	221	38	486	36	211	729	32	22	640	225
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)	115	466	240	41	528	39	229	792	35	24	696	245
RTOR Reduction (vph)	0	0	53	0	0	19	0	0	19	0	39	0
Lane Group Flow (vph)	115	466	187	41	528	20	229	792	16	24	902	0
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		
Actuated Green, G (s)	45.5	45.5	45.5	45.5	45.5	45.5	35.5	35.5	35.5	35.5	35.5	
Effective Green, g (s)	46.0	46.0	46.0	46.0	46.0	46.0	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	292	1333	596	318	1333	596	90	549	467	61	1002	
v/s Ratio Prot		0.18			c0.20			0.58			0.36	
v/s Ratio Perm	0.20		0.16	0.07		0.02	c1.01		0.01	0.16		
v/c Ratio	0.39	0.35	0.31	0.13	0.40	0.03	2.54	1.44	0.03	0.39	0.90	
Uniform Delay, d1	13.5	13.1	12.8	11.5	13.5	10.9	27.0	27.0	16.4	19.2	25.3	
Progression Factor	1.34	1.35	1.73	0.36	0.47	0.05	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.9	0.5	1.0	0.6	0.7	0.1	726.5	209.3	0.0	1.5	10.7	
Delay (s)	21.0	18.2	23.2	4.8	7.1	0.6	753.5	236.3	16.4	20.7	36.0	
Level of Service	C	B	C	A	A	A	F	F	B	C	D	
Approach Delay (s)		20.1			6.5			341.2			35.7	
Approach LOS		C			A			F			D	

Intersection Summary			
HCM Average Control Delay	120.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2522		1304	1373	1167	1304	2523		1304	2603	
Flt Permitted	0.43	1.00		0.51	1.00	1.00	0.22	1.00		0.16	1.00	
Satd. Flow (perm)	595	2522		698	1373	1167	301	2523		217	2603	
Volume (vph)	10	290	82	162	357	83	97	766	212	44	811	10
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	312	88	174	384	89	104	824	228	47	872	11
RTOR Reduction (vph)	0	42	0	0	0	48	0	43	0	0	2	0
Lane Group Flow (vph)	11	358	0	174	384	41	104	1009	0	47	881	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	26.2	26.2		26.2	26.2	26.2	24.8	24.8		24.8	24.8	
Effective Green, g (s)	26.7	26.7		26.7	26.7	26.7	25.3	25.3		25.3	25.3	
Actuated g/C Ratio	0.44	0.44		0.44	0.44	0.44	0.42	0.42		0.42	0.42	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	265	1122		311	611	519	127	1064		92	1098	
v/s Ratio Prot		0.14			c0.28			c0.40			0.34	
v/s Ratio Perm	0.02			0.25		0.03	0.35			0.22		
v/c Ratio	0.04	0.32		0.56	0.63	0.08	0.82	0.95		0.51	0.80	
Uniform Delay, d1	9.4	10.8		12.3	12.8	9.6	15.3	16.7		12.8	15.2	
Progression Factor	0.56	0.48		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.7		7.1	4.8	0.3	30.6	16.3		2.0	4.1	
Delay (s)	5.5	5.9		19.4	17.7	9.9	46.0	33.0		14.8	19.2	
Level of Service	A	A		B	B	A	D	C		B	B	
Approach Delay (s)		5.8			17.1			34.2			19.0	
Approach LOS		A			B			C			B	

Intersection Summary			
HCM Average Control Delay	22.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.95			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1304	2587		1304	2579		1304	1309			1349	
Flt Permitted	0.27	1.00		0.26	1.00		0.41	1.00			0.87	
Satd. Flow (perm)	366	2587		357	2579		558	1309			1189	
Volume (vph)	21	741	42	74	710	58	25	157	70	100	338	23
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	22	772	44	77	740	60	26	164	73	104	352	24
RTOR Reduction (vph)	0	4	0	0	6	0	0	21	0	0	2	0
Lane Group Flow (vph)	22	812	0	77	794	0	26	216	0	0	478	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.9	42.9		42.9	42.9		38.1	38.1			38.1	
Effective Green, g (s)	43.4	43.4		43.4	43.4		38.6	38.6			38.6	
Actuated g/C Ratio	0.48	0.48		0.48	0.48		0.43	0.43			0.43	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0			2.0	
Lane Grp Cap (vph)	176	1248		172	1244		239	561			510	
v/s Ratio Prot		c0.31			0.31			0.17				
v/s Ratio Perm	0.06			0.22			0.05				c0.40	
v/c Ratio	0.12	0.65		0.45	0.64		0.11	0.39			0.94	
Uniform Delay, d1	12.8	17.6		15.4	17.4		15.4	17.6			24.5	
Progression Factor	1.28	1.27		1.12	1.14		1.00	1.00			1.00	
Incremental Delay, d2	1.4	2.5		0.8	0.2		0.1	0.2			24.5	
Delay (s)	17.9	24.9		18.0	20.1		15.5	17.7			49.1	
Level of Service	B	C		B	C		B	B			D	
Approach Delay (s)		24.7			19.9			17.5			49.1	
Approach LOS		C			B			B			D	

Intersection Summary			
HCM Average Control Delay	27.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2579		1304	1373	1167	1304	1361		1304	1367	
Flt Permitted	0.47	1.00		0.53	1.00	1.00	0.36	1.00		0.35	1.00	
Satd. Flow (perm)	650	2579		732	1373	1167	499	1361		481	1367	
Volume (vph)	18	316	25	17	360	75	24	334	20	35	336	9
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	340	27	18	387	81	26	359	22	38	361	10
RTOR Reduction (vph)	0	8	0	0	0	37	0	4	0	0	2	0
Lane Group Flow (vph)	19	359	0	18	387	44	26	377	0	38	369	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	31.8	31.8		31.8	31.8	31.8	19.2	19.2		19.2	19.2	
Effective Green, g (s)	32.3	32.3		32.3	32.3	32.3	19.7	19.7		19.7	19.7	
Actuated g/C Ratio	0.54	0.54		0.54	0.54	0.54	0.33	0.33		0.33	0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	350	1388		394	739	628	164	447		158	449	
v/s Ratio Prot		0.14			c0.28			c0.28			0.27	
v/s Ratio Perm	0.03			0.02		0.04	0.05			0.08		
v/c Ratio	0.05	0.26		0.05	0.52	0.07	0.16	0.84		0.24	0.82	
Uniform Delay, d1	6.6	7.4		6.6	8.9	6.6	14.3	18.7		14.7	18.5	
Progression Factor	1.00	1.00		0.97	0.77	1.04	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.5		0.2	2.0	0.2	0.2	13.0		0.3	11.0	
Delay (s)	6.9	7.9		6.5	8.8	7.0	14.4	31.7		15.0	29.5	
Level of Service	A	A		A	A	A	B	C		B	C	
Approach Delay (s)		7.8			8.4			30.6			28.2	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.80	1.00	0.99		1.00	1.00	0.93	1.00	0.99	
Flpb, ped/bikes	0.94	1.00	1.00	0.93	1.00		0.97	1.00	1.00	0.96	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1232	2608	937	1212	2566		1261	1373	1082	1247	1322	
Flt Permitted	0.35	1.00	1.00	0.40	1.00		0.72	1.00	1.00	0.60	1.00	
Satd. Flow (perm)	456	2608	937	511	2566		953	1373	1082	788	1322	
Volume (vph)	12	604	45	89	675	34	107	125	91	79	47	10
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	636	47	94	711	36	113	132	96	83	49	11
RTOR Reduction (vph)	0	0	13	0	2	0	0	0	78	0	9	0
Lane Group Flow (vph)	13	636	34	94	745	0	113	132	18	83	51	0
Confl. Peds. (#/hr)	71		75	75		71	33		50	50		33
Confl. Bikes (#/hr)			7			6			7			6
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8		8	4		
Actuated Green, G (s)	64.8	64.8	64.8	64.8	64.8		16.2	16.2	16.2	16.2	16.2	
Effective Green, g (s)	65.3	65.3	65.3	65.3	65.3		16.7	16.7	16.7	16.7	16.7	
Actuated g/C Ratio	0.73	0.73	0.73	0.73	0.73		0.19	0.19	0.19	0.19	0.19	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	331	1892	680	371	1862		177	255	201	146	245	
v/s Ratio Prot		0.24			c0.29			0.10			0.04	
v/s Ratio Perm	0.03		0.04	0.18			c0.12		0.02	0.11		
v/c Ratio	0.04	0.34	0.05	0.25	0.40		0.64	0.52	0.09	0.57	0.21	
Uniform Delay, d1	3.5	4.5	3.5	4.2	4.8		33.9	33.0	30.3	33.4	31.0	
Progression Factor	1.67	1.54	2.75	2.34	2.30		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.4	0.1	1.3	0.5		5.5	0.7	0.1	3.0	0.2	
Delay (s)	6.0	7.3	9.8	11.1	11.5		39.3	33.8	30.4	36.4	31.2	
Level of Service	A	A	A	B	B		D	C	C	D	C	
Approach Delay (s)		7.5			11.5			34.7			34.2	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.6%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.93		0.99		1.00	0.98		1.00	1.00	0.93
Flpb, ped/bikes		0.99	1.00		0.99		0.98	1.00		0.95	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1642	1323		1574		1549	1593		1506	1667	1319
Flt Permitted		0.95	1.00		0.90		0.43	1.00		0.65	1.00	1.00
Satd. Flow (perm)		1576	1323		1428		698	1593		1029	1667	1319
Volume (vph)	14	75	67	40	94	23	33	132	32	12	501	18
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	15	78	70	42	98	24	34	138	33	12	522	19
RTOR Reduction (vph)	0	0	57	0	15	0	0	8	0	0	0	6
Lane Group Flow (vph)	0	93	13	0	149	0	34	163	0	12	522	13
Confl. Peds. (#/hr)	38		55	55		38	31		39	39		31
Confl. Bikes (#/hr)						1						2
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)		10.4	10.4		10.4		40.6	40.6		40.6	40.6	40.6
Effective Green, g (s)		10.9	10.9		10.9		41.1	41.1		41.1	41.1	41.1
Actuated g/C Ratio		0.18	0.18		0.18		0.69	0.69		0.69	0.69	0.69
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)		286	240		259		478	1091		705	1142	904
v/s Ratio Prot								0.10			c0.31	
v/s Ratio Perm		0.06	0.01		c0.10		0.05			0.01		0.01
v/c Ratio		0.33	0.05		0.58		0.07	0.15		0.02	0.46	0.01
Uniform Delay, d1		21.4	20.3		22.4		3.1	3.3		3.0	4.3	3.0
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.2	0.0		1.9		0.3	0.3		0.0	1.3	0.0
Delay (s)		21.6	20.3		24.4		3.4	3.6		3.1	5.7	3.0
Level of Service		C	C		C		A	A		A	A	A
Approach Delay (s)		21.0			24.4			3.6			5.5	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.87	1.00	1.00	0.88	1.00	1.00	0.85	1.00	1.00	0.83
Flpb, ped/bikes	0.96	1.00	1.00	0.99	1.00	1.00	0.96	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1245	2608	1016	1288	2608	1023	1252	1373	994	1184	1373	966
Flt Permitted	0.40	1.00	1.00	0.33	1.00	1.00	0.23	1.00	1.00	0.56	1.00	1.00
Satd. Flow (perm)	521	2608	1016	450	2608	1023	304	1373	994	695	1373	966
Volume (vph)	24	499	72	75	621	104	57	215	86	69	517	18
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	26	537	77	81	668	112	61	231	92	74	556	19
RTOR Reduction (vph)	0	0	47	0	0	58	0	0	53	0	0	11
Lane Group Flow (vph)	26	537	30	81	668	54	61	231	39	74	556	8
Confl. Peds. (#/hr)	80		84	84		80	121		103	103		121
Turn Type	Perm		Perm	pm+pt		Perm	Perm		Perm	Perm		Perm
Protected Phases		2		1	6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	34.2	34.2	34.2	43.0	43.0	43.0	38.0	38.0	38.0	38.0	38.0	38.0
Effective Green, g (s)	34.7	34.7	34.7	43.5	43.5	43.5	38.5	38.5	38.5	38.5	38.5	38.5
Actuated g/C Ratio	0.39	0.39	0.39	0.48	0.48	0.48	0.43	0.43	0.43	0.43	0.43	0.43
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	201	1006	392	262	1261	494	130	587	425	297	587	413
v/s Ratio Prot		0.21		0.02	c0.26			0.17			c0.41	
v/s Ratio Perm	0.05		0.03	0.13		0.05	0.20		0.04	0.11		0.01
v/c Ratio	0.13	0.53	0.08	0.31	0.53	0.11	0.47	0.39	0.09	0.25	0.95	0.02
Uniform Delay, d1	17.9	21.4	17.5	13.5	16.1	12.7	18.4	17.7	15.3	16.5	24.8	14.9
Progression Factor	1.10	1.13	1.70	0.98	1.02	1.29	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	1.9	0.4	0.2	1.5	0.4	1.0	0.2	0.0	0.2	24.3	0.0
Delay (s)	21.0	26.1	30.2	13.4	17.9	16.8	19.4	17.9	15.4	16.7	49.0	14.9
Level of Service	C	C	C	B	B	B	B	B	B	B	D	B
Approach Delay (s)		26.4			17.3			17.5			44.3	
Approach LOS		C			B			B			D	

Intersection Summary			
HCM Average Control Delay	26.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		0.98			0.98		1.00	1.00	0.90	1.00	1.00	
Flpb, ped/bikes		1.00			1.00		0.98	1.00	1.00	0.96	1.00	
Frt		0.96			0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected		0.99			1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1548			1572		1545	1667	1278	1513	3133	
Flt Permitted		0.96			0.99		0.33	1.00	1.00	0.48	1.00	
Satd. Flow (perm)		1501			1561		543	1667	1278	769	3133	
Volume (vph)	10	51	27	10	163	66	31	307	46	20	592	27
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	55	29	11	175	71	33	330	49	22	637	29
RTOR Reduction (vph)	0	16	0	0	23	0	0	0	28	0	6	0
Lane Group Flow (vph)	0	79	0	0	234	0	33	330	21	22	660	0
Confl. Peds. (#/hr)	41		59	59		41	38		42	42		38
Confl. Bikes (#/hr)			4			7			1			3
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)		25.5			25.5		25.5	25.5	25.5	25.5	25.5	
Effective Green, g (s)		26.0			26.0		26.0	26.0	26.0	26.0	26.0	
Actuated g/C Ratio		0.43			0.43		0.43	0.43	0.43	0.43	0.43	
Clearance Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)		650			676		235	722	554	333	1358	
v/s Ratio Prot								0.20			c0.21	
v/s Ratio Perm		0.05			c0.15		0.06		0.02	0.03		
v/c Ratio		0.12			0.35		0.14	0.46	0.04	0.07	0.49	
Uniform Delay, d1		10.2			11.3		10.3	12.0	9.8	9.9	12.2	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4			1.4		1.2	2.1	0.1	0.4	1.2	
Delay (s)		10.5			12.7		11.5	14.1	9.9	10.3	13.5	
Level of Service		B			B		B	B	A	B	B	
Approach Delay (s)		10.5			12.7			13.4			13.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1373	1167		1373	1167	1304	1373	1167	1304	2587	
Flt Permitted		1.00	1.00		1.00	1.00	0.30	1.00	1.00	0.29	1.00	
Satd. Flow (perm)		1373	1167		1373	1167	414	1373	1167	397	2587	
Volume (vph)	0	222	56	0	217	64	30	403	45	41	553	30
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)	0	241	61	0	236	70	33	438	49	45	601	33
RTOR Reduction (vph)	0	0	46	0	0	53	0	0	31	0	4	0
Lane Group Flow (vph)	0	241	15	0	236	17	33	438	18	45	630	0
Turn Type			Perm			Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases			2			6	8		8	4		
Actuated Green, G (s)		20.5	20.5		20.5	20.5	30.5	30.5	30.5	30.5	30.5	
Effective Green, g (s)		21.0	21.0		21.0	21.0	31.0	31.0	31.0	31.0	31.0	
Actuated g/C Ratio		0.25	0.25		0.25	0.25	0.36	0.36	0.36	0.36	0.36	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)		339	288		339	288	151	501	426	145	943	
v/s Ratio Prot		c0.18			c0.17			c0.32			0.24	
v/s Ratio Perm			0.01			0.01	0.08		0.02	0.11		
v/c Ratio		0.71	0.05		0.70	0.06	0.22	0.87	0.04	0.31	0.67	
Uniform Delay, d1		29.2	24.4		29.1	24.5	18.6	25.2	17.4	19.3	22.7	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		12.0	0.3		11.2	0.4	3.3	18.8	0.2	5.5	3.7	
Delay (s)		41.2	24.8		40.3	24.9	21.9	43.9	17.6	24.8	26.4	
Level of Service		D	C		D	C	C	D	B	C	C	
Approach Delay (s)		37.9			36.8			40.1			26.3	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM Average Control Delay	34.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.83		1.00	0.92
Flpb, ped/bikes	0.83	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1086	2608	1923		1304	1074
Flt Permitted	0.68	1.00	1.00		0.95	1.00
Satd. Flow (perm)	782	2608	1923		1304	1074
Volume (vph)	29	464	22	76	127	10
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	504	24	83	138	11
RTOR Reduction (vph)	0	0	23	0	0	9
Lane Group Flow (vph)	32	504	84	0	138	2
Confl. Peds. (#/hr)	82			82	87	61
Confl. Bikes (#/hr)				7		3
Turn Type	Perm					Perm
Protected Phases		2	6		4	
Permitted Phases	2					4
Actuated Green, G (s)	65.1	65.1	65.1		15.9	15.9
Effective Green, g (s)	65.6	65.6	65.6		16.4	16.4
Actuated g/C Ratio	0.73	0.73	0.73		0.18	0.18
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	570	1901	1402		238	196
v/s Ratio Prot		c0.19	0.04		c0.11	
v/s Ratio Perm	0.04					0.00
v/c Ratio	0.06	0.27	0.06		0.58	0.01
Uniform Delay, d1	3.4	4.1	3.5		33.6	30.2
Progression Factor	0.59	0.64	3.38		1.00	1.00
Incremental Delay, d2	0.2	0.3	0.1		2.1	0.0
Delay (s)	2.2	2.9	11.8		35.8	30.2
Level of Service	A	A	B		D	C
Approach Delay (s)		2.9	11.8		35.4	
Approach LOS		A	B		D	

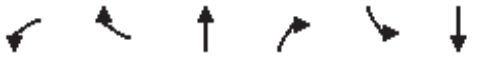
Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	1667	1417		1647	1417	1583	1667	1417	1583	1667	1417
Flt Permitted	0.63	1.00	1.00		0.91	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1053	1667	1417		1520	1417	1583	1667	1417	1583	1667	1417
Volume (vph)	21	141	314	34	109	37	174	566	35	32	428	213
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)	23	153	341	37	118	40	189	615	38	35	465	232
RTOR Reduction (vph)	0	0	98	0	0	25	0	0	21	0	0	153
Lane Group Flow (vph)	23	153	243	0	155	15	189	615	17	35	465	79
Turn Type	Perm		pm+ov	Perm		Perm	Prot		Perm	Prot		Perm
Protected Phases		2	3		6		3	8		7	4	
Permitted Phases	2		2	6		6			8			4
Actuated Green, G (s)	32.6	32.6	46.5		32.6	32.6	13.9	40.0	40.0	3.9	30.0	30.0
Effective Green, g (s)	33.1	33.1	47.5		33.1	33.1	14.4	40.5	40.5	4.4	30.5	30.5
Actuated g/C Ratio	0.37	0.37	0.53		0.37	0.37	0.16	0.45	0.45	0.05	0.34	0.34
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0
Lane Grp Cap (vph)	387	613	811		559	521	253	750	638	77	565	480
v/s Ratio Prot		0.09	c0.05				c0.12	c0.37		0.02	0.28	
v/s Ratio Perm	0.02		0.12		0.10	0.01			0.01			0.06
v/c Ratio	0.06	0.25	0.30		0.28	0.03	0.75	0.82	0.03	0.45	0.82	0.16
Uniform Delay, d1	18.4	19.8	11.9		20.0	18.2	36.1	21.6	13.8	41.6	27.3	20.8
Progression Factor	1.00	1.00	1.00		1.00	1.00	0.88	1.43	2.59	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.0	0.2		1.2	0.1	10.8	6.6	0.0	1.5	9.4	0.2
Delay (s)	18.7	20.8	12.1		21.3	18.3	42.6	37.5	35.7	43.2	36.7	21.0
Level of Service	B	C	B		C	B	D	D	D	D	D	C
Approach Delay (s)		15.0			20.6			38.6			32.0	
Approach LOS		B			C			D			C	

Intersection Summary			
HCM Average Control Delay	29.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2530	1167	2608	1167	1304	2608
Flt Permitted	0.95	1.00	1.00	1.00	0.39	1.00
Satd. Flow (perm)	2530	1167	2608	1167	532	2608
Volume (vph)	158	184	549	286	250	597
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	170	198	590	308	269	642
RTOR Reduction (vph)	0	172	0	102	0	0
Lane Group Flow (vph)	170	26	590	206	269	642
Turn Type		Perm		Perm	pm+pt	
Protected Phases	6		8		7	4
Permitted Phases		6		8	4	
Actuated Green, G (s)	11.3	11.3	59.7	59.7	69.7	69.7
Effective Green, g (s)	11.8	11.8	60.2	60.2	70.2	70.2
Actuated g/C Ratio	0.13	0.13	0.67	0.67	0.78	0.78
Clearance Time (s)	4.5	4.5	4.5	4.5	3.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	1.0	3.0
Lane Grp Cap (vph)	332	153	1744	781	466	2034
v/s Ratio Prot	c0.07		0.23		c0.04	0.25
v/s Ratio Perm		0.02		0.18	c0.41	
v/c Ratio	0.51	0.17	0.34	0.26	0.58	0.32
Uniform Delay, d1	36.4	34.7	6.4	6.0	3.1	2.9
Progression Factor	1.02	1.13	1.00	1.00	1.02	0.43
Incremental Delay, d2	1.3	0.5	0.5	0.8	0.9	0.3
Delay (s)	38.6	40.0	6.9	6.8	4.1	1.6
Level of Service	D	D	A	A	A	A
Approach Delay (s)	39.3		6.9			2.3
Approach LOS	D		A			A

Intersection Summary			
HCM Average Control Delay	10.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

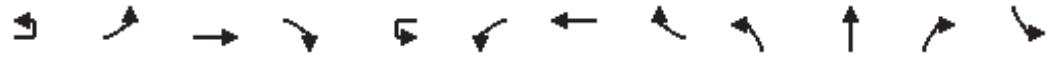


Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1304	1167	2608	1167	1304	2608
Flt Permitted	0.95	1.00	1.00	1.00	0.30	1.00
Satd. Flow (perm)	1304	1167	2608	1167	407	2608
Volume (vph)	67	44	744	174	184	571
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	71	47	791	185	196	607
RTOR Reduction (vph)	0	36	0	67	0	0
Lane Group Flow (vph)	71	11	791	118	196	607
Turn Type		pm+ov		Perm	pm+pt	
Protected Phases	6	7	8		7	4
Permitted Phases		6		8	4	
Actuated Green, G (s)	14.1	19.6	56.9	56.9	66.9	66.9
Effective Green, g (s)	14.6	20.6	57.4	57.4	67.4	67.4
Actuated g/C Ratio	0.16	0.23	0.64	0.64	0.75	0.75
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	212	319	1663	744	365	1953
v/s Ratio Prot	c0.05	0.00	0.30		c0.04	0.23
v/s Ratio Perm		0.01		0.10	c0.37	
v/c Ratio	0.33	0.03	0.48	0.16	0.54	0.31
Uniform Delay, d1	33.4	27.0	8.5	6.6	4.2	3.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.0	1.0	0.5	0.8	0.4
Delay (s)	33.7	27.0	9.5	7.0	5.0	4.1
Level of Service	C	C	A	A	A	A
Approach Delay (s)	31.0		9.0			4.3
Approach LOS	C		A			A

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00			0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1557	1662		1583	1634			1630			1591	
Flt Permitted	0.29	1.00		0.14	1.00			0.95			0.94	
Satd. Flow (perm)	479	1662		230	1634			1555			1504	
Volume (vph)	244	733	10	17	489	48	47	456	52	29	249	82
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	257	772	11	18	515	51	49	480	55	31	262	86
RTOR Reduction (vph)	0	1	0	0	6	0	0	6	0	0	18	0
Lane Group Flow (vph)	257	782	0	18	560	0	0	578	0	0	361	0
Confl. Peds. (#/hr)	28		25	25		21	28		21	21		28
Confl. Bikes (#/hr)			13			10			6			3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	29.0	29.0		29.0	29.0			23.0			23.0	
Effective Green, g (s)	29.0	29.0		29.0	29.0			23.0			23.0	
Actuated g/C Ratio	0.48	0.48		0.48	0.48			0.38			0.38	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	232	803		111	790			596			577	
v/s Ratio Prot		0.47			0.34							
v/s Ratio Perm	c0.54			0.08				c0.37			0.24	
v/c Ratio	1.11	0.97		0.16	0.71			0.97			0.63	
Uniform Delay, d1	15.5	15.1		8.7	12.2			18.2			15.0	
Progression Factor	1.00	1.00		0.80	0.90			2.54			1.00	
Incremental Delay, d2	91.0	26.0		2.6	4.5			19.6			5.1	
Delay (s)	106.5	41.1		9.6	15.5			65.7			20.1	
Level of Service	F	D		A	B			E			C	
Approach Delay (s)		57.3			15.3			65.7			20.1	
Approach LOS		E			B			E			C	

Intersection Summary			
HCM Average Control Delay	44.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.99		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1583	4550	1417		1583	4550	1417	1583	1654		1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.58	1.00		0.11
Satd. Flow (perm)		1583	4550	1417		1583	4550	1417	963	1654		179
Volume (vph)	30	36	2107	16	3	99	1787	89	25	477	25	146
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	31	37	2172	16	3	102	1842	92	26	492	26	151
RTOR Reduction (vph)	0	0	0	6	0	0	0	42	0	1	0	0
Lane Group Flow (vph)	0	68	2172	10	0	105	1842	50	26	517	0	151
Turn Type	Prot	Prot		Perm	Prot	Prot		pm+ov	pm+pt			pm+pt
Protected Phases	1	1	6		5	5	2	7	3	8		7
Permitted Phases				6				2	8			4
Actuated Green, G (s)		9.1	41.0	41.0		11.9	43.8	55.3	41.0	36.6		52.1
Effective Green, g (s)		9.1	42.0	42.0		11.9	44.8	56.3	43.0	38.6		54.1
Actuated g/C Ratio		0.08	0.35	0.35		0.10	0.37	0.47	0.36	0.32		0.45
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	4.0	4.0	6.0		4.0
Vehicle Extension (s)		3.0	4.4	4.4		3.0	4.3	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		120	1593	496		157	1699	712	368	532		215
v/s Ratio Prot		0.04	c0.48			c0.07	c0.40	0.01	0.00	c0.31		c0.07
v/s Ratio Perm				0.01				0.03	0.02			0.25
v/c Ratio		0.57	1.36	0.02		0.67	1.08	0.07	0.07	0.97		0.70
Uniform Delay, d1		53.5	39.0	25.5		52.1	37.6	17.5	25.1	40.2		25.6
Progression Factor		1.00	1.00	1.00		1.42	0.30	0.26	1.00	1.00		1.19
Incremental Delay, d2		6.0	167.7	0.1		1.0	39.1	0.0	0.1	31.6		9.1
Delay (s)		59.6	206.7	25.6		75.2	50.2	4.6	25.2	71.7		39.6
Level of Service		E	F	C		E	D	A	C	E		D
Approach Delay (s)			201.0				49.4			69.5		
Approach LOS			F				D			E		

Intersection Summary			
HCM Average Control Delay	115.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Ideal Flow (vphpl)	1700	1700
Total Lost time (s)	4.0	
Lane Util. Factor	1.00	
Frt	0.97	
Flt Protected	1.00	
Satd. Flow (prot)	1613	
Flt Permitted	1.00	
Satd. Flow (perm)	1613	
Volume (vph)	197	54
Peak-hour factor, PHF	0.97	0.97
Adj. Flow (vph)	203	56
RTOR Reduction (vph)	7	0
Lane Group Flow (vph)	252	0
Turn Type		
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	43.7	
Effective Green, g (s)	45.7	
Actuated g/C Ratio	0.38	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	614	
v/s Ratio Prot	0.16	
v/s Ratio Perm		
v/c Ratio	0.41	
Uniform Delay, d1	27.3	
Progression Factor	1.07	
Incremental Delay, d2	0.4	
Delay (s)	29.6	
Level of Service	C	
Approach Delay (s)	33.3	
Approach LOS	C	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1571	1622		1583	1632		1583	3050		1583	3071	
Flt Permitted	0.34	1.00		0.08	1.00		0.12	1.00		0.12	1.00	
Satd. Flow (perm)	558	1622		133	1632		208	3050		208	3071	
Volume (vph)	172	850	137	66	469	54	153	800	173	48	951	159
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	179	885	143	69	489	56	159	833	180	50	991	166
RTOR Reduction (vph)	0	7	0	0	4	0	0	21	0	0	15	0
Lane Group Flow (vph)	179	1021	0	69	541	0	159	992	0	50	1142	0
Confl. Peds. (#/hr)	18		24	24		18	27		25	25		27
Confl. Bikes (#/hr)			5			42			5			2
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	49.0	49.0		49.0	49.0		31.1	31.1		31.1	31.1	
Effective Green, g (s)	50.0	50.0		50.0	50.0		32.0	32.0		32.0	32.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	310	901		74	907		74	1084		74	1092	
v/s Ratio Prot		c0.63			0.33			0.33			0.37	
v/s Ratio Perm	0.32			0.52			c0.76			0.24		
v/c Ratio	0.58	1.13		0.93	0.60		2.15	0.92		0.68	1.05	
Uniform Delay, d1	13.1	20.0		18.4	13.3		29.0	27.7		24.6	29.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.6	73.9		87.0	2.9		559.0	13.3		39.8	40.0	
Delay (s)	20.7	93.9		105.4	16.2		588.0	41.0		64.4	69.0	
Level of Service	C	F		F	B		F	D		E	E	
Approach Delay (s)		83.0			26.2			115.2			68.9	
Approach LOS		F			C			F			E	

Intersection Summary			
HCM Average Control Delay	79.6	HCM Level of Service	E
HCM Volume to Capacity ratio	1.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	126.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	4550	1417		1583	4550	1417	1583	3167	1417	1583	3167
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.20	1.00	1.00	0.25	1.00
Satd. Flow (perm)	1583	4550	1417		1583	4550	1417	326	3167	1417	419	3167
Volume (vph)	113	1806	148	8	136	1495	180	139	720	147	10	688
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	116	1862	153	8	140	1541	186	143	742	152	10	709
RTOR Reduction (vph)	0	0	28	0	0	0	100	0	0	97	0	0
Lane Group Flow (vph)	116	1862	125	0	148	1541	86	143	742	55	10	709
Turn Type	Prot		pm+ov	Prot	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	6	3	5	5	2		3	8		7	4
Permitted Phases			6				2	8		8	4	
Actuated Green, G (s)	6.0	45.9	50.9		5.0	44.9	44.9	42.6	37.6	37.6	34.6	33.6
Effective Green, g (s)	6.0	47.2	53.2		5.0	46.2	46.2	45.8	39.8	39.8	37.8	35.8
Actuated g/C Ratio	0.05	0.43	0.48		0.05	0.42	0.42	0.42	0.36	0.36	0.34	0.33
Clearance Time (s)	4.0	5.3	5.0		4.0	5.3	5.3	5.0	6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	4.2	4.2	3.0	3.6
Lane Grp Cap (vph)	86	1952	737		72	1911	595	204	1146	513	165	1031
v/s Ratio Prot	0.07	c0.41	0.01		c0.09	0.34		c0.04	0.23		0.00	0.22
v/s Ratio Perm			0.08				0.06	c0.25		0.04	0.02	
v/c Ratio	1.35	0.95	0.17		2.06	0.81	0.14	0.70	0.65	0.11	0.06	0.69
Uniform Delay, d1	52.0	30.3	16.0		52.5	28.0	19.7	23.7	29.3	23.3	24.5	32.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	215.8	12.1	0.1		519.5	3.8	0.5	10.4	1.5	0.1	0.2	2.0
Delay (s)	267.8	42.4	16.1		572.0	31.7	20.2	34.0	30.7	23.4	24.6	34.3
Level of Service	F	D	B		F	C	C	C	C	C	C	C
Approach Delay (s)		52.8				73.2			30.1			33.2
Approach LOS		D				E			C			C

Intersection Summary			
HCM Average Control Delay	52.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	58
Peak-hour factor, PHF	0.97
Adj. Flow (vph)	60
RTOR Reduction (vph)	22
Lane Group Flow (vph)	38
Turn Type	pm+ov
Protected Phases	1
Permitted Phases	4
Actuated Green, G (s)	39.6
Effective Green, g (s)	41.8
Actuated g/C Ratio	0.38
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	538
v/s Ratio Prot	0.00
v/s Ratio Perm	0.02
v/c Ratio	0.07
Uniform Delay, d1	21.7
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	21.8
Level of Service	C
Approach Delay (s)	
Approach LOS	

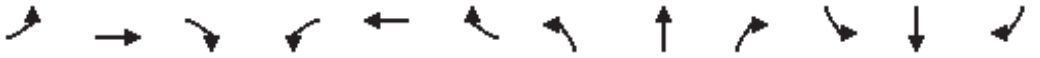
Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.86	0.81	0.86			
Frt	1.00	1.00			1.00	0.85	1.00	0.95	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	3072	4550			5733	1417	1362	3755	1218			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	3072	4550			5733	1417	1362	3755	1218			
Volume (vph)	564	1370	0	0	1446	268	885	239	753	0	0	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	576	1398	0	0	1476	273	903	244	768	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	169	0	37	37	0	0	0
Lane Group Flow (vph)	576	1398	0	0	1476	104	452	1042	347	0	0	0
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	1	6			2		4	4				
Permitted Phases						2			4			
Actuated Green, G (s)	36.0	74.0			34.0	34.0	35.2	35.2	35.2			
Effective Green, g (s)	36.0	75.0			35.0	35.0	37.0	37.0	37.0			
Actuated g/C Ratio	0.30	0.62			0.29	0.29	0.31	0.31	0.31			
Clearance Time (s)	4.0	5.0			5.0	5.0	5.8	5.8	5.8			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	922	2844			1672	413	420	1158	376			
v/s Ratio Prot	c0.19	0.31			c0.26		c0.33	0.28				
v/s Ratio Perm						0.07			0.28			
v/c Ratio	0.62	0.49			0.88	0.25	1.08	0.94dl	0.92			
Uniform Delay, d1	36.2	12.2			40.5	32.5	41.5	39.7	40.1			
Progression Factor	0.94	1.18			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	0.8	0.4			7.1	1.5	65.8	9.5	27.6			
Delay (s)	34.6	14.7			47.7	33.9	107.3	49.2	67.7			
Level of Service	C	B			D	C	F	D	E			
Approach Delay (s)		20.5			45.5			66.6			0.0	
Approach LOS		C			D			E			A	

Intersection Summary			
HCM Average Control Delay	43.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.81		0.97	0.91					0.91	0.86	0.91
Frt		0.96		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		6460		3072	4550					1441	2783	1289
Flt Permitted		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		6460		3072	4550					1441	2783	1289
Volume (vph)	0	1094	440	692	1633	0	0	0	0	852	283	61
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1116	449	706	1666	0	0	0	0	869	289	62
RTOR Reduction (vph)	0	61	0	0	0	0	0	0	0	0	0	22
Lane Group Flow (vph)	0	1504	0	706	1666	0	0	0	0	435	723	40
Turn Type				Prot						Split		Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		40.3		30.5	75.3					35.0	35.0	35.0
Effective Green, g (s)		41.0		31.0	76.0					36.0	36.0	36.0
Actuated g/C Ratio		0.34		0.26	0.63					0.30	0.30	0.30
Clearance Time (s)		4.7		4.5	4.7					5.0	5.0	5.0
Vehicle Extension (s)		3.0		4.0	3.0					4.0	4.0	4.0
Lane Grp Cap (vph)		2207		794	2882					432	835	387
v/s Ratio Prot		c0.23		c0.23	0.37					c0.30	0.26	
v/s Ratio Perm												0.03
v/c Ratio		0.68		0.89	0.58					1.01	1.00dl	0.10
Uniform Delay, d1		33.9		42.8	12.7					42.0	39.7	30.3
Progression Factor		1.00		0.83	0.51					1.00	1.00	1.00
Incremental Delay, d2		1.7		5.1	0.3					45.0	9.6	0.2
Delay (s)		35.6		40.8	6.8					87.0	49.4	30.5
Level of Service		D		D	A					F	D	C
Approach Delay (s)		35.6			16.9			0.0			61.8	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.99		1.00	0.98			0.96			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1565	1651		1583	1623			1575			1618	
Flt Permitted	0.32	1.00		0.12	1.00			1.00			0.77	
Satd. Flow (perm)	533	1651		201	1623			1575			1255	
Volume (vph)	68	994	43	166	520	67	0	312	155	23	79	10
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	68	994	43	166	520	67	0	312	155	23	79	10
RTOR Reduction (vph)	0	3	0	0	8	0	0	31	0	0	6	0
Lane Group Flow (vph)	68	1034	0	166	579	0	0	436	0	0	106	0
Confl. Peds. (#/hr)	19		23	23		19	17		16	16		17
Confl. Bikes (#/hr)			9			39			2			10
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	33.2	33.2		33.2	33.2			18.8			18.8	
Effective Green, g (s)	33.2	33.2		33.2	33.2			18.8			18.8	
Actuated g/C Ratio	0.55	0.55		0.55	0.55			0.31			0.31	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	295	914		111	898			494			393	
v/s Ratio Prot		0.63			0.36			c0.28				
v/s Ratio Perm	0.13			c0.83							0.08	
v/c Ratio	0.23	1.13		1.50	0.65			0.88			0.27	
Uniform Delay, d1	6.9	13.4		13.4	9.3			19.6			15.4	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.8	73.0		264.3	3.6			16.8			0.4	
Delay (s)	8.7	86.4		277.7	12.9			36.4			15.8	
Level of Service	A	F		F	B			D			B	
Approach Delay (s)		81.6			71.2			36.4			15.8	
Approach LOS		F			E			D			B	

Intersection Summary			
HCM Average Control Delay	66.7	HCM Level of Service	E
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	111.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.97		1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4532		1583	4513		1583	1623		1583	1574	
Flt Permitted	0.11	1.00		0.15	1.00		0.26	1.00		0.43	1.00	
Satd. Flow (perm)	190	4532		252	4513		436	1623		716	1574	
Volume (vph)	49	1292	35	27	1445	84	53	161	34	101	175	102
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)	53	1404	38	29	1571	91	58	175	37	110	190	111
RTOR Reduction (vph)	0	1	0	0	3	0	0	8	0	0	19	0
Lane Group Flow (vph)	53	1441	0	29	1659	0	58	204	0	110	282	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	84.7	84.7		84.7	84.7		25.9	25.9		25.9	25.9	
Effective Green, g (s)	85.1	85.1		85.1	85.1		26.9	26.9		26.9	26.9	
Actuated g/C Ratio	0.71	0.71		0.71	0.71		0.22	0.22		0.22	0.22	
Clearance Time (s)	4.4	4.4		4.4	4.4		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	135	3214		179	3200		98	364		161	353	
v/s Ratio Prot		0.32			c0.37			0.13			c0.18	
v/s Ratio Perm	0.28			0.12			0.13			0.15		
v/c Ratio	0.39	0.45		0.16	0.52		0.59	0.56		0.68	0.80	
Uniform Delay, d1	7.0	7.4		5.7	8.0		41.6	41.3		42.6	44.0	
Progression Factor	1.05	0.73		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.8	0.2		1.9	0.6		9.2	2.0		11.3	12.0	
Delay (s)	11.2	5.6		7.7	8.6		50.9	43.3		54.0	56.0	
Level of Service	B	A		A	A		D	D		D	E	
Approach Delay (s)		5.8			8.6			44.9			55.5	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM Average Control Delay	15.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	SBL	NWR
Lane Configurations				
Ideal Flow (vphpl)	1700	1700	1700	1700
Total Lost time (s)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Volume (vph)	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	0	0	0	0
Turn Type				
Protected Phases				
Permitted Phases				
Actuated Green, G (s)				
Effective Green, g (s)				
Actuated g/C Ratio				
Clearance Time (s)				
Lane Grp Cap (vph)				
v/s Ratio Prot				
v/s Ratio Perm				
v/c Ratio				
Uniform Delay, d1				
Progression Factor				
Incremental Delay, d2				
Delay (s)				
Level of Service				
Approach Delay (s)	0.0		0.0	0.0
Approach LOS	A		A	A

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	4550	3167	1417	3072	1417
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	4550	3167	1417	3072	1417
Volume (vph)	294	1314	991	434	571	300
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	316	1413	1066	467	614	323
RTOR Reduction (vph)	0	0	0	12	0	17
Lane Group Flow (vph)	316	1413	1066	455	614	306
Turn Type	Prot			pm+ov		pt+ov
Protected Phases	5	2	6	4	4	4 5
Permitted Phases				6		
Actuated Green, G (s)	12.5	42.6	39.1	66.5	27.4	43.5
Effective Green, g (s)	12.0	42.5	39.0	66.0	27.0	43.0
Actuated g/C Ratio	0.13	0.47	0.43	0.73	0.30	0.48
Clearance Time (s)	3.5	3.9	3.9	3.6	3.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	211	2149	1372	1102	922	677
v/s Ratio Prot	c0.20	c0.31	c0.34	0.12	c0.20	0.22
v/s Ratio Perm				0.20		
v/c Ratio	1.50	0.66	0.78	0.41	0.67	0.45
Uniform Delay, d1	39.0	18.2	21.8	4.6	27.6	15.6
Progression Factor	1.00	1.00	0.41	0.00	1.00	1.00
Incremental Delay, d2	247.2	1.6	2.1	0.1	1.8	0.5
Delay (s)	286.2	19.8	11.1	0.1	29.4	16.1
Level of Service	F	B	B	A	C	B
Approach Delay (s)		68.5	7.8		24.8	
Approach LOS		E	A		C	

Intersection Summary			
HCM Average Control Delay	36.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	SEL	SER	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	SER	NEL	NER
Lane Configurations				
Ideal Flow (vphpl)	1700	1700	1700	1700
Total Lost time (s)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Volume (vph)	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	0	0	0	0
Turn Type				
Protected Phases				
Permitted Phases				
Actuated Green, G (s)				
Effective Green, g (s)				
Actuated g/C Ratio				
Clearance Time (s)				
Lane Grp Cap (vph)				
v/s Ratio Prot				
v/s Ratio Perm				
v/c Ratio				
Uniform Delay, d1				
Progression Factor				
Incremental Delay, d2				
Delay (s)				
Level of Service				
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS	A	A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.95		1.00	0.95	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	3013		1509	3018	1429	
Flt Permitted	1.00		0.32	1.00	0.98	
Satd. Flow (perm)	3013		501	3018	1429	
Volume (vph)	840	8	30	1551	23	37
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	848	8	30	1567	23	37
RTOR Reduction (vph)	0	0	0	0	32	0
Lane Group Flow (vph)	856	0	30	1567	28	0
Turn Type			Perm			
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	78.0		78.0	78.0	14.0	
Effective Green, g (s)	77.5		77.5	77.5	14.5	
Actuated g/C Ratio	0.78		0.78	0.78	0.14	
Clearance Time (s)	3.5		3.5	3.5	4.5	
Vehicle Extension (s)	0.2		0.2	0.2	3.0	
Lane Grp Cap (vph)	2335		388	2339	207	
v/s Ratio Prot	0.28			c0.52	c0.02	
v/s Ratio Perm			0.06			
v/c Ratio	0.37		0.08	0.67	0.14	
Uniform Delay, d1	3.5		2.7	5.3	37.3	
Progression Factor	2.76		0.31	0.23	1.00	
Incremental Delay, d2	0.2		0.3	1.2	0.3	
Delay (s)	9.9		1.1	2.4	37.6	
Level of Service	A		A	A	D	
Approach Delay (s)	9.9			2.3	37.6	
Approach LOS	A			A	D	

Intersection Summary			
HCM Average Control Delay	5.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)										
Lane Util. Factor										
Frt										
Flt Protected										
Satd. Flow (prot)										
Flt Permitted										
Satd. Flow (perm)										
Volume (vph)	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0
Turn Type										
Protected Phases										
Permitted Phases										
Actuated Green, G (s)										
Effective Green, g (s)										
Actuated g/C Ratio										
Clearance Time (s)										
Lane Grp Cap (vph)										
v/s Ratio Prot										
v/s Ratio Perm										
v/c Ratio										
Uniform Delay, d1										
Progression Factor										
Incremental Delay, d2										
Delay (s)										
Level of Service										
Approach Delay (s)	0.0		0.0			0.0			0.0	
Approach LOS	A		A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	EBR2	NBT	NBR	NBR2	SBL2	SBL	SBT	NWR2
Lane Configurations											
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0					4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95					0.95	1.00
Frt	1.00	1.00	0.85	0.85	0.97					1.00	0.86
Flt Protected	0.95	1.00	1.00	1.00	1.00					0.98	1.00
Satd. Flow (prot)	1583	3167	1417	1417	3063					3115	1442
Flt Permitted	0.95	1.00	1.00	1.00	1.00					0.63	1.00
Satd. Flow (perm)	1583	3167	1417	1417	3063					1993	1442
Volume (vph)	55	711	241	10	300	51	33	106	53	319	14
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	59	756	256	11	319	54	35	113	56	339	15
RTOR Reduction (vph)	0	0	0	11	7	0	0	0	0	0	0
Lane Group Flow (vph)	59	756	256	0	401	0	0	0	0	508	15
Turn Type	custom		Perm	Perm					Prot		Free
Protected Phases	3	3			6				2	1	
Permitted Phases	4	4	3	3						2	Free
Actuated Green, G (s)	25.0	25.0	5.0	5.0	22.5					34.9	100.0
Effective Green, g (s)	23.6	23.6	4.0	4.0	22.5					33.9	100.0
Actuated g/C Ratio	0.24	0.24	0.04	0.04	0.22					0.34	1.00
Clearance Time (s)	3.0	3.0	3.0	3.0	4.0					4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	3.0					4.0	
Lane Grp Cap (vph)	437	874	57	57	689					900	1442
v/s Ratio Prot	0.01	c0.03			c0.13					c0.11	
v/s Ratio Perm	0.03	0.20	c0.18	0.00						c0.08	0.01
v/c Ratio	0.14	0.86	4.49	0.01	0.58					0.56	0.01
Uniform Delay, d1	30.3	36.7	48.0	46.1	34.6					27.0	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00					0.29	1.00
Incremental Delay, d2	0.1	8.6	1610.7	0.0	3.6					2.3	0.0
Delay (s)	30.4	45.3	1658.7	46.1	38.1					10.1	0.0
Level of Service	C	D	F	D	D					B	A
Approach Delay (s)		426.2			38.1					10.1	
Approach LOS		F			D					B	

Intersection Summary			
HCM Average Control Delay	239.4	HCM Level of Service	F
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.2%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00		0.95	1.00
Frt	1.00	0.97		1.00	0.98			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1583	4422		1583	4456			3142	1417		3147	1417
Flt Permitted	0.13	1.00		0.95	1.00			0.59	1.00		0.53	1.00
Satd. Flow (perm)	218	4422		1583	4456			1873	1417		1669	1417
Volume (vph)	265	1418	327	63	1279	204	177	957	109	90	643	119
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	279	1493	344	66	1346	215	186	1007	115	95	677	125
RTOR Reduction (vph)	0	41	0	0	14	0	0	0	72	0	0	22
Lane Group Flow (vph)	279	1796	0	66	1547	0	0	1193	43	0	772	103
Turn Type	Perm			Prot			Perm		Perm	Perm		Perm
Protected Phases		6		5	2			8			4	
Permitted Phases	6						8		8	4		4
Actuated Green, G (s)	37.7	37.7		6.3	48.0			33.5	33.5		33.5	33.5
Effective Green, g (s)	37.7	37.7		6.3	48.0			34.0	34.0		34.0	34.0
Actuated g/C Ratio	0.42	0.42		0.07	0.53			0.38	0.38		0.38	0.38
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	91	1852		111	2377			708	535		631	535
v/s Ratio Prot		0.41		0.04	c0.35							
v/s Ratio Perm	c1.28							c0.64	0.03		0.46	0.07
v/c Ratio	3.07	0.97		0.59	0.65			1.69	0.08		1.28dl	0.19
Uniform Delay, d1	26.1	25.6		40.6	15.0			28.0	18.0		28.0	18.8
Progression Factor	1.38	1.39		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	949.9	11.8		8.3	1.4			314.4	0.3		114.3	0.8
Delay (s)	985.9	47.4		48.9	16.4			342.4	18.3		142.3	19.6
Level of Service	F	D		D	B			F	B		F	B
Approach Delay (s)		171.2			17.7			313.9			125.2	
Approach LOS		F			B			F			F	

Intersection Summary			
HCM Average Control Delay	153.6	HCM Level of Service	F
HCM Volume to Capacity ratio	2.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	120.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	4.0
Lane Util. Factor		0.95			0.95			0.95			0.95	1.00
Frpb, ped/bikes		0.99			0.96			0.99			1.00	0.75
Flpb, ped/bikes		1.00			1.00			1.00			1.00	1.00
Frt		0.99			0.98			0.99			1.00	0.85
Flt Protected		1.00			1.00			1.00			1.00	1.00
Satd. Flow (prot)		3111			2959			3103			3167	1066
Flt Permitted		1.00			1.00			1.00			1.00	1.00
Satd. Flow (perm)		3111			2959			3103			3167	1066
Volume (vph)	0	1129	79	0	1130	191	0	1384	96	0	1608	111
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1176	82	0	1177	199	0	1442	100	0	1675	116
RTOR Reduction (vph)	0	2	0	0	4	0	0	5	0	0	0	8
Lane Group Flow (vph)	0	1256	0	0	1372	0	0	1537	0	0	1675	108
Confl. Peds. (#/hr)	136		73	73		136	120		104	120		104
Confl. Bikes (#/hr)			5			7			19			15
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)		40.2			40.2			40.2			40.2	40.2
Effective Green, g (s)		41.0			41.0			41.0			41.0	41.0
Actuated g/C Ratio		0.46			0.46			0.46			0.46	0.46
Clearance Time (s)		4.8			4.8			4.8			4.8	4.8
Vehicle Extension (s)		3.0			3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		1417			1348			1414			1443	486
v/s Ratio Prot		0.40			c0.46			0.50			c0.53	
v/s Ratio Perm												0.10
v/c Ratio		0.89			1.02			1.09			1.16	0.22
Uniform Delay, d1		22.4			24.5			24.5			24.5	14.8
Progression Factor		1.00			1.00			0.72			1.00	1.00
Incremental Delay, d2		8.5			29.1			40.4			80.4	1.1
Delay (s)		30.9			53.6			58.0			104.9	15.9
Level of Service		C			D			E			F	B
Approach Delay (s)		30.9			53.6			58.0			99.2	
Approach LOS		C			D			E			F	

Intersection Summary			
HCM Average Control Delay	63.6	HCM Level of Service	E
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.97		1.00	0.95		1.00	0.95		1.00	0.90	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4387		1583	4269		1583	2958		1583	2736	
Flt Permitted	0.13	1.00		0.13	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	216	4387		218	4269		230	2958		230	2736	
Volume (vph)	186	1123	85	133	1412	172	105	1413	195	103	974	367
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)	202	1221	92	145	1535	187	114	1536	212	112	1059	399
RTOR Reduction (vph)	0	9	0	0	17	0	0	12	0	0	43	0
Lane Group Flow (vph)	202	1304	0	145	1706	0	114	1736	0	112	1415	0
Confl. Peds. (#/hr)	663		371	371		663	453		618	618		453
Confl. Bikes (#/hr)			12			12			20			20
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	37.5	29.5		36.9	29.2		34.2	27.8		34.2	27.8	
Effective Green, g (s)	38.9	30.9		38.3	30.6		35.4	29.0		35.4	29.0	
Actuated g/C Ratio	0.43	0.34		0.43	0.34		0.39	0.32		0.39	0.32	
Clearance Time (s)	4.0	5.4		4.0	5.4		4.0	5.2		4.0	5.2	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	215	1506		210	1451		187	953		187	882	
v/s Ratio Prot	c0.08	0.30		0.06	c0.40		c0.04	c0.59		0.04	0.52	
v/s Ratio Perm	0.32			0.24			0.20			0.19		
v/c Ratio	0.94	0.87		0.69	1.18		0.61	1.82		0.60	1.60	
Uniform Delay, d1	21.5	27.6		18.7	29.7		22.5	30.5		22.5	30.5	
Progression Factor	1.87	0.92		0.77	0.87		0.75	0.93		1.58	1.44	
Incremental Delay, d2	25.9	3.2		7.2	84.7		2.9	371.8		0.5	272.2	
Delay (s)	65.9	28.5		21.6	110.5		19.9	400.2		36.0	316.3	
Level of Service	E	C		C	F		B	F		D	F	
Approach Delay (s)		33.5			103.6			377.0			296.3	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	207.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	119.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3140		1583	3107		1583	3127		1583	3152	
Flt Permitted	0.27	1.00		0.37	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	451	3140		612	3107		163	3127		163	3152	
Volume (vph)	51	519	31	95	632	91	73	1316	119	93	1412	45
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	54	552	33	101	672	97	78	1400	127	99	1502	48
RTOR Reduction (vph)	0	5	0	0	9	0	0	8	0	0	3	0
Lane Group Flow (vph)	54	580	0	101	760	0	78	1519	0	99	1547	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	40.4	40.4		40.4	40.4		40.3	40.3		40.3	40.3	
Effective Green, g (s)	41.0	41.0		41.0	41.0		41.0	41.0		41.0	41.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.46	0.46		0.46	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	205	1430		279	1415		74	1425		74	1436	
v/s Ratio Prot		0.18			c0.24			0.49			0.49	
v/s Ratio Perm	0.12			0.17			0.48			c0.61		
v/c Ratio	0.26	0.41		0.36	0.54		1.05	1.07		1.34	1.08	
Uniform Delay, d1	15.2	16.4		16.0	17.7		24.5	24.5		24.5	24.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.48	0.52	
Incremental Delay, d2	3.1	0.9		3.6	1.5		120.3	43.7		160.3	36.4	
Delay (s)	18.3	17.2		19.6	19.1		144.8	68.2		172.1	49.1	
Level of Service	B	B		B	B		F	E		F	D	
Approach Delay (s)		17.3			19.2			71.9			56.5	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM Average Control Delay	49.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4523		1583	4478		1583	3167	1417	1583	3167	1417
Flt Permitted	0.12	1.00		0.12	1.00		0.12	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	194	4523		196	4478		196	3167	1417	196	3167	1417
Volume (vph)	143	1872	76	113	1497	176	149	1080	136	199	1199	141
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	144	1891	77	114	1512	178	151	1091	137	201	1211	142
RTOR Reduction (vph)	0	5	0	0	15	0	0	0	15	0	0	26
Lane Group Flow (vph)	144	1963	0	114	1675	0	151	1091	122	201	1211	116
Turn Type	pm+pt			pm+pt			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8	5	7	4	1
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	41.3	33.3		40.7	33.0		41.0	33.0	40.7	41.0	33.0	41.0
Effective Green, g (s)	42.3	34.3		41.7	34.0		42.0	34.0	41.7	42.0	34.0	42.0
Actuated g/C Ratio	0.42	0.34		0.42	0.34		0.42	0.34	0.42	0.42	0.34	0.42
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	193	1551		189	1523		193	1077	648	193	1077	652
v/s Ratio Prot	c0.06	c0.43		0.05	0.37		0.06	0.34	0.01	c0.08	c0.38	0.01
v/s Ratio Perm	0.26			0.21			0.27		0.07	0.35		0.07
v/c Ratio	0.75	1.27		0.60	1.10		0.78	1.01	0.19	1.04	1.12	0.18
Uniform Delay, d1	23.5	32.9		24.1	33.0		24.0	33.0	18.4	23.8	33.0	18.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.5	124.9		5.3	55.6		18.4	30.7	0.1	76.1	68.4	0.1
Delay (s)	38.0	157.8		29.4	88.6		42.4	63.7	18.6	99.9	101.4	18.3
Level of Service	D	F		C	F		D	E	B	F	F	B
Approach Delay (s)		149.6			84.8			56.9			93.6	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM Average Control Delay	101.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4512		1583	4515		1583	3139		1583	3130	
Flt Permitted	0.09	1.00		0.09	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	145	4512		145	4515		185	3139		185	3130	
Volume (vph)	288	1877	110	112	1598	86	76	1077	67	78	1443	120
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	294	1915	112	114	1631	88	78	1099	68	80	1472	122
RTOR Reduction (vph)	0	3	0	0	6	0	0	4	0	0	7	0
Lane Group Flow (vph)	294	2024	0	114	1713	0	78	1163	0	80	1587	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		35.5	35.5		35.5	35.5	
Effective Green, g (s)	46.0	46.0		46.0	46.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	2306		74	2308		74	1256		74	1252	
v/s Ratio Prot		0.45			0.38			0.37			c0.51	
v/s Ratio Perm	c2.03			0.79			0.42			0.43		
v/c Ratio	3.97	0.88		1.54	0.74		1.05	0.93		1.08	1.27	
Uniform Delay, d1	22.0	19.5		22.0	17.3		27.0	25.7		27.0	27.0	
Progression Factor	1.24	1.32		1.17	1.23		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1361.4	3.9		249.3	0.2		120.3	13.0		128.5	127.0	
Delay (s)	1388.8	29.7		275.2	21.5		147.3	38.7		155.5	154.0	
Level of Service	F	C		F	C		F	D		F	F	
Approach Delay (s)		201.8			37.3			45.5			154.1	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM Average Control Delay	120.4	HCM Level of Service	F
HCM Volume to Capacity ratio	2.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	125.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	
Satd. Flow (prot)	1583	4539		1583	4536			1641	1417		1566	
Flt Permitted	0.10	1.00		0.06	1.00			0.86	1.00		0.93	
Satd. Flow (perm)	174	4539		98	4536			1440	1417		1464	
Volume (vph)	40	2097	34	74	1608	34	27	60	80	26	55	50
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)	43	2279	37	80	1748	37	29	65	87	28	60	54
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	4	0	15	0
Lane Group Flow (vph)	43	2315	0	80	1784	0	0	94	83	0	127	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	67.7	67.7		67.7	67.7			13.8	13.8		13.8	
Effective Green, g (s)	67.7	67.7		67.7	67.7			14.3	14.3		14.3	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16	0.16		0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	131	3414		74	3412			229	225		233	
v/s Ratio Prot		0.51			0.39							
v/s Ratio Perm	0.25			c0.81				0.07	0.06		c0.09	
v/c Ratio	0.33	0.68		1.08	0.52			0.41	0.37		0.54	
Uniform Delay, d1	3.7	5.6		11.1	4.6			34.1	33.8		34.9	
Progression Factor	1.00	1.00		1.38	0.94			1.00	1.00		1.00	
Incremental Delay, d2	6.6	1.1		104.8	0.3			1.2	1.0		2.6	
Delay (s)	10.2	6.7		120.3	4.6			35.3	34.8		37.4	
Level of Service	B	A		F	A			D	C		D	
Approach Delay (s)		6.8			9.6			35.1			37.4	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	0.91
Frpb, ped/bikes	0.97		1.00	1.00	0.99	0.98
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	0.97	0.85
Flt Protected	1.00		0.95	1.00	0.96	1.00
Satd. Flow (prot)	4259		1583	4550	2984	1258
Flt Permitted	1.00		0.09	1.00	0.96	1.00
Satd. Flow (perm)	4259		148	4550	2984	1258
Volume (vph)	1723	441	479	1302	639	581
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1758	450	489	1329	652	593
RTOR Reduction (vph)	49	0	0	0	32	1
Lane Group Flow (vph)	2159	0	489	1329	811	401
Confl. Peds. (#/hr)		159	159			5
Confl. Bikes (#/hr)		4				5
Turn Type			pm+pt			pm+ov
Protected Phases	6		5	2	4	5
Permitted Phases			2			4
Actuated Green, G (s)	40.0		52.0	52.0	28.3	36.3
Effective Green, g (s)	41.0		53.0	53.0	29.0	37.0
Actuated g/C Ratio	0.46		0.59	0.59	0.32	0.41
Clearance Time (s)	5.0		4.0	5.0	4.7	4.0
Vehicle Extension (s)	3.0		2.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1940		215	2679	962	573
v/s Ratio Prot	0.51		c0.20	0.29	c0.27	0.06
v/s Ratio Perm			c1.14			0.26
v/c Ratio	1.11		2.27	0.50	0.84	0.70
Uniform Delay, d1	24.5		26.0	10.7	28.4	21.9
Progression Factor	1.00		1.00	1.00	0.68	0.31
Incremental Delay, d2	58.7		588.1	0.7	4.8	2.3
Delay (s)	83.2		614.1	11.4	24.1	9.2
Level of Service	F		F	B	C	A
Approach Delay (s)	83.2			173.5	19.3	
Approach LOS	F			F	B	

Intersection Summary			
HCM Average Control Delay	99.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3055		1583	1667	1417	1583	3111		1583	3163	
Flt Permitted	0.50	1.00		0.42	1.00	1.00	0.27	1.00		0.13	1.00	
Satd. Flow (perm)	832	3055		696	1667	1417	454	3111		211	3163	
Volume (vph)	20	314	96	184	223	59	152	1191	159	20	862	7
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	20	320	98	188	228	60	155	1215	162	20	880	7
RTOR Reduction (vph)	0	0	0	0	0	42	0	12	0	0	1	0
Lane Group Flow (vph)	20	418	0	188	228	18	155	1365	0	20	886	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)	26.4	26.4		26.4	26.4	26.4	54.3	54.3		54.3	54.3	
Effective Green, g (s)	27.0	27.0		27.0	27.0	27.0	55.0	55.0		55.0	55.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	250	917		209	500	425	277	1901		129	1933	
v/s Ratio Prot		0.14			0.14			c0.44			0.28	
v/s Ratio Perm	0.02			c0.27		0.01	0.34			0.09		
v/c Ratio	0.08	0.46		0.90	0.46	0.04	0.56	0.72		0.16	0.46	
Uniform Delay, d1	22.6	25.5		30.2	25.5	22.3	10.3	12.1		7.5	9.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.56	1.69		0.30	0.39	
Incremental Delay, d2	0.6	1.6		40.6	3.0	0.2	0.7	0.2		0.2	0.1	
Delay (s)	23.2	27.2		70.8	28.5	22.5	16.9	20.7		2.5	3.7	
Level of Service	C	C		E	C	C	B	C		A	A	
Approach Delay (s)		27.0			44.5			20.4			3.7	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM Average Control Delay	20.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4519		1583	4515		1583	3160		1583	3167	1417
Flt Permitted	0.15	1.00		0.95	1.00		0.13	1.00		0.12	1.00	1.00
Satd. Flow (perm)	242	4519		1583	4515		212	3160		199	3167	1417
Volume (vph)	66	2171	103	101	1685	90	48	1459	21	84	1151	102
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	69	2285	108	106	1774	95	51	1536	22	88	1212	107
RTOR Reduction (vph)	0	6	0	0	7	0	0	1	0	0	0	65
Lane Group Flow (vph)	69	2387	0	106	1862	0	51	1557	0	88	1212	42
Turn Type	pm+pt			Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2						4			8		8
Actuated Green, G (s)	31.9	26.6		8.7	29.1		35.3	30.5		39.3	32.5	32.5
Effective Green, g (s)	33.2	27.5		8.2	30.0		36.3	31.5		40.3	33.5	33.5
Actuated g/C Ratio	0.37	0.31		0.09	0.33		0.40	0.35		0.45	0.37	0.37
Clearance Time (s)	4.4	4.9		3.5	4.9		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	174	1381		144	1505		159	1106		194	1179	527
v/s Ratio Prot	0.03	c0.53		c0.07	0.41		0.02	c0.49		c0.03	0.38	
v/s Ratio Perm	0.12						0.11			0.17		0.03
v/c Ratio	0.40	1.73		0.74	1.24		0.32	1.41		0.45	1.03	0.08
Uniform Delay, d1	22.9	31.2		39.8	30.0		20.2	29.2		20.8	28.2	18.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.81	0.63
Incremental Delay, d2	1.5	331.0		17.7	112.8		1.2	188.8		1.5	32.5	0.3
Delay (s)	24.4	362.3		57.5	142.8		21.4	218.1		22.2	55.3	11.8
Level of Service	C	F		E	F		C	F		C	E	B
Approach Delay (s)		352.8			138.2			211.9			49.9	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	208.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.43		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	120.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		0.99	1.00
Satd. Flow (prot)	1583	4516		1583	4534			1641	1417		1645	1417
Flt Permitted	0.09	1.00		0.09	1.00			0.98	1.00		0.99	1.00
Satd. Flow (perm)	147	4516		147	4534			1641	1417		1645	1417
Volume (vph)	66	1959	104	6	1817	44	80	177	42	64	174	29
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	73	2153	114	7	1997	48	88	195	46	70	191	32
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	36	0	0	28
Lane Group Flow (vph)	73	2267	0	7	2042	0	0	283	10	0	261	4
Turn Type	Perm			Perm			Split		Perm	Split		Perm
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2					4			3
Actuated Green, G (s)	43.6	43.6		43.6	43.6			19.0	19.0		10.5	10.5
Effective Green, g (s)	45.5	45.5		45.5	45.5			20.5	20.5		12.0	12.0
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.23	0.23		0.13	0.13
Clearance Time (s)	5.9	5.9		5.9	5.9			5.5	5.5		5.5	5.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	2283		74	2292			374	323		219	189
v/s Ratio Prot		c0.50			0.45			c0.17			c0.16	
v/s Ratio Perm	0.50			0.05					0.01			0.00
v/c Ratio	0.99	0.99		0.09	0.89			0.76	0.03		1.19	0.02
Uniform Delay, d1	21.9	22.1		11.6	20.0			32.4	27.0		39.0	33.9
Progression Factor	0.73	0.73		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	94.2	16.0		2.5	5.7			8.5	0.0		122.3	0.0
Delay (s)	110.2	32.3		14.1	25.8			40.9	27.1		161.3	34.0
Level of Service	F	C		B	C			D	C		F	C
Approach Delay (s)		34.7			25.7			39.0			147.4	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM Average Control Delay	37.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			1.00			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	1.00
Satd. Flow (prot)	1583	4550		1583	4538			1653			1646	1417
Flt Permitted	0.16	1.00		0.08	1.00			1.00			0.99	1.00
Satd. Flow (perm)	258	4550		138	4538			1653			1646	1417
Volume (vph)	132	1735	0	22	1290	23	26	284	10	10	29	192
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	138	1807	0	23	1344	24	27	296	10	10	30	200
RTOR Reduction (vph)	0	0	0	0	2	0	0	1	0	0	0	154
Lane Group Flow (vph)	138	1807	0	23	1366	0	0	332	0	0	40	46
Turn Type	Perm			Perm			Split			Split		Perm
Protected Phases		6			2		3	3		4	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	53.9	53.9		53.9	53.9			9.6			10.6	10.6
Effective Green, g (s)	55.4	55.4		55.4	55.4			11.0			11.6	11.6
Actuated g/C Ratio	0.62	0.62		0.62	0.62			0.12			0.13	0.13
Clearance Time (s)	5.5	5.5		5.5	5.5			5.4			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	159	2801		85	2793			202			212	183
v/s Ratio Prot		0.40			0.30			c0.20			0.02	
v/s Ratio Perm	c0.53			0.17								c0.03
v/c Ratio	0.87	0.65		0.27	0.49			1.64			0.19	0.25
Uniform Delay, d1	14.3	11.0		8.0	9.5			39.5			35.0	35.3
Progression Factor	1.00	1.00		1.46	1.58			1.00			1.00	1.00
Incremental Delay, d2	43.1	1.2		3.6	0.3			311.1			0.4	0.7
Delay (s)	57.4	12.2		15.2	15.4			350.6			35.4	36.0
Level of Service	E	B		B	B			F			D	D
Approach Delay (s)		15.4			15.4			350.6			35.9	
Approach LOS		B			B			F			D	

Intersection Summary			
HCM Average Control Delay	45.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor		0.91		1.00	0.91			1.00			1.00	
Frpb, ped/bikes		1.00		1.00	1.00			0.98			0.98	
Flpb, ped/bikes		1.00		0.99	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.95			0.94	
Flt Protected		1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)		4250		1480	4266			1459			1431	
Flt Permitted		1.00		0.07	1.00			0.96			0.95	
Satd. Flow (perm)		4250		115	4266			1411			1366	
Volume (vph)	0	1811	40	38	1491	22	18	72	47	10	17	24
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1990	44	42	1638	24	20	79	52	11	19	26
RTOR Reduction (vph)	0	2	0	0	1	0	0	6	0	0	17	0
Lane Group Flow (vph)	0	2032	0	42	1661	0	0	145	0	0	39	0
Confl. Peds. (#/hr)	34		71	71		34	15		9	9		15
Confl. Bikes (#/hr)			8			12			4			2
Turn Type				Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases				2			8			4		
Actuated Green, G (s)		66.8		66.8	66.8			15.7			15.7	
Effective Green, g (s)		66.3		66.3	66.3			15.7			15.7	
Actuated g/C Ratio		0.74		0.74	0.74			0.17			0.17	
Clearance Time (s)		3.5		3.5	3.5			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		3131		85	3143			246			238	
v/s Ratio Prot		c0.48			0.39							
v/s Ratio Perm				0.37				c0.10			0.03	
v/c Ratio		0.65		0.49	0.53			0.59			0.17	
Uniform Delay, d1		6.0		4.9	5.1			34.2			31.6	
Progression Factor		0.86		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.1		19.1	0.6			3.8			0.3	
Delay (s)		5.3		24.0	5.7			38.0			31.9	
Level of Service		A		C	A			D			C	
Approach Delay (s)		5.3			6.2			38.0			31.9	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	7.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.5%	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												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2960		1490	4244		1490	4219	
Flt Permitted	0.13	1.00	1.00	0.13	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	202	2980	1333	202	2960		216	4244		216	4219	
Volume (vph)	113	1405	102	175	1199	57	124	1926	121	196	1878	205
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	116	1448	105	180	1236	59	128	1986	125	202	1936	211
RTOR Reduction (vph)	0	0	19	0	4	0	0	7	0	0	15	0
Lane Group Flow (vph)	116	1448	86	180	1291	0	128	2104	0	202	2132	0
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	3	8	1	7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	36.9	30.0	37.0	37.1	30.1		35.0	28.0		35.0	28.0	
Effective Green, g (s)	37.9	31.0	38.0	38.1	31.1		36.0	29.0		36.0	29.0	
Actuated g/C Ratio	0.42	0.34	0.42	0.42	0.35		0.40	0.32		0.40	0.32	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.8	3.0	3.0	4.6		3.0	4.3		3.0	5.5	
Lane Grp Cap (vph)	184	1026	622	186	1023		185	1368		185	1359	
v/s Ratio Prot	0.05	c0.49	0.01	c0.08	0.44		0.05	0.50		c0.08	c0.51	
v/s Ratio Perm	0.22		0.05	0.34			0.22			0.35		
v/c Ratio	0.63	1.41	0.14	0.97	1.26		0.69	1.54		1.09	1.57	
Uniform Delay, d1	21.7	29.5	16.0	43.5	29.4		41.9	30.5		43.7	30.5	
Progression Factor	0.84	0.72	0.53	1.00	1.00		1.63	1.43		1.66	1.40	
Incremental Delay, d2	0.6	185.6	0.0	56.0	125.9		1.0	242.3		70.7	257.6	
Delay (s)	18.8	206.7	8.4	99.5	155.3		69.3	285.9		143.2	300.3	
Level of Service	B	F	A	F	F		E	F		F	F	
Approach Delay (s)		181.2			148.5			273.5			286.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	233.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	131.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2926		1490	4214		1490	4253	
Flt Permitted	0.18	1.00	1.00	0.26	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	276	2980	1333	413	2926		165	4214		165	4253	
Volume (vph)	54	669	161	166	985	137	159	1867	222	102	1817	88
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	55	676	163	168	995	138	161	1886	224	103	1835	89
RTOR Reduction (vph)	0	0	23	0	1	0	0	16	0	0	6	0
Lane Group Flow (vph)	55	676	140	168	1132	0	161	2094	0	103	1918	0
Turn Type	Perm		Perm	pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	35.0	35.0	35.0	43.0	43.0		37.0	37.0		37.0	37.0	
Effective Green, g (s)	36.0	36.0	36.0	44.0	44.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.49	0.49		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.0	5.0	5.0	3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	110	1192	533	250	1430		70	1779		70	1796	
v/s Ratio Prot		0.23		0.03	c0.39			0.50			0.45	
v/s Ratio Perm	0.20		0.11	0.30			c0.98			0.62		
v/c Ratio	0.50	0.57	0.26	0.67	0.79		2.30	1.18		1.47	1.07	
Uniform Delay, d1	20.2	21.0	18.1	17.8	19.2		26.0	26.0		26.0	26.0	
Progression Factor	1.36	1.39	1.56	1.00	1.00		1.00	1.00		0.36	0.35	
Incremental Delay, d2	1.5	0.2	0.1	6.9	4.6		627.4	85.9		219.1	32.0	
Delay (s)	28.9	29.3	28.4	24.8	23.7		653.4	111.9		228.6	41.1	
Level of Service	C	C	C	C	C		F	F		F	D	
Approach Delay (s)		29.1			23.9			150.3			50.6	
Approach LOS		C			C			F			D	

Intersection Summary			
HCM Average Control Delay	77.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.91		1.00	0.91	
Frt		0.99			0.98		1.00	1.00		1.00	0.99	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2951			2923		1490	4279		1490	4260	
Flt Permitted		1.00			1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)		2951			2923		283	4279		283	4260	
Volume (vph)	0	1118	77	0	909	134	71	2121	10	85	1954	70
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1141	79	0	928	137	72	2164	10	87	1994	71
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	6	0
Lane Group Flow (vph)	0	1220	0	0	1065	0	72	2173	0	87	2059	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		28.9			28.9		21.5	21.5		21.5	21.5	
Effective Green, g (s)		29.8			29.8		22.2	22.2		22.2	22.2	
Actuated g/C Ratio		0.50			0.50		0.37	0.37		0.37	0.37	
Clearance Time (s)		4.9			4.9		4.7	4.7		4.7	4.7	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1466			1452		105	1583		105	1576	
v/s Ratio Prot		c0.41			0.36			c0.51			0.48	
v/s Ratio Perm							0.25			0.31		
v/c Ratio		0.83			0.73		0.69	1.37		0.83	1.31	
Uniform Delay, d1		13.0			12.0		16.0	18.9		17.2	18.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		4.2			2.0		30.7	171.9		50.2	142.7	
Delay (s)		17.2			13.9		46.7	190.8		67.4	161.6	
Level of Service		B			B		D	F		E	F	
Approach Delay (s)		17.2			13.9			186.2			157.8	
Approach LOS		B			B			F			F	

Intersection Summary			
HCM Average Control Delay	118.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	106.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1488	4124		1490	4131		1490	4253		1490	4171	
Flt Permitted	0.14	1.00		0.14	1.00		0.13	1.00		0.95	1.00	
Satd. Flow (perm)	216	4124		216	4131		202	4253		1490	4171	
Volume (vph)	257	1599	199	218	1168	149	141	1778	50	155	1671	135
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	262	1632	203	222	1192	152	144	1814	51	158	1705	138
RTOR Reduction (vph)	0	18	0	0	18	0	0	3	0	0	10	0
Lane Group Flow (vph)	262	1817	0	222	1326	0	144	1862	0	158	1833	0
Confl. Peds. (#/hr)	135		153	153		135	164		79	79		164
Confl. Bikes (#/hr)			13			8			6			17
Turn Type	pm+pt			pm+pt			pm+pt			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					
Actuated Green, G (s)	36.5	29.0		36.5	29.0		38.5	31.0		7.5	31.0	
Effective Green, g (s)	36.0	29.0		36.0	29.0		38.0	31.0		7.0	31.0	
Actuated g/C Ratio	0.40	0.32		0.40	0.32		0.42	0.34		0.08	0.34	
Clearance Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	185	1329		185	1331		185	1465		116	1437	
v/s Ratio Prot	c0.11	0.44		0.09	0.32		0.06	0.44		c0.11	c0.44	
v/s Ratio Perm	c0.46			0.39			0.27					
v/c Ratio	1.42	1.37		1.20	1.00		0.78	1.27		1.36	1.28	
Uniform Delay, d1	22.8	30.5		43.7	30.4		42.4	29.5		41.5	29.5	
Progression Factor	1.52	0.75		1.31	0.82		2.04	1.09		1.00	1.00	
Incremental Delay, d2	205.4	168.3		126.0	22.1		8.5	124.3		208.5	129.4	
Delay (s)	240.1	191.2		183.2	47.0		94.9	156.3		250.0	158.9	
Level of Service	F	F		F	D		F	F		F	F	
Approach Delay (s)		197.3			66.3			151.9			166.1	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	150.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	122.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.99		1.00	1.00		1.00	0.99	
Flt Protected		1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1492			1521		1490	4267		1490	4232	
Flt Permitted		0.95			0.76		0.09	1.00		0.09	1.00	
Satd. Flow (perm)		1422			1168		139	4267		139	4232	
Volume (vph)	52	332	142	58	138	23	60	1875	28	19	2007	73
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	53	339	145	59	141	23	61	1913	29	19	2048	74
RTOR Reduction (vph)	0	1	0	0	2	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	536	0	0	221	0	61	1941	0	19	2118	0
Confl. Peds. (#/hr)	10		12	12		10	57		25	25		57
Confl. Bikes (#/hr)			2						1			15
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		35.9			35.9		44.6	44.6		44.6	44.6	
Effective Green, g (s)		36.9			36.9		45.1	45.1		45.1	45.1	
Actuated g/C Ratio		0.41			0.41		0.50	0.50		0.50	0.50	
Clearance Time (s)		5.0			5.0		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		583			479		70	2138		70	2121	
v/s Ratio Prot								0.45			c0.50	
v/s Ratio Perm		c0.38			0.19		0.44			0.14		
v/c Ratio		0.92			0.46		0.87	0.91		0.27	1.00	
Uniform Delay, d1		25.2			19.3		19.9	20.5		13.0	22.4	
Progression Factor		1.00			1.00		1.00	1.00		0.51	0.56	
Incremental Delay, d2		19.9			0.7		75.6	7.1		0.9	5.5	
Delay (s)		45.1			20.0		95.5	27.6		7.4	18.0	
Level of Service		D			C		F	C		A	B	
Approach Delay (s)		45.1			20.0			29.7			17.9	
Approach LOS		D			C			C			B	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.98		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4258		1490	4213		1490	4268		1490	4219	
Flt Permitted	0.14	1.00		0.11	1.00		0.95	1.00		0.11	1.00	
Satd. Flow (perm)	221	4258		169	4213		1490	4268		180	4219	
Volume (vph)	316	1836	73	68	1215	146	59	1823	43	179	1992	216
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	326	1893	75	70	1253	151	61	1879	44	185	2054	223
RTOR Reduction (vph)	0	4	0	0	15	0	0	2	0	0	12	0
Lane Group Flow (vph)	326	1964	0	70	1389	0	61	1921	0	185	2265	0
Turn Type	Perm			pm+pt			Prot			pm+pt		
Protected Phases		8		7	4		5			1	6	
Permitted Phases	8			4				2		6		
Actuated Green, G (s)	31.8	31.8		42.9	42.9		8.2	29.4		46.3	34.1	
Effective Green, g (s)	33.2	33.2		44.3	44.3		8.2	30.8		47.7	35.5	
Actuated g/C Ratio	0.33	0.33		0.44	0.44		0.08	0.31		0.48	0.36	
Clearance Time (s)	5.4	5.4		4.0	5.4		4.0	5.4		4.0	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		4.0	3.0	
Lane Grp Cap (vph)	73	1414		169	1866		122	1315		255	1498	
v/s Ratio Prot		0.46		0.03	c0.33		0.04			c0.09	c0.54	
v/s Ratio Perm	c1.48			0.15				0.45		0.25		
v/c Ratio	4.47	1.39		0.41	0.74		0.50	1.46		0.73	1.51	
Uniform Delay, d1	33.4	33.4		23.2	23.1		43.9	34.6		22.2	32.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1590.7	179.5		1.6	2.7		3.2	211.6		10.5	233.8	
Delay (s)	1624.1	212.9		24.8	25.9		47.1	246.2		32.7	266.1	
Level of Service	F	F		C	C		D	F		C	F	
Approach Delay (s)		413.4			25.8			240.1			248.5	
Approach LOS		F			C			F			F	

Intersection Summary			
HCM Average Control Delay	252.6	HCM Level of Service	F
HCM Volume to Capacity ratio	2.56		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	121.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91			0.91			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	0.97			0.99			1.00	0.96		0.99	
Flpb, ped/bikes	0.98	1.00			1.00			0.99	1.00		0.99	
Frt	1.00	0.99			0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00			1.00			0.99	1.00		0.98	
Satd. Flow (prot)	1461	4103			4201			1527	1280		1495	
Flt Permitted	0.13	1.00			1.00			0.87	1.00		0.57	
Satd. Flow (perm)	194	4103			4201			1342	1280		862	
Volume (vph)	233	1755	188	0	1332	65	68	196	191	65	77	15
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	259	1950	209	0	1480	72	76	218	212	72	86	17
RTOR Reduction (vph)	0	12	0	0	5	0	0	0	4	0	4	0
Lane Group Flow (vph)	259	2147	0	0	1547	0	0	294	208	0	171	0
Confl. Peds. (#/hr)	95		113	113		95	73		22	22		73
Confl. Bikes (#/hr)			13			15			3			3
Turn Type	Perm						Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6						8		8	4		
Actuated Green, G (s)	59.3	59.3			59.3			23.2	23.2		23.2	
Effective Green, g (s)	58.8	58.8			58.8			23.2	23.2		23.2	
Actuated g/C Ratio	0.65	0.65			0.65			0.26	0.26		0.26	
Clearance Time (s)	3.5	3.5			3.5			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	127	2681			2745			346	330		222	
v/s Ratio Prot		0.52			0.37							
v/s Ratio Perm	c1.33							c0.22	0.16		0.20	
v/c Ratio	2.04	0.80			0.56			0.85	0.63		0.77	
Uniform Delay, d1	15.6	11.3			8.6			31.7	29.6		30.9	
Progression Factor	1.33	1.25			0.28			1.00	1.00		1.00	
Incremental Delay, d2	488.3	2.0			0.3			17.4	3.7		14.7	
Delay (s)	509.2	16.2			2.7			49.1	33.3		45.6	
Level of Service	F	B			A			D	C		D	
Approach Delay (s)		69.0			2.7			42.5			45.6	
Approach LOS		E			A			D			D	

Intersection Summary			
HCM Average Control Delay	43.1	HCM Level of Service	D
HCM Volume to Capacity ratio	1.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.95			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.99	
Satd. Flow (prot)	1583	4536		1583	4300	1218		1570			1573	
Flt Permitted	0.13	1.00		0.08	1.00	1.00		0.90			0.83	
Satd. Flow (perm)	217	4536		126	4300	1218		1419			1323	
Volume (vph)	111	1713	35	73	1264	103	36	164	128	63	189	141
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	122	1882	38	80	1389	113	40	180	141	69	208	155
RTOR Reduction (vph)	0	2	0	0	0	46	0	9	0	0	23	0
Lane Group Flow (vph)	122	1918	0	80	1389	67	0	352	0	0	409	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	53.1	53.1		53.1	53.1	53.1		28.9			28.9	
Effective Green, g (s)	53.1	53.1		53.1	53.1	53.1		28.9			28.9	
Actuated g/C Ratio	0.59	0.59		0.59	0.59	0.59		0.32			0.32	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	128	2676		74	2537	719		456			425	
v/s Ratio Prot		0.42			0.32							
v/s Ratio Perm	0.56			c0.64		0.05		0.25			c0.31	
v/c Ratio	0.95	0.72		1.08	0.55	0.09		0.77			0.96	
Uniform Delay, d1	17.3	13.1		18.4	11.2	8.0		27.6			30.0	
Progression Factor	1.96	2.14		1.03	0.83	0.78		1.00			1.00	
Incremental Delay, d2	56.0	1.2		118.7	0.7	0.2		7.9			33.8	
Delay (s)	89.8	29.3		137.7	10.0	6.5		35.5			63.8	
Level of Service	F	C		F	A	A		D			E	
Approach Delay (s)		32.9			16.2			35.5			63.8	
Approach LOS		C			B			D			E	

Intersection Summary			
HCM Average Control Delay	30.1	HCM Level of Service	C
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	1.00		1.00	1.00	0.99	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	4546		1583	4550	1577	
Flt Permitted	1.00		0.07	1.00	0.96	
Satd. Flow (perm)	4546		121	4550	1577	
Volume (vph)	1875	10	48	1369	82	7
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1974	11	51	1441	86	7
RTOR Reduction (vph)	0	0	0	0	4	0
Lane Group Flow (vph)	1985	0	51	1441	89	0
Turn Type			Perm			
Protected Phases	6			2	8	
Permitted Phases			2			
Actuated Green, G (s)	54.8		54.8	54.8	26.0	
Effective Green, g (s)	55.3		55.3	55.3	26.7	
Actuated g/C Ratio	0.61		0.61	0.61	0.30	
Clearance Time (s)	4.5		4.5	4.5	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2793		74	2796	468	
v/s Ratio Prot	c0.44			0.32	c0.06	
v/s Ratio Perm			0.42			
v/c Ratio	0.71		0.69	0.52	0.19	
Uniform Delay, d1	11.9		11.6	9.8	23.6	
Progression Factor	1.00		1.61	1.70	1.00	
Incremental Delay, d2	1.6		34.9	0.6	0.2	
Delay (s)	13.4		53.6	17.2	23.8	
Level of Service	B		D	B	C	
Approach Delay (s)	13.4			18.5	23.8	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.8%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417	1583	3167	1417	1583	3130	
Flt Permitted	0.19	1.00	1.00	0.10	1.00	1.00	0.15	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	321	3167	1417	167	3167	1417	247	3167	1417	215	3130	
Volume (vph)	106	1423	79	174	1072	215	120	1182	252	135	1211	100
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	110	1482	82	181	1117	224	125	1231	262	141	1261	104
RTOR Reduction (vph)	0	0	18	0	0	2	0	0	117	0	7	0
Lane Group Flow (vph)	110	1482	64	181	1117	222	125	1231	145	141	1358	0
Turn Type	Perm		Perm	pm+pt		pm+ov	Perm		Perm	pm+pt		
Protected Phases		6		5	2	7		8		7	4	
Permitted Phases	6		6	2		2	8		8	4		
Actuated Green, G (s)	35.0	35.0	35.0	44.0	44.0	49.7	27.1	27.1	27.1	36.0	36.0	
Effective Green, g (s)	36.0	36.0	36.0	45.0	45.0	51.0	27.0	27.0	27.0	37.0	37.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.50	0.50	0.57	0.30	0.30	0.30	0.41	0.41	
Clearance Time (s)	5.0	5.0	5.0	3.2	5.0	4.3	3.9	3.9	3.9	4.3	5.0	
Vehicle Extension (s)	4.7	4.7	4.7	3.0	4.2	3.0	4.3	4.3	4.3	3.0	4.5	
Lane Grp Cap (vph)	128	1267	567	162	1584	866	74	950	425	180	1287	
v/s Ratio Prot		0.47		c0.06	0.35	0.02		0.39		0.05	c0.43	
v/s Ratio Perm	0.34		0.05	c0.50		0.14	c0.51		0.10	0.27		
v/c Ratio	0.86	1.17	0.11	1.12	0.71	0.26	1.69	1.30	0.34	0.78	1.06	
Uniform Delay, d1	24.7	27.0	17.0	44.7	17.4	9.9	31.5	31.5	24.6	43.0	26.5	
Progression Factor	1.00	1.00	1.00	2.27	0.30	0.38	0.53	0.52	0.14	1.11	1.13	
Incremental Delay, d2	48.6	85.1	0.4	61.0	0.2	0.0	315.4	133.8	0.2	14.5	37.3	
Delay (s)	73.3	112.1	17.4	162.4	5.4	3.7	332.1	150.3	3.7	62.3	67.2	
Level of Service	E	F	B	F	A	A	F	F	A	E	E	
Approach Delay (s)		104.9			23.8			140.6			66.7	
Approach LOS		F			C			F			E	

Intersection Summary			
HCM Average Control Delay	85.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	117.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3139		1583	3167	1417	1583	3133		1583	3114	
Flt Permitted	0.22	1.00		0.12	1.00	1.00	0.14	1.00		0.12	1.00	
Satd. Flow (perm)	359	3139		196	3167	1417	238	3133		208	3114	
Volume (vph)	198	1196	74	135	780	196	75	1142	87	286	1218	153
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	202	1220	76	138	796	200	77	1165	89	292	1243	156
RTOR Reduction (vph)	0	5	0	0	0	31	0	6	0	0	11	0
Lane Group Flow (vph)	202	1291	0	138	796	169	77	1248	0	292	1388	0
Turn Type	pm+pt			pm+pt		pm+ov	Perm			pm+pt		
Protected Phases	1	6		5	2	7		8		7	4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	40.1	32.3		39.7	32.1	37.9	26.1	26.1		35.1	35.1	
Effective Green, g (s)	41.2	34.2		40.8	34.0	39.0	28.0	28.0		37.0	37.0	
Actuated g/C Ratio	0.46	0.38		0.45	0.38	0.43	0.31	0.31		0.41	0.41	
Clearance Time (s)	3.2	5.9		3.2	5.9	3.2	5.9	5.9		3.2	5.9	
Vehicle Extension (s)	3.0	4.6		3.0	4.7	3.0	4.7	4.7		3.0	4.7	
Lane Grp Cap (vph)	260	1193		194	1196	677	74	975		162	1280	
v/s Ratio Prot	c0.06	c0.41		0.05	0.25	0.01		0.40		c0.10	0.45	
v/s Ratio Perm	0.30			0.27		0.11	0.32			c0.64		
v/c Ratio	0.78	1.08		0.71	0.67	0.25	1.04	1.28		1.80	1.08	
Uniform Delay, d1	16.9	27.9		20.1	23.3	16.2	31.0	31.0		44.7	26.5	
Progression Factor	1.00	1.00		1.64	1.00	0.78	1.51	1.50		0.96	0.52	
Incremental Delay, d2	13.6	51.3		1.1	0.3	0.0	109.8	133.0		370.7	44.2	
Delay (s)	30.4	79.2		34.2	23.5	12.7	156.7	179.5		413.7	57.9	
Level of Service	C	E		C	C	B	F	F		F	E	
Approach Delay (s)		72.6			22.9			178.2			119.4	
Approach LOS		E			C			F			F	

Intersection Summary			
HCM Average Control Delay	101.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.75	1.00	1.00	0.65	1.00	0.98	
Flpb, ped/bikes	0.85	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1351	1632		3072	1667	1060	1583	3167	918	1485	3085	
Flt Permitted	0.55	1.00		0.95	1.00	1.00	0.11	1.00	1.00	0.20	1.00	
Satd. Flow (perm)	778	1632		3072	1667	1060	184	3167	918	312	3085	
Volume (vph)	19	438	25	147	344	124	21	969	185	8	1188	62
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	20	456	26	153	358	129	22	1009	193	8	1238	65
RTOR Reduction (vph)	0	2	0	0	0	21	0	0	0	0	4	0
Lane Group Flow (vph)	20	480	0	153	358	108	22	1009	193	8	1299	0
Confl. Peds. (#/hr)	152		159	159		152	117		165	165		117
Confl. Bikes (#/hr)			5			9			7			6
Turn Type	Perm			Prot		Perm	Perm		pm+ov	Perm		
Protected Phases		8		7	4			6	7		2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	20.2	20.2		10.0	34.2	34.2	46.2	46.2	56.2	46.2	46.2	
Effective Green, g (s)	21.0	21.0		10.0	35.0	35.0	47.0	47.0	57.0	47.0	47.0	
Actuated g/C Ratio	0.23	0.23		0.11	0.39	0.39	0.52	0.52	0.63	0.52	0.52	
Clearance Time (s)	4.8	4.8		4.0	4.8	4.8	4.8	4.8	4.0	4.8	4.8	
Vehicle Extension (s)	5.9	5.9		3.0	5.2	5.2	4.8	4.8	3.0	4.4	4.4	
Lane Grp Cap (vph)	182	381		341	648	412	96	1654	622	163	1611	
v/s Ratio Prot		c0.29		0.05	c0.21			0.32	0.03		c0.42	
v/s Ratio Perm	0.03					0.10	0.12		0.18	0.03		
v/c Ratio	0.11	1.26		0.45	0.55	0.26	0.23	0.61	0.31	0.05	0.81	
Uniform Delay, d1	27.1	34.5		37.4	21.4	18.7	11.7	15.1	7.5	10.5	17.7	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.25	0.22	0.23	0.37	0.78	
Incremental Delay, d2	1.2	136.2		0.9	3.4	1.5	0.5	0.2	0.0	0.1	0.4	
Delay (s)	28.4	170.7		38.4	24.8	20.3	3.4	3.5	1.7	4.0	14.3	
Level of Service	C	F		D	C	C	A	A	A	A	B	
Approach Delay (s)		165.1			27.1			3.2			14.2	
Approach LOS		F			C			A			B	

Intersection Summary			
HCM Average Control Delay	33.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.97		1.00	0.98		1.00	0.96		1.00	1.00	0.86
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1580	4317		1583	4415		1583	2972		1583	3167	1220
Flt Permitted	0.15	1.00		0.15	1.00		0.13	1.00		0.95	1.00	1.00
Satd. Flow (perm)	242	4317		242	4415		218	2972		1583	3167	1220
Volume (vph)	216	1971	336	190	1086	90	83	1205	185	143	1502	208
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	227	2075	354	200	1143	95	87	1268	195	151	1581	219
RTOR Reduction (vph)	0	26	0	0	10	0	0	13	0	0	0	103
Lane Group Flow (vph)	227	2403	0	200	1228	0	87	1450	0	151	1581	116
Confl. Peds. (#/hr)	152		159	159		152	117		165	165		117
Confl. Bikes (#/hr)			5			9			7			6
Turn Type	pm+pt			pm+pt			pm+pt			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					4
Actuated Green, G (s)	33.3	26.5		33.3	26.5		35.0	29.6		10.7	34.9	34.9
Effective Green, g (s)	33.5	27.5		33.5	27.5		35.2	30.6		9.9	35.9	35.9
Actuated g/C Ratio	0.37	0.31		0.37	0.31		0.39	0.34		0.11	0.40	0.40
Clearance Time (s)	3.2	5.0		3.2	5.0		3.2	5.0		3.2	5.0	5.0
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	179	1319		179	1349		155	1010		174	1263	487
v/s Ratio Prot	c0.08	c0.56		0.07	0.28		0.03	c0.49		c0.10	c0.50	
v/s Ratio Perm	0.39			0.34			0.19					0.09
v/c Ratio	1.27	1.82		1.12	0.91		0.56	1.44		0.87	1.25	0.24
Uniform Delay, d1	24.9	31.2		44.2	30.1		22.9	29.7		39.4	27.1	18.0
Progression Factor	1.29	1.20		1.00	1.00		1.06	0.83		0.83	1.51	2.79
Incremental Delay, d2	149.3	371.9		102.2	10.7		4.0	200.9		29.4	118.9	1.0
Delay (s)	181.5	409.5		146.4	40.7		28.2	225.5		62.1	159.8	51.0
Level of Service	F	F		F	D		C	F		E	F	D
Approach Delay (s)		390.0			55.4			214.4			140.0	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	226.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	130.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor			1.00	0.95	0.91	0.95		0.95		1.00	0.95	
Frpb, ped/bikes			0.98	1.00	0.98	0.97		0.99		1.00	1.00	
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		0.99	1.00	
Frt			0.86	1.00	0.92	0.85		0.98		1.00	1.00	
Flt Protected			1.00	0.95	0.98	1.00		1.00		0.95	1.00	
Satd. Flow (prot)			1412	1501	1338	1301		3077		1573	3167	
Flt Permitted			1.00	0.95	0.98	1.00		1.00		0.16	1.00	
Satd. Flow (perm)			1412	1501	1338	1301		3077		259	3167	
Volume (vph)	0	0	82	134	0	156	0	1123	153	177	1176	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	84	137	0	159	0	1146	156	181	1200	0
RTOR Reduction (vph)	0	0	79	0	48	86	0	9	0	0	0	0
Lane Group Flow (vph)	0	0	5	87	59	16	0	1293	0	181	1200	0
Confl. Peds. (#/hr)	10		1	1		10	18		29	29		18
Confl. Bikes (#/hr)			1			2			3			3
Turn Type			custom	Perm		Perm				Perm		
Protected Phases					3			2			2	
Permitted Phases			4	3		3				2		
Actuated Green, G (s)			4.6	13.1	13.1	13.1		57.9		57.9	57.9	
Effective Green, g (s)			5.5	14.0	14.0	14.0		58.5		58.5	58.5	
Actuated g/C Ratio			0.06	0.16	0.16	0.16		0.65		0.65	0.65	
Clearance Time (s)			4.9	4.9	4.9	4.9		4.6		4.6	4.6	
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)			86	233	208	202		2000		168	2059	
v/s Ratio Prot								0.42			0.38	
v/s Ratio Perm			c0.00	c0.06	0.04	0.01				c0.70		
v/c Ratio			0.06	0.37	0.28	0.08		0.65		1.08	0.58	
Uniform Delay, d1			39.8	34.1	33.6	32.5		9.5		15.8	8.9	
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.14	0.70	
Incremental Delay, d2			0.3	1.0	0.7	0.2		1.6		45.2	0.1	
Delay (s)			40.1	35.1	34.3	32.7		11.1		63.1	6.3	
Level of Service			D	D	C	C		B		E	A	
Approach Delay (s)		40.1			34.0			11.1			13.8	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.91		1.00	0.86			0.86	
Frt		0.98			0.96		1.00	1.00			1.00	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		4457			4370		1583	5733			5733	
Flt Permitted		1.00			1.00		0.17	1.00			1.00	
Satd. Flow (perm)		4457			4370		284	5733			5733	
Volume (vph)	0	1874	295	0	1202	431	159	1116	0	0	1471	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1912	301	0	1227	440	162	1139	0	0	1501	0
RTOR Reduction (vph)	0	22	0	0	65	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	2191	0	0	1602	0	162	1139	0	0	1501	0
Turn Type							Perm					
Protected Phases		6			6			2			2	
Permitted Phases							2					
Actuated Green, G (s)		22.1			22.1		24.5	24.5			24.5	
Effective Green, g (s)		23.0			23.0		23.5	23.5			23.5	
Actuated g/C Ratio		0.23			0.23		0.24	0.24			0.24	
Clearance Time (s)		4.9			4.9		3.0	3.0			3.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1025			1005		67	1347			1347	
v/s Ratio Prot		c0.49			0.37			0.20			0.26	
v/s Ratio Perm							c0.57					
v/c Ratio		2.14			1.59		2.42	0.85			1.11	
Uniform Delay, d1		38.5			38.5		38.2	36.5			38.2	
Progression Factor		0.70			1.00		1.00	1.00			0.69	
Incremental Delay, d2		512.4			272.2		681.0	6.7			52.6	
Delay (s)		539.2			310.7		719.2	43.2			79.2	
Level of Service		F			F		F	D			E	
Approach Delay (s)		539.2			310.7			127.4			79.2	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	298.6	HCM Level of Service	F
HCM Volume to Capacity ratio	2.28		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	53.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86	1.00		0.91	1.00		0.95		1.00	0.95	
Frt	1.00	1.00	0.85		1.00	0.85		1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1583	5733	1417		4550	1417		3165		1583	3142	
Flt Permitted	0.17	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	284	5733	1417		4550	1417		3165		1583	3142	
Volume (vph)	30	1370	34	0	1229	300	0	960	3	150	1175	64
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	1398	35	0	1254	306	0	980	3	153	1199	65
RTOR Reduction (vph)	0	0	27	0	0	234	0	0	0	0	4	0
Lane Group Flow (vph)	31	1398	8	0	1254	72	0	983	0	153	1260	0
Turn Type	Perm		Perm			Perm				Prot		
Protected Phases		2			2			8		7	4	
Permitted Phases	2		2			2						
Actuated Green, G (s)	24.5	24.5	24.5		24.5	24.5		31.0		5.0	31.0	
Effective Green, g (s)	23.5	23.5	23.5		23.5	23.5		32.5		5.0	32.5	
Actuated g/C Ratio	0.24	0.24	0.24		0.24	0.24		0.32		0.05	0.32	
Clearance Time (s)	3.0	3.0	3.0		3.0	3.0		5.5		4.0	5.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		5.0		3.0	4.0	
Lane Grp Cap (vph)	67	1347	333		1069	333		1029		79	1021	
v/s Ratio Prot		0.24			c0.28			0.31		c0.10	c0.40	
v/s Ratio Perm	0.11		0.01			0.05						
v/c Ratio	0.46	1.04	0.02		1.17	0.22		0.96		1.94	1.23	
Uniform Delay, d1	32.8	38.2	29.4		38.2	30.8		33.0		47.5	33.8	
Progression Factor	1.00	1.00	1.00		0.76	1.40		0.35		1.00	1.00	
Incremental Delay, d2	21.3	34.9	0.1		78.9	0.1		2.9		464.3	113.9	
Delay (s)	54.1	73.2	29.6		108.0	43.4		14.5		511.8	147.7	
Level of Service	D	E	C		F	D		B		F	F	
Approach Delay (s)		71.7			95.4			14.5			187.0	
Approach LOS		E			F			B			F	

Intersection Summary			
HCM Average Control Delay	98.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.99			0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4533		1583	4545		1583	3139			3050	
Flt Permitted	0.17	1.00		0.17	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	290	4533		290	4545		1583	3139			3050	
Volume (vph)	193	2152	56	94	1250	9	34	725	44	0	919	298
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	197	2196	57	96	1276	9	35	740	45	0	938	304
RTOR Reduction (vph)	0	2	0	0	1	0	0	5	0	0	31	0
Lane Group Flow (vph)	197	2251	0	96	1284	0	35	780	0	0	1211	0
Turn Type	Perm			Perm			Prot					
Protected Phases		6			6		3	8			4	
Permitted Phases	6			6								
Actuated Green, G (s)	22.1	22.1		22.1	22.1		5.0	31.0			31.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		5.0	32.5			32.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.05	0.32			0.32	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.0	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	5.0			4.0	
Lane Grp Cap (vph)	67	1043		67	1045		79	1020			991	
v/s Ratio Prot		0.50			0.28		c0.02	0.25			c0.40	
v/s Ratio Perm	c0.68			0.33								
v/c Ratio	2.94	2.16		1.43	1.23		0.44	0.76			1.22	
Uniform Delay, d1	38.5	38.5		38.5	38.5		46.1	30.3			33.8	
Progression Factor	1.00	1.00		0.69	0.68		1.00	1.00			0.27	
Incremental Delay, d2	912.1	524.3		202.5	103.8		3.9	5.5			100.8	
Delay (s)	950.6	562.8		229.1	130.2		50.1	35.8			109.7	
Level of Service	F	F		F	F		D	D			F	
Approach Delay (s)		593.9			137.0			36.4			109.7	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	307.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.82		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.5
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	3143		1583	3151		1583	3167	1417	1583	3167	1417
Flt Permitted	0.14	1.00		0.13	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	234	3143		222	3151		1583	3167	1417	1583	3167	1417
Volume (vph)	80	1392	72	41	820	29	97	692	187	79	924	80
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	83	1450	75	43	854	30	101	721	195	82	962	83
RTOR Reduction (vph)	0	4	0	0	3	0	0	0	61	0	0	46
Lane Group Flow (vph)	83	1521	0	43	881	0	101	721	134	82	962	37
Turn Type	Perm			Perm			Prot		Perm	Prot		Perm
Protected Phases		6			2		3	8		7	4	
Permitted Phases	6			2					8			4
Actuated Green, G (s)	29.0	29.0		29.0	29.0		7.8	39.3	39.3	7.7	39.2	39.2
Effective Green, g (s)	30.0	30.0		30.0	30.0		7.8	40.3	40.3	7.7	40.2	40.2
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.09	0.45	0.45	0.09	0.45	0.45
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	78	1048		74	1050		137	1418	635	135	1415	633
v/s Ratio Prot		c0.48			0.28		c0.06	0.23		0.05	c0.30	
v/s Ratio Perm	0.36			0.19					0.09			0.03
v/c Ratio	1.06	1.45		0.58	0.84		0.74	0.51	0.21	0.61	0.68	0.06
Uniform Delay, d1	30.0	30.0		24.8	27.8		40.1	17.8	15.2	39.7	19.8	14.1
Progression Factor	0.87	0.85		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	49.1	203.6		29.2	8.1		18.5	1.3	0.8	7.5	2.7	0.2
Delay (s)	75.1	229.1		54.0	35.8		58.6	19.1	15.9	47.2	22.4	14.3
Level of Service	E	F		D	D		E	B	B	D	C	B
Approach Delay (s)		221.2			36.7			22.4			23.6	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM Average Control Delay	93.8	HCM Level of Service	F
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.99			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1583	4506		1583	4485			3132			3120	
Flt Permitted	0.14	1.00		0.09	1.00			1.00			0.86	
Satd. Flow (perm)	241	4506		142	4485			3132			2687	
Volume (vph)	179	1882	128	167	1177	123	0	916	73	22	814	82
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	183	1920	131	170	1201	126	0	935	74	22	831	84
RTOR Reduction (vph)	0	8	0	0	13	0	0	3	0	0	9	0
Lane Group Flow (vph)	183	2043	0	170	1314	0	0	1006	0	0	928	0
Turn Type	Perm			Perm						Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2						4		
Actuated Green, G (s)	45.1	45.1		45.1	45.1			33.2			33.2	
Effective Green, g (s)	46.8	46.8		46.8	46.8			35.2			35.2	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.39			0.39	
Clearance Time (s)	5.7	5.7		5.7	5.7			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	125	2343		74	2332			1225			1051	
v/s Ratio Prot		0.45			0.29			0.32				
v/s Ratio Perm	0.76			c1.19							c0.35	
v/c Ratio	1.46	0.87		2.30	0.56			0.82			0.88	
Uniform Delay, d1	21.6	19.0		21.6	14.7			24.6			25.5	
Progression Factor	0.42	0.36		0.66	0.29			1.00			1.00	
Incremental Delay, d2	212.8	0.5		609.5	0.6			4.5			9.0	
Delay (s)	221.8	7.3		623.7	4.9			29.1			34.4	
Level of Service	F	A		F	A			C			C	
Approach Delay (s)		24.9			75.2			29.1			34.4	
Approach LOS		C			E			C			C	

Intersection Summary			
HCM Average Control Delay	40.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.69		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4479		1583	4490		1583	4361		1583	4550	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	222	4479		222	4490		1583	4361		1583	4550	1417
Volume (vph)	294	1677	194	342	1140	110	98	873	334	269	1628	244
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	306	1747	202	356	1188	115	102	909	348	280	1696	254
RTOR Reduction (vph)	0	16	0	0	13	0	0	25	0	0	0	97
Lane Group Flow (vph)	306	1933	0	356	1290	0	102	1232	0	280	1696	157
Turn Type	Perm			Perm			Prot			Prot		Perm
Protected Phases		4			8		5			1	6	
Permitted Phases	4			8				2				6
Actuated Green, G (s)	28.0	28.0		28.0	28.0		8.8	32.0		15.0	37.2	37.2
Effective Green, g (s)	30.0	30.0		30.0	30.0		9.8	33.0		15.0	38.2	38.2
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.11	0.37		0.17	0.42	0.42
Clearance Time (s)	6.0	6.0		6.0	6.0		5.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	74	1493		74	1497		172	1599		264	1931	601
v/s Ratio Prot		0.43			0.29		0.06			c0.18	c0.37	
v/s Ratio Perm	1.38			c1.60				0.28				0.11
v/c Ratio	4.14	1.29		4.81	0.86		0.59	0.77		1.06	0.88	0.26
Uniform Delay, d1	30.0	30.0		30.0	28.1		38.2	25.2		37.5	23.8	16.8
Progression Factor	1.00	1.00		0.45	0.40		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1442.2	137.7		1742.3	6.2		3.6	3.7		72.3	6.1	1.1
Delay (s)	1472.2	167.7		1755.9	17.3		41.8	28.8		109.8	29.8	17.8
Level of Service	F	F		F	B		D	C		F	C	B
Approach Delay (s)		344.7			390.4			29.8			38.5	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM Average Control Delay	206.8	HCM Level of Service	F
HCM Volume to Capacity ratio	2.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	119.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.92
Flpb, ped/bikes	0.99	1.00		0.99	1.00			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	1.00
Satd. Flow (prot)	1560	4539		1575	4510			1585			1650	1306
Flt Permitted	0.14	1.00		0.07	1.00			0.96			0.93	1.00
Satd. Flow (perm)	225	4539		118	4510			1527			1551	1306
Volume (vph)	80	1851	14	25	1378	39	25	182	50	23	155	196
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	1969	15	27	1466	41	27	194	53	24	165	209
RTOR Reduction (vph)	0	1	0	0	3	0	0	8	0	0	0	35
Lane Group Flow (vph)	85	1983	0	27	1504	0	0	266	0	0	189	174
Confl. Peds. (#/hr)	67		64	64		67	46		45	45		46
Confl. Bikes (#/hr)			7			5			5			6
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	69.0	69.0		69.0	69.0			25.0			25.0	25.0
Effective Green, g (s)	68.0	68.0		68.0	68.0			24.0			24.0	24.0
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.24			0.24	0.24
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	3.0
Lane Grp Cap (vph)	153	3087		80	3067			366			372	313
v/s Ratio Prot		c0.44			0.33							
v/s Ratio Perm	0.38			0.23				c0.17			0.12	0.13
v/c Ratio	0.56	0.64		0.34	0.49			0.73			0.51	0.56
Uniform Delay, d1	8.2	9.1		6.6	7.7			35.0			32.9	33.3
Progression Factor	0.68	0.32		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	1.3	0.1		11.1	0.6			11.9			4.9	7.0
Delay (s)	6.9	3.0		17.7	8.2			46.8			37.8	40.3
Level of Service	A	A		B	A			D			D	D
Approach Delay (s)		3.2			8.4			46.8			39.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.75	1.00	0.92		1.00	0.96		1.00	0.95	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1574	3167	1060	1583	2814		3072	4331		3072	4204	
Flt Permitted	0.15	1.00	1.00	0.11	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	244	3167	1060	185	2814		3072	4331		3072	4204	
Volume (vph)	322	1025	116	263	556	182	63	1819	155	158	1386	252
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	343	1090	123	280	591	194	67	1935	165	168	1474	268
RTOR Reduction (vph)	0	0	71	0	27	0	0	8	0	0	21	0
Lane Group Flow (vph)	343	1090	52	280	758	0	67	2092	0	168	1721	0
Confl. Peds. (#/hr)	211		160	160		211	310		128	128		310
Confl. Bikes (#/hr)			10			8			9			7
Turn Type	pm+pt		Perm	pm+pt			Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								
Actuated Green, G (s)	49.6	34.6	34.6	49.6	34.6		9.6	43.4		9.6	43.4	
Effective Green, g (s)	50.0	36.0	36.0	50.0	36.0		9.6	44.4		9.6	44.4	
Actuated g/C Ratio	0.42	0.30	0.30	0.42	0.30		0.08	0.37		0.08	0.37	
Clearance Time (s)	3.0	5.4	5.4	3.0	5.4		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	257	950	318	240	844		246	1602		246	1555	
v/s Ratio Prot	c0.16	0.34		0.14	0.27		0.02	c0.48		0.05	c0.41	
v/s Ratio Perm	c0.40		0.05	0.35								
v/c Ratio	1.33	1.15	0.16	1.17	0.90		0.27	1.31		0.68	1.11	
Uniform Delay, d1	28.9	42.0	30.9	35.1	40.3		51.9	37.8		53.7	37.8	
Progression Factor	1.41	0.97	1.33	1.00	1.00		0.97	0.93		1.19	0.43	
Incremental Delay, d2	161.6	72.0	0.1	110.6	14.4		0.4	141.0		0.7	49.2	
Delay (s)	202.4	113.0	41.2	145.7	54.6		50.8	175.9		64.4	65.2	
Level of Service	F	F	D	F	D		D	F		E	E	
Approach Delay (s)		127.0			78.6			172.1			65.2	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM Average Control Delay	116.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		0.91		1.00	0.86	0.86	1.00		1.00	0.97	
Frt	1.00		1.00		1.00	0.96	0.85	1.00		0.85	1.00	
Flt Protected	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (prot)	1583		4538		1583	4144	1218	1583		1417	3072	
Flt Permitted	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (perm)	1583		4538		1583	4144	1218	1583		1417	3072	
Volume (vph)	22	0	1214	22	14	903	878	30	0	46	1040	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	23	0	1291	23	15	961	934	32	0	49	1106	0
RTOR Reduction (vph)	0	0	1	0	0	39	311	0	0	46	0	0
Lane Group Flow (vph)	23	0	1313	0	15	1228	317	32	0	3	1106	0
Turn Type	Prot				Prot		Perm	Prot		custom	custom	
Protected Phases	5		2		1	6		7				
Permitted Phases							6			7	8	
Actuated Green, G (s)	10.8		67.2		3.2	58.7	58.7	6.8		6.8	21.0	
Effective Green, g (s)	12.7		68.2		5.1	60.6	60.6	7.8		7.8	22.9	
Actuated g/C Ratio	0.11		0.57		0.04	0.51	0.51	0.06		0.06	0.19	
Clearance Time (s)	5.9		5.0		5.9	5.9	5.9	5.0		5.0	5.9	
Vehicle Extension (s)	3.0		3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	168		2579		67	2093	615	103		92	586	
v/s Ratio Prot	0.01		c0.29		0.01	c0.30		c0.02				
v/s Ratio Perm							0.26			0.00	c0.36	
v/c Ratio	0.14		0.51		0.22	0.59	0.52	0.31		0.03	1.89	
Uniform Delay, d1	48.7		15.7		55.5	20.9	19.9	53.5		52.6	48.5	
Progression Factor	1.29		1.62		0.84	1.72	9.78	1.00		1.00	0.86	
Incremental Delay, d2	0.0		0.1		0.9	0.7	1.7	1.7		0.2	402.3	
Delay (s)	63.1		25.5		47.3	36.6	196.0	55.3		52.7	443.8	
Level of Service	E		C		D	D	F	E		D	F	
Approach Delay (s)			26.1			89.1			53.7			416.2
Approach LOS			C			F			D			F

Intersection Summary			
HCM Average Control Delay	155.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	78
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	83
RTOR Reduction (vph)	48
Lane Group Flow (vph)	35
Turn Type	custom
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	21.0
Effective Green, g (s)	22.9
Actuated g/C Ratio	0.19
Clearance Time (s)	5.9
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	270
v/s Ratio Prot	
v/s Ratio Perm	0.02
v/c Ratio	0.13
Uniform Delay, d1	40.3
Progression Factor	1.17
Incremental Delay, d2	0.5
Delay (s)	47.5
Level of Service	D
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor		0.86	1.00		0.86	1.00	1.00	0.91			0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00			0.98	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)		5733	1417		5733	1417	1583	4549			4448	
Flt Permitted		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)		5733	1417		5733	1417	1583	4549			4448	
Volume (vph)	0	1662	490	0	1241	384	261	1779	2	0	1648	289
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1713	505	0	1279	396	269	1834	2	0	1699	298
RTOR Reduction (vph)	0	0	4	0	0	15	0	0	0	0	15	0
Lane Group Flow (vph)	0	1713	501	0	1279	381	269	1836	0	0	1982	0
Turn Type			pm+ov			Perm	Prot					
Protected Phases		8	1		4		1	6			2	
Permitted Phases		8	8			4						
Actuated Green, G (s)		34.2	49.2		34.2	34.2	15.0	73.8			53.3	
Effective Green, g (s)		36.2	52.7		36.2	36.2	16.5	75.8			55.3	
Actuated g/C Ratio		0.30	0.44		0.30	0.30	0.14	0.63			0.46	
Clearance Time (s)		6.0	5.5		6.0	6.0	5.5	6.0			6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)		1729	670		1729	427	218	2873			2050	
v/s Ratio Prot		c0.30	0.10		0.22		c0.17	0.40			c0.45	
v/s Ratio Perm			0.25			0.27						
v/c Ratio		0.99	0.75		0.74	0.89	1.23	0.64			0.97	
Uniform Delay, d1		41.7	28.1		37.7	40.0	51.8	13.7			31.5	
Progression Factor		1.49	0.99		1.00	1.00	1.09	0.77			0.36	
Incremental Delay, d2		4.7	0.4		2.9	23.6	130.1	0.8			4.9	
Delay (s)		67.0	28.1		40.6	63.7	186.4	11.2			16.1	
Level of Service		E	C		D	E	F	B			B	
Approach Delay (s)		58.1			46.0			33.6			16.1	
Approach LOS		E			D			C			B	

Intersection Summary			
HCM Average Control Delay	38.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.97			0.97		1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1584			1600		1583	4522		1583	4505	
Flt Permitted		0.83			0.93		0.07	1.00		0.08	1.00	
Satd. Flow (perm)		1346			1494		122	4522		130	4505	
Volume (vph)	211	176	109	10	41	17	60	1811	78	118	1803	127
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	215	180	111	10	42	17	61	1848	80	120	1840	130
RTOR Reduction (vph)	0	8	0	0	10	0	0	4	0	0	6	0
Lane Group Flow (vph)	0	498	0	0	59	0	61	1924	0	120	1964	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0		83.4	83.4		83.4	83.4	
Effective Green, g (s)		29.0			29.0		83.0	83.0		83.0	83.0	
Actuated g/C Ratio		0.24			0.24		0.69	0.69		0.69	0.69	
Clearance Time (s)		3.0			3.0		3.6	3.6		3.6	3.6	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		325			361		84	3128		90	3116	
v/s Ratio Prot								0.43			0.44	
v/s Ratio Perm		c0.37			0.04		0.50			c0.92		
v/c Ratio		1.53			0.16		0.73	0.62		1.33	0.63	
Uniform Delay, d1		45.5			35.9		11.5	9.9		18.5	10.1	
Progression Factor		1.00			1.00		1.00	1.00		0.51	0.35	
Incremental Delay, d2		254.1			1.0		42.3	0.9		176.1	0.4	
Delay (s)		299.6			36.9		53.8	10.8		185.5	3.9	
Level of Service		F			D		D	B		F	A	
Approach Delay (s)		299.6			36.9			12.2			14.3	
Approach LOS		F			D			B			B	

Intersection Summary			
HCM Average Control Delay	44.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4295		1583	4491		1583	4480		1583	4407	
Flt Permitted	0.11	1.00		0.11	1.00		0.12	1.00		0.12	1.00	
Satd. Flow (perm)	190	4295		190	4491		196	4480		196	4407	
Volume (vph)	215	1723	334	193	1400	75	261	1737	101	153	1665	189
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	229	1833	355	205	1489	80	278	1848	107	163	1771	201
RTOR Reduction (vph)	0	29	0	0	6	0	0	7	0	0	14	0
Lane Group Flow (vph)	229	2159	0	205	1563	0	278	1948	0	163	1958	0
Confl. Peds. (#/hr)	63		133	133		63	103		84	84		103
Confl. Bikes (#/hr)			6			13			4			11
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	44.5	35.5		44.5	35.5		42.0	34.0		42.0	34.0	
Effective Green, g (s)	43.0	35.0		43.0	35.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio	0.43	0.35		0.43	0.35		0.41	0.34		0.41	0.34	
Clearance Time (s)	3.0	3.5		3.0	3.5		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	193	1503		193	1572		177	1523		177	1498	
v/s Ratio Prot	c0.09	c0.50		0.08	0.35		c0.11	0.43		0.06	0.44	
v/s Ratio Perm	0.41			0.37			c0.53			0.31		
v/c Ratio	1.19	1.44		1.06	0.99		1.57	1.28		0.92	1.31	
Uniform Delay, d1	23.5	32.5		48.2	32.4		48.7	33.0		48.2	33.0	
Progression Factor	0.74	0.95		1.56	0.98		1.89	0.79		1.00	1.00	
Incremental Delay, d2	114.7	199.3		78.4	20.1		272.8	128.9		44.8	143.2	
Delay (s)	131.9	230.3		153.6	51.9		365.0	154.8		93.1	176.2	
Level of Service	F	F		F	D		F	F		F	F	
Approach Delay (s)		221.0			63.7			181.0			169.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	165.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	129.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.96			1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1511			1589		1583	4484		1583	4496	
Flt Permitted		0.93			0.33		0.06	1.00		0.06	1.00	
Satd. Flow (perm)		1419			531		104	4484		104	4496	
Volume (vph)	56	263	203	116	106	19	57	1989	116	39	1975	60
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	59	277	214	122	112	20	60	2094	122	41	2079	63
RTOR Reduction (vph)	0	6	0	0	3	0	0	6	0	0	3	0
Lane Group Flow (vph)	0	544	0	0	251	0	60	2210	0	41	2139	0
Confl. Peds. (#/hr)	29		64	64		29	102		42	42		102
Confl. Bikes (#/hr)			4			5			5			15
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		64.2	64.2		64.2	64.2	
Effective Green, g (s)		28.0			28.0		64.0	64.0		64.0	64.0	
Actuated g/C Ratio		0.28			0.28		0.64	0.64		0.64	0.64	
Clearance Time (s)		3.0			3.0		3.8	3.8		3.8	3.8	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		397			149		67	2870		67	2877	
v/s Ratio Prot								0.49			0.48	
v/s Ratio Perm		0.38			c0.47		c0.58			0.39		
v/c Ratio		1.37			1.69		0.90	0.77		0.61	0.74	
Uniform Delay, d1		36.0			36.0		15.2	12.8		10.7	12.4	
Progression Factor		1.00			1.00		1.00	1.00		1.44	1.28	
Incremental Delay, d2		182.2			335.7		83.2	2.1		3.7	0.2	
Delay (s)		218.2			371.7		98.3	14.8		19.0	16.0	
Level of Service		F			F		F	B		B	B	
Approach Delay (s)		218.2			371.7			17.0			16.1	
Approach LOS		F			F			B			B	

Intersection Summary			
HCM Average Control Delay	54.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4501		1583	4528		1583	4513		1583	4450	
Flt Permitted	0.15	1.00		0.13	1.00		0.12	1.00		0.11	1.00	
Satd. Flow (perm)	256	4501		222	4528		196	4513		187	4450	
Volume (vph)	293	2247	173	149	1557	52	99	1774	102	238	1678	289
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	315	2416	186	160	1674	56	106	1908	110	256	1804	311
RTOR Reduction (vph)	0	10	0	0	4	0	0	7	0	0	26	0
Lane Group Flow (vph)	315	2592	0	160	1726	0	106	2011	0	256	2089	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.0	25.0		36.0	36.0		38.4	33.0		41.6	34.6	
Effective Green, g (s)	26.0	26.0		37.0	37.0		39.4	34.0		42.6	35.6	
Actuated g/C Ratio	0.29	0.29		0.41	0.41		0.44	0.38		0.47	0.40	
Clearance Time (s)	5.0	5.0		3.5	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1300		197	1862		169	1705		197	1760	
v/s Ratio Prot		0.58		0.06	c0.38		0.04	0.45		c0.10	0.47	
v/s Ratio Perm	c1.23			0.27			0.24			c0.51		
v/c Ratio	4.26	1.99		0.81	0.93		0.63	1.18		1.30	1.19	
Uniform Delay, d1	32.0	32.0		42.6	25.2		21.7	28.0		43.7	27.2	
Progression Factor	1.37	1.38		1.00	1.00		1.42	0.44		1.00	1.00	
Incremental Delay, d2	1468.4	447.5		21.9	9.5		1.8	82.5		166.8	90.2	
Delay (s)	1512.2	491.6		64.4	34.7		32.6	94.8		210.5	117.4	
Level of Service	F	F		E	C		C	F		F	F	
Approach Delay (s)		601.8			37.2			91.7			127.4	
Approach LOS		F			D			F			F	

Intersection Summary			
HCM Average Control Delay	249.7	HCM Level of Service	F
HCM Volume to Capacity ratio	2.35		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	131.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3069		1583	3109		1583	4477		1583	4496	
Flt Permitted	0.27	1.00		0.13	1.00		0.12	1.00		0.14	1.00	
Satd. Flow (perm)	450	3069		221	3109		202	4477		230	4496	
Volume (vph)	168	1172	305	146	774	108	338	1735	208	235	1750	152
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	181	1260	328	157	832	116	363	1866	224	253	1882	163
RTOR Reduction (vph)	0	26	0	0	3	0	0	17	0	0	11	0
Lane Group Flow (vph)	181	1562	0	157	945	0	363	2073	0	253	2034	0
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		8		7	4		1	6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	25.2	25.2		38.0	38.0		42.0	42.0		28.0	28.0	
Effective Green, g (s)	26.2	26.2		39.0	39.0		43.0	43.0		29.0	29.0	
Actuated g/C Ratio	0.29	0.29		0.43	0.43		0.48	0.48		0.32	0.32	
Clearance Time (s)	5.0	5.0		3.0	5.0		4.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	131	893		229	1347		250	2139		74	1449	
v/s Ratio Prot		c0.51		0.07	c0.30		c0.16	0.46			0.45	
v/s Ratio Perm	0.40			0.23			0.53			c1.10		
v/c Ratio	1.38	1.75		0.69	0.70		1.45	0.97		3.42	1.40	
Uniform Delay, d1	31.9	31.9		40.7	20.8		42.2	22.9		30.5	30.5	
Progression Factor	1.00	1.00		1.79	1.76		1.00	1.00		0.81	0.81	
Incremental Delay, d2	212.0	342.0		5.7	2.1		224.4	13.5		1091.6	182.1	
Delay (s)	243.9	373.9		78.5	38.7		266.6	36.3		1116.4	206.8	
Level of Service	F	F		E	D		F	D		F	F	
Approach Delay (s)		360.6			44.4			70.4			307.0	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM Average Control Delay	205.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.25		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	132.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	0.97		1.00	0.98	
Flpb, ped/bikes	0.96	1.00		0.99	1.00		1.00	1.00		0.98	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1519	3056		1566	3004		1583	2982		1552	3050	
Flt Permitted	0.24	1.00		0.12	1.00		0.09	1.00		0.16	1.00	
Satd. Flow (perm)	380	3056		193	3004		149	2982		267	3050	
Volume (vph)	167	1048	158	27	726	127	86	737	190	204	1020	111
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	172	1080	163	28	748	131	89	760	196	210	1052	114
RTOR Reduction (vph)	0	9	0	0	12	0	0	19	0	0	7	0
Lane Group Flow (vph)	172	1234	0	28	867	0	89	937	0	210	1159	0
Confl. Peds. (#/hr)	100		100	100		100	100		100	100		100
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	59.6	59.6		59.6	59.6		49.1	49.1		49.1	49.1	
Effective Green, g (s)	61.5	61.5		61.5	61.5		50.5	50.5		50.5	50.5	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	195	1566		99	1540		63	1255		112	1284	
v/s Ratio Prot		0.40			0.29			0.31			0.38	
v/s Ratio Perm	c0.45			0.14			0.60			c0.79		
v/c Ratio	0.88	0.79		0.28	0.56		1.41	0.75		1.88	0.90	
Uniform Delay, d1	26.0	23.9		16.7	20.0		34.8	29.3		34.8	32.5	
Progression Factor	1.00	1.00		0.60	0.59		0.93	0.93		1.00	1.00	
Incremental Delay, d2	39.6	4.1		2.9	0.6		247.1	3.4		425.6	10.5	
Delay (s)	65.6	28.0		12.9	12.3		279.6	30.6		460.4	42.9	
Level of Service	E	C		B	B		F	C		F	D	
Approach Delay (s)		32.6			12.4			51.8			106.7	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM Average Control Delay	54.4	HCM Level of Service	D
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.98			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1583	4533		1583	4542			1608			1637	
Flt Permitted	0.08	1.00		0.06	1.00			0.76			0.98	
Satd. Flow (perm)	134	4533		100	4542			1242			1614	
Volume (vph)	46	2054	54	71	1737	21	43	103	31	14	243	33
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	49	2209	58	76	1868	23	46	111	33	15	261	35
RTOR Reduction (vph)	0	3	0	0	1	0	0	8	0	0	5	0
Lane Group Flow (vph)	49	2264	0	76	1890	0	0	183	0	0	307	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.0	68.0		68.0	68.0			26.0			26.0	
Effective Green, g (s)	67.0	67.0		67.0	67.0			25.0			25.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.25			0.25	
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	90	3037		67	3043			311			404	
v/s Ratio Prot		0.50			0.42							
v/s Ratio Perm	0.37			c0.76				0.15			c0.19	
v/c Ratio	0.54	0.75		1.13	0.62			0.59			0.76	
Uniform Delay, d1	8.6	10.9		16.5	9.3			33.0			34.7	
Progression Factor	0.57	0.42		0.82	0.46			1.00			1.00	
Incremental Delay, d2	2.1	0.2		76.6	0.1			7.9			12.6	
Delay (s)	7.1	4.7		90.1	4.4			40.8			47.3	
Level of Service	A	A		F	A			D			D	
Approach Delay (s)		4.8			7.7			40.8			47.3	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	4550	1417	1583	1667	1417	1583	1645	
Flt Permitted	0.27	1.00	1.00	0.27	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	444	3167	1417	444	4550	1417	1583	1667	1417	1583	1645	
Volume (vph)	130	969	164	111	998	58	91	690	34	171	674	63
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	138	1031	174	118	1062	62	97	734	36	182	717	67
RTOR Reduction (vph)	0	0	131	0	0	47	0	0	5	0	6	0
Lane Group Flow (vph)	138	1031	44	118	1062	16	97	734	31	182	778	0
Turn Type	Perm		Perm	Perm		Perm	Prot		Perm	Prot		
Protected Phases		4			4		1	2		1	6	
Permitted Phases	4		4	4		4			2			
Actuated Green, G (s)	14.0	14.0	14.0	14.0	14.0	14.0	4.0	28.2	28.2	4.0	28.2	
Effective Green, g (s)	15.0	15.0	15.0	15.0	15.0	15.0	4.0	29.0	29.0	4.0	29.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.48	0.48	0.07	0.48	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.8	4.8	4.0	4.8	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	792	354	111	1138	354	106	806	685	106	795	
v/s Ratio Prot		c0.33			0.23		0.06	0.44		c0.11	c0.47	
v/s Ratio Perm	0.31		0.03	0.27		0.01			0.02			
v/c Ratio	1.24	1.30	0.12	1.06	0.93	0.04	0.92	0.91	0.05	1.72	0.98	
Uniform Delay, d1	22.5	22.5	17.4	22.5	22.0	17.1	27.8	14.3	8.2	28.0	15.2	
Progression Factor	1.00	1.00	1.00	1.78	1.72	2.29	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	164.6	145.0	0.7	99.2	13.7	0.2	60.6	16.2	0.1	359.2	27.2	
Delay (s)	187.1	167.5	18.1	139.3	51.6	39.2	88.4	30.5	8.3	387.2	42.4	
Level of Service	F	F	B	F	D	D	F	C	A	F	D	
Approach Delay (s)		150.1			59.3			36.1			107.4	
Approach LOS		F			E			D			F	

Intersection Summary			
HCM Average Control Delay	92.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4489		1583	4533		1583	3060		1583	3100	
Flt Permitted	0.10	1.00		0.10	1.00		0.13	1.00		0.17	1.00	
Satd. Flow (perm)	161	4489		161	4533		218	3060		279	3100	
Volume (vph)	147	2036	200	192	1660	43	155	598	173	73	723	117
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	152	2099	206	198	1711	44	160	616	178	75	745	121
RTOR Reduction (vph)	0	12	0	0	3	0	0	26	0	0	13	0
Lane Group Flow (vph)	152	2293	0	198	1752	0	160	768	0	75	853	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.4	42.4		50.4	42.4		39.6	31.6		35.6	29.6	
Effective Green, g (s)	48.4	41.4		48.4	41.4		37.6	30.6		33.6	28.6	
Actuated g/C Ratio	0.48	0.41		0.48	0.41		0.38	0.31		0.34	0.29	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	177	1858		177	1877		178	936		159	887	
v/s Ratio Prot	0.06	c0.51		c0.08	0.39		c0.06	0.25		0.02	0.28	
v/s Ratio Perm	0.35			0.46			c0.28			0.14		
v/c Ratio	0.86	1.23		1.12	0.93		0.90	0.82		0.47	0.96	
Uniform Delay, d1	20.5	29.3		48.7	28.0		24.8	32.2		24.4	35.2	
Progression Factor	1.81	1.45		1.63	1.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.4	107.2		95.4	8.3		38.9	8.0		0.8	22.3	
Delay (s)	50.6	149.8		174.7	56.7		63.7	40.2		25.2	57.4	
Level of Service	D	F		F	E		E	D		C	E	
Approach Delay (s)		143.7			68.7			44.1			54.9	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM Average Control Delay	92.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	110.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4533		1583	4527		1583	3066		1583	3020	
Flt Permitted	0.11	1.00		0.10	1.00		0.15	1.00		0.17	1.00	
Satd. Flow (perm)	183	4533		172	4527		257	3066		282	3020	
Volume (vph)	82	2381	60	433	1377	47	183	856	230	62	689	308
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	87	2533	64	461	1465	50	195	911	245	66	733	328
RTOR Reduction (vph)	0	3	0	0	4	0	0	26	0	0	57	0
Lane Group Flow (vph)	87	2594	0	461	1511	0	195	1130	0	66	1004	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	43.1	37.4		47.7	39.7		34.9	26.9		30.3	24.6	
Effective Green, g (s)	41.1	36.4		45.7	38.7		32.9	25.9		28.3	23.6	
Actuated g/C Ratio	0.46	0.40		0.51	0.43		0.37	0.29		0.31	0.26	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	157	1833		197	1947		197	882		157	792	
v/s Ratio Prot	0.03	0.57		c0.18	0.33		c0.08	c0.37		0.02	0.33	
v/s Ratio Perm	0.22			c1.00			0.28			0.11		
v/c Ratio	0.55	1.42		2.34	0.78		0.99	1.28		0.42	1.27	
Uniform Delay, d1	16.1	26.8		43.7	21.9		43.6	32.0		25.2	33.2	
Progression Factor	1.00	1.00		1.45	0.71		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	190.1		608.4	1.1		60.4	135.4		0.7	130.5	
Delay (s)	18.5	216.9		671.6	16.6		104.0	167.5		25.8	163.7	
Level of Service	B	F		F	B		F	F		C	F	
Approach Delay (s)		210.5			169.4			158.3			155.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	180.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	136.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.99			0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4498			4521		1583	1667	1417	1583	3117	
Flt Permitted	0.09	1.00			1.00		0.20	1.00	1.00	0.32	1.00	
Satd. Flow (perm)	149	4498			4521		332	1667	1417	530	3117	
Volume (vph)	188	2089	173	0	1863	84	142	387	46	25	583	69
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	200	2222	184	0	1982	89	151	412	49	27	620	73
RTOR Reduction (vph)	0	8	0	0	5	0	0	0	32	0	9	0
Lane Group Flow (vph)	200	2398	0	0	2066	0	151	412	17	27	684	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	51.8	51.8			41.8		42.2	35.5	35.5	35.9	32.2	
Effective Green, g (s)	50.8	50.8			40.8		40.5	34.5	34.5	33.9	31.2	
Actuated g/C Ratio	0.51	0.51			0.41		0.40	0.34	0.34	0.34	0.31	
Clearance Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Vehicle Extension (s)	2.0	5.0			5.0		2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	162	2285			1845		210	575	489	208	973	
v/s Ratio Prot	0.07	c0.53			0.46		c0.04	0.25		0.00	0.22	
v/s Ratio Perm	c0.55						c0.25		0.01	0.04		
v/c Ratio	1.23	1.05			1.12		0.72	0.72	0.03	0.13	0.70	
Uniform Delay, d1	25.2	24.6			29.6		22.0	28.5	21.7	23.0	30.3	
Progression Factor	1.23	1.27			1.78		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	143.5	32.4			57.7		9.4	7.5	0.1	0.1	4.2	
Delay (s)	174.4	63.6			110.4		31.4	36.0	21.8	23.1	34.6	
Level of Service	F	E			F		C	D	C	C	C	
Approach Delay (s)		72.1			110.4			33.7			34.1	
Approach LOS		E			F			C			C	

Intersection Summary			
HCM Average Control Delay	76.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	2232		1118	2222		1118	2182		1118	2213	
Flt Permitted	0.07	1.00		0.07	1.00		0.43	1.00		0.29	1.00	
Satd. Flow (perm)	77	2232		77	2222		508	2182		345	2213	
Volume (vph)	13	2018	21	60	1751	72	48	409	77	100	326	23
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	13	2080	22	62	1805	74	49	422	79	103	336	24
RTOR Reduction (vph)	0	1	0	0	3	0	0	13	0	0	6	0
Lane Group Flow (vph)	13	2101	0	62	1876	0	49	488	0	103	354	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	60.5	60.5		60.5	60.5		20.8	20.8		20.8	20.8	
Effective Green, g (s)	61.0	61.0		61.0	61.0		21.0	21.0		21.0	21.0	
Actuated g/C Ratio	0.68	0.68		0.68	0.68		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2		4.2	4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	52	1513		52	1506		119	509		81	516	
v/s Ratio Prot		c0.94			0.84			0.22			0.16	
v/s Ratio Perm	0.17			0.80			0.10			c0.30		
v/c Ratio	0.25	1.39		1.19	1.25		0.41	0.96		1.27	0.69	
Uniform Delay, d1	5.6	14.5		14.5	14.5		29.3	34.1		34.5	31.5	
Progression Factor	0.42	0.34		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.0	175.3		186.3	116.3		10.2	30.9		189.4	7.2	
Delay (s)	3.4	180.1		200.8	130.8		39.5	64.9		223.9	38.7	
Level of Service	A	F		F	F		D	E		F	D	
Approach Delay (s)		179.1			133.0			62.7			79.9	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM Average Control Delay	139.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	129.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			0.95	
Frpb, ped/bikes		0.99						0.99			1.00	
Flpb, ped/bikes		1.00						1.00			0.99	
Frt		0.98						0.98			1.00	
Flt Protected		0.99						1.00			0.99	
Satd. Flow (prot)		3036						3072			3125	
Flt Permitted		0.99						1.00			0.82	
Satd. Flow (perm)		3036						3072			2593	
Volume (vph)	79	393	76	0	0	0	0	331	51	71	382	0
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)	86	427	83	0	0	0	0	360	55	77	415	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	584	0	0	0	0	0	394	0	0	492	0
Confl. Peds. (#/hr)	5		38				63		59	59		63
Confl. Bikes (#/hr)			5						1			1
Turn Type	Perm									Perm		
Protected Phases		2						8			4	
Permitted Phases	2									4		
Actuated Green, G (s)		37.0						17.0			17.0	
Effective Green, g (s)		36.0						16.0			16.0	
Actuated g/C Ratio		0.60						0.27			0.27	
Clearance Time (s)		3.0						3.0			3.0	
Vehicle Extension (s)		5.0						3.0			3.0	
Lane Grp Cap (vph)		1822						819			691	
v/s Ratio Prot								0.13				
v/s Ratio Perm		0.19									c0.19	
v/c Ratio		0.32						0.48			0.71	
Uniform Delay, d1		5.9						18.5			19.9	
Progression Factor		0.74						1.00			1.00	
Incremental Delay, d2		0.4						2.0			6.1	
Delay (s)		4.8						20.5			26.1	
Level of Service		A						C			C	
Approach Delay (s)		4.8			0.0			20.5			26.1	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.3%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0				4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91				1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99				0.94		1.00	0.92
Flpb, ped/bikes	1.00	1.00		0.99	1.00				1.00		0.95	1.00
Frt	1.00	1.00		1.00	0.99				0.86		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00				1.00		0.95	1.00
Satd. Flow (prot)	1583	4519		1572	4464				1355		1516	1301
Flt Permitted	0.95	1.00		0.95	1.00				1.00		0.95	1.00
Satd. Flow (perm)	1583	4519		1572	4464				1355		1516	1301
Volume (vph)	156	1768	46	3	1677	149	0	0	74	206	10	229
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	162	1842	48	3	1747	155	0	0	77	215	10	239
RTOR Reduction (vph)	0	2	0	0	10	0	0	0	59	0	0	170
Lane Group Flow (vph)	162	1888	0	3	1892	0	0	0	18	0	225	69
Confl. Peds. (#/hr)	26		44	44		26	50		36	36		50
Confl. Bikes (#/hr)			5			6						3
Turn Type	Prot			Prot					custom	Perm		Perm
Protected Phases	5	2		1	6						4	
Permitted Phases									8	4		4
Actuated Green, G (s)	12.9	65.9		1.1	54.1				24.0		24.0	24.0
Effective Green, g (s)	11.9	64.9		0.1	53.1				23.0		23.0	23.0
Actuated g/C Ratio	0.12	0.65		0.00	0.53				0.23		0.23	0.23
Clearance Time (s)	3.0	3.0		3.0	3.0				3.0		3.0	3.0
Vehicle Extension (s)	2.0	5.0		2.0	5.0				3.0		3.0	3.0
Lane Grp Cap (vph)	188	2933		2	2370				312		349	299
v/s Ratio Prot	c0.10	0.42		0.00	c0.42							
v/s Ratio Perm									0.01		0.15	0.05
v/c Ratio	0.86	0.64		1.50	0.80				0.06		0.64	0.23
Uniform Delay, d1	43.2	10.6		50.0	19.1				30.0		34.8	31.3
Progression Factor	1.00	1.00		0.56	1.75				1.00		1.00	1.00
Incremental Delay, d2	30.1	1.1		372.0	0.3				0.3		8.9	1.8
Delay (s)	73.3	11.7		400.1	33.6				30.4		43.7	33.1
Level of Service	E	B		F	C				C		D	C
Approach Delay (s)		16.5			34.2			30.4			38.2	
Approach LOS		B			C			C			D	

Intersection Summary			
HCM Average Control Delay	26.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	2228		1118	2227		1118	2166		1118	2195	
Flt Permitted	0.07	1.00		0.07	1.00		0.25	1.00		0.15	1.00	
Satd. Flow (perm)	84	2228		84	2227		299	2166		181	2195	
Volume (vph)	51	1811	41	99	1690	42	6	735	192	57	523	72
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	53	1886	43	103	1760	44	6	766	200	59	545	75
RTOR Reduction (vph)	0	2	0	0	2	0	0	12	0	0	12	0
Lane Group Flow (vph)	53	1927	0	103	1802	0	6	954	0	59	608	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	55.5	55.5		55.5	55.5		25.8	25.8		25.8	25.8	
Effective Green, g (s)	56.0	56.0		56.0	56.0		26.0	26.0		26.0	26.0	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2		4.2	4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	52	1386		52	1386		86	626		52	634	
v/s Ratio Prot		0.87			0.81			c0.44			0.28	
v/s Ratio Perm	0.63			c1.23			0.02			0.33		
v/c Ratio	1.02	1.39		1.98	1.30		0.07	1.52		1.13	0.96	
Uniform Delay, d1	17.0	17.0		17.0	17.0		23.2	32.0		32.0	31.5	
Progression Factor	1.00	1.00		0.63	0.63		0.54	0.48		1.00	1.00	
Incremental Delay, d2	130.4	180.2		447.6	135.6		0.1	236.5		166.6	26.9	
Delay (s)	147.4	197.2		458.3	146.3		12.7	252.0		198.6	58.4	
Level of Service	F	F		F	F		B	F		F	E	
Approach Delay (s)		195.9			163.1			250.5			70.6	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	178.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	150.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00		0.95	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1118	2196		1118	2225		1118	2235	1000		2185	
Flt Permitted	0.21	1.00		0.08	1.00		0.23	1.00	1.00		1.00	
Satd. Flow (perm)	242	2196		90	2225		267	2235	1000		2185	
Volume (vph)	122	1367	180	70	965	30	82	752	192	0	580	103
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	128	1439	189	74	1016	32	86	792	202	0	611	108
RTOR Reduction (vph)	0	11	0	0	3	0	0	0	25	0	16	0
Lane Group Flow (vph)	128	1617	0	74	1045	0	86	792	177	0	703	0
Turn Type	Perm			Perm			Perm		Perm			
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8			
Actuated Green, G (s)	51.5	51.5		51.5	51.5		29.8	29.8	29.8		29.8	
Effective Green, g (s)	52.0	52.0		52.0	52.0		30.0	30.0	30.0		30.0	
Actuated g/C Ratio	0.58	0.58		0.58	0.58		0.33	0.33	0.33		0.33	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.2	4.2	4.2		4.2	
Vehicle Extension (s)	5.0	5.0		5.0	5.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	140	1269		52	1286		89	745	333		728	
v/s Ratio Prot		0.74			0.47			c0.35			0.32	
v/s Ratio Perm	0.53			c0.82			0.32		0.18			
v/c Ratio	0.91	1.27		1.42	0.81		0.97	1.06	0.53		0.97	
Uniform Delay, d1	17.0	19.0		19.0	15.1		29.5	30.0	24.3		29.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		0.46	
Incremental Delay, d2	56.0	129.5		271.9	5.7		86.5	51.0	5.9		4.8	
Delay (s)	73.0	148.5		290.9	20.8		116.0	81.0	30.2		18.3	
Level of Service	E	F		F	C		F	F	C		B	
Approach Delay (s)		143.0			38.6			74.3			18.3	
Approach LOS		F			D			E			B	

Intersection Summary			
HCM Average Control Delay	82.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	128.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						0.95			0.95	
Frpb, ped/bikes		1.00						0.97			1.00	
Flpb, ped/bikes		0.98						1.00			1.00	
Frt		0.99						0.98			1.00	
Flt Protected		0.99						1.00			0.99	
Satd. Flow (prot)		3055						2986			3135	
Flt Permitted		0.99						1.00			0.69	
Satd. Flow (perm)		3055						2986			2176	
Volume (vph)	159	359	20	0	0	0	0	750	149	97	725	0
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	185	417	23	0	0	0	0	872	173	113	843	0
RTOR Reduction (vph)	0	5	0	0	0	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	620	0	0	0	0	0	1017	0	0	956	0
Confl. Peds. (#/hr)	60								223	223		
Confl. Bikes (#/hr)			1						3			
Turn Type	Perm									Perm		
Protected Phases		4						2			6	
Permitted Phases	4									6		
Actuated Green, G (s)		21.0						33.0			33.0	
Effective Green, g (s)		20.0						32.0			32.0	
Actuated g/C Ratio		0.33						0.53			0.53	
Clearance Time (s)		3.0						3.0			3.0	
Vehicle Extension (s)		3.0						3.0			3.0	
Lane Grp Cap (vph)		1018						1593			1161	
v/s Ratio Prot								0.34				
v/s Ratio Perm		0.20									c0.44	
v/c Ratio		0.61						0.64			0.82	
Uniform Delay, d1		16.7						9.9			11.6	
Progression Factor		1.35						1.00			1.00	
Incremental Delay, d2		2.2						2.0			6.7	
Delay (s)		24.9						11.9			18.3	
Level of Service		C						B			B	
Approach Delay (s)		24.9			0.0			11.9			18.3	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM Average Control Delay	17.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00		0.95	1.00
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00	0.80		1.00	0.84
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1583	4402		1583	4409		1583	3167	1133		3167	1189
Flt Permitted	0.09	1.00		0.09	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (perm)	152	4402		149	4409		1583	3167	1133		3167	1189
Volume (vph)	133	1799	140	304	1494	137	198	774	144	0	697	232
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	141	1914	149	323	1589	146	211	823	153	0	741	247
RTOR Reduction (vph)	0	9	0	0	11	0	0	0	100	0	0	126
Lane Group Flow (vph)	141	2054	0	323	1724	0	211	823	53	0	741	121
Confl. Peds. (#/hr)	158		220	220		158	112		142	142		112
Confl. Bikes (#/hr)			9			5			5			3
Turn Type	pm+pt			pm+pt			Prot		Perm			Perm
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases	2			6					8			4
Actuated Green, G (s)	53.3	45.0		54.7	45.7		8.9	34.9	34.9		22.9	22.9
Effective Green, g (s)	51.3	44.0		52.7	44.7		8.0	34.0	34.0		22.0	22.0
Actuated g/C Ratio	0.52	0.45		0.54	0.46		0.08	0.35	0.35		0.22	0.22
Clearance Time (s)	3.0	3.0		3.0	3.0		3.1	3.1	3.1		3.1	3.1
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	186	1976		197	2011		129	1099	393		711	267
v/s Ratio Prot	0.06	0.47		c0.13	0.39		c0.13	0.26			c0.23	
v/s Ratio Perm	0.34			c0.75					0.05			0.10
v/c Ratio	0.76	1.04		1.64	0.86		1.64	0.75	0.14		1.04	0.45
Uniform Delay, d1	17.4	27.0		26.4	23.8		45.0	28.2	21.9		38.0	32.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	14.5	31.4		309.6	5.0		318.3	4.7	0.7		45.2	5.4
Delay (s)	31.9	58.4		336.0	28.8		363.3	32.9	22.6		83.2	38.2
Level of Service	C	E		F	C		F	C	C		F	D
Approach Delay (s)		56.7			77.0			90.3			72.0	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM Average Control Delay	71.7	HCM Level of Service	E
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	98.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.95		1.00	0.95	
Frt		0.96			0.99		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		3011			3085		1583	3133		1583	3143	
Flt Permitted		0.84			0.71		0.15	1.00		0.14	1.00	
Satd. Flow (perm)		2550			2217		255	3133		241	3143	
Volume (vph)	62	230	114	81	203	27	84	983	75	68	969	50
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	68	253	125	89	223	30	92	1080	82	75	1065	55
RTOR Reduction (vph)	0	45	0	0	8	0	0	5	0	0	4	0
Lane Group Flow (vph)	0	401	0	0	334	0	92	1157	0	75	1116	0
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		52.4	46.6		51.6	46.2	
Effective Green, g (s)		28.0			28.0		50.4	45.6		49.6	45.2	
Actuated g/C Ratio		0.31			0.31		0.56	0.51		0.55	0.50	
Clearance Time (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)		3.0			3.0		2.0	5.0		2.0	5.0	
Lane Grp Cap (vph)		793			690		214	1587		198	1578	
v/s Ratio Prot							c0.02	c0.37		0.02	0.36	
v/s Ratio Perm		c0.16			0.15		0.22			0.19		
v/c Ratio		0.51			0.48		0.43	0.73		0.38	0.71	
Uniform Delay, d1		25.3			25.1		11.6	17.4		11.8	17.3	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		2.3			0.5		0.5	3.0		0.4	2.7	
Delay (s)		27.6			25.7		12.1	20.3		12.3	20.0	
Level of Service		C			C		B	C		B	B	
Approach Delay (s)		27.6			25.7			19.7			19.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM Average Control Delay	21.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.96			0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4533		1583	4550		1583	3030			3078	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	1583	4533		1583	4550		1583	3030			3078	
Volume (vph)	50	2610	65	67	2245	0	6	300	121	0	525	121
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	2719	68	70	2339	0	6	312	126	0	547	126
RTOR Reduction (vph)	0	3	0	0	0	0	0	48	0	0	22	0
Lane Group Flow (vph)	52	2784	0	70	2339	0	6	390	0	0	651	0
Turn Type	Prot			Prot			Split					
Protected Phases	1!	2!		5!	6!		8	8			7	
Permitted Phases												
Actuated Green, G (s)	5.6	33.7		7.4	30.9		13.7	13.7			22.0	
Effective Green, g (s)	5.1	33.2		7.4	30.9		13.7	13.7			22.0	
Actuated g/C Ratio	0.06	0.37		0.08	0.34		0.15	0.15			0.24	
Clearance Time (s)	3.5	3.5		4.0	4.0		4.0	4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	90	1672		130	1562		241	461			752	
v/s Ratio Prot	0.03	c0.61		c0.04	0.51		0.00	c0.13			c0.21	
v/s Ratio Perm												
v/c Ratio	0.58	1.67		0.54	1.50		0.02	0.85			0.87	
Uniform Delay, d1	41.4	28.4		39.7	29.6		32.5	37.1			32.6	
Progression Factor	1.26	0.48		1.52	0.37		1.00	1.00			1.00	
Incremental Delay, d2	0.8	299.7		0.4	224.2		0.0	13.3			12.8	
Delay (s)	52.9	313.2		60.6	235.1		32.5	50.4			45.3	
Level of Service	D	F		E	F		C	D			D	
Approach Delay (s)		308.4			230.0			50.2			45.3	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM Average Control Delay	232.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	89.4%	ICU Level of Service	E
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt		0.99		1.00	0.99		1.00	0.99		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		4503		1583	4514		1583	3121		1583	3167	
Flt Permitted		1.00		0.95	1.00		0.18	1.00		0.24	1.00	
Satd. Flow (perm)		4503		1583	4514		303	3121		400	3167	
Volume (vph)	0	2546	189	15	2117	117	155	507	53	33	674	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	2625	195	15	2182	121	160	523	55	34	695	0
RTOR Reduction (vph)	0	9	0	0	7	0	0	9	0	0	0	0
Lane Group Flow (vph)	0	2811	0	15	2296	0	160	569	0	34	695	0
Turn Type				Prot			Perm			Perm		
Protected Phases		2!		5!	6			7			7	
Permitted Phases							7			7		
Actuated Green, G (s)		33.7		7.4	30.9		22.0	22.0		22.0	22.0	
Effective Green, g (s)		33.2		7.4	30.9		22.0	22.0		22.0	22.0	
Actuated g/C Ratio		0.37		0.08	0.34		0.24	0.24		0.24	0.24	
Clearance Time (s)		3.5		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1661		130	1550		74	763		98	774	
v/s Ratio Prot		c0.62		c0.01	0.51			0.18			0.22	
v/s Ratio Perm							c0.53			0.08		
v/c Ratio		1.69		0.12	1.48		2.16	0.75		0.35	0.90	
Uniform Delay, d1		28.4		38.3	29.6		34.0	31.4		28.1	32.9	
Progression Factor		0.27		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		311.8		0.4	220.2		564.9	6.5		9.5	15.3	
Delay (s)		319.6		38.7	249.8		598.9	38.0		37.5	48.3	
Level of Service		F		D	F		F	D		D	D	
Approach Delay (s)		319.6			248.4			159.6			47.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	246.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	25.7
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0						4.0		4.0	4.0	
Lane Util. Factor		0.95						0.95		1.00	0.95	
Frpb, ped/bikes		0.98						0.94		1.00	1.00	
Flpb, ped/bikes		0.89						1.00		0.81	1.00	
Frt		0.99						0.97		1.00	1.00	
Flt Protected		0.98						1.00		0.95	1.00	
Satd. Flow (prot)		2719						2878		1284	3167	
Flt Permitted		0.98						1.00		0.49	1.00	
Satd. Flow (perm)		2719						2878		656	3167	
Volume (vph)	179	340	31	0	0	0	0	286	67	93	476	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	188	358	33	0	0	0	0	301	71	98	501	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	34	0	0	0	0
Lane Group Flow (vph)	0	572	0	0	0	0	0	338	0	98	501	0
Confl. Peds. (#/hr)	173		248	248		173	221		404	404		221
Confl. Bikes (#/hr)			3			2			1			4
Turn Type	Perm									Perm		
Protected Phases		2						4			4	
Permitted Phases	2									4		
Actuated Green, G (s)		17.0						17.0		17.0	17.0	
Effective Green, g (s)		16.0						16.0		16.0	16.0	
Actuated g/C Ratio		0.27						0.27		0.27	0.27	
Clearance Time (s)		3.0						3.0		3.0	3.0	
Vehicle Extension (s)		5.0						3.0		3.0	3.0	
Lane Grp Cap (vph)		725						767		175	845	
v/s Ratio Prot								0.12			c0.16	
v/s Ratio Perm		0.21								0.15		
v/c Ratio		0.79						0.44		0.56	0.59	
Uniform Delay, d1		20.4						18.3		19.0	19.2	
Progression Factor		1.00						1.00		1.00	1.00	
Incremental Delay, d2		8.5						1.8		12.3	3.1	
Delay (s)		28.9						20.1		31.3	22.2	
Level of Service		C						C		C	C	
Approach Delay (s)		28.9			0.0			20.1			23.7	
Approach LOS		C			A			C			C	

Intersection Summary			
HCM Average Control Delay	24.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.99			0.98		1.00	0.87		1.00	1.00	0.78
Flpb, ped/bikes	1.00	1.00			1.00		0.83	1.00		1.00	1.00	1.00
Frt	1.00	1.00			0.99		1.00	0.93		1.00	1.00	0.85
Flt Protected	0.95	1.00			1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4516			4401		1316	1353		1583	1667	1102
Flt Permitted	0.08	1.00			1.00		0.65	1.00		0.95	1.00	1.00
Satd. Flow (perm)	140	4516			4401		901	1353		1583	1667	1102
Volume (vph)	100	1879	29	0	1862	144	111	97	82	145	166	146
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	102	1917	30	0	1900	147	113	99	84	148	169	149
RTOR Reduction (vph)	0	2	0	0	9	0	0	0	0	0	0	0
Lane Group Flow (vph)	102	1945	0	0	2038	0	113	183	0	148	169	149
Confl. Peds. (#/hr)	244		131	131		244	166		211	211		166
Confl. Bikes (#/hr)			3			5			2			3
Turn Type	Perm						Perm			Prot		custom
Protected Phases		2			6			8		7		
Permitted Phases	2						8				4	4
Actuated Green, G (s)	48.6	48.6			48.6		21.0	21.0		11.4	35.4	35.4
Effective Green, g (s)	47.6	47.6			47.6		20.0	20.0		10.4	34.4	34.4
Actuated g/C Ratio	0.53	0.53			0.53		0.22	0.22		0.12	0.38	0.38
Clearance Time (s)	3.0	3.0			3.0		3.0	3.0		3.0	3.0	3.0
Vehicle Extension (s)	5.0	5.0			5.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	2388			2328		200	301		183	637	421
v/s Ratio Prot		0.43			0.46			c0.14		c0.09		
v/s Ratio Perm	c0.73						0.13				0.10	0.14
v/c Ratio	1.38	0.81			0.88		0.56	0.61		0.81	0.27	0.35
Uniform Delay, d1	21.2	17.5			18.6		31.1	31.5		38.8	19.1	19.9
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	234.6	3.2			5.0		11.1	8.8		22.4	1.0	2.3
Delay (s)	255.8	20.7			23.6		42.2	40.3		61.3	20.1	22.2
Level of Service	F	C			C		D	D		E	C	C
Approach Delay (s)		32.4			23.6			41.0			33.9	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	29.4	HCM Level of Service	C
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBR2
Lane Configurations									
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00
Frpb, ped/bikes		1.00	0.98		1.00	0.96			1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00
Frt		1.00	0.99		1.00	0.98			0.86
Flt Protected		0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)		1583	4419		1583	4313			1442
Flt Permitted		0.95	1.00		0.95	1.00			1.00
Satd. Flow (perm)		1583	4419		1583	4313			1442
Volume (vph)	220	372	1874	121	317	1401	110	69	256
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	227	384	1932	125	327	1444	113	71	264
RTOR Reduction (vph)	0	0	7	0	0	3	0	0	232
Lane Group Flow (vph)	0	611	2050	0	327	1625	0	0	32
Confl. Peds. (#/hr)	99	154		137	137		99	154	155
Confl. Bikes (#/hr)				6			7	10	2
Turn Type	Prot	Prot			Prot				custom
Protected Phases	1	1	2		8	6			1
Permitted Phases									
Actuated Green, G (s)		13.0	54.3		23.7	81.0			13.0
Effective Green, g (s)		12.0	53.3		22.7	80.0			12.0
Actuated g/C Ratio		0.12	0.53		0.23	0.80			0.12
Clearance Time (s)		3.0	3.0		3.0	3.0			3.0
Vehicle Extension (s)		2.5	5.0		3.0	5.0			2.5
Lane Grp Cap (vph)		190	2355		359	3450			173
v/s Ratio Prot		c0.39	c0.46		c0.21	0.38			0.02
v/s Ratio Perm									
v/c Ratio		3.22	0.87		0.91	0.47			0.18
Uniform Delay, d1		44.0	20.3		37.7	3.2			39.6
Progression Factor		1.18	1.61		1.00	1.00			1.00
Incremental Delay, d2		998.3	0.5		26.4	0.5			0.4
Delay (s)		1050.2	33.2		64.1	3.7			40.0
Level of Service		F	C		E	A			D
Approach Delay (s)			266.1			13.8			
Approach LOS			F			B			

Intersection Summary			
HCM Average Control Delay	152.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	0.86	0.86		1.00	0.91			0.95	1.00		0.86	0.86
Frt	1.00	1.00		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (prot)	961	3007		1118	3209			2235	1000		3035	860
Flt Permitted	0.95	0.67		0.95	1.00			1.00	1.00		1.00	1.00
Satd. Flow (perm)	961	2043		1118	3209			2235	1000		3035	860
Volume (vph)	589	1441	24	78	1699	10	0	1015	321	0	1341	689
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	669	1638	27	89	1931	11	0	1153	365	0	1524	783
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	215	0	0	325
Lane Group Flow (vph)	386	1947	0	89	1941	0	0	1153	150	0	1524	458
Turn Type	Prot			Prot					Perm			Over
Protected Phases	7	4		3	8			2			6	7
Permitted Phases									2			
Actuated Green, G (s)	15.9	41.4		14.9	40.4			29.4	29.4		29.4	15.9
Effective Green, g (s)	17.0	42.0		16.0	41.0			30.0	30.0		30.0	17.0
Actuated g/C Ratio	0.17	0.42		0.16	0.41			0.30	0.30		0.30	0.17
Clearance Time (s)	5.1	4.6		5.1	4.6			4.6	4.6		4.6	5.1
Vehicle Extension (s)	3.0	3.0		5.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	163	1022		179	1316			671	300		911	146
v/s Ratio Prot	0.40	0.32		0.08	c0.60			c0.52			0.50	c0.53
v/s Ratio Perm		c0.48							0.15			
v/c Ratio	2.37	1.90		0.50	1.48			1.72	0.50		1.67	3.13
Uniform Delay, d1	41.5	29.0		38.3	29.5			35.0	28.8		35.0	41.5
Progression Factor	1.00	1.00		1.21	0.54			1.00	1.00		1.00	1.00
Incremental Delay, d2	634.2	410.9		2.1	215.8			329.5	5.9		307.6	978.3
Delay (s)	675.7	439.9		48.5	231.7			364.5	34.7		342.6	1019.8
Level of Service	F	F		D	F			F	C		F	F
Approach Delay (s)		478.9			223.6			285.2			572.5	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	406.1	HCM Level of Service	F
HCM Volume to Capacity ratio	2.07		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	159.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frt		1.00		1.00	1.00		1.00	1.00	0.85	1.00	0.95	
Flt Protected		0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		3184		1118	3204		1118	2235	1000	1118	2117	
Flt Permitted		0.66		0.95	1.00		0.13	1.00	1.00	0.14	1.00	
Satd. Flow (perm)		2127		1118	3204		157	2235	1000	170	2117	
Volume (vph)	304	1574	10	252	1288	21	10	788	334	28	599	327
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	310	1606	10	257	1314	21	10	804	341	29	611	334
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	214	0	74	0
Lane Group Flow (vph)	0	1925	0	257	1333	0	10	804	127	29	872	0
Turn Type	Prot			Prot			Perm		Perm	Perm		
Protected Phases	7	4		3	8			2			6	
Permitted Phases							2		2	6		
Actuated Green, G (s)		41.4		14.9	40.4		29.4	29.4	29.4	29.4	29.4	
Effective Green, g (s)		42.0		16.0	41.0		30.0	30.0	30.0	30.0	30.0	
Actuated g/C Ratio		0.42		0.16	0.41		0.30	0.30	0.30	0.30	0.30	
Clearance Time (s)		4.6		5.1	4.6		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)		3.0		5.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		1073		179	1314		47	671	300	51	635	
v/s Ratio Prot		c0.31		c0.23	0.42			0.36			c0.41	
v/s Ratio Perm		c0.45					0.06		0.13	0.17		
v/c Ratio		1.79		1.44	1.01		0.21	1.20	0.42	0.57	1.37	
Uniform Delay, d1		29.0		42.0	29.5		26.2	35.0	28.1	29.5	35.0	
Progression Factor		0.71		0.93	1.47		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		357.8		222.9	27.5		10.1	103.2	4.3	38.8	177.5	
Delay (s)		378.6		261.9	71.0		36.2	138.2	32.4	68.3	212.5	
Level of Service		F		F	E		D	F	C	E	F	
Approach Delay (s)		378.6			101.8			106.1			208.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	215.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	151.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.86	1.00	0.97	0.86	0.97	0.88
Frpb, ped/bikes		1.00	0.94	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)		4047	940	2168	4047	2168	1760
Flt Permitted		1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)		4047	940	2168	4047	2168	1760
Volume (vph)	0	2000	263	437	1577	387	972
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	2062	271	451	1626	399	1002
RTOR Reduction (vph)	0	0	79	0	0	0	680
Lane Group Flow (vph)	0	2062	192	451	1626	399	322
Confl. Peds. (#/hr)			60	60		1	4
Confl. Bikes (#/hr)			23				4
Turn Type	Prot		pm+ov	Prot			Over
Protected Phases	1	6	4	3	2 3	4	3
Permitted Phases			6				
Actuated Green, G (s)		47.6	73.1	31.0	84.6	25.5	31.0
Effective Green, g (s)		49.6	78.0	30.0	83.6	28.4	30.0
Actuated g/C Ratio		0.41	0.65	0.25	0.70	0.24	0.25
Clearance Time (s)		6.0	6.9	3.0		6.9	3.0
Vehicle Extension (s)		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1673	642	542	2819	513	440
v/s Ratio Prot		c0.51	0.07	c0.21	0.40	c0.18	0.18
v/s Ratio Perm			0.13				
v/c Ratio		1.23	0.30	0.83	0.58	0.78	0.73
Uniform Delay, d1		35.2	9.1	42.6	9.2	42.8	41.3
Progression Factor		0.88	4.17	1.00	1.00	1.00	1.00
Incremental Delay, d2		107.0	0.1	10.5	0.3	7.3	6.2
Delay (s)		137.8	38.2	53.1	9.5	50.1	47.5
Level of Service		F	D	D	A	D	D
Approach Delay (s)		126.3			19.0	48.2	
Approach LOS		F			B	D	

Intersection Summary			
HCM Average Control Delay	69.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0				4.0	4.0			4.0	4.0
Lane Util. Factor	0.95	0.95	0.88				1.00	0.91			0.95	1.00
Frt	1.00	1.00	0.85				1.00	1.00			1.00	0.85
Flt Protected	0.95	0.95	1.00				0.95	1.00			1.00	1.00
Satd. Flow (prot)	1504	1504	2493				1583	4550			3167	1417
Flt Permitted	0.95	0.95	1.00				0.12	1.00			1.00	1.00
Satd. Flow (perm)	1504	1504	2493				195	4550			3167	1417
Volume (vph)	503	0	575	0	0	0	108	476	0	0	1040	158
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	572	0	653	0	0	0	123	541	0	0	1182	180
RTOR Reduction (vph)	0	0	544	0	0	0	0	0	0	0	0	136
Lane Group Flow (vph)	286	286	109	0	0	0	123	541	0	0	1182	44
Turn Type	Split		custom				pm+pt			Perm		Over
Protected Phases	4	4	7 1		3		5	2			6	4
Permitted Phases							2			6		
Actuated Green, G (s)	16.5	16.5	14.4				45.7	40.7			40.7	16.5
Effective Green, g (s)	17.1	17.1	15.0				46.9	41.9			41.9	17.1
Actuated g/C Ratio	0.19	0.19	0.17				0.52	0.47			0.47	0.19
Clearance Time (s)	4.6	4.6					4.0	5.2			5.2	4.6
Vehicle Extension (s)	3.0	3.0					3.0	3.2			3.4	3.0
Lane Grp Cap (vph)	286	286	416				179	2118			1474	269
v/s Ratio Prot	c0.19	0.19	c0.04				c0.04	0.12			c0.37	0.03
v/s Ratio Perm							0.32					
v/c Ratio	1.00	1.00	0.26				0.69	0.26			0.80	0.16
Uniform Delay, d1	36.5	36.5	32.7				14.9	14.6			20.5	30.5
Progression Factor	0.83	0.83	4.38				1.61	0.94			1.00	1.00
Incremental Delay, d2	52.5	52.5	0.3				6.5	0.2			4.7	1.3
Delay (s)	82.8	82.8	143.4				30.4	13.8			25.2	31.8
Level of Service	F	F	F				C	B			C	C
Approach Delay (s)		115.1			0.0			16.9			26.1	
Approach LOS		F			A			B			C	

Intersection Summary			
HCM Average Control Delay	57.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.4%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.86		0.97	0.91		0.97	0.95	0.88
Frt		1.00	0.85		0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		4550	1417		5619		3072	4468		3072	3167	2493
Flt Permitted		1.00	1.00		1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)		4550	1417		5619		3072	4468		3072	3167	2493
Volume (vph)	0	2646	447	0	2472	378	10	688	94	273	460	240
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	2728	461	0	2548	390	10	709	97	281	474	247
RTOR Reduction (vph)	0	0	75	0	31	0	0	3	0	0	0	162
Lane Group Flow (vph)	0	2728	386	0	2907	0	10	803	0	281	474	85
Turn Type			pm+ov				Prot			Prot		Perm
Protected Phases		6	3		2		3	8		7	4	
Permitted Phases			6									4
Actuated Green, G (s)		38.5	45.5		38.5		7.0	27.7		9.0	29.7	29.7
Effective Green, g (s)		40.0	47.0		40.0		7.0	29.0		9.0	31.0	31.0
Actuated g/C Ratio		0.44	0.52		0.44		0.08	0.32		0.10	0.34	0.34
Clearance Time (s)		5.5	4.0		5.5		4.0	5.3		4.0	5.3	5.3
Vehicle Extension (s)		4.9	3.0		5.2		3.0	5.1		3.0	5.1	5.1
Lane Grp Cap (vph)		2022	803		2497		239	1440		307	1091	859
v/s Ratio Prot		c0.60	0.04		0.52		0.00	c0.18		c0.09	0.15	
v/s Ratio Perm			0.23									0.03
v/c Ratio		1.35	0.48		1.16		0.04	0.56		0.92	0.43	0.10
Uniform Delay, d1		25.0	13.7		25.0		38.4	25.2		40.1	22.7	20.0
Progression Factor		1.00	1.00		1.02		1.00	1.00		1.25	1.01	2.63
Incremental Delay, d2		160.5	0.5		74.4		0.1	1.6		21.7	0.4	0.1
Delay (s)		185.5	14.2		99.9		38.5	26.8		71.7	23.4	52.7
Level of Service		F	B		F		D	C		E	C	D
Approach Delay (s)		160.7			99.9			26.9			44.2	
Approach LOS		F			F			C			D	

Intersection Summary			
HCM Average Control Delay	109.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations							
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.86	1.00	0.97	0.91	0.94	0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1118	4047	1000	2168	3212	3152	1760
Flt Permitted	0.95	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1118	4047	1000	2168	3212	3152	1760
Volume (vph)	15	1724	393	307	1663	733	556
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	15	1741	397	310	1680	740	562
RTOR Reduction (vph)	0	0	260	0	0	0	444
Lane Group Flow (vph)	15	1741	137	310	1680	740	118
Confl. Peds. (#/hr)			86	86		1	139
Confl. Bikes (#/hr)			19				3
Turn Type	Prot		Over	Prot			Over
Protected Phases	1	6	8	5	2	8	5
Permitted Phases							
Actuated Green, G (s)	2.3	47.5	29.6	25.3	69.5	29.6	25.3
Effective Green, g (s)	3.3	50.2	32.5	25.3	72.2	32.5	25.3
Actuated g/C Ratio	0.03	0.42	0.27	0.21	0.60	0.27	0.21
Clearance Time (s)	5.0	6.7	6.9	4.0	6.7	6.9	4.0
Vehicle Extension (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0
Lane Grp Cap (vph)	31	1693	271	457	1933	854	371
v/s Ratio Prot	0.01	c0.43	0.14	0.14	c0.52	c0.23	0.07
v/s Ratio Perm							
v/c Ratio	0.48	1.03	0.50	0.68	0.87	0.87	0.32
Uniform Delay, d1	57.5	34.9	36.9	43.6	20.0	41.7	40.1
Progression Factor	0.86	1.54	2.09	0.89	0.72	1.00	1.00
Incremental Delay, d2	1.1	15.6	0.1	3.1	4.5	9.2	0.5
Delay (s)	50.6	69.4	77.3	41.9	19.0	50.9	40.6
Level of Service	D	E	E	D	B	D	D
Approach Delay (s)		70.7			22.5	46.4	
Approach LOS		E			C	D	

Intersection Summary			
HCM Average Control Delay	47.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.89	1.00	1.00	0.88	1.00	1.00	0.87	1.00	0.94	
Flpb, ped/bikes	0.99	1.00	1.00	0.94	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	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1563	3167	1261	1484	3167	1244	3072	4550	1231	3072	4124	
Flt Permitted	0.33	1.00	1.00	0.50	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	551	3167	1261	778	3167	1244	3072	4550	1231	3072	4124	
Volume (vph)	45	403	478	257	495	245	265	677	154	220	693	253
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)	49	438	520	279	538	266	288	736	167	239	753	275
RTOR Reduction (vph)	0	0	3	0	0	161	0	0	120	0	69	0
Lane Group Flow (vph)	49	438	517	279	538	105	288	736	47	239	959	0
Confl. Peds. (#/hr)	114		119	119		114	155		101	101		155
Confl. Bikes (#/hr)			4			5			4			3
Turn Type	pm+pt		pm+ov	Perm		Perm	Prot		Perm	Prot		
Protected Phases	1	6	3		2		3	8		7	4	
Permitted Phases	6		6	2		2			8			
Actuated Green, G (s)	40.7	40.7	46.7	33.9	33.9	33.9	6.0	24.8	24.8	10.5	29.3	
Effective Green, g (s)	42.2	42.2	48.2	35.4	35.4	35.4	6.0	25.3	25.3	10.5	29.8	
Actuated g/C Ratio	0.47	0.47	0.54	0.39	0.39	0.39	0.07	0.28	0.28	0.12	0.33	
Clearance Time (s)	3.5	5.5	4.0	5.5	5.5	5.5	4.0	4.5	4.5	4.0	4.5	
Vehicle Extension (s)	3.0	4.0	2.0	4.0	4.0	4.0	2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	290	1485	731	306	1246	489	205	1279	346	358	1366	
v/s Ratio Prot	0.01	0.14	c0.05		0.17		c0.09	0.16		0.08	c0.23	
v/s Ratio Perm	0.07		0.36	c0.36		0.08			0.04			
v/c Ratio	0.17	0.29	0.71	0.91	0.43	0.21	1.40	0.58	0.14	0.67	0.70	
Uniform Delay, d1	13.7	14.7	15.6	25.8	20.0	18.1	42.0	27.7	24.2	38.1	26.2	
Progression Factor	1.15	1.12	1.11	1.06	1.07	1.59	1.01	1.12	1.56	1.00	1.00	
Incremental Delay, d2	0.3	0.2	2.6	30.1	0.3	0.3	208.5	1.9	0.8	3.6	3.0	
Delay (s)	16.0	16.7	19.9	57.4	21.6	29.0	250.9	32.9	38.5	41.7	29.3	
Level of Service	B	B	B	E	C	C	F	C	D	D	C	
Approach Delay (s)		18.3			32.7			86.4			31.6	
Approach LOS		B			C			F			C	

Intersection Summary			
HCM Average Control Delay	43.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor					1.00	1.00	1.00	0.91	1.00	1.00	0.91	
Frt					1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected					0.95	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)					1583	1417	1583	4550	1417	1583	4550	
Flt Permitted					0.76	1.00	0.13	1.00	1.00	0.36	1.00	
Satd. Flow (perm)					1262	1417	213	4550	1417	608	4550	
Volume (vph)	0	0	0	125	0	191	1	663	95	174	1476	0
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)	0	0	0	136	0	208	1	721	103	189	1604	0
RTOR Reduction (vph)	0	0	0	0	0	170	0	0	28	0	0	0
Lane Group Flow (vph)	0	0	0	0	136	38	1	721	75	189	1604	0
Turn Type	Perm			Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4		4	2		2	2		
Actuated Green, G (s)					15.5	15.5	64.5	64.5	64.5	64.5	64.5	
Effective Green, g (s)					16.5	16.5	65.5	65.5	65.5	65.5	65.5	
Actuated g/C Ratio					0.18	0.18	0.73	0.73	0.73	0.73	0.73	
Clearance Time (s)					5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)					3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)					231	260	155	3311	1031	442	3311	
v/s Ratio Prot								0.16			c0.35	
v/s Ratio Perm					c0.11	0.03	0.00		0.05	0.31		
v/c Ratio					0.59	0.15	0.01	0.22	0.07	0.43	0.48	
Uniform Delay, d1					33.6	30.8	3.4	4.0	3.5	4.8	5.2	
Progression Factor					1.00	1.00	1.97	1.62	3.74	1.18	1.19	
Incremental Delay, d2					3.8	0.3	0.1	0.1	0.1	2.2	0.4	
Delay (s)					37.4	31.1	6.7	6.5	13.3	7.9	6.5	
Level of Service					D	C	A	A	B	A	A	
Approach Delay (s)		0.0			33.6			7.4			6.6	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM Average Control Delay	10.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.9%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95	0.95	1.00	0.91		0.97	0.91	
Frt		0.96			0.96	0.85	1.00	0.97		1.00	1.00	
Flt Protected		0.97			0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2961			1501	1346	1583	4400		3072	4540	
Flt Permitted		0.80			0.90	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)		2424			1366	1346	1583	4400		3072	4540	
Volume (vph)	84	31	42	10	16	69	11	617	173	132	1424	22
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	86	32	43	10	16	70	11	630	177	135	1453	22
RTOR Reduction (vph)	0	36	0	0	8	35	0	30	0	0	1	0
Lane Group Flow (vph)	0	125	0	0	27	27	11	777	0	135	1474	0
Turn Type	Perm			Perm		pm+ov	Prot			Prot		
Protected Phases		8			4	5	1	6		5	2	
Permitted Phases	8			4		4						
Actuated Green, G (s)		12.6			12.6	21.0	1.4	54.8		8.4	61.8	
Effective Green, g (s)		14.1			14.1	22.5	1.4	55.5		8.4	62.5	
Actuated g/C Ratio		0.16			0.16	0.25	0.02	0.62		0.09	0.69	
Clearance Time (s)		5.5			5.5	4.0	4.0	4.7		4.0	4.7	
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		380			214	396	25	2713		287	3153	
v/s Ratio Prot						0.01	0.01	0.18		c0.04	c0.32	
v/s Ratio Perm		c0.05			0.02	0.01						
v/c Ratio		0.33			0.13	0.07	0.44	0.29		0.47	0.47	
Uniform Delay, d1		33.7			32.7	25.7	43.9	8.0		38.7	6.2	
Progression Factor		1.00			1.00	1.00	0.74	1.94		0.91	0.94	
Incremental Delay, d2		0.5			0.3	0.1	11.5	0.3		1.1	0.4	
Delay (s)		34.2			32.9	25.8	43.9	15.8		36.2	6.3	
Level of Service		C			C	C	D	B		D	A	
Approach Delay (s)		34.2			28.4			16.2			8.8	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.3%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	0.97		1.00	1.00		1.00	0.97	0.91		1.00	0.91	
Frt	1.00		0.85	1.00		0.85	1.00	0.99		1.00	1.00	
Flt Protected	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	3072		1417	1583		1417	3072	4515		1583	4542	
Flt Permitted	0.95		1.00	0.95		1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	3072		1417	1583		1417	3072	4515		1583	4542	
Volume (vph)	128	0	179	18	0	105	19	596	32	62	1294	15
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	141	0	197	20	0	115	21	655	35	68	1422	16
RTOR Reduction (vph)	0	0	154	0	0	87	0	5	0	0	1	0
Lane Group Flow (vph)	141	0	43	20	0	28	21	685	0	68	1437	0
Turn Type	Prot		custom	Prot		custom	Prot			Prot		
Protected Phases	3		3 5	4		1 4	5	2		1	6	
Permitted Phases												
Actuated Green, G (s)	13.2		19.4	9.9		22.5	6.2	41.3		7.7	42.8	
Effective Green, g (s)	14.1		19.5	10.8		21.7	5.4	42.2		6.9	43.7	
Actuated g/C Ratio	0.16		0.22	0.12		0.24	0.06	0.47		0.08	0.49	
Clearance Time (s)	4.9			4.9			3.2	4.9		3.2	4.9	
Vehicle Extension (s)	3.0			3.0			3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	481		307	190		342	184	2117		121	2205	
v/s Ratio Prot	c0.05		0.03	c0.01		0.02	0.01	0.15		c0.04	c0.32	
v/s Ratio Perm												
v/c Ratio	0.29		0.14	0.11		0.08	0.11	0.32		0.56	0.65	
Uniform Delay, d1	33.5		28.5	35.3		26.4	40.0	15.0		40.1	17.4	
Progression Factor	1.00		1.00	1.00		1.00	1.39	0.38		0.78	1.18	
Incremental Delay, d2	0.3		0.2	0.2		0.1	0.0	0.0		5.4	1.4	
Delay (s)	33.9		28.7	35.5		26.5	55.6	5.8		36.7	21.9	
Level of Service	C		C	D		C	E	A		D	C	
Approach Delay (s)		30.9			27.9			7.3			22.6	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM Average Control Delay	19.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		0.97	0.88
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3072	4550	4484		3072	2493
Flt Permitted	0.95	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3072	4550	4484		3072	2493
Volume (vph)	453	1753	1706	181	455	989
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	492	1905	1854	197	495	1075
RTOR Reduction (vph)	0	0	14	0	0	347
Lane Group Flow (vph)	492	1905	2037	0	495	728
Turn Type	Prot					Prot
Protected Phases	5	2 5	6		4	4
Permitted Phases						
Actuated Green, G (s)	12.0	50.7	33.7		28.8	28.8
Effective Green, g (s)	13.0	52.2	35.2		29.8	29.8
Actuated g/C Ratio	0.14	0.58	0.39		0.33	0.33
Clearance Time (s)	5.0		5.5		5.0	5.0
Vehicle Extension (s)	2.0		3.0		3.0	3.0
Lane Grp Cap (vph)	444	2639	1754		1017	825
v/s Ratio Prot	c0.16	0.42	c0.45		0.16	c0.29
v/s Ratio Perm						
v/c Ratio	1.11	0.72	1.16		0.49	0.88
Uniform Delay, d1	38.5	13.7	27.4		24.0	28.4
Progression Factor	1.00	1.00	1.00		1.19	1.55
Incremental Delay, d2	75.4	1.7	79.4		0.3	9.0
Delay (s)	113.9	15.4	106.8		28.8	53.0
Level of Service	F	B	F		C	D
Approach Delay (s)		35.6	106.8		45.4	
Approach LOS		D	F		D	

Intersection Summary			
HCM Average Control Delay	62.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.91	1.00	0.97	0.91	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	3212	1000	2168	3212	2168	910
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	3212	1000	2168	3212	2168	910
Volume (vph)	1927	172	136	2224	518	250
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1987	177	140	2293	534	258
RTOR Reduction (vph)	0	80	0	0	0	194
Lane Group Flow (vph)	1987	97	140	2293	534	65
Confl. Peds. (#/hr)		145	145		56	
Confl. Bikes (#/hr)		19				
Turn Type		Over	Prot			Perm
Protected Phases	6	4	5	2	4	
Permitted Phases						4
Actuated Green, G (s)	66.1	28.1	10.7	80.8	28.1	28.1
Effective Green, g (s)	67.3	30.0	10.7	82.0	30.0	30.0
Actuated g/C Ratio	0.56	0.25	0.09	0.68	0.25	0.25
Clearance Time (s)	5.2	5.9	4.0	5.2	5.9	5.9
Vehicle Extension (s)	3.7	3.8	1.0	3.5	3.8	3.8
Lane Grp Cap (vph)	1801	250	193	2195	542	228
v/s Ratio Prot	c0.62	0.10	0.06	c0.71	c0.25	
v/s Ratio Perm						0.07
v/c Ratio	1.10	0.39	0.73	1.04	0.99	0.28
Uniform Delay, d1	26.4	37.4	53.2	19.0	44.8	36.3
Progression Factor	1.60	0.82	0.96	0.86	1.00	1.00
Incremental Delay, d2	47.4	0.4	5.8	27.3	35.2	3.1
Delay (s)	89.5	31.0	56.7	43.6	80.0	39.4
Level of Service	F	C	E	D	E	D
Approach Delay (s)	84.7			44.4	66.8	
Approach LOS	F			D	E	

Intersection Summary			
HCM Average Control Delay	63.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.88	0.95	1.00	1.00	0.91
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	2493	3167	1417	1583	4550
Flt Permitted	0.95	1.00	1.00	1.00	0.54	1.00
Satd. Flow (perm)	3072	2493	3167	1417	895	4550
Volume (vph)	465	364	255	318	117	258
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	511	400	280	349	129	284
RTOR Reduction (vph)	0	293	0	62	0	0
Lane Group Flow (vph)	511	107	280	287	129	284
Turn Type		Perm		pm+ov	pm+pt	
Protected Phases	4		2	4	1	6
Permitted Phases		4		2	6	
Actuated Green, G (s)	23.5	23.5	48.5	72.0	56.5	56.5
Effective Green, g (s)	24.0	24.0	50.0	74.0	58.0	58.0
Actuated g/C Ratio	0.27	0.27	0.56	0.82	0.64	0.64
Clearance Time (s)	4.5	4.5	5.5	4.5	3.0	5.5
Vehicle Extension (s)	3.0	3.0	5.0	3.0	3.0	5.0
Lane Grp Cap (vph)	819	665	1759	1228	607	2932
v/s Ratio Prot	c0.17		0.09	c0.06	c0.01	0.06
v/s Ratio Perm		0.04		0.14	0.13	
v/c Ratio	0.62	0.16	0.16	0.23	0.21	0.10
Uniform Delay, d1	29.0	25.3	9.8	1.8	6.3	6.1
Progression Factor	1.19	3.61	1.57	3.97	1.00	1.00
Incremental Delay, d2	1.0	0.1	0.2	0.1	0.2	0.1
Delay (s)	35.5	91.4	15.5	7.1	6.5	6.1
Level of Service	D	F	B	A	A	A
Approach Delay (s)	60.0		10.8			6.2
Approach LOS	E		B			A

Intersection Summary			
HCM Average Control Delay	32.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	0.91	1.00	0.97	0.88
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	3072	4550	4550	1417	3072	2493
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	3072	4550	4550	1417	3072	2493
Volume (vph)	156	2127	2290	123	11	589
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	159	2170	2337	126	11	601
RTOR Reduction (vph)	0	0	0	57	0	0
Lane Group Flow (vph)	159	2170	2337	69	11	601
Turn Type	Prot			Perm		Perm
Protected Phases	5	2	6		4	
Permitted Phases				6		4
Actuated Green, G (s)	9.8	53.1	39.3	39.3	27.0	27.0
Effective Green, g (s)	9.8	54.3	40.5	40.5	27.7	27.7
Actuated g/C Ratio	0.11	0.60	0.45	0.45	0.31	0.31
Clearance Time (s)	4.0	5.2	5.2	5.2	4.7	4.7
Vehicle Extension (s)	3.0	4.8	4.6	4.6	3.0	3.0
Lane Grp Cap (vph)	335	2745	2048	638	945	767
v/s Ratio Prot	0.05	c0.48	c0.51		0.00	
v/s Ratio Perm				0.05		c0.24
v/c Ratio	0.47	0.79	1.14	0.11	0.01	0.78
Uniform Delay, d1	37.7	13.5	24.8	14.3	21.6	28.4
Progression Factor	0.58	1.96	1.00	1.00	0.72	0.63
Incremental Delay, d2	0.1	0.2	70.0	0.3	0.0	4.8
Delay (s)	22.0	26.8	94.7	14.6	15.5	22.6
Level of Service	C	C	F	B	B	C
Approach Delay (s)		26.4	90.6		22.5	
Approach LOS		C	F		C	

Intersection Summary			
HCM Average Control Delay	55.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4550	1417	1583	4516		1583	3105		1583	3108	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.13	1.00		0.15	1.00	
Satd. Flow (perm)	1583	4550	1417	1583	4516		215	3105		247	3108	
Volume (vph)	123	2190	338	110	1914	101	158	846	127	133	676	95
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	127	2258	348	113	1973	104	163	872	131	137	697	98
RTOR Reduction (vph)	0	0	133	0	4	0	0	10	0	0	9	0
Lane Group Flow (vph)	127	2258	215	113	2073	0	163	993	0	137	786	0
Turn Type	Prot		Perm	Prot			pm+pt			Perm		
Protected Phases	1	6		5	2		3	8			4	
Permitted Phases			6				8			4		
Actuated Green, G (s)	12.7	53.9	53.9	12.1	53.3		40.0	40.0		26.0	26.0	
Effective Green, g (s)	12.7	54.9	54.9	12.1	54.3		41.0	41.0		27.0	27.0	
Actuated g/C Ratio	0.11	0.46	0.46	0.10	0.45		0.34	0.34		0.22	0.22	
Clearance Time (s)	4.0	5.0	5.0	4.0	5.0		3.5	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	4.0	4.0	2.0	4.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	168	2082	648	160	2043		187	1061		56	699	
v/s Ratio Prot	c0.08	c0.50		0.07	0.46		0.07	c0.32			0.25	
v/s Ratio Perm			0.15				0.22			c0.55		
v/c Ratio	0.76	1.08	0.33	0.71	1.01		0.87	0.94		2.45	1.12	
Uniform Delay, d1	52.1	32.5	20.8	52.2	32.9		32.5	38.2		46.5	46.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.43	1.35		1.00	1.00	
Incremental Delay, d2	15.7	47.0	1.4	11.0	23.6		11.6	5.1		701.3	73.5	
Delay (s)	67.8	79.6	22.2	63.2	56.4		58.2	56.8		747.8	120.0	
Level of Service	E	E	C	E	E		E	E		F	F	
Approach Delay (s)		71.7			56.8			57.0			212.3	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM Average Control Delay	83.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.3%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	3212	1000	2168	3212	1000	2168	2235	1000	2168	2235	1000
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	2168	3212	1000	2168	3212	1000	2168	2235	1000	2168	2235	1000
Volume (vph)	166	1663	121	161	2154	431	138	730	114	307	1176	57
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	171	1714	125	166	2221	444	142	753	118	316	1212	59
RTOR Reduction (vph)	0	0	66	0	0	31	0	0	77	0	0	30
Lane Group Flow (vph)	171	1714	59	166	2221	413	142	753	41	316	1212	29
Turn Type	Prot		Perm	Prot		pm+ov	Prot		Perm	Prot		Perm
Protected Phases	1	6		5	2	7	3	8		7	4	
Permitted Phases			6			2			8			4
Actuated Green, G (s)	8.0	27.5	27.5	11.0	30.5	52.5	10.8	39.6	39.6	22.0	50.8	50.8
Effective Green, g (s)	8.0	29.0	29.0	11.0	32.0	54.0	10.8	42.0	42.0	22.0	53.2	53.2
Actuated g/C Ratio	0.07	0.24	0.24	0.09	0.27	0.45	0.09	0.35	0.35	0.18	0.44	0.44
Clearance Time (s)	4.0	5.5	5.5	4.0	5.5	4.0	4.0	6.4	6.4	4.0	6.4	6.4
Vehicle Extension (s)	2.0	4.5	4.5	2.0	5.2	2.0	2.0	4.7	4.7	2.0	4.7	4.7
Lane Grp Cap (vph)	145	776	242	199	857	450	195	782	350	397	991	443
v/s Ratio Prot	0.08	c0.53		0.08	c0.69	0.17	0.07	c0.34		0.15	c0.54	
v/s Ratio Perm			0.06			0.24			0.04			0.03
v/c Ratio	1.18	2.21	0.24	0.83	2.59	0.92	0.73	0.96	0.12	0.80	1.22	0.07
Uniform Delay, d1	56.0	45.5	36.7	53.6	44.0	30.9	53.2	38.2	26.4	46.9	33.4	19.1
Progression Factor	0.94	0.38	0.16	0.92	0.89	0.81	1.00	1.00	1.00	0.69	0.54	0.37
Incremental Delay, d2	87.5	544.3	0.2	2.7	716.5	3.1	10.9	23.6	0.3	7.7	107.5	0.1
Delay (s)	139.9	561.8	6.1	51.8	755.6	28.3	64.1	61.9	26.7	40.0	125.5	7.2
Level of Service	F	F	A	D	F	C	E	E	C	D	F	A
Approach Delay (s)		491.4			600.2			58.1			104.0	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM Average Control Delay	391.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	144.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.86		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	1583	5684		1583	3167	1417	1583	3167	1417
Flt Permitted	0.11	1.00	1.00	0.11	1.00		0.16	1.00	1.00	0.19	1.00	1.00
Satd. Flow (perm)	177	4550	1417	188	5684		262	3167	1417	316	3167	1417
Volume (vph)	160	2009	111	107	2726	167	109	661	54	268	1019	215
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	165	2071	114	110	2810	172	112	681	56	276	1051	222
RTOR Reduction (vph)	0	0	45	0	10	0	0	0	5	0	0	0
Lane Group Flow (vph)	165	2071	69	110	2972	0	112	681	51	276	1051	222
Turn Type	pm+pt		Perm	pm+pt			Perm		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2			8	5	7	4	1
Permitted Phases	6		6	2			8	8	8	4		4
Actuated Green, G (s)	44.2	37.2	37.2	39.8	35.0		25.0	25.0	29.8	34.0	34.0	41.0
Effective Green, g (s)	44.7	37.7	37.7	40.3	35.5		26.5	26.5	31.3	35.5	35.5	42.5
Actuated g/C Ratio	0.50	0.42	0.42	0.45	0.39		0.29	0.29	0.35	0.39	0.39	0.47
Clearance Time (s)	4.0	4.5	4.5	4.0	4.5		5.5	5.5	4.0	4.0	5.5	4.0
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0		5.0	5.0	3.0	3.0	5.0	3.0
Lane Grp Cap (vph)	197	1906	594	159	2242		77	933	556	195	1249	732
v/s Ratio Prot	c0.07	0.46		0.04	c0.52			0.22	0.00	c0.08	0.33	0.02
v/s Ratio Perm	0.35		0.05	0.27			0.43		0.03	c0.48		0.13
v/c Ratio	0.84	1.09	0.12	0.69	1.33		1.45	0.73	0.09	1.42	0.84	0.30
Uniform Delay, d1	42.7	26.1	16.0	20.8	27.2		31.8	28.5	19.8	26.1	24.7	14.6
Progression Factor	2.28	0.73	0.82	1.84	1.54		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	40.0	0.0	1.2	146.9		262.8	3.5	0.1	214.4	5.9	0.2
Delay (s)	100.4	59.1	13.1	39.3	188.8		294.5	32.1	19.9	240.4	30.6	14.9
Level of Service	F	E	B	D	F		F	C	B	F	C	B
Approach Delay (s)		59.8			183.5			65.9			65.7	
Approach LOS		E			F			E			E	

Intersection Summary			
HCM Average Control Delay	110.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	110.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.95	1.00		1.00	
Frt	1.00	0.98		1.00	1.00		1.00	1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00		1.00	
Satd. Flow (prot)	1583	3106		1583	3158		1504	1570	1417		1577	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00		1.00	
Satd. Flow (perm)	1583	3106		1583	3158		1504	1570	1417		1577	
Volume (vph)	10	1131	167	178	1099	21	328	243	489	27	164	111
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	10	1178	174	185	1145	22	342	253	509	28	171	116
RTOR Reduction (vph)	0	10	0	0	1	0	0	0	236	0	0	0
Lane Group Flow (vph)	10	1342	0	185	1166	0	290	305	273	0	315	0
Turn Type	Prot			Prot			Split		pm+ov	Split		
Protected Phases	1	6		5	2		3	3	5	4	4	
Permitted Phases									3			
Actuated Green, G (s)	1.5	54.9		17.4	70.8		10.0	10.0	27.4		20.0	
Effective Green, g (s)	0.5	55.7		16.4	71.6		10.9	10.9	27.3		21.0	
Actuated g/C Ratio	0.00	0.46		0.14	0.60		0.09	0.09	0.23		0.18	
Clearance Time (s)	3.0	4.8		3.0	4.8		4.9	4.9	3.0		5.0	
Vehicle Extension (s)	3.0	6.0		3.0	6.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	7	1442		216	1884		137	143	370		276	
v/s Ratio Prot	0.01	c0.43		c0.12	0.37		0.19	c0.19	0.10		c0.20	
v/s Ratio Perm									0.09			
v/c Ratio	1.43	0.93		0.86	0.62		2.12	2.13	0.74		1.14	
Uniform Delay, d1	59.8	30.3		50.6	15.5		54.5	54.5	43.0		49.5	
Progression Factor	1.12	1.11		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	251.9	1.4		26.7	1.5		526.3	532.5	7.5		97.8	
Delay (s)	318.7	35.3		77.4	17.0		580.9	587.0	50.5		147.3	
Level of Service	F	D		E	B		F	F	D		F	
Approach Delay (s)		37.3			25.3			338.0			147.3	
Approach LOS		D			C			F			F	

Intersection Summary			
HCM Average Control Delay	122.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.91		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	0.95	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1504	1511	1417	1583	1522		1583	1647		1583	1667	1417
Flt Permitted	0.72	0.69	1.00	0.95	1.00		0.31	1.00		0.39	1.00	1.00
Satd. Flow (perm)	1140	1099	1417	1583	1522		524	1647		657	1667	1417
Volume (vph)	394	10	172	20	23	32	64	458	39	34	612	373
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	410	10	179	21	24	33	67	477	41	35	638	389
RTOR Reduction (vph)	0	0	153	0	30	0	0	3	0	0	0	149
Lane Group Flow (vph)	205	215	26	21	27	0	67	515	0	35	638	240
Turn Type	Perm		Perm	Split			Perm			Perm		Perm
Protected Phases		4		3	3			2			2	
Permitted Phases	4		4				2			2		2
Actuated Green, G (s)	10.0	10.0	10.0	4.8	4.8		44.8	44.8		44.8	44.8	44.8
Effective Green, g (s)	11.0	11.0	11.0	5.8	5.8		46.2	46.2		46.2	46.2	46.2
Actuated g/C Ratio	0.15	0.15	0.15	0.08	0.08		0.62	0.62		0.62	0.62	0.62
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.4	5.4		5.4	5.4	5.4
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	167	161	208	122	118		323	1015		405	1027	873
v/s Ratio Prot				0.01	c0.02			0.31			c0.38	
v/s Ratio Perm	0.18	c0.20	0.02				0.13			0.05		0.17
v/c Ratio	1.23	1.34	0.13	0.17	0.23		0.21	0.51		0.09	0.62	0.27
Uniform Delay, d1	32.0	32.0	27.8	32.4	32.5		6.3	8.0		5.8	9.0	6.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	143.8	186.9	0.3	0.7	1.0		1.5	1.8		0.4	2.8	0.8
Delay (s)	175.8	218.9	28.1	33.0	33.5		7.8	9.9		6.3	11.8	7.4
Level of Service	F	F	C	C	C		A	A		A	B	A
Approach Delay (s)		147.1			33.3			9.6			10.0	
Approach LOS		F			C			A			B	

Intersection Summary			
HCM Average Control Delay	46.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SEL2	SEL	SET	SER
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)			4.0	4.0		4.0				4.0	4.0	
Lane Util. Factor			1.00	1.00		0.95				1.00	0.95	
Frt			1.00	0.85		0.99				1.00	0.99	
Flt Protected			0.99	1.00		0.98				0.95	1.00	
Satd. Flow (prot)			1166	1000		2158				1118	2203	
Flt Permitted			0.59	1.00		0.54				0.52	1.00	
Satd. Flow (perm)			700	1000		1198				610	2203	
Volume (vph)	11	92	456	48	365	435	47	40	11	63	448	48
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	11	96	475	50	380	453	49	42	11	66	467	50
RTOR Reduction (vph)	0	0	0	26	0	5	0	0	0	0	11	0
Lane Group Flow (vph)	0	0	582	24	0	919	0	0	0	77	506	0
Turn Type		Perm		Perm	Perm				Perm	Perm		
Protected Phases			6			2					4	
Permitted Phases		6		6	2				4	4		
Actuated Green, G (s)			34.0	34.0		34.0				30.0	30.0	
Effective Green, g (s)			36.0	36.0		36.0				31.0	31.0	
Actuated g/C Ratio			0.48	0.48		0.48				0.41	0.41	
Clearance Time (s)			6.0	6.0		6.0				5.0	5.0	
Vehicle Extension (s)			3.0	3.0		3.0				3.0	3.0	
Lane Grp Cap (vph)			336	480		575				252	911	
v/s Ratio Prot											0.23	
v/s Ratio Perm			c0.83	0.02		0.77				0.13		
v/c Ratio			1.73	0.05		2.47dl				0.31	0.56	
Uniform Delay, d1			19.5	10.4		19.5				14.8	16.8	
Progression Factor			1.02	1.01		1.00				1.00	1.00	
Incremental Delay, d2			339.9	0.2		277.6				3.1	2.4	
Delay (s)			359.7	10.7		297.1				17.9	19.2	
Level of Service			F	B		F				B	B	
Approach Delay (s)			332.1			297.1					19.0	
Approach LOS			F			F					B	

Intersection Summary			
HCM Average Control Delay	179.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	142.3%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	NWL	NWT	NWR	NWR2
Lane Configurations				
Ideal Flow (vphpl)	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	
Satd. Flow (prot)	1118	1176	1000	
Flt Permitted	0.40	1.00	1.00	
Satd. Flow (perm)	475	1176	1000	
Volume (vph)	78	261	85	256
Peak-hour factor, PHF	0.96	0.96	0.96	0.96
Adj. Flow (vph)	81	272	89	267
RTOR Reduction (vph)	0	0	144	0
Lane Group Flow (vph)	81	272	212	0
Turn Type	Perm		Perm	
Protected Phases		8		
Permitted Phases	8		8	
Actuated Green, G (s)	30.0	30.0	30.0	
Effective Green, g (s)	31.0	31.0	31.0	
Actuated g/C Ratio	0.41	0.41	0.41	
Clearance Time (s)	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	
Lane Grp Cap (vph)	196	486	413	
v/s Ratio Prot		c0.23		
v/s Ratio Perm	0.17		0.21	
v/c Ratio	0.41	0.56	0.51	
Uniform Delay, d1	15.6	16.8	16.4	
Progression Factor	1.07	1.09	1.62	
Incremental Delay, d2	0.6	0.4	0.4	
Delay (s)	17.3	18.8	26.9	
Level of Service	B	B	C	
Approach Delay (s)		22.7		
Approach LOS		C		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		1.00	0.86			1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.99			0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99		0.95	1.00	1.00
Satd. Flow (prot)	2168	4033		1118	3990			1111		1118	1176	1000
Flt Permitted	0.95	1.00		0.06	1.00			0.41		0.39	1.00	1.00
Satd. Flow (perm)	2168	4033		69	3990			459		459	1176	1000
Volume (vph)	257	2073	49	90	2202	229	126	175	134	268	368	302
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	271	2182	52	95	2318	241	133	184	141	282	387	318
RTOR Reduction (vph)	0	2	0	0	11	0	0	5	0	0	0	1
Lane Group Flow (vph)	271	2232	0	95	2548	0	0	453	0	282	387	317
Turn Type	Prot			Perm			Perm			Perm		pm+ov
Protected Phases	5	2			6			4			4	5
Permitted Phases				6			4			4		4
Actuated Green, G (s)	19.6	92.0		68.4	68.4			49.0		49.0	49.0	68.6
Effective Green, g (s)	19.6	92.0		68.4	68.4			50.0		50.0	50.0	69.6
Actuated g/C Ratio	0.13	0.61		0.46	0.46			0.33		0.33	0.33	0.46
Clearance Time (s)	4.0	4.0		4.0	4.0			5.0		5.0	5.0	4.0
Vehicle Extension (s)	1.5	4.0		4.0	4.0			3.0		3.0	3.0	1.5
Lane Grp Cap (vph)	283	2474		31	1819			153		153	392	491
v/s Ratio Prot	0.12	c0.55			0.64						0.33	0.08
v/s Ratio Perm				c1.37				c0.99		0.61		0.23
v/c Ratio	0.96	0.90		3.06	1.40			2.96		1.84	0.99	0.65
Uniform Delay, d1	64.8	25.1		40.8	40.8			50.0		50.0	49.7	30.8
Progression Factor	1.31	0.60		1.00	1.00			1.00		1.00	0.99	1.06
Incremental Delay, d2	8.2	0.6		1008.4	183.6			898.8		390.5	26.8	1.0
Delay (s)	93.0	15.6		1049.2	224.4			948.8		440.2	76.0	33.5
Level of Service	F	B		F	F			F		F	E	C
Approach Delay (s)		24.0			254.0			948.8			166.4	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	201.8	HCM Level of Service	F
HCM Volume to Capacity ratio	2.71		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	150.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.96		1.00	0.98		1.00	1.00	0.55	1.00	1.00	0.79
Flpb, ped/bikes	0.94	1.00		0.97	1.00		0.92	1.00	1.00	0.73	1.00	1.00
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1494	1540		1533	1603		1463	3167	776	1154	3167	1122
Flt Permitted	0.53	1.00		0.38	1.00		0.35	1.00	1.00	0.44	1.00	1.00
Satd. Flow (perm)	833	1540		617	1603		538	3167	776	537	3167	1122
Volume (vph)	48	247	73	185	322	56	116	425	173	10	553	200
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	50	257	76	193	335	58	121	443	180	10	576	208
RTOR Reduction (vph)	0	14	0	0	4	0	0	0	52	0	0	130
Lane Group Flow (vph)	50	319	0	193	389	0	121	443	128	10	576	78
Confl. Peds. (#/hr)	117		216	216		117	196		419	419		196
Confl. Bikes (#/hr)			5			6			8			20
Turn Type	Perm			pm+pt			Perm		pm+ov	Perm		Perm
Protected Phases		6		5	2			8	5		4	
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	27.6	27.6		37.6	37.6		27.0	27.0	33.5	27.0	27.0	27.0
Effective Green, g (s)	29.0	29.0		39.0	39.0		28.0	28.0	34.0	28.0	28.0	28.0
Actuated g/C Ratio	0.39	0.39		0.52	0.52		0.37	0.37	0.45	0.37	0.37	0.37
Clearance Time (s)	5.4	5.4		3.5	5.4		5.0	5.0	3.5	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	322	595		394	834		201	1182	393	200	1182	419
v/s Ratio Prot		c0.21		0.04	c0.24			0.14	0.03		0.18	
v/s Ratio Perm	0.06			0.22			c0.22		0.14	0.02		0.07
v/c Ratio	0.16	0.54		0.49	0.47		0.60	0.37	0.33	0.05	0.49	0.19
Uniform Delay, d1	15.0	17.8		10.8	11.4		19.0	17.1	13.1	15.0	18.0	15.8
Progression Factor	0.86	0.92		1.00	1.00		0.87	0.81	1.20	1.00	1.00	1.00
Incremental Delay, d2	1.0	3.4		1.0	1.9		10.9	0.8	0.4	0.5	1.4	1.0
Delay (s)	13.9	19.6		11.8	13.3		27.5	14.7	16.2	15.5	19.4	16.8
Level of Service	B	B		B	B		C	B	B	B	B	B
Approach Delay (s)		18.9			12.8			17.1			18.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0			4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		1.00	0.95			0.95	1.00
Frpb, ped/bikes		1.00	1.00		0.92		1.00	0.94			1.00	0.30
Flpb, ped/bikes		0.96	1.00		0.94		0.89	1.00			0.99	1.00
Frt		1.00	0.85		0.97		1.00	0.99			1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00			1.00	1.00
Satd. Flow (prot)		1585	1417		1390		1403	2931			3125	420
Flt Permitted		0.81	1.00		0.93		0.17	1.00			0.89	1.00
Satd. Flow (perm)		1296	1417		1295		257	2931			2789	420
Volume (vph)	57	152	124	67	301	106	175	599	58	48	950	61
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	59	157	128	69	310	109	180	618	60	49	979	63
RTOR Reduction (vph)	0	0	128	0	1	0	0	3	0	0	0	34
Lane Group Flow (vph)	0	216	0	0	487	0	180	675	0	0	1028	29
Confl. Peds. (#/hr)	570		715	715		570	814		795	795		814
Confl. Bikes (#/hr)			9			12			43			28
Turn Type	Perm		NA	Perm			Perm			Perm		Perm
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		2
Actuated Green, G (s)		30.5	0.0		30.5		34.1	34.1			34.1	34.1
Effective Green, g (s)		32.0	0.0		32.0		35.0	35.0			35.0	35.0
Actuated g/C Ratio		0.43	0.00		0.43		0.47	0.47			0.47	0.47
Clearance Time (s)		5.5			5.5		4.9	4.9			4.9	4.9
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	3.0
Lane Grp Cap (vph)		553	0		553		120	1368			1302	196
v/s Ratio Prot								0.23				
v/s Ratio Perm		0.17			c0.38		c0.70				0.37	0.07
v/c Ratio		0.39	0.00		0.88		1.50	0.49			0.79	0.15
Uniform Delay, d1		14.8	37.5		19.8		20.0	13.9			16.9	11.5
Progression Factor		1.00	1.00		1.00		1.00	1.00			1.64	3.03
Incremental Delay, d2		2.1	0.0		18.1		263.4	1.3			4.6	1.5
Delay (s)		16.9	37.5		37.8		283.4	15.1			32.3	36.3
Level of Service		B	D		D		F	B			C	D
Approach Delay (s)		24.5			37.8			71.4			32.6	
Approach LOS		C			D			E			C	

Intersection Summary			
HCM Average Control Delay	44.5	HCM Level of Service	D
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor		0.95			0.95			0.95	1.00		0.95	
Frpb, ped/bikes		0.87			0.97			1.00	0.54		0.98	
Flpb, ped/bikes		0.99			0.93			1.00	1.00		1.00	
Frt		0.94			0.99			1.00	0.85		0.99	
Flt Protected		1.00			0.98			1.00	1.00		1.00	
Satd. Flow (prot)		1793			1951			2235	540		2181	
Flt Permitted		0.89			0.68			1.00	1.00		0.95	
Satd. Flow (perm)		1607			1351			2235	540		2075	
Volume (vph)	22	153	128	205	269	30	0	916	310	5	1041	43
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	22	156	131	209	274	31	0	935	316	5	1062	44
RTOR Reduction (vph)	0	2	0	0	3	0	0	0	91	0	2	0
Lane Group Flow (vph)	0	307	0	0	511	0	0	935	225	0	1109	0
Confl. Peds. (#/hr)	238		195	195		238	518		548	548		518
Confl. Bikes (#/hr)			8			5			23			18
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2	2		
Actuated Green, G (s)		61.5			61.5			78.0	78.0		78.0	
Effective Green, g (s)		63.0			63.0			79.0	79.0		79.0	
Actuated g/C Ratio		0.42			0.42			0.53	0.53		0.53	
Clearance Time (s)		5.5			5.5			5.0	5.0		5.0	
Vehicle Extension (s)		3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)		675			567			1177	284		1093	
v/s Ratio Prot								0.42				
v/s Ratio Perm		0.19			c0.38				0.42		c0.53	
v/c Ratio		0.45			0.97dl			0.79	0.79		1.01	
Uniform Delay, d1		31.2			40.6			28.9	28.8		35.5	
Progression Factor		0.90			1.08			1.76	2.89		1.00	
Incremental Delay, d2		1.4			2.5			1.7	6.4		30.9	
Delay (s)		29.4			46.3			52.4	89.6		66.4	
Level of Service		C			D			D	F		E	
Approach Delay (s)		29.4			46.3			61.8			66.4	
Approach LOS		C			D			E			E	

Intersection Summary			
HCM Average Control Delay	57.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.9%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.91		1.00	0.86	0.86
Frpb, ped/bikes	1.00	0.96		1.00	0.98		1.00	0.95		1.00	0.97	0.71
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		0.92	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.99	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	2168	3838		2168	3950		1114	2992		1025	2899	614
Flt Permitted	0.95	1.00		0.95	1.00		0.13	1.00		0.26	1.00	1.00
Satd. Flow (perm)	2168	3838		2168	3950		158	2992		275	2899	614
Volume (vph)	184	2177	252	109	2304	123	490	890	136	229	931	333
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	192	2268	262	114	2400	128	510	927	142	239	970	347
RTOR Reduction (vph)	0	13	0	0	5	0	0	14	0	0	8	7
Lane Group Flow (vph)	192	2517	0	114	2523	0	510	1055	0	239	1066	236
Confl. Peds. (#/hr)	237		298	298		237	247		419	419		247
Confl. Bikes (#/hr)			4			3			8			8
Turn Type	Prot			Prot			pm+pt			Perm		pm+ov
Protected Phases	5	2		1	6		3	8			4	5
Permitted Phases							8			4		4
Actuated Green, G (s)	7.0	47.5		5.0	45.5		82.1	82.1		57.1	57.1	64.1
Effective Green, g (s)	7.0	49.0		5.0	47.0		84.0	84.0		59.0	59.0	66.0
Actuated g/C Ratio	0.05	0.33		0.03	0.31		0.56	0.56		0.39	0.39	0.44
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	5.9		5.9	5.9	4.0
Vehicle Extension (s)	2.0	4.0		2.0	4.0		3.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)	101	1254		72	1238		222	1676		108	1140	287
v/s Ratio Prot	0.09	c0.66		0.05	c0.64		c0.32	0.35			0.37	0.04
v/s Ratio Perm							c0.97			0.87		0.35
v/c Ratio	1.90	2.01		1.58	2.04		2.30	0.63		2.21	0.94	0.82
Uniform Delay, d1	71.5	50.5		72.5	51.5		36.3	22.4		45.5	43.7	36.9
Progression Factor	1.21	0.90		1.16	1.23		1.00	1.00		1.31	1.32	1.42
Incremental Delay, d2	408.8	453.3		268.5	467.4		597.8	0.5		560.5	7.8	8.8
Delay (s)	495.2	499.0		352.9	530.8		634.2	23.0		620.0	65.3	61.2
Level of Service	F	F		F	F		F	C		F	E	E
Approach Delay (s)		498.7			523.1			220.4			149.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	390.7	HCM Level of Service	F
HCM Volume to Capacity ratio	2.14		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	154.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95			0.95	
Frt		0.93			0.97		1.00	0.98			0.98	
Flt Protected		1.00			0.99		0.95	1.00			1.00	
Satd. Flow (prot)		1097			1127		1118	2201			2194	
Flt Permitted		1.00			0.90		0.17	1.00			1.00	
Satd. Flow (perm)		1097			1024		195	2201			2194	
Volume (vph)	0	154	153	58	230	99	60	1319	149	0	1195	166
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	179	178	67	267	115	70	1534	173	0	1390	193
RTOR Reduction (vph)	0	4	0	0	2	0	0	14	0	0	17	0
Lane Group Flow (vph)	0	353	0	0	447	0	70	1693	0	0	1566	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		26.9			26.9		23.7	23.7			23.7	
Effective Green, g (s)		27.9			27.9		24.1	24.1			24.1	
Actuated g/C Ratio		0.46			0.46		0.40	0.40			0.40	
Clearance Time (s)		5.0			5.0		4.4	4.4			4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		510			476		78	884			881	
v/s Ratio Prot		0.32						c0.77			0.71	
v/s Ratio Perm					c0.44		0.36					
v/c Ratio		0.69			0.94		0.90	1.92			1.78	
Uniform Delay, d1		12.7			15.2		16.8	17.9			17.9	
Progression Factor		1.00			1.00		0.55	0.54			1.00	
Incremental Delay, d2		4.0			26.3		14.0	412.3			354.3	
Delay (s)		16.7			41.6		23.2	421.9			372.3	
Level of Service		B			D		C	F			F	
Approach Delay (s)		16.7			41.6			406.2			372.3	
Approach LOS		B			D			F			F	

Intersection Summary			
HCM Average Control Delay	320.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	148.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	1145		1118	1161		1118	2211		1118	2207	
Flt Permitted	0.47	1.00		0.34	1.00		0.15	1.00		0.15	1.00	
Satd. Flow (perm)	554	1145		401	1161		174	2211		174	2207	
Volume (vph)	197	367	80	76	297	29	91	1394	107	44	1441	134
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	201	374	82	78	303	30	93	1422	109	45	1470	137
RTOR Reduction (vph)	0	7	0	0	6	0	0	9	0	0	12	0
Lane Group Flow (vph)	201	449	0	78	327	0	93	1522	0	45	1595	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	23.3	23.3		23.3	23.3		26.6	26.6		26.6	26.6	
Effective Green, g (s)	24.9	24.9		24.9	24.9		27.1	27.1		27.1	27.1	
Actuated g/C Ratio	0.41	0.41		0.41	0.41		0.45	0.45		0.45	0.45	
Clearance Time (s)	5.6	5.6		5.6	5.6		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	230	475		166	482		79	999		79	997	
v/s Ratio Prot		c0.39			0.28			0.69			c0.72	
v/s Ratio Perm	0.36			0.19			0.54			0.26		
v/c Ratio	0.87	0.95		0.47	0.68		1.18	1.52		0.57	1.60	
Uniform Delay, d1	16.1	16.9		12.8	14.3		16.4	16.4		12.1	16.4	
Progression Factor	0.47	0.45		1.00	1.00		1.67	1.81		0.48	0.54	
Incremental Delay, d2	21.3	21.6		2.1	3.8		116.9	237.3		2.7	270.6	
Delay (s)	28.9	29.1		14.8	18.1		144.4	267.1		8.5	279.4	
Level of Service	C	C		B	B		F	F		A	F	
Approach Delay (s)		29.1			17.5			260.0			272.0	
Approach LOS		C			B			F			F	

Intersection Summary			
HCM Average Control Delay	206.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	136.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor		0.97	0.91	1.00		0.97	0.91	1.00	1.00	0.95		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		3072	4550	1417		3072	4550	1417	1583	3163		1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.09	1.00		0.09
Satd. Flow (perm)		3072	4550	1417		3072	4550	1417	148	3163		148
Volume (vph)	3	227	2025	134	20	266	1677	365	212	1256	10	353
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	3	229	2045	135	20	269	1694	369	214	1269	10	357
RTOR Reduction (vph)	0	0	0	30	0	0	0	41	0	1	0	0
Lane Group Flow (vph)	0	232	2045	105	0	289	1694	328	214	1278	0	357
Turn Type	Prot	Prot		pm+ov	Prot	Prot		pm+ov	pm+pt			pm+pt
Protected Phases	1	1	6	3	5	5	2	7	3	8		7
Permitted Phases				6				2	8			4
Actuated Green, G (s)		13.9	29.1	41.1		16.4	31.6	43.6	54.3	42.3		54.3
Effective Green, g (s)		13.9	30.6	42.6		16.4	33.1	45.1	57.0	45.0		57.0
Actuated g/C Ratio		0.12	0.26	0.36		0.14	0.28	0.38	0.48	0.38		0.48
Clearance Time (s)		4.0	5.5	4.0		4.0	5.5	4.0	4.0	6.7		4.0
Vehicle Extension (s)		3.0	5.0	3.0		3.0	5.0	3.0	3.0	4.0		3.0
Lane Grp Cap (vph)		356	1160	550		420	1255	580	214	1186		214
v/s Ratio Prot		0.08	c0.45	0.02		c0.09	0.37	0.06	0.10	0.40		c0.17
v/s Ratio Perm				0.05				0.18	0.37			c0.63
v/c Ratio		0.65	1.76	0.19		0.69	1.35	0.57	1.00	1.08		1.67
Uniform Delay, d1		50.7	44.7	26.8		49.4	43.5	29.7	56.2	37.5		35.5
Progression Factor		1.55	0.68	0.08		1.56	0.84	0.16	1.00	1.00		1.35
Incremental Delay, d2		1.2	344.3	0.0		0.4	157.9	0.1	61.5	49.8		302.6
Delay (s)		79.9	374.8	2.1		77.6	194.5	4.8	117.7	87.3		350.5
Level of Service		E	F	A		E	F	A	F	F		F
Approach Delay (s)			325.5				150.4			91.7		
Approach LOS			F				F			F		

Intersection Summary			
HCM Average Control Delay	191.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	127.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Ideal Flow (vphpl)	1700	1700
Total Lost time (s)	4.0	4.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3167	1417
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3167	1417
Volume (vph)	1340	109
Peak-hour factor, PHF	0.99	0.99
Adj. Flow (vph)	1354	110
RTOR Reduction (vph)	0	51
Lane Group Flow (vph)	1354	59
Turn Type		Perm
Protected Phases	4	
Permitted Phases		4
Actuated Green, G (s)	42.3	42.3
Effective Green, g (s)	45.0	45.0
Actuated g/C Ratio	0.38	0.38
Clearance Time (s)	6.7	6.7
Vehicle Extension (s)	4.0	4.0
Lane Grp Cap (vph)	1188	531
v/s Ratio Prot	0.43	
v/s Ratio Perm		0.04
v/c Ratio	1.14	0.11
Uniform Delay, d1	37.5	24.5
Progression Factor	1.07	1.35
Incremental Delay, d2	64.0	0.0
Delay (s)	104.0	33.1
Level of Service	F	C
Approach Delay (s)	148.0	
Approach LOS	F	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4525		1583	5681		1583	3142		1583	3129	
Flt Permitted	0.14	1.00		0.12	1.00		0.15	1.00		0.13	1.00	
Satd. Flow (perm)	230	4525		202	5681		247	3142		215	3129	
Volume (vph)	75	1969	76	248	2895	186	79	1229	66	318	1300	113
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	78	2051	79	258	3016	194	82	1280	69	331	1354	118
RTOR Reduction (vph)	0	5	0	0	11	0	0	4	0	0	0	0
Lane Group Flow (vph)	78	2125	0	258	3199	0	82	1345	0	331	1472	0
Turn Type	Perm			pm+pt			Perm			pm+pt		
Protected Phases		2		1	6			8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	28.0	28.0		41.0	41.0		25.6	25.6		38.6	38.6	
Effective Green, g (s)	29.0	29.0		42.0	42.0		27.0	27.0		40.0	40.0	
Actuated g/C Ratio	0.32	0.32		0.47	0.47		0.30	0.30		0.44	0.44	
Clearance Time (s)	5.0	5.0		3.5	5.0		5.4	5.4		3.5	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1458		232	2651		74	943		232	1391	
v/s Ratio Prot		c0.47		0.11	c0.56			0.43		c0.14	0.47	
v/s Ratio Perm	0.34			0.41			0.33			c0.49		
v/c Ratio	1.05	1.46		1.11	1.21		1.11	1.43		1.43	1.06	
Uniform Delay, d1	30.5	30.5		42.7	24.0		31.5	31.5		42.7	25.0	
Progression Factor	1.73	1.72		2.10	0.46		1.01	0.98		1.00	1.00	
Incremental Delay, d2	46.6	206.3		56.6	93.4		122.3	196.4		215.2	41.2	
Delay (s)	99.4	258.7		146.2	104.6		154.1	227.1		257.9	66.2	
Level of Service	F	F		F	F		F	F		F	E	
Approach Delay (s)		253.1			107.7			222.9			101.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	160.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	133.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4550	1417	1583	4550	1417	1583	3167	1417	1583	3068	
Flt Permitted	0.13	1.00	1.00	0.13	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	223	4550	1417	223	4550	1417	1583	3167	1417	1583	3068	
Volume (vph)	160	1639	221	369	1912	474	220	721	89	242	957	249
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	162	1656	223	373	1931	479	222	728	90	244	967	252
RTOR Reduction (vph)	0	0	13	0	0	60	0	0	1	0	26	0
Lane Group Flow (vph)	162	1656	210	373	1931	419	222	728	89	244	1193	0
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	Prot		pm+ov	Prot		
Protected Phases	1	6	3	5	2	7	3	8	5	7	4	
Permitted Phases	6		6	2		2			8			
Actuated Green, G (s)	34.5	28.0	35.6	34.5	28.0	34.5	7.6	30.9	37.4	6.5	29.8	
Effective Green, g (s)	35.9	29.9	37.0	35.9	29.9	35.9	7.1	32.1	38.1	6.0	31.0	
Actuated g/C Ratio	0.40	0.33	0.41	0.40	0.33	0.40	0.08	0.36	0.42	0.07	0.34	
Clearance Time (s)	3.5	5.9	3.5	3.5	5.9	3.5	3.5	5.2	3.5	3.5	5.2	
Vehicle Extension (s)	3.0	5.0	3.0	3.0	5.0	3.0	3.0	5.0	3.0	3.0	5.0	
Lane Grp Cap (vph)	180	1512	583	180	1512	628	125	1130	663	106	1057	
v/s Ratio Prot	0.06	0.36	0.03	c0.14	0.42	0.04	c0.14	0.23	0.01	c0.15	c0.39	
v/s Ratio Perm	0.30		0.12	c0.69		0.25			0.05			
v/c Ratio	0.90	1.10	0.36	2.07	1.28	0.67	1.78	0.64	0.13	2.30	1.13	
Uniform Delay, d1	43.7	30.1	18.3	25.0	30.1	22.2	41.5	24.2	15.9	42.0	29.5	
Progression Factor	0.95	0.64	0.72	1.00	1.00	1.00	1.00	1.00	1.00	1.26	1.10	
Incremental Delay, d2	6.0	44.1	0.0	501.1	130.0	2.7	379.5	1.7	0.1	588.5	59.4	
Delay (s)	47.5	63.3	13.3	526.1	160.0	24.8	421.0	25.9	16.0	641.4	91.8	
Level of Service	D	E	B	F	F	C	F	C	B	F	F	
Approach Delay (s)		56.6			185.8			109.4			183.5	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM Average Control Delay	138.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.72		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	123.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.96		1.00	1.00	0.75	1.00	0.89		1.00	0.99	
Flpb, ped/bikes	0.84	1.00		0.67	1.00	1.00	0.96	1.00		0.86	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.93		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1333	1585		1067	1667	1062	1522	2622		1357	3122	
Flt Permitted	0.51	1.00		0.68	1.00	1.00	0.15	1.00		0.53	1.00	
Satd. Flow (perm)	712	1585		759	1667	1062	248	2622		756	3122	
Volume (vph)	14	107	10	287	212	62	98	195	158	139	1167	33
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	15	114	11	305	226	66	104	207	168	148	1241	35
RTOR Reduction (vph)	0	4	0	0	0	48	0	32	0	0	3	0
Lane Group Flow (vph)	15	121	0	305	226	18	104	343	0	148	1273	0
Confl. Peds. (#/hr)	212		207	207		212	177		203	203		177
Confl. Bikes (#/hr)			13			9			15			12
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4		4	2			2		
Actuated Green, G (s)	20.2	20.2		20.2	20.2	20.2	45.3	45.3		45.3	45.3	
Effective Green, g (s)	21.0	21.0		21.0	21.0	21.0	46.0	46.0		46.0	46.0	
Actuated g/C Ratio	0.28	0.28		0.28	0.28	0.28	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.8	4.8		4.8	4.8	4.8	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	199	444		213	467	297	152	1608		464	1915	
v/s Ratio Prot		0.08			0.14			0.13			0.41	
v/s Ratio Perm	0.02			c0.40		0.02	c0.42			0.20		
v/c Ratio	0.08	0.27		1.43	0.48	0.06	0.68	0.21		0.32	0.66	
Uniform Delay, d1	19.9	21.0		27.0	22.5	19.8	9.7	6.5		7.0	9.5	
Progression Factor	1.00	1.00		0.97	0.96	1.05	1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.7	1.5		217.0	3.2	0.4	22.2	0.3		1.8	1.8	
Delay (s)	20.6	22.5		243.2	24.8	21.2	31.9	6.8		8.8	11.3	
Level of Service	C	C		F	C	C	C	A		A	B	
Approach Delay (s)		22.3			136.0			12.2			11.0	
Approach LOS		C			F			B			B	

Intersection Summary			
HCM Average Control Delay	40.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes		0.99		1.00	0.86		1.00	1.00	0.72	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		0.98	1.00	1.00	0.93	1.00	
Frt		0.93		1.00	0.86		1.00	1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1069		1118	870		1093	2235	722	1036	2234	
Flt Permitted		0.99		0.76	1.00		0.17	1.00	1.00	0.28	1.00	
Satd. Flow (perm)		1069		888	870		193	2235	722	304	2234	
Volume (vph)	1	1	2	218	8	114	3	774	155	147	1045	2
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1	1	2	222	8	116	3	790	158	150	1066	2
RTOR Reduction (vph)	0	2	0	0	78	0	0	0	82	0	0	0
Lane Group Flow (vph)	0	2	0	222	46	0	3	790	76	150	1068	0
Confl. Peds. (#/hr)	82					82	77		239	239		77
Confl. Bikes (#/hr)			2			6			9			5
Turn Type	Split			Perm			Perm		Perm	custom		
Protected Phases	3	3			4			6				
Permitted Phases				4			6		6	2	2	
Actuated Green, G (s)		1.3		23.4	23.4		35.7	35.7	35.7	35.7	35.7	
Effective Green, g (s)		2.3		24.4	24.4		36.3	36.3	36.3	36.3	36.3	
Actuated g/C Ratio		0.03		0.33	0.33		0.48	0.48	0.48	0.48	0.48	
Clearance Time (s)		5.0		5.0	5.0		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		33		289	283		93	1082	349	147	1081	
v/s Ratio Prot		c0.00			0.05			0.35				
v/s Ratio Perm				c0.25			0.02		0.11	c0.49	0.48	
v/c Ratio		0.06		0.77	0.16		0.03	0.73	0.22	1.02	0.99	
Uniform Delay, d1		35.3		22.8	18.0		10.1	15.4	11.2	19.4	19.1	
Progression Factor		1.00		1.82	3.59		0.98	1.21	2.59	1.00	1.00	
Incremental Delay, d2		0.8		6.2	0.1		0.1	0.4	0.1	79.7	24.6	
Delay (s)		36.1		47.7	64.7		10.0	19.1	29.0	99.1	43.8	
Level of Service		D		D	E		B	B	C	F	D	
Approach Delay (s)		36.1			53.8			20.7			50.6	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM Average Control Delay	39.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		1.00	0.86		1.00	0.95	1.00	1.00	1.00	0.88
Frpb, ped/bikes	1.00	0.97		1.00	0.98		1.00	1.00	0.69	1.00	1.00	0.80
Flpb, ped/bikes	1.00	1.00		0.98	1.00		1.00	1.00	1.00	0.80	1.00	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	3902		1100	3910		1118	2235	691	897	1176	1411
Flt Permitted	0.95	1.00		0.06	1.00		0.10	1.00	1.00	0.57	1.00	1.00
Satd. Flow (perm)	2168	3902		75	3910		116	2235	691	536	1176	1411
Volume (vph)	400	2264	120	44	2813	185	203	290	81	231	393	699
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	417	2358	125	46	2930	193	211	302	84	241	409	728
RTOR Reduction (vph)	0	5	0	0	6	0	0	0	1	0	0	0
Lane Group Flow (vph)	417	2478	0	46	3117	0	211	302	83	241	409	728
Confl. Peds. (#/hr)	150		269	269		450	284		210	210		284
Confl. Bikes (#/hr)			4			9			6			5
Turn Type	Prot			Perm			pm+pt		Perm	Perm		pm+ov
Protected Phases	1	6			2		3	8			4	1
Permitted Phases				2			8		8	4		4
Actuated Green, G (s)	25.0	90.0		61.0	61.0		49.2	49.2	49.2	35.2	35.2	60.2
Effective Green, g (s)	25.0	91.0		62.0	62.0		51.0	51.0	51.0	37.0	37.0	62.0
Actuated g/C Ratio	0.17	0.61		0.41	0.41		0.34	0.34	0.34	0.25	0.25	0.41
Clearance Time (s)	4.0	5.0		5.0	5.0		4.0	5.8	5.8	5.8	5.8	4.0
Vehicle Extension (s)	2.0	4.0		4.0	4.0		2.0	3.0	3.0	3.0	3.0	2.0
Lane Grp Cap (vph)	361	2367		31	1616		106	760	235	132	290	621
v/s Ratio Prot	0.19	0.63			c0.80		c0.13	0.14			0.35	c0.20
v/s Ratio Perm				0.62			c0.54		0.12	0.45		0.32
v/c Ratio	1.16	1.05		1.48	1.93		1.99	0.40	0.35	1.83	1.41	1.17
Uniform Delay, d1	62.5	29.5		44.0	44.0		41.5	37.8	37.1	56.5	56.5	44.0
Progression Factor	0.83	1.53		0.43	0.45		1.00	1.00	1.00	0.92	0.91	1.06
Incremental Delay, d2	73.0	22.5		232.7	418.1		477.6	0.3	0.9	387.6	195.8	87.3
Delay (s)	124.8	67.7		251.6	437.7		519.1	38.1	38.1	439.5	247.5	134.0
Level of Service	F	E		F	F		F	D	D	F	F	F
Approach Delay (s)		75.9			435.0			208.1			221.1	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM Average Control Delay	252.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	152.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0			
Lane Util. Factor		0.95		1.00	0.95		1.00		1.00			
Frt		0.99		1.00	1.00		1.00		0.85			
Flt Protected		1.00		0.95	1.00		0.95		1.00			
Satd. Flow (prot)		3122		1583	3167		1583		1417			
Flt Permitted		1.00		0.09	1.00		0.76		1.00			
Satd. Flow (perm)		3122		156	3167		1262		1417			
Volume (vph)	0	1379	143	536	1970	0	380	0	745	0	0	0
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1422	147	553	2031	0	392	0	768	0	0	0
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	334	0	0	0
Lane Group Flow (vph)	0	1563	0	553	2031	0	392	0	434	0	0	0
Turn Type				pm+pt			custom		Over	Perm		
Protected Phases		2		1	6				1		4	
Permitted Phases				6			8			4		
Actuated Green, G (s)		37.7		81.0	81.0		30.0		39.3			
Effective Green, g (s)		38.7		82.0	82.0		30.0		39.3			
Actuated g/C Ratio		0.32		0.68	0.68		0.25		0.33			
Clearance Time (s)		5.0		4.0	5.0		4.0		4.0			
Vehicle Extension (s)		4.0		3.0	3.0		3.0		3.0			
Lane Grp Cap (vph)		1007		574	2164		316		464			
v/s Ratio Prot		c0.50		0.32	c0.64				0.31			
v/s Ratio Perm				0.34			c0.31					
v/c Ratio		1.55		0.96	0.94		1.24		0.93			
Uniform Delay, d1		40.6		41.7	16.8		45.0		39.1			
Progression Factor		1.00		0.94	1.00		1.00		1.00			
Incremental Delay, d2		253.3		24.8	7.9		132.3		26.1			
Delay (s)		294.0		64.1	24.7		177.3		65.2			
Level of Service		F		E	C		F		E			
Approach Delay (s)		294.0			33.1			103.1			0.0	
Approach LOS		F			C			F			A	

Intersection Summary			
HCM Average Control Delay	125.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	114.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	1.00	1.00	0.95	0.88
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	1.00	0.93	1.00	1.00	0.91
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	2168	3901		2168	3961		1114	2235	928	1107	2235	1607
Flt Permitted	0.95	1.00		0.95	1.00		0.17	1.00	1.00	0.16	1.00	1.00
Satd. Flow (perm)	2168	3901		2168	3961		196	2235	928	183	2235	1607
Volume (vph)	85	2612	278	8	3250	403	207	813	265	106	621	646
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)	92	2839	302	9	3533	438	225	884	288	115	675	702
RTOR Reduction (vph)	0	12	0	0	15	0	0	0	0	0	0	2
Lane Group Flow (vph)	92	3129	0	9	3956	0	225	884	288	115	675	700
Confl. Peds. (#/hr)	16		74	74		16	73		33	33		73
Confl. Bikes (#/hr)			14			12			27			14
Turn Type	Prot			Prot			pm+pt		pm+ov	Perm		pm+ov
Protected Phases	5	2		1	6		3	8	1		4	5
Permitted Phases							8		8	4		4
Actuated Green, G (s)	22.0	80.5		5.0	63.5		48.1	48.1	53.1	39.1	39.1	61.1
Effective Green, g (s)	22.0	82.0		5.0	65.0		51.0	51.0	56.0	42.0	42.0	64.0
Actuated g/C Ratio	0.15	0.55		0.03	0.43		0.34	0.34	0.37	0.28	0.28	0.43
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	6.9	4.0	6.9	6.9	4.0
Vehicle Extension (s)	1.0	4.0		1.0	4.0		3.0	2.0	1.0	2.0	2.0	1.0
Lane Grp Cap (vph)	318	2133		72	1716		97	760	371	51	626	686
v/s Ratio Prot	0.04	c0.80		0.00	c1.00		c0.08	0.40	0.03		0.30	0.15
v/s Ratio Perm							c0.71		0.28	0.63		0.29
v/c Ratio	0.29	1.47		0.12	2.31		2.32	1.16	0.78	2.25	1.08	1.02
Uniform Delay, d1	57.0	34.0		70.4	42.5		50.4	49.5	41.5	54.0	54.0	43.0
Progression Factor	0.57	0.39		1.27	0.52		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.0	210.4		0.0	587.6		624.8	87.6	9.0	622.3	58.9	39.5
Delay (s)	32.6	223.8		89.1	609.6		675.2	137.1	50.4	676.3	112.9	82.5
Level of Service	C	F		F	F		F	F	D	F	F	F
Approach Delay (s)		218.3			608.4			205.9			142.0	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	359.0	HCM Level of Service	F
HCM Volume to Capacity ratio	2.12		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	154.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86		0.97	0.81		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1118	3996		2168	4707		1118	2172		1118	2170	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1118	3996		2168	4707		1118	2172		1118	2170	
Volume (vph)	123	2381	217	283	2846	249	136	988	231	138	842	204
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	128	2480	226	295	2965	259	142	1029	241	144	877	212
RTOR Reduction (vph)	0	10	0	0	10	0	0	14	0	0	14	0
Lane Group Flow (vph)	128	2696	0	295	3214	0	142	1256	0	144	1075	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases												
Actuated Green, G (s)	12.0	62.5		21.0	71.5		17.0	33.0		14.0	30.0	
Effective Green, g (s)	12.0	64.0		21.0	73.0		17.0	35.0		14.0	32.0	
Actuated g/C Ratio	0.08	0.43		0.14	0.49		0.11	0.23		0.09	0.21	
Clearance Time (s)	4.0	5.5		4.0	5.5		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	1.0	4.0		1.0	4.0		1.0	4.0		1.0	4.0	
Lane Grp Cap (vph)	89	1705		304	2291		127	507		104	463	
v/s Ratio Prot	0.11	c0.67		0.14	c0.68		0.13	c0.58		0.13	c0.50	
v/s Ratio Perm												
v/c Ratio	1.44	1.58		0.97	1.40		1.12	2.48		1.38	2.32	
Uniform Delay, d1	69.0	43.0		64.2	38.5		66.5	57.5		68.0	59.0	
Progression Factor	1.04	0.90		0.64	0.41		1.00	1.00		1.00	1.00	
Incremental Delay, d2	213.0	262.4		9.6	181.5		115.1	670.9		221.7	601.4	
Delay (s)	284.9	300.9		50.9	197.2		181.6	728.4		289.7	660.4	
Level of Service	F	F		D	F		F	F		F	F	
Approach Delay (s)		300.2			184.9			673.4			617.1	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	357.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.83		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	153.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4476		1583	4550	1417	1583	3167	1417	1583	3109	
Flt Permitted	0.12	1.00		0.95	1.00	1.00	0.16	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	208	4476		1583	4550	1417	263	3167	1417	185	3109	
Volume (vph)	120	1889	228	159	2874	155	41	1423	135	88	824	114
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	122	1928	233	162	2933	158	42	1452	138	90	841	116
RTOR Reduction (vph)	0	17	0	0	0	3	0	0	36	0	0	0
Lane Group Flow (vph)	122	2144	0	162	2933	155	42	1452	102	90	957	0
Turn Type	Perm			Prot		Perm	Perm		Perm	Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	31.0	31.0		10.5	45.0	45.0	35.0	35.0	35.0	35.0	35.0	
Effective Green, g (s)	32.0	32.0		10.0	46.0	46.0	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.36	0.36		0.11	0.51	0.51	0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	5.0	5.0		3.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	74	1591		176	2326	724	105	1267	567	74	1244	
v/s Ratio Prot		0.48		0.10	c0.64			0.46			0.31	
v/s Ratio Perm	c0.59					0.11	0.16		0.07	c0.49		
v/c Ratio	1.65	1.35		0.92	1.26	0.21	0.40	1.15	0.18	1.22	0.77	
Uniform Delay, d1	29.0	29.0		39.6	22.0	12.1	19.3	27.0	17.5	27.0	23.4	
Progression Factor	0.77	0.76		1.08	0.55	0.19	0.92	0.78	0.96	1.00	1.00	
Incremental Delay, d2	336.9	160.1		7.7	117.8	0.1	5.1	70.5	0.3	173.9	4.6	
Delay (s)	359.3	182.2		50.5	129.8	2.4	23.0	91.6	17.0	200.9	28.0	
Level of Service	F	F		D	F	A	C	F	B	F	C	
Approach Delay (s)		191.6			119.7			83.5			42.9	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	122.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.42		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	136.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	1583	4503		1583	3112		1583	3167	1417
Flt Permitted	0.18	1.00	1.00	0.15	1.00		0.95	1.00		0.13	1.00	1.00
Satd. Flow (perm)	303	4550	1417	256	4503		1583	3112		211	3167	1417
Volume (vph)	116	1622	210	222	1767	131	223	1291	166	59	1219	105
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	117	1638	212	224	1785	132	225	1304	168	60	1231	106
RTOR Reduction (vph)	0	0	14	0	9	0	0	11	0	0	0	17
Lane Group Flow (vph)	117	1638	198	224	1908	0	225	1461	0	60	1231	89
Turn Type	Perm		pm+ov	pm+pt			Prot			Perm		Perm
Protected Phases		6	3	5	2		3	8			4	
Permitted Phases	6		6	2						4		4
Actuated Green, G (s)	20.5	20.5	32.0	29.5	29.5		11.5	50.5		35.5	35.5	35.5
Effective Green, g (s)	22.0	22.0	33.0	31.0	31.0		11.0	51.0		36.0	36.0	36.0
Actuated g/C Ratio	0.24	0.24	0.37	0.34	0.34		0.12	0.57		0.40	0.40	0.40
Clearance Time (s)	5.5	5.5	3.5	3.0	5.5		3.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	2.0	3.0	3.0		2.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	1112	583	162	1551		193	1763		84	1267	567
v/s Ratio Prot		0.36	0.04	0.08	c0.42		c0.14	0.47			c0.39	
v/s Ratio Perm	c0.39		0.10	0.40						0.28		0.06
v/c Ratio	1.58	1.47	0.34	1.38	1.23		1.17	0.83		0.71	0.97	0.16
Uniform Delay, d1	34.0	34.0	20.6	44.7	29.5		39.5	15.9		22.7	26.5	17.3
Progression Factor	1.00	1.00	1.00	1.61	1.50		1.00	1.00		1.35	1.37	1.54
Incremental Delay, d2	316.2	217.8	0.1	175.8	104.1		116.6	4.7		25.9	13.7	0.3
Delay (s)	350.2	251.8	20.7	247.7	148.3		156.1	20.6		56.5	50.0	26.9
Level of Service	F	F	C	F	F		F	C		E	D	C
Approach Delay (s)		232.7			158.7			38.5			48.6	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM Average Control Delay	129.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	117.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91	1.00	1.00	0.95	1.00	0.86	0.86	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1303	3742		1304	3747	1129	1304	2608	1137	2243	2285	
Flt Permitted	0.07	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	95	3742		1304	3747	1129	1304	2608	1137	2243	2285	
Volume (vph)	22	1437	10	83	1721	1101	91	393	264	976	216	7
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	22	1466	10	85	1756	1123	93	401	269	996	220	7
RTOR Reduction (vph)	0	1	0	0	0	358	0	0	0	0	1	0
Lane Group Flow (vph)	22	1475	0	85	1756	765	93	401	269	664	558	0
Confl. Peds. (#/hr)	11		9	9		11	58		11	11		58
Confl. Bikes (#/hr)			6			8			10			4
Turn Type	Perm			Prot		Perm	Split		pm+ov	Split		
Protected Phases		6		5	2		3	3	5	4	4	
Permitted Phases	6					2			3			
Actuated Green, G (s)	56.8	56.8		10.0	70.8	70.8	24.2	24.2	34.2	40.0	40.0	
Effective Green, g (s)	57.8	57.8		10.0	71.8	71.8	25.2	25.2	35.2	41.0	41.0	
Actuated g/C Ratio	0.39	0.39		0.07	0.48	0.48	0.17	0.17	0.23	0.27	0.27	
Clearance Time (s)	5.0	5.0		4.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	
Vehicle Extension (s)	4.0	4.0		2.0	4.0	4.0	2.0	2.0	2.0	4.0	4.0	
Lane Grp Cap (vph)	37	1442		87	1794	540	219	438	267	613	625	
v/s Ratio Prot		0.39		0.07	0.47		0.07	0.15	c0.07	c0.30	0.24	
v/s Ratio Perm	0.23					c0.68			0.17			
v/c Ratio	0.59	1.02		0.98	0.98	1.42	0.42	0.92	1.01	1.08	1.02dl	
Uniform Delay, d1	36.8	46.1		69.9	38.4	39.1	55.9	61.4	57.4	54.5	52.4	
Progression Factor	1.68	1.66		1.14	1.00	3.33	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	45.1	27.1		23.1	3.1	188.4	0.5	23.2	57.0	60.9	15.4	
Delay (s)	106.7	103.7		102.7	41.3	318.4	56.4	84.5	114.4	115.4	67.8	
Level of Service	F	F		F	D	F	E	F	F	F	E	
Approach Delay (s)		103.7			148.1			91.6			93.7	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	120.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	135.1%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.95	1.00		1.00			0.95	
Frt	1.00	0.99		1.00	1.00	0.85		0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.99	
Satd. Flow (prot)	1583	4482		1583	3167	1417		1651			3057	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.53	
Satd. Flow (perm)	1583	4482		1583	3167	1417		1630			1627	
Volume (vph)	141	1020	113	90	1008	125	10	654	47	98	464	127
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	148	1074	119	95	1061	132	11	688	49	103	488	134
RTOR Reduction (vph)	0	12	0	0	0	75	0	2	0	0	23	0
Lane Group Flow (vph)	148	1181	0	95	1061	57	0	746	0	0	702	0
Turn Type	Prot			Prot		Perm	Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases						2						
Actuated Green, G (s)	12.8	43.4		8.3	38.9	38.9		26.0			26.0	
Effective Green, g (s)	12.8	43.7		8.3	39.2	39.2		26.0			26.0	
Actuated g/C Ratio	0.14	0.49		0.09	0.44	0.44		0.29			0.29	
Clearance Time (s)	4.0	4.3		4.0	4.3	4.3		4.0			4.0	
Vehicle Extension (s)	3.0	5.7		3.0	5.5	5.5		3.0			3.0	
Lane Grp Cap (vph)	225	2176		146	1379	617		471			470	
v/s Ratio Prot	c0.09	0.26		0.06	c0.34							
v/s Ratio Perm						0.04		c0.46			0.43	
v/c Ratio	0.66	0.54		0.65	0.77	0.09		1.58			4.06dl	
Uniform Delay, d1	36.5	16.2		39.5	21.6	14.9		32.0			32.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	
Incremental Delay, d2	6.8	1.0		9.9	4.2	0.3		272.6			232.7	
Delay (s)	43.3	17.1		49.4	25.7	15.2		304.6			264.7	
Level of Service	D	B		D	C	B		F			F	
Approach Delay (s)		20.0			26.4			304.6			264.7	
Approach LOS		C			C			F			F	

Intersection Summary			
HCM Average Control Delay	117.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	117.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.87	1.00	0.97	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		0.93	1.00	1.00	0.92	1.00	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	3710		1293	3740		1213	2608	1013	1200	2479	
Flt Permitted	0.08	1.00		0.13	1.00		0.28	1.00	1.00	0.55	1.00	
Satd. Flow (perm)	103	3710		171	3740		353	2608	1013	694	2479	
Volume (vph)	351	1406	51	76	1792	10	59	233	28	37	481	68
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	366	1465	53	79	1867	10	61	243	29	39	501	71
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	20	0	8	0
Lane Group Flow (vph)	366	1515	0	79	1877	0	61	243	9	39	564	0
Confl. Peds. (#/hr)	63		61	61		63	79		72	72		79
Confl. Bikes (#/hr)			9			13			4			9
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	95.5	95.5		95.5	95.5		46.0	46.0	46.0	46.0	46.0	
Effective Green, g (s)	96.0	96.0		96.0	96.0		46.0	46.0	46.0	46.0	46.0	
Actuated g/C Ratio	0.64	0.64		0.64	0.64		0.31	0.31	0.31	0.31	0.31	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	66	2374		109	2394		108	800	311	213	760	
v/s Ratio Prot		0.41			0.50			0.09			c0.23	
v/s Ratio Perm	c3.55			0.46			0.17		0.01	0.06		
v/c Ratio	5.55	0.64		0.72	0.78		0.56	0.30	0.03	0.18	0.74	
Uniform Delay, d1	27.0	16.4		18.1	19.5		43.6	39.8	36.4	38.2	46.7	
Progression Factor	1.00	1.00		1.55	1.67		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2078.2	1.3		15.8	1.1		19.7	1.0	0.2	1.9	6.5	
Delay (s)	2105.2	17.8		43.9	33.6		63.3	40.7	36.5	40.1	53.2	
Level of Service	F	B		D	C		E	D	D	D	D	
Approach Delay (s)		423.3			34.0			44.5			52.3	
Approach LOS		F			C			D			D	

Intersection Summary			
HCM Average Control Delay	190.4	HCM Level of Service	F
HCM Volume to Capacity ratio	3.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	1.00		1.00	1.00	1.00
Frt		0.97			0.98		1.00	1.00		1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1615			1627		1583	1662		1583	1667	1417
Flt Permitted		0.94			0.91		0.33	1.00		0.36	1.00	1.00
Satd. Flow (perm)		1534			1493		549	1662		601	1667	1417
Volume (vph)	66	389	105	19	142	26	93	504	10	93	553	76
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	69	405	109	20	148	27	97	525	10	97	576	79
RTOR Reduction (vph)	0	14	0	0	10	0	0	1	0	0	0	36
Lane Group Flow (vph)	0	569	0	0	185	0	97	534	0	97	576	43
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		8			4			2			6	
Permitted Phases	8			4			2			6		6
Actuated Green, G (s)		18.5			18.5		32.7	32.7		32.7	32.7	32.7
Effective Green, g (s)		19.0			19.0		33.0	33.0		33.0	33.0	33.0
Actuated g/C Ratio		0.32			0.32		0.55	0.55		0.55	0.55	0.55
Clearance Time (s)		4.5			4.5		4.3	4.3		4.3	4.3	4.3
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		486			473		302	914		331	917	779
v/s Ratio Prot								0.32			c0.35	
v/s Ratio Perm		c0.37			0.12		0.18			0.16		0.03
v/c Ratio		1.17			0.39		0.32	0.58		0.29	0.63	0.06
Uniform Delay, d1		20.5			16.0		7.4	8.9		7.2	9.3	6.3
Progression Factor		1.00			1.00		1.04	0.89		1.00	1.00	1.00
Incremental Delay, d2		97.2			0.5		1.5	1.4		2.2	3.3	0.1
Delay (s)		117.7			16.5		9.1	9.5		9.5	12.5	6.4
Level of Service		F			B		A	A		A	B	A
Approach Delay (s)		117.7			16.5			9.4			11.5	
Approach LOS		F			B			A			B	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	3688		1304	3717		1304	1373	1167	1304	1369	
Flt Permitted	0.17	1.00		0.17	1.00		0.27	1.00	1.00	0.30	1.00	
Satd. Flow (perm)	239	3688		239	3717		371	1373	1167	414	1369	
Volume (vph)	37	1267	150	86	1326	75	98	544	101	58	571	10
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	38	1293	153	88	1353	77	100	555	103	59	583	10
RTOR Reduction (vph)	0	24	0	0	10	0	0	0	6	0	1	0
Lane Group Flow (vph)	38	1422	0	88	1420	0	100	555	97	59	592	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4		4	4		
Actuated Green, G (s)	22.4	22.4		22.4	22.4		28.0	28.0	28.0	28.0	28.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		29.0	29.0	29.0	29.0	29.0	
Actuated g/C Ratio	0.38	0.38		0.38	0.38		0.48	0.48	0.48	0.48	0.48	
Clearance Time (s)	4.6	4.6		4.6	4.6		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)	92	1414		92	1425		179	664	564	200	662	
v/s Ratio Prot		c0.39			0.38			0.40			c0.43	
v/s Ratio Perm	0.16			0.37			0.27		0.08	0.14		
v/c Ratio	0.41	1.01		0.96	1.00		0.56	0.84	0.17	0.29	0.89	
Uniform Delay, d1	13.6	18.5		18.0	18.5		11.0	13.4	8.7	9.3	14.1	
Progression Factor	1.00	1.00		1.36	1.31		1.00	1.00	1.00	0.53	0.73	
Incremental Delay, d2	13.1	25.3		72.7	20.4		12.0	11.9	0.7	2.6	12.6	
Delay (s)	26.7	43.8		97.1	44.6		23.0	25.3	9.4	7.6	23.0	
Level of Service	C	D		F	D		C	C	A	A	C	
Approach Delay (s)		43.4			47.6			22.9			21.6	
Approach LOS		D			D			C			C	

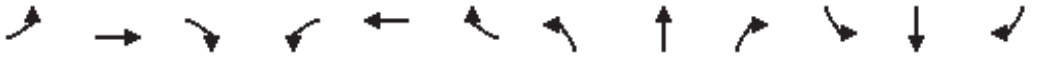
Intersection Summary			
HCM Average Control Delay	38.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	122.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4417		1583	5733	1417	1583	3070		1583	3167	1417
Flt Permitted	0.10	1.00		0.10	1.00	1.00	0.12	1.00		0.14	1.00	1.00
Satd. Flow (perm)	167	4417		167	5733	1417	208	3070		241	3167	1417
Volume (vph)	118	1159	279	207	1855	253	150	700	179	193	1170	63
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	123	1207	291	216	1932	264	156	729	186	201	1219	66
RTOR Reduction (vph)	0	45	0	0	0	35	0	25	0	0	0	17
Lane Group Flow (vph)	123	1453	0	216	1932	229	156	890	0	201	1219	49
Turn Type	Perm			Perm		pm+ov	pm+pt			pm+pt		Perm
Protected Phases		6			2	7	3	8		7	4	
Permitted Phases	6			2		2	8			4		4
Actuated Green, G (s)	39.0	39.0		39.0	39.0	45.0	36.1	30.1		36.1	30.1	30.1
Effective Green, g (s)	40.0	40.0		40.0	40.0	46.0	38.0	32.0		38.0	32.0	32.0
Actuated g/C Ratio	0.44	0.44		0.44	0.44	0.51	0.42	0.36		0.42	0.36	0.36
Clearance Time (s)	5.0	5.0		5.0	5.0	4.0	4.0	5.9		4.0	5.9	5.9
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	74	1963		74	2548	787	179	1092		191	1126	504
v/s Ratio Prot		0.33			0.34	0.02	0.06	0.29		c0.07	c0.38	
v/s Ratio Perm	0.74			c1.30		0.14	0.31			0.37		0.03
v/c Ratio	1.66	0.74		2.92	0.76	0.29	0.87	0.81		1.05	1.08	0.10
Uniform Delay, d1	25.0	20.7		25.0	20.9	12.6	21.5	26.3		22.3	29.0	19.4
Progression Factor	1.00	1.00		1.03	1.00	1.53	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	350.0	2.6		866.8	0.2	0.0	34.0	6.7		79.6	52.1	0.4
Delay (s)	375.0	23.3		892.5	21.2	19.4	55.5	33.0		102.0	81.1	19.7
Level of Service	F	C		F	C	B	E	C		F	F	B
Approach Delay (s)		49.9			99.0			36.3			81.2	
Approach LOS		D			F			D			F	

Intersection Summary			
HCM Average Control Delay	72.7	HCM Level of Service	E
HCM Volume to Capacity ratio	2.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	0.99		1.00	1.00	0.97	
Flt Protected	1.00		0.95	1.00	0.96	
Satd. Flow (prot)	3710		1304	3747	1277	
Flt Permitted	1.00		0.09	1.00	0.96	
Satd. Flow (perm)	3710		119	3747	1277	
Volume (vph)	1641	114	69	1835	188	65
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1709	119	72	1911	196	68
RTOR Reduction (vph)	6	0	0	0	12	0
Lane Group Flow (vph)	1822	0	72	1911	252	0
Turn Type			Perm			
Protected Phases	6			2	4	
Permitted Phases			2			
Actuated Green, G (s)	59.3		59.3	59.3	21.9	
Effective Green, g (s)	59.4		59.4	59.4	22.6	
Actuated g/C Ratio	0.66		0.66	0.66	0.25	
Clearance Time (s)	4.1		4.1	4.1	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2449		79	2473	321	
v/s Ratio Prot	0.49			0.51	c0.20	
v/s Ratio Perm			c0.60			
v/c Ratio	0.74		0.91	0.77	0.79	
Uniform Delay, d1	10.2		13.1	10.6	31.4	
Progression Factor	0.38		1.00	1.00	1.00	
Incremental Delay, d2	1.6		78.8	2.4	11.9	
Delay (s)	5.5		91.8	13.0	43.3	
Level of Service	A		F	B	D	
Approach Delay (s)	5.5			15.9	43.3	
Approach LOS	A			B	D	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.95			1.00	0.94
Flpb, ped/bikes	0.99	1.00		0.99	1.00			0.99			0.97	1.00
Frt	1.00	1.00		1.00	1.00			0.92			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.97	1.00
Satd. Flow (prot)	1287	3719		1296	3694			1180			1301	1095
Flt Permitted	0.08	1.00		0.11	1.00			0.92			0.80	1.00
Satd. Flow (perm)	110	3719		145	3694			1094			1072	1095
Volume (vph)	49	1628	47	84	1813	58	33	26	77	40	36	45
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	51	1696	49	88	1889	60	34	27	80	42	38	47
RTOR Reduction (vph)	0	2	0	0	2	0	0	14	0	0	0	6
Lane Group Flow (vph)	51	1743	0	88	1947	0	0	127	0	0	80	41
Confl. Peds. (#/hr)	123		38	38		123	46		63	63		46
Confl. Bikes (#/hr)			7			9						1
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	65.3	65.3		65.3	65.3			16.7			16.7	16.7
Effective Green, g (s)	65.3	65.3		65.3	65.3			16.7			16.7	16.7
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.19			0.19	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	80	2698		105	2680			203			199	203
v/s Ratio Prot		0.47			0.53							
v/s Ratio Perm	0.46			c0.61				c0.12			0.07	0.04
v/c Ratio	0.64	0.65		0.84	0.73			0.63			0.40	0.20
Uniform Delay, d1	6.3	6.4		8.6	7.2			33.8			32.3	31.0
Progression Factor	2.56	3.01		0.80	0.64			1.00			1.00	1.00
Incremental Delay, d2	3.5	0.1		36.1	1.1			5.9			1.3	0.5
Delay (s)	19.7	19.3		43.0	5.7			39.7			33.6	31.5
Level of Service	B	B		D	A			D			C	C
Approach Delay (s)		19.3			7.3			39.7			32.8	
Approach LOS		B			A			D			C	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.97	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3167	1417	1583	3167	3012	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3167	1417	1583	3167	3012	
Volume (vph)	1290	602	95	1448	387	104
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1358	634	100	1524	407	109
RTOR Reduction (vph)	0	76	0	0	28	0
Lane Group Flow (vph)	1358	558	100	1524	488	0
Turn Type		pt+ov	Prot			
Protected Phases	2	2 4	1	6	4	
Permitted Phases						
Actuated Green, G (s)	41.0	73.9	9.0	37.5	29.0	
Effective Green, g (s)	40.9	73.5	8.5	37.4	28.6	
Actuated g/C Ratio	0.45	0.82	0.09	0.42	0.32	
Clearance Time (s)	3.9		3.5	3.9	3.6	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	1439	1157	150	1316	957	
v/s Ratio Prot	c0.43	c0.39	c0.06	c0.48	0.16	
v/s Ratio Perm						
v/c Ratio	0.94	0.48	0.67	1.16	0.51	
Uniform Delay, d1	23.5	2.5	39.4	26.3	25.0	
Progression Factor	0.88	0.32	1.00	1.00	1.00	
Incremental Delay, d2	11.0	0.2	10.7	80.0	0.4	
Delay (s)	31.5	1.0	50.0	106.3	25.4	
Level of Service	C	A	D	F	C	
Approach Delay (s)	21.8			102.9	25.4	
Approach LOS	C			F	C	

Intersection Summary			
HCM Average Control Delay	54.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.7%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.98		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	3691		1304	3614		1296	2547		1304	2472	
Flt Permitted	0.13	1.00		0.13	1.00		0.22	1.00		0.15	1.00	
Satd. Flow (perm)	172	3691		172	3614		296	2547		210	2472	
Volume (vph)	130	1492	85	132	1418	127	205	1000	90	104	508	119
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	134	1538	88	136	1462	131	211	1031	93	107	524	123
RTOR Reduction (vph)	0	7	0	0	12	0	0	7	0	0	23	0
Lane Group Flow (vph)	134	1619	0	136	1581	0	211	1117	0	107	624	0
Confl. Peds. (#/hr)	105		77	77		105	97		104	104		97
Confl. Bikes (#/hr)			5			11			3			7
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	36.9	30.9		36.9	30.9		37.4	27.4		32.8	25.1	
Effective Green, g (s)	37.9	31.9		37.9	31.9		38.4	28.4		33.8	26.1	
Actuated g/C Ratio	0.42	0.35		0.42	0.35		0.43	0.32		0.38	0.29	
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	148	1308		148	1281		237	804		172	717	
v/s Ratio Prot	0.06	c0.44		c0.06	0.44		c0.10	c0.44		0.05	0.25	
v/s Ratio Perm	0.32			0.33			0.28			0.18		
v/c Ratio	0.91	1.24		0.92	1.23		0.89	1.39		0.62	0.87	
Uniform Delay, d1	20.7	29.1		21.2	29.1		19.3	30.8		22.4	30.3	
Progression Factor	1.27	0.82		1.36	0.75		1.50	1.35		1.00	1.00	
Incremental Delay, d2	34.1	111.3		39.1	110.4		19.3	179.4		6.8	11.2	
Delay (s)	60.5	135.2		67.8	132.3		48.2	221.1		29.2	41.6	
Level of Service	E	F		E	F		D	F		C	D	
Approach Delay (s)		129.5			127.2			193.8			39.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	132.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.95			0.95	
Frpb, ped/bikes		0.98			0.99			1.00			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.94			0.98			0.99			0.99	
Flt Protected		1.00			0.99			1.00			1.00	
Satd. Flow (prot)		1530			1601			3128			3122	
Flt Permitted		0.96			0.74			0.85			0.81	
Satd. Flow (perm)		1471			1189			2656			2524	
Volume (vph)	31	181	158	47	153	36	46	1127	50	43	953	49
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	35	206	180	53	174	41	52	1281	57	49	1083	56
RTOR Reduction (vph)	0	30	0	0	7	0	0	3	0	0	4	0
Lane Group Flow (vph)	0	391	0	0	261	0	0	1387	0	0	1184	0
Confl. Peds. (#/hr)	28		18	18		28	29		26	26		29
Confl. Bikes (#/hr)			4			2			1			6
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		25.2			25.2			56.4			56.4	
Effective Green, g (s)		25.2			25.2			56.8			56.8	
Actuated g/C Ratio		0.28			0.28			0.63			0.63	
Clearance Time (s)		4.0			4.0			4.4			4.4	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		412			333			1676			1593	
v/s Ratio Prot												
v/s Ratio Perm		c0.27			0.22			c0.52			0.47	
v/c Ratio		0.95			0.78			0.83			0.74	
Uniform Delay, d1		31.8			29.9			12.8			11.5	
Progression Factor		1.00			1.00			1.00			0.94	
Incremental Delay, d2		31.1			11.4			4.8			2.6	
Delay (s)		62.8			41.3			17.7			13.5	
Level of Service		E			D			B			B	
Approach Delay (s)		62.8			41.3			17.7			13.5	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00		0.91		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85		0.98		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00		1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	2608	1167		3686		1304	2608	1167	1304	2603	
Flt Permitted	0.14	1.00	1.00		1.00		0.28	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	198	2608	1167		3686		381	2608	1167	174	2603	
Volume (vph)	73	1180	145	0	1063	130	71	1151	95	120	741	10
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	74	1204	148	0	1085	133	72	1174	97	122	756	10
RTOR Reduction (vph)	0	0	77	0	13	0	0	0	14	0	1	0
Lane Group Flow (vph)	74	1204	71	0	1205	0	72	1174	83	122	765	0
Turn Type	Perm		Perm				Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4				2		2	6		
Actuated Green, G (s)	52.0	52.0	52.0		52.0		58.0	58.0	58.0	58.0	58.0	
Effective Green, g (s)	53.0	53.0	53.0		53.0		59.0	59.0	59.0	59.0	59.0	
Actuated g/C Ratio	0.44	0.44	0.44		0.44		0.49	0.49	0.49	0.49	0.49	
Clearance Time (s)	5.0	5.0	5.0		5.0		5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	87	1152	515		1628		187	1282	574	86	1280	
v/s Ratio Prot		c0.46			0.33			0.45			0.29	
v/s Ratio Perm	0.37		0.06				0.19		0.07	c0.70		
v/c Ratio	0.85	1.05	0.14		0.74		0.39	0.92	0.15	1.42	0.60	
Uniform Delay, d1	30.0	33.5	19.9		27.8		19.1	28.2	16.7	30.5	22.0	
Progression Factor	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	61.5	39.1	0.6		3.1		5.9	11.7	0.5	243.3	2.1	
Delay (s)	91.5	72.6	20.5		30.9		25.0	39.9	17.2	273.8	24.0	
Level of Service	F	E	C		C		C	D	B	F	C	
Approach Delay (s)		68.2			30.9			37.4			58.3	
Approach LOS		E			C			D			E	

Intersection Summary			
HCM Average Control Delay	48.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	121.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4550	1417	3072	4550	1417	1583	3167	1417	1583	3167	1417
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1583	4550	1417	3072	4550	1417	1583	3167	1417	1583	3167	1417
Volume (vph)	238	1513	518	235	1453	245	249	1443	268	155	709	127
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	248	1576	540	245	1514	255	259	1503	279	161	739	132
RTOR Reduction (vph)	0	0	29	0	0	152	0	0	23	0	0	7
Lane Group Flow (vph)	248	1576	511	245	1514	103	259	1503	256	161	739	125
Turn Type	Prot		pm+ov	Prot		Perm	Prot		pm+ov	Prot		pm+ov
Protected Phases	3	8	1	7	4		1	6	7	5	2	3
Permitted Phases			8			4			6			2
Actuated Green, G (s)	13.0	37.5	50.5	12.5	37.0	37.0	13.0	37.0	49.5	13.0	37.0	50.0
Effective Green, g (s)	13.0	39.5	52.5	12.5	39.0	39.0	13.0	39.0	51.5	13.0	39.0	52.0
Actuated g/C Ratio	0.11	0.33	0.44	0.10	0.32	0.32	0.11	0.32	0.43	0.11	0.32	0.43
Clearance Time (s)	4.0	6.0	4.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Vehicle Extension (s)	3.0	4.7	3.0	3.0	5.0	5.0	3.0	4.5	3.0	3.0	4.6	3.0
Lane Grp Cap (vph)	171	1498	667	320	1479	461	171	1029	655	171	1029	661
v/s Ratio Prot	c0.16	c0.35	0.08	0.08	0.33		c0.16	c0.47	0.04	0.10	0.23	0.02
v/s Ratio Perm			0.28			0.07			0.14			0.07
v/c Ratio	1.45	1.05	0.77	0.77	1.02	0.22	1.51	1.46	0.39	0.94	0.72	0.19
Uniform Delay, d1	53.5	40.2	28.5	52.3	40.5	29.5	53.5	40.5	23.5	53.1	35.7	21.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.18	0.73	0.51	1.00	1.00	1.00
Incremental Delay, d2	232.2	38.3	5.2	10.4	29.6	0.5	255.5	211.9	0.3	51.7	4.3	0.1
Delay (s)	285.7	78.5	33.8	62.8	70.1	30.0	318.7	241.3	12.3	104.8	40.0	21.1
Level of Service	F	E	C	E	E	C	F	F	B	F	D	C
Approach Delay (s)		90.1			64.1			219.8			47.7	
Approach LOS		F			E			F			D	

Intersection Summary			
HCM Average Control Delay	112.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.95	1.00
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	3081		1583	3096		1583	4442		1583	3167	1417
Flt Permitted	0.14	1.00		0.07	1.00		0.12	1.00		0.12	1.00	1.00
Satd. Flow (perm)	239	3081		123	3096		196	4442		196	3167	1417
Volume (vph)	137	1289	284	273	884	154	321	958	179	136	1259	108
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	140	1315	290	279	902	157	328	978	183	139	1285	110
RTOR Reduction (vph)	0	16	0	0	12	0	0	23	0	0	0	44
Lane Group Flow (vph)	140	1589	0	279	1047	0	328	1138	0	139	1285	66
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8		7	4	1
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)	61.3	53.0		61.7	53.2		41.5	33.0		41.5	33.0	41.3
Effective Green, g (s)	61.8	54.0		62.2	54.2		42.0	34.0		42.0	34.0	41.8
Actuated g/C Ratio	0.51	0.45		0.52	0.45		0.35	0.28		0.35	0.28	0.35
Clearance Time (s)	3.5	5.0		3.5	5.0		3.5	5.0		3.5	5.0	3.5
Vehicle Extension (s)	3.0	5.0		3.0	5.0		3.0	4.3		3.0	4.6	3.0
Lane Grp Cap (vph)	210	1386		161	1398		161	1259		161	897	541
v/s Ratio Prot	0.04	0.52		c0.12	0.34		c0.14	0.26		0.06	0.41	0.01
v/s Ratio Perm	0.30			c0.78			c0.58			0.24		0.04
v/c Ratio	0.67	1.15		1.73	0.75		2.04	0.90		0.86	1.43	0.12
Uniform Delay, d1	19.4	33.0		58.2	27.3		58.2	41.4		30.6	43.0	26.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.21	1.17	1.94
Incremental Delay, d2	7.8	74.9		354.4	3.7		487.8	9.6		25.3	198.9	0.1
Delay (s)	27.1	107.9		412.6	31.0		546.0	51.0		62.4	249.3	51.7
Level of Service	C	F		F	C		F	D		E	F	D
Approach Delay (s)		101.4			110.6			160.1			218.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	147.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.79		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	139.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.95		1.00	0.95	1.00	1.00
Frt	1.00		1.00	1.00	1.00	0.85
Flt Protected	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	2605		1304	2608	1304	1167
Flt Permitted	1.00		0.12	1.00	0.95	1.00
Satd. Flow (perm)	2605		167	2608	1304	1167
Volume (vph)	1438	9	70	1539	143	162
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1467	9	71	1570	146	165
RTOR Reduction (vph)	0	0	0	0	0	26
Lane Group Flow (vph)	1476	0	71	1570	146	139
Turn Type			Perm			Perm
Protected Phases	5			2	4	
Permitted Phases			2			4
Actuated Green, G (s)	59.8		59.8	59.8	22.2	22.2
Effective Green, g (s)	59.8		59.8	59.8	22.2	22.2
Actuated g/C Ratio	0.66		0.66	0.66	0.25	0.25
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	4.0		4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	1731		111	1733	322	288
v/s Ratio Prot	0.57			c0.60	0.11	
v/s Ratio Perm			0.43			c0.12
v/c Ratio	0.85		0.64	0.91	0.45	0.48
Uniform Delay, d1	11.7		8.8	12.7	28.8	29.0
Progression Factor	1.48		1.87	1.99	1.00	1.00
Incremental Delay, d2	2.7		2.6	0.9	1.0	1.3
Delay (s)	20.0		19.0	26.2	29.8	30.2
Level of Service	C		B	C	C	C
Approach Delay (s)	20.0			25.9	30.0	
Approach LOS	C			C	C	

Intersection Summary			
HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	0.99		1.00	0.99			0.95			0.96	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.98	
Satd. Flow (prot)	1583	3147		1583	3150			1580			1576	
Flt Permitted	0.28	1.00		0.21	1.00			0.98			0.65	
Satd. Flow (perm)	464	3147		355	3150			1555			1045	
Volume (vph)	44	895	38	108	739	26	15	168	106	43	45	34
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	52	1053	45	127	869	31	18	198	125	51	53	40
RTOR Reduction (vph)	0	3	0	0	2	0	0	26	0	0	17	0
Lane Group Flow (vph)	52	1095	0	127	898	0	0	315	0	0	127	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	58.7	58.7		58.7	58.7			22.1			22.1	
Effective Green, g (s)	59.0	59.0		59.0	59.0			23.0			23.0	
Actuated g/C Ratio	0.66	0.66		0.66	0.66			0.26			0.26	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	304	2063		233	2065			397			267	
v/s Ratio Prot		0.35			0.29							
v/s Ratio Perm	0.11			c0.36				c0.20			0.12	
v/c Ratio	0.17	0.53		0.55	0.43			0.79			0.48	
Uniform Delay, d1	6.0	8.2		8.3	7.5			31.3			28.4	
Progression Factor	0.58	0.61		1.00	1.00			1.00			1.00	
Incremental Delay, d2	1.0	0.8		8.9	0.7			10.4			1.3	
Delay (s)	4.5	5.7		17.2	8.1			41.7			29.7	
Level of Service	A	A		B	A			D			C	
Approach Delay (s)		5.7			9.3			41.7			29.7	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.9%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.82	1.00	1.00	0.70	1.00	0.98		1.00	0.99	
Flpb, ped/bikes	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1515	3167	1162	1565	3167	992	1583	4390		1583	4439	
Flt Permitted	0.36	1.00	1.00	0.25	1.00	1.00	0.14	1.00		0.14	1.00	
Satd. Flow (perm)	572	3167	1162	413	3167	992	237	4390		237	4439	
Volume (vph)	216	698	66	132	526	82	46	1585	173	88	1541	113
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	223	720	68	136	542	85	47	1634	178	91	1589	116
RTOR Reduction (vph)	0	0	39	0	0	24	0	14	0	0	9	0
Lane Group Flow (vph)	223	720	29	136	542	61	47	1798	0	91	1696	0
Confl. Peds. (#/hr)	150		150	150		150	150		150	150		150
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		
Protected Phases	7	4	5	3	4	1	5	2		1	6	
Permitted Phases	4		4	4		4	2			6		
Actuated Green, G (s)	38.8	31.8	37.2	38.8	31.8	37.2	32.2	26.8		32.2	26.8	
Effective Green, g (s)	40.3	33.1	38.7	40.3	33.1	38.7	33.7	28.1		33.7	28.1	
Actuated g/C Ratio	0.45	0.37	0.43	0.45	0.37	0.43	0.37	0.31		0.37	0.31	
Clearance Time (s)	4.2	5.3	4.2	4.2	5.3	4.2	4.2	5.3		4.2	5.3	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	332	1165	551	277	1165	471	172	1371		172	1386	
v/s Ratio Prot	c0.05	0.23	0.00	0.04	0.17	0.01	0.02	c0.41		c0.03	0.38	
v/s Ratio Perm	c0.25		0.02	0.18		0.05	0.08			0.16		
v/c Ratio	0.67	0.62	0.05	0.49	0.47	0.13	0.27	1.31		0.53	1.22	
Uniform Delay, d1	17.4	23.3	15.0	15.9	21.7	15.5	22.5	30.9		23.1	30.9	
Progression Factor	1.31	0.28	0.00	1.90	1.66	2.25	1.23	1.37		1.00	1.00	
Incremental Delay, d2	1.6	0.3	0.0	1.3	0.3	0.1	0.5	143.2		2.9	107.3	
Delay (s)	24.5	6.8	0.0	31.6	36.2	35.0	28.2	185.6		26.0	138.3	
Level of Service	C	A	A	C	D	C	C	F		C	F	
Approach Delay (s)		10.3			35.3			181.6			132.6	
Approach LOS		B			D			F			F	

Intersection Summary			
HCM Average Control Delay	112.9	HCM Level of Service	F
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.98			0.94		1.00	0.99		1.00	1.00	
Flt Protected		0.98			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1598			1533		1583	4527		1583	4543	
Flt Permitted		0.90			0.83		0.09	1.00		0.09	1.00	
Satd. Flow (perm)		1471			1311		142	4527		142	4543	
Volume (vph)	7	7	3	131	17	108	6	1730	61	115	1672	17
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	8	8	3	146	19	120	7	1922	68	128	1858	19
RTOR Reduction (vph)	0	2	0	0	4	0	0	4	0	0	1	0
Lane Group Flow (vph)	0	17	0	0	281	0	7	1986	0	128	1876	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)		35.5			35.5		47.5	47.5		47.5	47.5	
Effective Green, g (s)		35.0			35.0		47.0	47.0		47.0	47.0	
Actuated g/C Ratio		0.39			0.39		0.52	0.52		0.52	0.52	
Clearance Time (s)		3.5			3.5		3.5	3.5		3.5	3.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		572			510		74	2364		74	2372	
v/s Ratio Prot								0.44			0.41	
v/s Ratio Perm		0.01			c0.21		0.05			c0.90		
v/c Ratio		0.03			0.55		0.09	0.84		1.73	0.79	
Uniform Delay, d1		17.0			21.4		10.8	18.3		21.5	17.5	
Progression Factor		1.00			1.00		0.53	0.88		0.80	0.78	
Incremental Delay, d2		0.1			4.2		0.2	0.4		343.2	0.8	
Delay (s)		17.1			25.6		5.9	16.5		360.4	14.4	
Level of Service		B			C		A	B		F	B	
Approach Delay (s)		17.1			25.6			16.4			36.5	
Approach LOS		B			C			B			D	

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4526		1583	4545		1583	4496		1583	4481	
Flt Permitted	0.13	1.00		0.15	1.00		0.13	1.00		0.13	1.00	
Satd. Flow (perm)	222	4526		256	4545		215	4496		215	4481	
Volume (vph)	410	1760	64	148	1339	10	148	1339	116	165	1626	183
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)	446	1913	70	161	1455	11	161	1455	126	179	1767	199
RTOR Reduction (vph)	0	4	0	0	1	0	0	11	0	0	15	0
Lane Group Flow (vph)	446	1979	0	161	1465	0	161	1570	0	179	1951	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	3	8		7	4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	41.0	32.0		31.0	25.0		36.0	30.0		36.0	30.0	
Effective Green, g (s)	42.0	33.0		31.0	26.0		36.0	31.0		36.0	31.0	
Actuated g/C Ratio	0.47	0.37		0.34	0.29		0.40	0.34		0.40	0.34	
Clearance Time (s)	3.0	5.0		3.0	5.0		3.0	5.0		3.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	285	1660		162	1313		162	1549		162	1543	
v/s Ratio Prot	c0.21	0.44		0.06	0.32		0.06	0.35		c0.06	c0.44	
v/s Ratio Perm	c0.52			0.29			0.34			0.38		
v/c Ratio	1.56	1.19		0.99	1.12		0.99	1.01		1.10	1.26	
Uniform Delay, d1	24.6	28.5		44.7	32.0		44.7	29.5		25.2	29.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.51	1.34	
Incremental Delay, d2	270.6	92.6		68.6	63.1		68.6	26.2		89.0	122.6	
Delay (s)	295.2	121.1		113.2	95.1		113.2	55.7		127.0	162.2	
Level of Service	F	F		F	F		F	E		F	F	
Approach Delay (s)		153.1			96.9			61.1			159.3	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM Average Control Delay	123.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	116.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3057		1583	3100		1583	4448		1583	4478	
Flt Permitted	0.11	1.00		0.11	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	190	3057		190	3100		185	4448		185	4478	
Volume (vph)	318	979	295	137	1092	178	90	1331	235	127	1634	193
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	349	1076	324	151	1200	196	99	1463	258	140	1796	212
RTOR Reduction (vph)	0	26	0	0	6	0	0	28	0	0	16	0
Lane Group Flow (vph)	349	1374	0	151	1390	0	99	1693	0	140	1992	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.1	34.1		42.1	34.1		35.2	35.2		35.2	35.2	
Effective Green, g (s)	42.0	35.0		42.0	35.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.47	0.39		0.47	0.39		0.40	0.40		0.40	0.40	
Clearance Time (s)	3.0	4.9		3.0	4.9		4.8	4.8		4.8	4.8	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	197	1189		197	1206		74	1779		74	1791	
v/s Ratio Prot	c0.14	0.45		0.06	0.45			0.38			0.44	
v/s Ratio Perm	c0.69			0.30			0.53			c0.76		
v/c Ratio	1.77	1.16		0.77	1.15		1.34	0.95		1.89	1.11	
Uniform Delay, d1	21.9	27.5		20.7	27.5		27.0	26.2		27.0	27.0	
Progression Factor	1.52	1.01		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	361.6	77.2		16.2	78.5		218.9	11.9		447.6	59.0	
Delay (s)	394.8	105.0		37.0	106.0		245.9	38.0		474.6	86.0	
Level of Service	F	F		D	F		F	D		F	F	
Approach Delay (s)		162.9			99.2			49.4			111.3	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	105.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	121.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93			0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417		1537			1535	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.99			0.98	
Satd. Flow (perm)	1583	3167	1417	1583	3167	1417		1537			1535	
Volume (vph)	40	863	53	89	524	142	34	77	125	61	39	91
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)	43	938	58	97	570	154	37	84	136	66	42	99
RTOR Reduction (vph)	0	0	42	0	0	107	0	45	0	0	37	0
Lane Group Flow (vph)	43	938	16	97	570	47	0	212	0	0	170	0
Turn Type	Prot		Perm	Prot		Perm	Split			Split		
Protected Phases	1	6		5	2		3	3		4	4	
Permitted Phases			6			2						
Actuated Green, G (s)	5.4	24.7	24.7	7.9	27.2	27.2		21.0			21.0	
Effective Green, g (s)	4.4	24.9	24.9	6.9	27.4	27.4		21.6			20.6	
Actuated g/C Ratio	0.05	0.28	0.28	0.08	0.30	0.30		0.24			0.23	
Clearance Time (s)	3.0	4.2	4.2	3.0	4.2	4.2		4.6			3.6	
Vehicle Extension (s)	3.0	5.0	5.0	3.0	5.0	5.0		3.0			3.0	
Lane Grp Cap (vph)	77	876	392	121	964	431		369			351	
v/s Ratio Prot	0.03	c0.30		c0.06	0.18			c0.14			c0.11	
v/s Ratio Perm			0.01			0.03						
v/c Ratio	0.56	1.07	0.04	0.80	0.59	0.11		0.57			0.48	
Uniform Delay, d1	41.9	32.5	23.8	40.9	26.6	22.5		30.2			30.1	
Progression Factor	1.47	0.69	0.28	1.07	1.65	4.29		1.00			1.00	
Incremental Delay, d2	2.9	40.0	0.1	27.7	2.4	0.5		6.4			4.7	
Delay (s)	64.5	62.4	6.8	71.5	46.3	97.1		36.5			34.8	
Level of Service	E	E	A	E	D	F		D			C	
Approach Delay (s)		59.4			58.8			36.5			34.8	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM Average Control Delay	54.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.7%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	0.99	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.95			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1568	3161		1583	3148			1560			1580	
Flt Permitted	0.15	1.00		0.11	1.00			0.98			0.82	
Satd. Flow (perm)	247	3161		186	3148			1540			1310	
Volume (vph)	150	1473	12	46	1273	27	8	88	59	32	83	36
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	167	1637	13	51	1414	30	9	98	66	36	92	40
RTOR Reduction (vph)	0	0	0	0	1	0	0	17	0	0	16	0
Lane Group Flow (vph)	167	1650	0	51	1443	0	0	156	0	0	152	0
Confl. Peds. (#/hr)	40		16	16		40	10		8	8		10
Confl. Bikes (#/hr)			15			9			2			5
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	67.0	67.0		67.0	67.0			13.9			13.9	
Effective Green, g (s)	67.5	67.5		67.5	67.5			14.5			14.5	
Actuated g/C Ratio	0.75	0.75		0.75	0.75			0.16			0.16	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.6			4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	185	2371		140	2361			248			211	
v/s Ratio Prot		0.52			0.46							
v/s Ratio Perm	c0.68			0.27				0.10			c0.12	
v/c Ratio	0.90	0.70		0.36	0.61			0.63			0.72	
Uniform Delay, d1	8.7	5.9		3.9	5.2			35.2			35.8	
Progression Factor	1.00	1.00		0.81	0.43			1.00			1.00	
Incremental Delay, d2	44.7	1.7		0.7	0.1			4.9			11.5	
Delay (s)	53.4	7.6		3.8	2.4			40.2			47.3	
Level of Service	D	A		A	A			D			D	
Approach Delay (s)		11.8			2.4			40.2			47.3	
Approach LOS		B			A			D			D	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	0.99		1.00	0.97		1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2884		1490	2946		1490	2891		1490	2843	
Flt Permitted	0.30	1.00		0.17	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	467	2884		273	2946		157	2891		157	2843	
Volume (vph)	433	606	166	296	453	38	145	1004	252	32	895	398
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	461	645	177	315	482	40	154	1068	268	34	952	423
RTOR Reduction (vph)	0	28	0	0	7	0	0	24	0	0	56	0
Lane Group Flow (vph)	461	794	0	315	515	0	154	1312	0	34	1319	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	7	4		3	8			2			2	
Permitted Phases	4			8			2			2		
Actuated Green, G (s)	38.0	22.0		38.0	22.0		39.0	39.0		39.0	39.0	
Effective Green, g (s)	38.0	23.0		38.0	23.0		40.0	40.0		40.0	40.0	
Actuated g/C Ratio	0.42	0.26		0.42	0.26		0.44	0.44		0.44	0.44	
Clearance Time (s)	3.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	5.1		3.0	4.1		5.7	5.7		5.7	5.7	
Lane Grp Cap (vph)	368	737		318	753		70	1285		70	1264	
v/s Ratio Prot	c0.21	0.28		0.17	0.17			0.45			0.46	
v/s Ratio Perm	c0.32			0.25			c0.98			0.22		
v/c Ratio	1.25	1.08		0.99	0.68		2.20	1.02		0.49	1.04	
Uniform Delay, d1	22.0	33.5		23.6	30.2		25.0	25.0		17.7	25.0	
Progression Factor	1.00	1.00		0.91	1.15		1.14	1.15		1.00	1.00	
Incremental Delay, d2	134.3	56.2		45.0	4.5		544.2	13.6		22.2	37.4	
Delay (s)	156.3	89.7		66.6	39.1		572.7	42.4		39.9	62.4	
Level of Service	F	F		E	D		F	D		D	E	
Approach Delay (s)		113.6			49.4			97.2			61.9	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM Average Control Delay	83.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.74		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.91	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1490	4245		1490	4244		1490	2980	1333	1490	4210	
Flt Permitted	0.14	1.00		0.12	1.00		0.19	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	220	4245		182	4244		296	2980	1333	1490	4210	
Volume (vph)	10	1468	91	193	1185	74	96	1196	299	151	1053	133
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	1578	98	208	1274	80	103	1286	322	162	1132	143
RTOR Reduction (vph)	0	7	0	0	6	0	0	0	38	0	19	0
Lane Group Flow (vph)	11	1669	0	208	1348	0	103	1286	284	162	1256	0
Turn Type	pm+pt			pm+pt			Perm		pm+ov	Prot		
Protected Phases	3	8		7	4			2	7	1	6	
Permitted Phases	8			4			2		2			
Actuated Green, G (s)	31.2	29.2		45.4	38.2		21.2	21.2	32.2	10.0	19.8	
Effective Green, g (s)	33.6	30.4		45.4	38.2		21.2	21.2	32.2	11.4	21.2	
Actuated g/C Ratio	0.37	0.34		0.50	0.42		0.24	0.24	0.36	0.13	0.24	
Clearance Time (s)	5.2	5.2		4.0	4.0		4.0	4.0	4.0	5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.5	3.0		3.0	3.0	3.5	3.0	3.0	
Lane Grp Cap (vph)	127	1434		252	1801		70	702	536	189	992	
v/s Ratio Prot	0.00	c0.39		c0.10	0.32			c0.43	0.06	c0.11	0.30	
v/s Ratio Perm	0.03			0.32			0.35		0.15			
v/c Ratio	0.09	1.16		0.83	0.75		1.47	1.83	0.53	0.86	1.27	
Uniform Delay, d1	18.2	29.8		21.3	21.8		34.4	34.4	22.9	38.5	34.4	
Progression Factor	1.47	1.44		1.00	1.00		1.08	1.05	0.68	1.24	0.86	
Incremental Delay, d2	0.1	76.4		19.8	2.9		237.0	376.3	0.4	3.7	120.5	
Delay (s)	26.9	119.4		41.0	24.7		274.1	412.5	16.1	51.5	149.9	
Level of Service	C	F		D	C		F	F	B	D	F	
Approach Delay (s)		118.8			26.9			329.6			138.8	
Approach LOS		F			C			F			F	

Intersection Summary			
HCM Average Control Delay	157.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2962		1509	1585		1509	4314		1509	4254	
Flt Permitted	0.21	1.00		0.21	1.00		0.22	1.00		0.22	1.00	
Satd. Flow (perm)	334	2962		334	1585		353	4314		353	4254	
Volume (vph)	154	920	128	125	835	10	138	1421	50	74	1225	178
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	166	989	138	134	898	11	148	1528	54	80	1317	191
RTOR Reduction (vph)	0	7	0	0	1	0	0	8	0	0	38	0
Lane Group Flow (vph)	166	1120	0	134	908	0	148	1574	0	80	1470	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Actuated Green, G (s)	19.0	19.0		19.0	19.0		18.0	18.0		18.0	18.0	
Effective Green, g (s)	19.0	19.0		19.0	19.0		18.0	18.0		18.0	18.0	
Actuated g/C Ratio	0.42	0.42		0.42	0.42		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	141	1251		141	669		141	1726		141	1702	
v/s Ratio Prot		0.38			c0.57			0.36			0.35	
v/s Ratio Perm	0.50			0.40			c0.42			0.23		
v/c Ratio	1.18	0.90		0.95	1.36		1.05	0.91		0.57	0.86	
Uniform Delay, d1	13.0	12.1		12.5	13.0		13.5	12.7		10.5	12.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.91	0.85	
Incremental Delay, d2	131.3	8.6		60.6	170.3		89.6	8.8		5.5	2.2	
Delay (s)	144.3	20.7		73.1	183.3		103.1	21.6		15.0	12.7	
Level of Service	F	C		E	F		F	C		B	B	
Approach Delay (s)		36.5			169.1			28.5			12.8	
Approach LOS		D			F			C			B	

Intersection Summary			
HCM Average Control Delay	51.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	45.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	0.98		1.00	0.96	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2906		1509	2937		1509	4132		1509	4122	
Flt Permitted	0.11	1.00		0.09	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	182	2906		138	2937		219	4132		227	4122	
Volume (vph)	174	1218	129	221	1038	76	109	1478	276	88	1257	134
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	183	1282	136	233	1093	80	115	1556	291	93	1323	141
RTOR Reduction (vph)	0	8	0	0	5	0	0	27	0	0	13	0
Lane Group Flow (vph)	183	1410	0	233	1168	0	115	1820	0	93	1451	0
Confl. Peds. (#/hr)	161		157	157		161	381		91	91		381
Confl. Bikes (#/hr)			19			25			10			23
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	52.0	46.0		52.0	46.0		35.0	29.0		33.0	28.0	
Effective Green, g (s)	51.0	46.0		51.0	46.0		34.0	29.0		32.0	28.0	
Actuated g/C Ratio	0.51	0.46		0.51	0.46		0.34	0.29		0.32	0.28	
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0		1.0	5.0	
Lane Grp Cap (vph)	159	1337		139	1351		139	1198		124	1154	
v/s Ratio Prot	0.06	0.49		c0.08	0.40		c0.04	c0.44		0.03	0.35	
v/s Ratio Perm	0.53			c0.77			0.24			0.21		
v/c Ratio	1.15	1.05		1.68	0.86		0.83	1.52		0.75	1.26	
Uniform Delay, d1	21.3	27.0		21.3	24.2		29.0	35.5		49.1	36.0	
Progression Factor	1.91	0.55		1.00	1.00		1.00	0.82		1.00	1.00	
Incremental Delay, d2	91.7	32.0		333.6	7.5		11.7	235.1		20.0	123.0	
Delay (s)	132.2	46.8		354.9	31.8		40.7	264.2		69.1	159.0	
Level of Service	F	D		F	C		D	F		E	F	
Approach Delay (s)		56.6			85.3			251.1			153.6	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM Average Control Delay	144.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	120.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00			1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98			0.99		1.00	1.00		1.00	0.97	
Flpb, ped/bikes	0.97	1.00			1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90			0.98		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1464	1402			1518		1509	2984		1509	2879	
Flt Permitted	0.56	1.00			0.54		0.06	1.00		0.07	1.00	
Satd. Flow (perm)	860	1402			827		102	2984		108	2879	
Volume (vph)	101	100	186	61	92	22	226	1719	93	22	1367	176
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	106	105	196	64	97	23	238	1809	98	23	1439	185
RTOR Reduction (vph)	0	74	0	0	5	0	0	3	0	0	9	0
Lane Group Flow (vph)	106	227	0	0	179	0	238	1904	0	23	1615	0
Confl. Peds. (#/hr)	33		13	13		33	97		20	20		97
Confl. Bikes (#/hr)			3			4			6			22
Turn Type	Perm			Perm			pm+pt			pm+pt		
Protected Phases		8			4		1	6		5	2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	24.2	24.2			24.2		67.8	62.4		61.2	58.8	
Effective Green, g (s)	24.2	24.2			24.2		67.4	62.4		60.2	58.8	
Actuated g/C Ratio	0.24	0.24			0.24		0.67	0.62		0.60	0.59	
Clearance Time (s)	4.0	4.0			4.0		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	5.0	5.0			5.0		1.0	0.2		1.0	0.2	
Lane Grp Cap (vph)	208	339			200		139	1862		85	1693	
v/s Ratio Prot		0.16					c0.09	0.64		0.00	0.56	
v/s Ratio Perm	0.12				c0.22		c1.07			0.16		
v/c Ratio	0.51	0.67			0.89		1.71	1.02		0.27	0.95	
Uniform Delay, d1	32.8	34.3			36.7		25.6	18.8		16.5	19.3	
Progression Factor	1.00	1.00			1.00		1.00	1.00		1.98	1.66	
Incremental Delay, d2	4.1	6.7			37.6		349.1	26.8		0.1	1.8	
Delay (s)	36.8	41.0			74.2		374.7	45.6		32.8	33.9	
Level of Service	D	D			E		F	D		C	C	
Approach Delay (s)		39.9			74.2			82.1			33.9	
Approach LOS		D			E			F			C	

Intersection Summary			
HCM Average Control Delay	59.7	HCM Level of Service	E
HCM Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	116.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.98			0.98		1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1529			1515		1490	4245		1490	4268	
Flt Permitted		0.86			0.65		0.09	1.00		0.08	1.00	
Satd. Flow (perm)		1329			993		138	4245		123	4268	
Volume (vph)	73	349	65	91	200	54	60	1959	120	93	1584	35
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	77	367	68	96	211	57	63	2062	126	98	1667	37
RTOR Reduction (vph)	0	6	0	0	5	0	0	7	0	0	3	0
Lane Group Flow (vph)	0	506	0	0	359	0	63	2181	0	98	1701	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		30.0			30.0		50.6	50.6		50.6	50.6	
Effective Green, g (s)		31.0			31.0		51.0	51.0		51.0	51.0	
Actuated g/C Ratio		0.34			0.34		0.57	0.57		0.57	0.57	
Clearance Time (s)		5.0			5.0		4.4	4.4		4.4	4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		458			342		78	2406		70	2419	
v/s Ratio Prot								0.51			0.40	
v/s Ratio Perm		c0.38			0.36		0.46			c0.80		
v/c Ratio		1.11			1.05		0.81	0.91		1.40	0.70	
Uniform Delay, d1		29.5			29.5		15.6	17.4		19.5	14.0	
Progression Factor		1.00			1.00		0.35	0.29		1.00	1.00	
Incremental Delay, d2		73.8			62.6		8.0	0.6		245.9	1.7	
Delay (s)		103.3			92.1		13.5	5.7		265.4	15.8	
Level of Service		F			F		B	A		F	B	
Approach Delay (s)		103.3			92.1			5.9			29.4	
Approach LOS		F			F			A			C	

Intersection Summary			
HCM Average Control Delay	31.0	HCM Level of Service	C
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2944		1490	2948		1490	4204		1490	4217	
Flt Permitted	0.27	1.00		0.12	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	428	2944		185	2948		161	4204		161	4217	
Volume (vph)	166	1104	97	220	856	67	10	1890	264	54	1579	180
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	177	1174	103	234	911	71	11	2011	281	57	1680	191
RTOR Reduction (vph)	0	7	0	0	1	0	0	20	0	0	15	0
Lane Group Flow (vph)	177	1270	0	234	981	0	11	2272	0	57	1856	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	28.6	28.6		41.6	41.6		37.6	37.6		37.6	37.6	
Effective Green, g (s)	30.0	30.0		43.0	43.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.33	0.33		0.48	0.48		0.43	0.43		0.43	0.43	
Clearance Time (s)	5.4	5.4		3.5	5.4		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	143	981		219	1408		70	1822		70	1827	
v/s Ratio Prot		c0.43		c0.11	0.33			c0.54			0.44	
v/s Ratio Perm	0.41			0.40			0.07			0.35		
v/c Ratio	1.24	1.29		1.07	0.70		0.16	1.25		0.81	1.02	
Uniform Delay, d1	30.0	30.0		42.7	18.4		15.5	25.5		22.3	25.5	
Progression Factor	0.66	0.67		1.00	1.00		0.15	0.28		1.42	1.44	
Incremental Delay, d2	112.6	133.1		80.1	2.9		0.4	111.6		49.7	21.7	
Delay (s)	132.3	153.3		122.9	21.3		2.7	118.9		81.4	58.3	
Level of Service	F	F		F	C		A	F		F	E	
Approach Delay (s)		150.7			40.8			118.3			59.0	
Approach LOS		F			D			F			E	

Intersection Summary			
HCM Average Control Delay	94.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	117.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	0.98		1.00	0.99			1.00	0.93		0.97	
Flpb, ped/bikes	0.98	1.00		1.00	1.00			0.97	1.00		0.99	
Frt	1.00	0.99		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.99	
Satd. Flow (prot)	1477	2906		1509	2987			1476	1255		1449	
Flt Permitted	0.20	1.00		0.06	1.00			0.65	1.00		0.94	
Satd. Flow (perm)	307	2906		99	2987			1004	1255		1375	
Volume (vph)	34	1410	137	128	1113	37	139	34	132	16	48	38
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	38	1567	152	142	1237	41	154	38	147	18	53	42
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	93	0	24	0
Lane Group Flow (vph)	38	1713	0	142	1276	0	0	192	54	0	89	0
Confl. Peds. (#/hr)	50		85	85		50	37		38	38		37
Confl. Bikes (#/hr)			12			7			3			3
Turn Type	Perm			pm+pt			Perm		Perm	Perm		
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	60.1	60.1		69.1	69.1			22.9	22.9		22.9	
Effective Green, g (s)	60.1	60.1		69.1	69.1			22.9	22.9		22.9	
Actuated g/C Ratio	0.60	0.60		0.69	0.69			0.23	0.23		0.23	
Clearance Time (s)	4.0	4.0		3.0	4.0			4.0	4.0		4.0	
Vehicle Extension (s)	0.2	0.2		1.0	0.2			4.0	4.0		3.0	
Lane Grp Cap (vph)	185	1747		139	2064			230	287		315	
v/s Ratio Prot		0.59		c0.05	0.43							
v/s Ratio Perm	0.12			c0.65				c0.19	0.04		0.06	
v/c Ratio	0.21	0.98		1.02	0.62			0.83	0.19		0.28	
Uniform Delay, d1	9.1	19.4		26.8	8.3			36.7	31.1		31.8	
Progression Factor	0.85	1.11		1.82	1.31			1.00	1.00		1.00	
Incremental Delay, d2	2.2	16.1		58.9	0.7			23.0	0.4		0.5	
Delay (s)	9.9	37.7		107.7	11.6			59.8	31.5		32.3	
Level of Service	A	D		F	B			E	C		C	
Approach Delay (s)		37.1			21.2			47.5			32.3	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	31.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	0.95		1.00	
Frt	1.00	1.00	0.99		0.89	
Flt Protected	0.95	1.00	1.00		0.99	
Satd. Flow (prot)	1509	3018	2992		1405	
Flt Permitted	0.17	1.00	1.00		0.99	
Satd. Flow (perm)	274	3018	2992		1405	
Volume (vph)	82	1390	1264	76	26	94
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	85	1433	1303	78	27	97
RTOR Reduction (vph)	0	0	3	0	84	0
Lane Group Flow (vph)	85	1433	1378	0	40	0
Turn Type	Perm					
Protected Phases		2	6		4	
Permitted Phases	2					
Actuated Green, G (s)	80.5	80.5	80.5		11.5	
Effective Green, g (s)	80.0	80.0	80.0		12.0	
Actuated g/C Ratio	0.80	0.80	0.80		0.12	
Clearance Time (s)	3.5	3.5	3.5		4.5	
Vehicle Extension (s)	0.2	0.2	0.2		3.0	
Lane Grp Cap (vph)	219	2414	2394		169	
v/s Ratio Prot		c0.47	0.46		c0.03	
v/s Ratio Perm	0.31					
v/c Ratio	0.39	0.59	0.58		0.23	
Uniform Delay, d1	2.9	3.8	3.7		39.8	
Progression Factor	0.30	0.30	1.43		1.00	
Incremental Delay, d2	4.0	0.9	0.8		0.7	
Delay (s)	4.9	2.0	6.1		40.6	
Level of Service	A	A	A		D	
Approach Delay (s)		2.2	6.1		40.6	
Approach LOS		A	A		D	

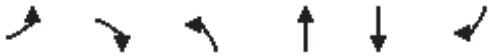
Intersection Summary			
HCM Average Control Delay	5.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4499		1583	4506		1583	3167	1417	1583	3167	1417
Flt Permitted	0.14	1.00		0.11	1.00		0.23	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	228	4499		175	4506		376	3167	1417	222	3167	1417
Volume (vph)	242	1702	137	256	1080	74	153	1104	282	68	671	335
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	260	1830	147	275	1161	80	165	1187	303	73	722	360
RTOR Reduction (vph)	0	10	0	0	9	0	0	0	2	0	0	180
Lane Group Flow (vph)	260	1967	0	275	1232	0	165	1187	301	73	722	180
Turn Type	pm+pt			pm+pt			Perm		pm+ov	Perm		Perm
Protected Phases	1	6		5	2			8	5		4	
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	48.0	37.0		48.0	37.0		28.1	28.1	39.1	28.1	28.1	28.1
Effective Green, g (s)	48.0	38.0		48.0	38.0		30.0	30.0	40.0	30.0	30.0	30.0
Actuated g/C Ratio	0.53	0.42		0.53	0.42		0.33	0.33	0.44	0.33	0.33	0.33
Clearance Time (s)	3.0	5.0		3.0	5.0		5.9	5.9	3.0	5.9	5.9	5.9
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	272	1900		250	1903		125	1056	693	74	1056	472
v/s Ratio Prot	0.11	0.44		c0.12	0.27			0.37	0.05		0.23	
v/s Ratio Perm	0.40			c0.46			c0.44		0.16	0.33		0.13
v/c Ratio	0.96	1.04		1.10	0.65		1.32	1.12	0.43	0.99	0.68	0.38
Uniform Delay, d1	17.8	26.0		25.0	20.7		30.0	30.0	17.2	29.8	25.9	22.9
Progression Factor	1.00	1.00		1.58	0.93		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	42.2	30.3		71.4	0.9		189.2	68.4	0.4	100.9	3.6	2.3
Delay (s)	60.0	56.3		110.9	20.2		219.2	98.4	17.7	130.7	29.5	25.2
Level of Service	E	E		F	C		F	F	B	F	C	C
Approach Delay (s)		56.8			36.7			95.7			34.6	
Approach LOS		E			D			F			C	

Intersection Summary			
HCM Average Control Delay	58.0	HCM Level of Service	E
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2997		1509	2978		1509	2966		1509	2955	
Flt Permitted	0.21	1.00		0.15	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	333	2997		244	2978		176	2966		176	2955	
Volume (vph)	279	1082	51	183	877	85	66	1159	150	43	850	137
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	294	1139	54	193	923	89	69	1220	158	45	895	144
RTOR Reduction (vph)	0	4	0	0	4	0	0	10	0	0	13	0
Lane Group Flow (vph)	294	1189	0	193	1008	0	69	1368	0	45	1026	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			4			8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	55.0	55.0		55.0	55.0		35.0	35.0		35.0	35.0	
Effective Green, g (s)	56.0	56.0		56.0	56.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56		0.36	0.36		0.36	0.36	
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	4.9	4.9		4.9	4.9		4.9	4.9		4.9	4.9	
Lane Grp Cap (vph)	186	1678		137	1668		63	1068		63	1064	
v/s Ratio Prot		0.40			0.34			c0.46			0.35	
v/s Ratio Perm	c0.88			0.79			0.39			0.26		
v/c Ratio	1.58	0.71		1.41	0.60		1.10	1.28		0.71	0.96	
Uniform Delay, d1	22.0	16.1		22.0	14.6		32.0	32.0		27.6	31.4	
Progression Factor	1.00	1.00		1.00	1.00		0.96	0.91		1.00	1.00	
Incremental Delay, d2	285.4	2.6		221.5	1.6		122.0	131.4		51.1	20.3	
Delay (s)	307.4	18.6		243.5	16.3		152.8	160.5		78.7	51.6	
Level of Service	F	B		F	B		F	F		E	D	
Approach Delay (s)		75.7			52.7			160.2			52.8	
Approach LOS		E			D			F			D	

Intersection Summary			
HCM Average Control Delay	89.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	114.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	1.00		1.00	0.95	0.95	
Frpb, ped/bikes	0.95		1.00	1.00	0.99	
Flpb, ped/bikes	1.00		0.97	1.00	1.00	
Frt	0.91		1.00	1.00	1.00	
Flt Protected	0.98		0.95	1.00	1.00	
Satd. Flow (prot)	1348		1460	3018	2984	
Flt Permitted	0.98		0.22	1.00	1.00	
Satd. Flow (perm)	1348		331	3018	2984	
Volume (vph)	77	135	202	1401	1016	28
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	82	144	215	1490	1081	30
RTOR Reduction (vph)	64	0	0	0	2	0
Lane Group Flow (vph)	162	0	215	1490	1109	0
Confl. Peds. (#/hr)		58	70			70
Confl. Bikes (#/hr)						3
Turn Type			Perm			
Protected Phases	4			2	2	
Permitted Phases			2			
Actuated Green, G (s)	23.4		69.0	69.0	69.0	
Effective Green, g (s)	23.4		68.6	68.6	68.6	
Actuated g/C Ratio	0.23		0.69	0.69	0.69	
Clearance Time (s)	4.0		3.6	3.6	3.6	
Vehicle Extension (s)	3.0		0.2	0.2	0.2	
Lane Grp Cap (vph)	315		227	2070	2047	
v/s Ratio Prot	c0.12			0.49	0.37	
v/s Ratio Perm			c0.65			
v/c Ratio	0.52		0.95	0.72	0.54	
Uniform Delay, d1	33.4		14.1	9.7	7.8	
Progression Factor	1.00		0.89	0.35	1.49	
Incremental Delay, d2	5.9		9.2	0.2	0.1	
Delay (s)	39.3		21.7	3.7	11.8	
Level of Service	D		C	A	B	
Approach Delay (s)	39.3			5.9	11.8	
Approach LOS	D			A	B	

Intersection Summary			
HCM Average Control Delay	10.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00		0.91	0.91
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	1.00	0.77		1.00	0.69
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00		1.00	1.00
Satd. Flow (prot)	1509	2913		1509	2949		1509	3018	1041		2878	844
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00		0.52	1.00
Satd. Flow (perm)	1509	2913		1509	2949		1509	3018	1041		1500	844
Volume (vph)	281	1132	142	205	998	58	103	1190	210	87	945	105
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	296	1192	149	216	1051	61	108	1253	221	92	995	111
RTOR Reduction (vph)	0	0	0	0	4	0	0	0	88	0	0	74
Lane Group Flow (vph)	296	1341	0	216	1108	0	108	1253	133	0	1087	37
Confl. Peds. (#/hr)	212		147	147		212	215		146	146		215
Confl. Bikes (#/hr)			11			9			6			6
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases									8			4
Actuated Green, G (s)	13.0	51.0		4.5	42.5		6.5	33.5	33.5		24.0	24.0
Effective Green, g (s)	12.0	51.0		3.5	42.5		5.5	33.5	33.5		24.0	24.0
Actuated g/C Ratio	0.12	0.51		0.04	0.42		0.06	0.34	0.34		0.24	0.24
Clearance Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	1.0	0.2		1.0	0.2		1.0	5.0	5.0		5.0	5.0
Lane Grp Cap (vph)	181	1486		53	1253		83	1011	349		360	203
v/s Ratio Prot	c0.20	c0.46		c0.14	0.38		0.07	c0.42				
v/s Ratio Perm									0.13		c0.72	0.04
v/c Ratio	1.64	0.90		4.08	0.88		1.30	1.24	0.38		3.02	0.18
Uniform Delay, d1	44.0	22.2		48.2	26.5		47.2	33.2	25.3		38.0	30.2
Progression Factor	1.13	0.52		1.04	0.82		1.00	1.00	1.00		0.96	1.08
Incremental Delay, d2	297.7	4.8		1420.8	8.0		199.3	116.3	3.1		915.0	1.7
Delay (s)	347.4	16.5		1471.2	29.8		246.5	149.5	28.5		951.6	34.4
Level of Service	F	B		F	C		F	F	C		F	C
Approach Delay (s)		76.3			264.3			139.2			866.6	
Approach LOS		E			F			F			F	

Intersection Summary			
HCM Average Control Delay	301.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.68		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	143.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.99			0.93		1.00	0.99		1.00	0.99	
Flt Protected		1.00			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1642			1537		1583	4526		1583	4504	
Flt Permitted		0.91			0.83		0.16	1.00		0.13	1.00	
Satd. Flow (perm)		1509			1281		259	4526		214	4504	
Volume (vph)	44	374	34	57	133	213	96	1302	47	48	1145	84
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	47	398	36	61	141	227	102	1385	50	51	1218	89
RTOR Reduction (vph)	0	4	0	0	9	0	0	3	0	0	7	0
Lane Group Flow (vph)	0	477	0	0	420	0	102	1432	0	51	1300	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		31.3			31.3		48.9	48.9		48.9	48.9	
Effective Green, g (s)		32.7			32.7		49.3	49.3		49.3	49.3	
Actuated g/C Ratio		0.36			0.36		0.55	0.55		0.55	0.55	
Clearance Time (s)		5.4			5.4		4.4	4.4		4.4	4.4	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		548			465		142	2479		117	2467	
v/s Ratio Prot								0.32			0.29	
v/s Ratio Perm		0.32			c0.33		c0.39			0.24		
v/c Ratio		0.87			0.90		0.72	0.58		0.44	0.53	
Uniform Delay, d1		26.7			27.2		15.2	13.5		12.1	12.9	
Progression Factor		1.00			1.00		1.55	1.64		1.00	1.00	
Incremental Delay, d2		14.1			20.6		14.3	0.5		11.4	0.8	
Delay (s)		40.8			47.8		37.8	22.6		23.5	13.7	
Level of Service		D			D		D	C		C	B	
Approach Delay (s)		40.8			47.8			23.6			14.1	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	0.98		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3107		1583	3089		1583	4441		1583	4449	
Flt Permitted	0.33	1.00		0.10	1.00		0.14	1.00		0.12	1.00	
Satd. Flow (perm)	547	3107		163	3089		238	4441		202	4449	
Volume (vph)	227	1174	168	206	708	139	73	1172	223	110	950	165
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	232	1198	171	210	722	142	74	1196	228	112	969	168
RTOR Reduction (vph)	0	12	0	0	5	0	0	31	0	0	27	0
Lane Group Flow (vph)	232	1357	0	210	859	0	74	1393	0	112	1110	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	35.7	35.7		47.7	47.7		32.1	32.1		32.1	32.1	
Effective Green, g (s)	37.0	37.0		49.0	49.0		33.0	33.0		33.0	33.0	
Actuated g/C Ratio	0.41	0.41		0.54	0.54		0.37	0.37		0.37	0.37	
Clearance Time (s)	5.3	5.3		3.5	5.3		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	225	1277		215	1682		87	1628		74	1631	
v/s Ratio Prot		c0.44		c0.09	0.28			0.31			0.25	
v/s Ratio Perm	0.42			0.45			0.31			c0.55		
v/c Ratio	1.03	1.06		0.98	0.51		0.85	0.86		1.51	0.68	
Uniform Delay, d1	26.5	26.5		24.0	12.9		26.2	26.3		28.5	24.1	
Progression Factor	1.00	1.00		0.71	0.80		0.61	0.59		1.00	1.02	
Incremental Delay, d2	68.3	43.5		42.6	0.7		9.3	0.6		280.8	2.0	
Delay (s)	94.8	70.0		59.7	11.1		25.2	16.1		309.2	26.5	
Level of Service	F	E		E	B		C	B		F	C	
Approach Delay (s)		73.6			20.6			16.6			51.8	
Approach LOS		E			C			B			D	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		0.95		1.00	0.95	1.00
Frt	1.00	1.00		1.00	1.00	0.85		0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00		0.95	1.00	1.00
Satd. Flow (prot)	1509	3010		1509	3018	1350		2985		1509	3018	1350
Flt Permitted	0.13	1.00		0.11	1.00	1.00		1.00		0.13	1.00	1.00
Satd. Flow (perm)	199	3010		170	3018	1350		2985		205	3018	1350
Volume (vph)	286	1386	24	32	1003	101	0	988	76	62	616	196
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	298	1444	25	33	1045	105	0	1029	79	65	642	204
RTOR Reduction (vph)	0	1	0	0	0	33	0	6	0	0	0	141
Lane Group Flow (vph)	298	1468	0	33	1045	72	0	1102	0	65	642	63
Turn Type	pm+pt			pm+pt		Perm	Perm			Perm		Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6		6	8			4		4
Actuated Green, G (s)	61.0	55.2		45.4	42.6	42.6		31.0		31.0	31.0	31.0
Effective Green, g (s)	61.0	55.2		44.4	42.6	42.6		31.0		31.0	31.0	31.0
Actuated g/C Ratio	0.61	0.55		0.44	0.43	0.43		0.31		0.31	0.31	0.31
Clearance Time (s)	3.0	4.0		3.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	1.0	3.0		1.0	3.0	3.0		3.5		3.5	3.5	3.5
Lane Grp Cap (vph)	310	1662		100	1286	575		925		64	936	419
v/s Ratio Prot	c0.14	0.49		0.01	0.35			c0.37			0.21	
v/s Ratio Perm	c0.45			0.14		0.05				0.32		0.05
v/c Ratio	0.96	0.88		0.33	0.81	0.12		1.19		1.02	0.69	0.15
Uniform Delay, d1	24.8	19.6		17.5	25.2	17.4		34.5		34.5	30.2	25.0
Progression Factor	1.00	1.00		0.92	1.03	1.18		1.00		1.00	1.00	1.00
Incremental Delay, d2	40.3	7.2		0.3	2.7	0.2		97.1		116.9	4.1	0.8
Delay (s)	65.1	26.8		16.4	28.5	20.8		131.6		151.4	34.3	25.7
Level of Service	E	C		B	C	C		F		F	C	C
Approach Delay (s)		33.2			27.5			131.6			40.8	
Approach LOS		C			C			F			D	

Intersection Summary			
HCM Average Control Delay	55.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	119.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1583	3164		1583	3154			1618			1605	
Flt Permitted	0.16	1.00		0.12	1.00			0.99			0.88	
Satd. Flow (perm)	271	3164		200	3154			1597			1419	
Volume (vph)	65	1751	10	40	1118	32	13	269	72	41	133	46
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	68	1824	10	42	1165	33	14	280	75	43	139	48
RTOR Reduction (vph)	0	0	0	0	3	0	0	1	0	0	14	0
Lane Group Flow (vph)	68	1834	0	42	1195	0	0	368	0	0	216	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	33.1	33.1		33.1	33.1			17.7			17.7	
Effective Green, g (s)	33.4	33.4		33.4	33.4			18.6			18.6	
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.31			0.31	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	151	1761		111	1756			495			440	
v/s Ratio Prot		c0.58			0.38							
v/s Ratio Perm	0.25			0.21				c0.23			0.15	
v/c Ratio	0.45	1.04		0.38	0.68			0.74			0.49	
Uniform Delay, d1	7.9	13.3		7.5	9.5			18.6			16.8	
Progression Factor	1.27	1.65		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.9	20.6		9.5	2.2			5.9			0.9	
Delay (s)	10.9	42.6		17.0	11.6			24.5			17.7	
Level of Service	B	D		B	B			C			B	
Approach Delay (s)		41.5			11.8			24.5			17.7	
Approach LOS		D			B			C			B	

Intersection Summary			
HCM Average Control Delay	28.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95	1.00		1.00		0.95	0.95	
Frt		1.00			1.00	0.85		0.96		1.00	0.99	
Flt Protected		1.00			1.00	1.00		0.99		0.95	0.97	
Satd. Flow (prot)		3013			3018	1350		1499		1433	1440	
Flt Permitted		1.00			1.00	1.00		0.99		0.95	0.97	
Satd. Flow (perm)		3013			3018	1350		1499		1433	1440	
Volume (vph)	0	1668	16	0	1298	299	12	18	15	472	59	22
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1720	16	0	1338	308	12	19	15	487	61	23
RTOR Reduction (vph)	0	1	0	0	0	51	0	14	0	0	3	0
Lane Group Flow (vph)	0	1735	0	0	1338	257	0	32	0	283	285	0
Turn Type						pm+ov	Split			Split		
Protected Phases		2			6	4	3	3		4	4	
Permitted Phases						6						
Actuated Green, G (s)		61.7			61.7	83.3		4.7		21.6	21.6	
Effective Green, g (s)		61.7			61.7	83.3		4.7		21.6	21.6	
Actuated g/C Ratio		0.62			0.62	0.83		0.05		0.22	0.22	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Vehicle Extension (s)		4.5			4.5	4.0		3.0		4.0	4.0	
Lane Grp Cap (vph)		1859			1862	1179		70		310	311	
v/s Ratio Prot		c0.58			0.44	0.05		c0.02		0.20	c0.20	
v/s Ratio Perm						0.14						
v/c Ratio		0.93			0.72	0.22		0.45		0.91	0.92	
Uniform Delay, d1		17.3			13.2	1.7		46.4		38.3	38.3	
Progression Factor		0.99			1.00	1.00		1.00		1.25	1.26	
Incremental Delay, d2		1.2			2.4	0.1		4.6		19.3	19.6	
Delay (s)		18.3			15.6	1.8		51.0		67.1	67.8	
Level of Service		B			B	A		D		E	E	
Approach Delay (s)		18.3			13.0			51.0			67.5	
Approach LOS		B			B			D			E	

Intersection Summary			
HCM Average Control Delay	23.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00	1.00		1.00	
Frt	1.00	0.99		1.00	0.99			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.96	1.00		0.99	
Satd. Flow (prot)	1509	2976		1509	2980			1527	1350		1495	
Flt Permitted	0.16	1.00		0.09	1.00			0.96	1.00		0.99	
Satd. Flow (perm)	258	2976		136	2980			1527	1350		1495	
Volume (vph)	16	1535	157	403	1014	92	194	47	614	38	78	66
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	17	1633	167	429	1079	98	206	50	653	40	83	70
RTOR Reduction (vph)	0	6	0	0	5	0	0	0	276	0	20	0
Lane Group Flow (vph)	17	1794	0	429	1172	0	0	256	377	0	173	0
Turn Type	Perm			pm+pt			Split		pm+ov	Split		
Protected Phases		6		5 7	2		4	4	5 7	8	8	
Permitted Phases	6			2					4			
Actuated Green, G (s)	42.8	42.8		54.8	50.8			18.0	27.0		4.0	
Effective Green, g (s)	42.8	42.8		54.8	50.8			18.0	26.0		4.0	
Actuated g/C Ratio	0.43	0.43		0.55	0.51			0.18	0.26		0.04	
Clearance Time (s)	4.0	4.0			4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0			3.0			4.0			3.0	
Lane Grp Cap (vph)	110	1274		184	1514			275	351		60	
v/s Ratio Prot		0.60		c0.19	0.39			0.17	c0.09		c0.12	
v/s Ratio Perm	0.07			c1.09					0.19			
v/c Ratio	0.15	1.41		2.33	0.77			0.93	1.07		2.88	
Uniform Delay, d1	17.5	28.6		48.2	19.9			40.4	37.0		48.0	
Progression Factor	1.00	1.00		1.00	1.00			1.52	3.81		1.00	
Incremental Delay, d2	3.0	188.3		615.9	3.9			21.4	54.1		890.0	
Delay (s)	20.5	216.9		664.0	23.9			82.7	195.0		938.0	
Level of Service	C	F		F	C			F	F		F	
Approach Delay (s)		215.1			194.9			163.4			938.0	
Approach LOS		F			F			F			F	

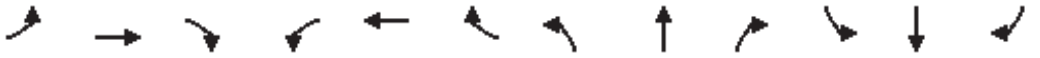
Intersection Summary			
HCM Average Control Delay	228.4	HCM Level of Service	F
HCM Volume to Capacity ratio	2.02		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	23.2
Intersection Capacity Utilization	122.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)			4.0	4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor			1.00	0.95	0.95			0.95	1.00		0.95	
Frpb, ped/bikes			1.00	1.00	0.99			1.00	1.00		1.00	
Flpb, ped/bikes			1.00	1.00	1.00			1.00	1.00		1.00	
Frt			0.86	1.00	0.97			1.00	0.85		1.00	
Flt Protected			1.00	0.95	0.96			1.00	1.00		1.00	
Satd. Flow (prot)			1374	1433	1392			3015	1350		3011	
Flt Permitted			1.00	0.95	0.96			0.93	1.00		1.00	
Satd. Flow (perm)			1374	1433	1392			2816	1350		3011	
Volume (vph)	0	0	7	948	11	114	16	785	1614	0	616	4
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	0	8	1077	12	130	18	892	1834	0	700	5
RTOR Reduction (vph)	0	0	4	0	11	0	0	0	698	0	1	0
Lane Group Flow (vph)	0	0	4	645	563	0	0	910	1136	0	704	0
Confl. Peds. (#/hr)	14					14	31					31
Confl. Bikes (#/hr)						3						2
Turn Type			custom	Prot			Perm		Perm			
Protected Phases				4	8			2			2	
Permitted Phases			4				2		2			
Actuated Green, G (s)			56.0	56.0	56.0			35.0	35.0		35.0	
Effective Green, g (s)			56.0	56.0	56.0			36.0	36.0		36.0	
Actuated g/C Ratio			0.56	0.56	0.56			0.36	0.36		0.36	
Clearance Time (s)			4.0	4.0	4.0			5.0	5.0		5.0	
Vehicle Extension (s)			7.0	7.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)			769	802	780			1014	486		1084	
v/s Ratio Prot				c0.45	0.40						0.23	
v/s Ratio Perm			0.00					0.32	c0.84			
v/c Ratio			0.01	0.80	0.72			0.90	2.34		0.65	
Uniform Delay, d1			9.7	17.6	16.3			30.3	32.0		26.7	
Progression Factor			1.00	1.00	1.00			0.79	4.79		1.33	
Incremental Delay, d2			0.0	7.3	3.3			1.4	602.2		0.3	
Delay (s)			9.7	24.9	19.6			25.4	755.6		35.7	
Level of Service			A	C	B			C	F		D	
Approach Delay (s)		9.7			22.4			513.4			35.7	
Approach LOS		A			C			F			D	

Intersection Summary			
HCM Average Control Delay	312.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	120.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.97		1.00	0.99		1.00	1.00	0.93
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.95		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1502	1588	1274	1489	1470		1509	2968		1509	3018	1250
Flt Permitted	0.22	1.00	1.00	0.53	1.00		0.11	1.00		0.10	1.00	1.00
Satd. Flow (perm)	349	1588	1274	827	1470		181	2968		160	3018	1250
Volume (vph)	564	394	149	31	207	102	123	1553	82	122	1038	178
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	570	398	151	31	209	103	124	1569	83	123	1048	180
RTOR Reduction (vph)	0	0	66	0	18	0	0	4	0	0	0	50
Lane Group Flow (vph)	570	398	85	31	294	0	124	1648	0	123	1048	130
Confl. Peds. (#/hr)	41		27	27		41	29		45	45		29
Confl. Bikes (#/hr)			1						3			3
Turn Type	pm+pt		Perm	pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6		6	2			4			8		8
Actuated Green, G (s)	43.0	37.1	37.1	25.4	22.5		45.9	40.0		44.6	39.6	39.6
Effective Green, g (s)	43.5	37.6	37.6	24.4	22.5		45.4	40.5		43.6	39.6	39.6
Actuated g/C Ratio	0.44	0.38	0.38	0.24	0.22		0.45	0.40		0.44	0.40	0.40
Clearance Time (s)	3.0	4.5	4.5	3.0	4.0		3.0	4.5		3.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	1.0	2.5		1.0	5.0		1.0	5.0	5.0
Lane Grp Cap (vph)	348	597	479	214	331		147	1202		124	1195	495
v/s Ratio Prot	c0.28	0.25		0.00	0.20		c0.04	c0.56		0.04	0.35	
v/s Ratio Perm	c0.43		0.07	0.03			0.34			0.39		0.10
v/c Ratio	1.64	0.67	0.18	0.14	0.89		0.84	1.37		0.99	0.88	0.26
Uniform Delay, d1	23.0	26.0	20.9	29.2	37.5		20.1	29.8		50.2	27.9	20.4
Progression Factor	1.00	1.00	1.00	0.98	0.99		1.07	0.58		1.07	1.06	1.11
Incremental Delay, d2	299.8	2.8	0.2	0.1	23.4		4.0	167.6		63.8	6.5	0.9
Delay (s)	322.7	28.8	21.0	28.6	60.6		25.6	185.0		117.4	36.2	23.5
Level of Service	F	C	C	C	E		C	F		F	D	C
Approach Delay (s)		177.5			57.7			173.9			41.9	
Approach LOS		F			E			F			D	

Intersection Summary			
HCM Average Control Delay	127.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	132.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	4.0
Lane Util. Factor	0.97	0.95		0.97	0.95		0.97	0.95			0.95	1.00
Frpb, ped/bikes	1.00	0.98		1.00	1.00		1.00	0.97			1.00	0.94
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00			1.00	1.00
Frt	1.00	0.99		1.00	1.00		1.00	0.98			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)	2927	2901		2927	2999		2927	2869			3018	1271
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (perm)	2927	2901		2927	2999		2927	2869			3018	1271
Volume (vph)	607	1632	180	348	973	17	240	1162	221	0	768	550
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	653	1755	194	374	1046	18	258	1249	238	0	826	591
RTOR Reduction (vph)	0	8	0	0	1	0	0	16	0	0	0	260
Lane Group Flow (vph)	653	1941	0	374	1063	0	258	1471	0	0	826	331
Confl. Peds. (#/hr)	157		168	168		157	46		116	116		46
Confl. Bikes (#/hr)			17			14			1			
Turn Type	Prot			Prot			Prot					Perm
Protected Phases	5	2		1	6		3	8			4	
Permitted Phases												4
Actuated Green, G (s)	20.5	44.5		4.0	28.0		4.0	38.0			29.0	29.0
Effective Green, g (s)	20.5	45.0		4.0	28.5		5.0	39.0			30.0	30.0
Actuated g/C Ratio	0.20	0.45		0.04	0.28		0.05	0.39			0.30	0.30
Clearance Time (s)	4.0	4.5		4.0	4.5		5.0	5.0			5.0	5.0
Vehicle Extension (s)	1.0	5.0		1.0	5.0		2.0	4.0			4.0	4.0
Lane Grp Cap (vph)	600	1305		117	855		146	1119			905	381
v/s Ratio Prot	0.22	c0.67		c0.13	0.35		c0.09	c0.51			0.27	
v/s Ratio Perm												0.26
v/c Ratio	1.09	1.49		3.20	1.24		1.77	1.31			0.91	0.87
Uniform Delay, d1	39.8	27.5		48.0	35.8		47.5	30.5			33.7	33.1
Progression Factor	1.00	0.59		0.79	1.39		1.00	1.00			1.62	2.88
Incremental Delay, d2	42.8	219.6		1004.7	116.7		371.6	148.0			10.6	14.8
Delay (s)	82.5	235.7		1042.7	166.4		419.1	178.5			65.2	110.1
Level of Service	F	F		F	F		F	F			E	F
Approach Delay (s)		197.3			394.3			214.1			83.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	218.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	129.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1509	2979		1509	2991		1509	2922		1509	2980	
Flt Permitted	0.37	1.00		0.95	1.00		0.12	1.00		0.10	1.00	
Satd. Flow (perm)	587	2979		1509	2991		194	2922		151	2980	
Volume (vph)	96	931	87	257	685	42	103	1470	395	83	1048	95
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	98	950	89	262	699	43	105	1500	403	85	1069	97
RTOR Reduction (vph)	0	8	0	0	5	0	0	27	0	0	7	0
Lane Group Flow (vph)	98	1031	0	262	737	0	105	1876	0	85	1159	0
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8						6			2		
Actuated Green, G (s)	25.0	25.0		11.0	39.0		41.0	41.0		41.0	41.0	
Effective Green, g (s)	26.0	26.0		10.0	40.0		42.0	42.0		42.0	42.0	
Actuated g/C Ratio	0.29	0.29		0.11	0.44		0.47	0.47		0.47	0.47	
Clearance Time (s)	5.0	5.0		3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	170	861		168	1329		91	1364		70	1391	
v/s Ratio Prot		c0.35		c0.17	0.25			c0.64			0.39	
v/s Ratio Perm	0.17						0.54			0.56		
v/c Ratio	0.58	1.20		1.56	0.55		1.15	1.38		1.21	0.83	
Uniform Delay, d1	27.3	32.0		40.0	18.4		24.0	24.0		24.0	20.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.5	100.2		278.8	1.7		141.7	173.7		176.2	6.0	
Delay (s)	40.8	132.2		318.8	20.1		165.7	197.7		200.2	26.9	
Level of Service	D	F		F	C		F	F		F	C	
Approach Delay (s)		124.3			98.0			196.1			38.7	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	126.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	134.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0			4.0		4.0	4.0	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frpb, ped/bikes					1.00			0.99		1.00	1.00	
Flpb, ped/bikes					0.98			1.00		1.00	1.00	
Frt					0.95			0.99		1.00	1.00	
Flt Protected					0.97			1.00		0.95	1.00	
Satd. Flow (prot)					1503			3091		1583	3167	
Flt Permitted					0.82			1.00		0.07	1.00	
Satd. Flow (perm)					1271			3091		109	3167	
Volume (vph)	0	0	0	108	0	74	0	1767	126	62	1470	0
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	124	0	85	0	2031	145	71	1690	0
RTOR Reduction (vph)	0	0	0	0	6	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	203	0	0	2171	0	71	1690	0
Confl. Peds. (#/hr)			20	20			47		58	58		47
Confl. Bikes (#/hr)			1						7			1
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)					30.5			61.0		61.0	61.0	
Effective Green, g (s)					31.0			61.0		61.0	61.0	
Actuated g/C Ratio					0.31			0.61		0.61	0.61	
Clearance Time (s)					4.5			4.0		4.0	4.0	
Vehicle Extension (s)					3.0			5.0		5.0	5.0	
Lane Grp Cap (vph)					394			1886		66	1932	
v/s Ratio Prot								c0.70			0.53	
v/s Ratio Perm					c0.16					0.65		
v/c Ratio					0.51			1.15		1.08	0.87	
Uniform Delay, d1					28.3			19.5		19.5	16.3	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					4.7			74.6		133.2	5.9	
Delay (s)					33.1			94.1		152.7	22.2	
Level of Service					C			F		F	C	
Approach Delay (s)		0.0			33.1			94.1			27.5	
Approach LOS		A			C			F			C	

Intersection Summary			
HCM Average Control Delay	62.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.74	1.00	0.98		1.00	1.00	0.79	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3072	3167	1048	3072	3024		1583	3167	1117	1583	4394	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	3072	3167	1048	3072	3024		168	3167	1117	168	4394	
Volume (vph)	261	1430	100	344	777	132	313	1560	479	87	1281	112
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	275	1505	105	362	818	139	329	1642	504	92	1348	118
RTOR Reduction (vph)	0	0	1	0	11	0	0	0	27	0	9	0
Lane Group Flow (vph)	275	1505	104	362	946	0	329	1642	477	92	1457	0
Confl. Peds. (#/hr)	102		193	193		102	173		149	149		173
Confl. Bikes (#/hr)			6			6			9			5
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2				8		8	4		
Actuated Green, G (s)	8.0	48.0	55.0	8.0	48.0		45.3	38.3	46.3	45.3	38.3	
Effective Green, g (s)	8.0	49.3	56.3	8.0	49.3		46.7	39.7	47.7	46.7	39.7	
Actuated g/C Ratio	0.07	0.41	0.47	0.07	0.41		0.39	0.33	0.40	0.39	0.33	
Clearance Time (s)	4.0	5.3	4.0	4.0	5.3		4.0	5.4	4.0	4.0	5.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	205	1301	527	205	1242		148	1048	481	148	1454	
v/s Ratio Prot	0.09	c0.48	0.01	c0.12	0.31		c0.13	0.52	0.07	0.04	0.33	
v/s Ratio Perm			0.09				c0.74		0.36	0.21		
v/c Ratio	1.34	1.16	0.20	1.77	0.76		2.22	1.57	0.99	0.62	1.00	
Uniform Delay, d1	56.0	35.4	18.6	56.0	30.3		31.2	40.1	36.0	56.5	40.1	
Progression Factor	0.89	0.82	0.73	1.14	0.76		1.17	1.10	1.49	1.00	1.00	
Incremental Delay, d2	165.2	74.1	0.1	359.7	3.5		552.3	255.5	10.6	7.9	24.1	
Delay (s)	214.9	102.9	13.6	423.8	26.6		589.0	299.7	64.3	64.4	64.3	
Level of Service	F	F	B	F	C		F	F	E	E	E	
Approach Delay (s)		114.3			135.6			290.2			64.3	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	167.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	122.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3032		1583	3167	1417	1583	3126	
Flt Permitted	0.18	1.00	1.00	0.07	1.00		0.12	1.00	1.00	0.20	1.00	
Satd. Flow (perm)	298	3167	1417	113	3032		200	3167	1417	336	3126	
Volume (vph)	174	1469	112	117	682	271	193	837	209	143	954	89
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	185	1563	119	124	726	288	205	890	222	152	1015	95
RTOR Reduction (vph)	0	0	25	0	35	0	0	0	8	0	6	0
Lane Group Flow (vph)	185	1563	94	124	979	0	205	890	214	152	1104	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6		6	2			8		8	4		
Actuated Green, G (s)	57.1	57.1	57.1	57.1	57.1		51.5	51.5	51.5	51.5	51.5	
Effective Green, g (s)	59.0	59.0	59.0	59.0	59.0		53.0	53.0	53.0	53.0	53.0	
Actuated g/C Ratio	0.49	0.49	0.49	0.49	0.49		0.44	0.44	0.44	0.44	0.44	
Clearance Time (s)	5.9	5.9	5.9	5.9	5.9		5.5	5.5	5.5	5.5	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	147	1557	697	56	1491		88	1399	626	148	1381	
v/s Ratio Prot		0.49			0.32			0.28			0.35	
v/s Ratio Perm	0.62		0.07	c1.10			c1.02		0.15	0.45		
v/c Ratio	1.26	1.00	0.13	2.21	0.66		2.33	0.64	0.34	1.03	0.80	
Uniform Delay, d1	30.5	30.5	16.6	30.5	22.9		33.5	26.0	22.0	33.5	28.9	
Progression Factor	1.25	1.26	1.46	0.55	0.56		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	121.5	7.8	0.0	551.7	0.2		632.2	2.2	1.5	81.3	4.9	
Delay (s)	159.6	46.1	24.2	568.5	13.0		665.7	28.2	23.5	114.8	33.9	
Level of Service	F	D	C	F	B		F	C	C	F	C	
Approach Delay (s)		56.0			73.5			126.7			43.6	
Approach LOS		E			E			F			D	

Intersection Summary			
HCM Average Control Delay	73.4	HCM Level of Service	E
HCM Volume to Capacity ratio	2.27		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	111.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0	4.0		4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00		0.95		0.95	0.95	1.00		1.00	
Frt	1.00	1.00	0.85		1.00		1.00	1.00	0.85		0.97	
Flt Protected	0.95	1.00	1.00		1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1509	3018	1350		3007		1433	1466	1350		1515	
Flt Permitted	0.16	1.00	1.00		1.00		0.95	0.97	1.00		0.99	
Satd. Flow (perm)	259	3018	1350		3007		1433	1466	1350		1515	
Volume (vph)	66	1477	637	0	1115	26	314	86	53	20	31	15
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	69	1539	664	0	1161	27	327	90	55	21	32	16
RTOR Reduction (vph)	0	0	73	0	1	0	0	0	45	0	9	0
Lane Group Flow (vph)	69	1539	591	0	1187	0	203	214	10	0	60	0
Turn Type	pm+pt		Perm				Split		Perm	Split		
Protected Phases	1	6			2		4	4		3	3	
Permitted Phases	6		6						4			
Actuated Green, G (s)	74.9	70.8	70.8		70.8		21.0	21.0	21.0		9.1	
Effective Green, g (s)	73.9	70.8	70.8		70.8		21.0	21.0	21.0		9.1	
Actuated g/C Ratio	0.62	0.59	0.59		0.59		0.18	0.18	0.18		0.08	
Clearance Time (s)	3.0	4.0	4.0		4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	1.0	6.0	6.0		6.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	192	1781	797		1774		251	257	236		115	
v/s Ratio Prot	c0.01	c0.51			0.39		0.14	c0.15			c0.04	
v/s Ratio Perm	0.21		0.44						0.01			
v/c Ratio	0.36	0.86	0.74		0.67		0.81	0.83	0.04		0.52	
Uniform Delay, d1	11.8	20.6	17.9		16.7		47.6	47.8	41.1		53.3	
Progression Factor	0.81	0.58	0.48		1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	0.1	1.5	1.5		2.0		17.2	20.0	0.1		3.9	
Delay (s)	9.6	13.3	10.1		18.7		64.8	67.8	41.2		57.3	
Level of Service	A	B	B		B		E	E	D		E	
Approach Delay (s)		12.2			18.7			63.4			57.3	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	0.96		1.00	1.00	0.84	1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.96	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2997		1509	2856		1447	3018	1128	1509	2950	
Flt Permitted	0.07	1.00		0.07	1.00		0.17	1.00	1.00	0.17	1.00	
Satd. Flow (perm)	107	2997		108	2856		265	3018	1128	276	2950	
Volume (vph)	128	2127	46	232	1409	178	73	911	253	46	625	43
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	141	2337	51	255	1548	196	80	1001	278	51	687	47
RTOR Reduction (vph)	0	2	0	0	10	0	0	0	79	0	5	0
Lane Group Flow (vph)	141	2386	0	255	1734	0	80	1001	199	51	729	0
Confl. Peds. (#/hr)	257		114	114		257	133		103	103		133
Confl. Bikes (#/hr)			12			3			1			2
Turn Type	pm+pt			pm+pt			Perm		Perm	Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	65.5	59.5		65.0	59.0		23.0	23.0	23.0	23.0	23.0	
Effective Green, g (s)	65.5	59.5		64.5	59.0		23.0	23.0	23.0	23.0	23.0	
Actuated g/C Ratio	0.66	0.60		0.64	0.59		0.23	0.23	0.23	0.23	0.23	
Clearance Time (s)	4.0	4.0		3.5	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	1.0	5.0		1.0	5.0		4.0	4.0	4.0	4.0	4.0	
Lane Grp Cap (vph)	154	1783		147	1685		61	694	259	63	679	
v/s Ratio Prot	0.05	0.80		c0.10	0.61			c0.33			0.25	
v/s Ratio Perm	0.55			c1.03			0.30		0.18	0.18		
v/c Ratio	0.92	1.34		1.73	1.03		1.31	1.44	0.77	0.81	1.07	
Uniform Delay, d1	25.3	20.2		49.5	20.5		38.5	38.5	36.0	36.4	38.5	
Progression Factor	1.21	0.95		0.67	1.71		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.9	152.6		333.2	15.9		219.5	207.2	19.3	67.8	56.2	
Delay (s)	38.4	171.9		366.4	51.0		258.0	245.7	55.3	104.2	94.7	
Level of Service	D	F		F	D		F	F	E	F	F	
Approach Delay (s)		164.5			91.2			207.5			95.3	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	143.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	133.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1509	2984		1509	1588	1350	1509	2964		1509	3018	1350
Flt Permitted	0.23	1.00		0.18	1.00	1.00	0.25	1.00		0.11	1.00	1.00
Satd. Flow (perm)	360	2984		282	1588	1350	391	2964		176	3018	1350
Volume (vph)	89	796	65	266	505	188	100	1052	142	239	782	158
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	98	875	71	292	555	207	110	1156	156	263	859	174
RTOR Reduction (vph)	0	8	0	0	0	25	0	14	0	0	0	90
Lane Group Flow (vph)	98	938	0	292	555	182	110	1298	0	263	859	84
Turn Type	Perm			Perm		Perm	Perm			Perm		Perm
Protected Phases		2			2			4			4	
Permitted Phases	2			2		2	4			4		4
Actuated Green, G (s)	31.0	31.0		31.0	31.0	31.0	36.0	36.0		36.0	36.0	36.0
Effective Green, g (s)	31.0	31.0		31.0	31.0	31.0	36.0	36.0		36.0	36.0	36.0
Actuated g/C Ratio	0.41	0.41		0.41	0.41	0.41	0.48	0.48		0.48	0.48	0.48
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0	1.0
Lane Grp Cap (vph)	149	1233		117	656	558	188	1423		84	1449	648
v/s Ratio Prot		0.31			0.35			0.44			0.28	
v/s Ratio Perm	0.27			c1.04		0.13	0.28			c1.49		0.06
v/c Ratio	0.66	0.76		2.50	0.85	0.33	0.59	0.91		3.13	0.59	0.13
Uniform Delay, d1	17.7	18.8		22.0	19.8	14.9	14.1	18.0		19.5	14.2	10.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	20.5	4.5		697.8	12.7	1.6	12.6	10.4		989.4	1.8	0.4
Delay (s)	38.2	23.3		719.8	32.6	16.5	26.7	28.4		1008.9	16.0	11.2
Level of Service	D	C		F	C	B	C	C		F	B	B
Approach Delay (s)		24.7			219.8			28.3			216.8	
Approach LOS		C			F			C			F	

Intersection Summary			
HCM Average Control Delay	120.2	HCM Level of Service	F
HCM Volume to Capacity ratio	2.83		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		0.95	0.91	0.95	1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1509	2985		1509	2993		1433	1405	1282	1509	1561	
Flt Permitted	0.18	1.00		0.05	1.00		0.95	0.97	1.00	0.95	1.00	
Satd. Flow (perm)	282	2985		85	2993		1433	1405	1282	1509	1561	
Volume (vph)	14	1597	124	207	1138	65	453	125	430	21	202	26
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	15	1681	131	218	1198	68	477	132	453	22	213	27
RTOR Reduction (vph)	0	5	0	0	4	0	0	0	173	0	3	0
Lane Group Flow (vph)	15	1807	0	218	1263	0	303	306	280	22	237	0
Turn Type	Perm			pm+pt			Split		pm+ov	Split		
Protected Phases		6		5	2		4	4	5	3	3	
Permitted Phases	6			2					4			
Actuated Green, G (s)	71.0	71.0		78.0	78.0		13.0	13.0	17.0	18.0	18.0	
Effective Green, g (s)	71.0	71.0		78.0	78.0		13.0	13.0	16.0	17.0	17.0	
Actuated g/C Ratio	0.59	0.59		0.65	0.65		0.11	0.11	0.13	0.14	0.14	
Clearance Time (s)	4.0	4.0		3.0	4.0		4.0	4.0	3.0	3.0	3.0	
Vehicle Extension (s)	4.5	4.5		1.0	4.5		2.0	2.0	1.0	2.0	2.0	
Lane Grp Cap (vph)	167	1766		91	1945		155	152	214	214	221	
v/s Ratio Prot		0.61		c0.06	0.42		0.21	c0.22	0.03	0.01	c0.15	
v/s Ratio Perm	0.05			c1.50					0.19			
v/c Ratio	0.09	1.02		2.40	0.65		1.95	2.01	1.31	0.10	1.07	
Uniform Delay, d1	10.6	24.5		27.4	12.7		53.5	53.5	52.0	44.9	51.5	
Progression Factor	1.00	1.00		2.31	0.51		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.1	27.5		651.2	1.2		452.3	478.3	167.6	1.0	80.5	
Delay (s)	11.6	52.0		714.6	7.7		505.8	531.8	219.6	45.8	132.0	
Level of Service	B	D		F	A		F	F	F	D	F	
Approach Delay (s)		51.7			111.5			391.2			124.7	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	152.8	HCM Level of Service	F
HCM Volume to Capacity ratio	2.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	121.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.95		1.00	0.95	
Frt		0.96			0.97		1.00	0.98		1.00	1.00	
Flt Protected		0.99			0.97		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1521			1490		1509	2960		1509	3009	
Flt Permitted		0.96			0.73		0.39	1.00		0.19	1.00	
Satd. Flow (perm)		1470			1124		612	2960		294	3009	
Volume (vph)	50	251	111	44	10	17	224	866	126	10	559	11
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	261	116	46	10	18	233	902	131	10	582	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	429	0	0	74	0	233	1033	0	10	593	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Actuated Green, G (s)		20.8			20.8		22.6	22.6		22.6	22.6	
Effective Green, g (s)		21.4			21.4		21.6	21.6		21.6	21.6	
Actuated g/C Ratio		0.42			0.42		0.42	0.42		0.42	0.42	
Clearance Time (s)		4.6			4.6		3.0	3.0		3.0	3.0	
Vehicle Extension (s)		4.5			4.5		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		617			472		259	1254		125	1274	
v/s Ratio Prot								0.35			0.20	
v/s Ratio Perm		c0.29			0.07		c0.38			0.03		
v/c Ratio		0.70			0.16		0.90	0.82		0.08	0.47	
Uniform Delay, d1		12.1			9.2		13.7	13.0		8.8	10.6	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		6.4			0.7		30.6	4.5		0.3	0.3	
Delay (s)		18.5			9.9		44.3	17.5		9.0	10.8	
Level of Service		B			A		D	B		A	B	
Approach Delay (s)		18.5			9.9			22.5			10.8	
Approach LOS		B			A			C			B	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	51.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.5%	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												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99			0.92			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1509	2998		1509	2973			1334			1525	
Flt Permitted	0.07	1.00		0.08	1.00			0.96			0.58	
Satd. Flow (perm)	114	2998		123	2973			1281			895	
Volume (vph)	17	1994	33	231	1304	57	49	159	254	38	56	8
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	18	2121	35	246	1387	61	52	169	270	40	60	9
RTOR Reduction (vph)	0	1	0	0	3	0	0	44	0	0	3	0
Lane Group Flow (vph)	18	2155	0	246	1445	0	0	447	0	0	106	0
Confl. Peds. (#/hr)	63		90	90		63	52		90	90		52
Confl. Bikes (#/hr)			4			3						1
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	65.5	58.5		55.0	51.5			26.0			26.0	
Effective Green, g (s)	65.5	58.5		54.5	51.5			26.5			26.5	
Actuated g/C Ratio	0.66	0.58		0.54	0.52			0.26			0.26	
Clearance Time (s)	3.5	4.0		3.5	4.0			4.5			4.5	
Vehicle Extension (s)	1.0	5.0		1.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	214	1754		109	1531			339			237	
v/s Ratio Prot	0.01	c0.72		c0.07	0.49							
v/s Ratio Perm	0.05			c1.16				c0.35			0.12	
v/c Ratio	0.08	1.23		2.26	0.94			1.32			0.45	
Uniform Delay, d1	12.7	20.8		50.7	22.9			36.8			30.6	
Progression Factor	1.00	1.00		2.15	0.33			1.00			1.00	
Incremental Delay, d2	0.8	108.1		568.3	1.7			162.6			1.3	
Delay (s)	13.5	128.8		677.2	9.3			199.4			32.0	
Level of Service	B	F		F	A			F			C	
Approach Delay (s)		127.9			106.3			199.4			32.0	
Approach LOS		F			F			F			C	

Intersection Summary			
HCM Average Control Delay	125.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.95		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	126.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3150		1583	3097		1583	1667	1417	1583	1626	
Flt Permitted	0.20	1.00		0.20	1.00		0.21	1.00	1.00	0.31	1.00	
Satd. Flow (perm)	327	3150		327	3097		353	1667	1417	518	1626	
Volume (vph)	98	1406	52	89	795	137	74	558	190	2	572	112
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	102	1465	54	93	828	143	77	581	198	2	596	117
RTOR Reduction (vph)	0	5	0	0	23	0	0	0	1	0	12	0
Lane Group Flow (vph)	102	1514	0	93	948	0	77	581	197	2	701	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	20.1	20.1		20.1	20.1		31.0	31.0	31.0	31.0	31.0	
Effective Green, g (s)	20.4	20.4		20.4	20.4		31.6	31.6	31.6	31.6	31.6	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.53	0.53	0.53	0.53	0.53	
Clearance Time (s)	4.3	4.3		4.3	4.3		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	1071		111	1053		186	878	746	273	856	
v/s Ratio Prot		c0.48			0.31			0.35			c0.43	
v/s Ratio Perm	0.31			0.28			0.22		0.14	0.00		
v/c Ratio	0.92	1.41		0.84	0.90		0.41	0.66	0.26	0.01	0.82	
Uniform Delay, d1	19.0	19.8		18.3	18.8		8.6	10.3	7.8	6.7	11.8	
Progression Factor	1.00	1.00		1.05	1.05		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	65.7	191.9		18.5	3.9		6.7	3.9	0.9	0.0	8.6	
Delay (s)	84.7	211.7		37.7	23.6		15.3	14.2	8.7	6.8	20.4	
Level of Service	F	F		D	C		B	B	A	A	C	
Approach Delay (s)		203.7			24.8			13.0			20.4	
Approach LOS		F			C			B			C	

Intersection Summary			
HCM Average Control Delay	89.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620	1620
Total Lost time (s)				4.0	4.0			4.0			4.0	4.0
Lane Util. Factor				1.00	0.95			0.95			0.95	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			1.00			1.00	1.00
Satd. Flow (prot)				1509	3004			3004			3018	1350
Flt Permitted				0.95	1.00			0.88			1.00	1.00
Satd. Flow (perm)				1509	3004			2652			3018	1350
Volume (vph)	0	0	0	205	1185	36	40	385	0	0	400	100
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	228	1317	40	44	428	0	0	444	111
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	228	1355	0	0	472	0	0	444	111
Turn Type				custom			custom					Free
Protected Phases				2	2		3	3			1	
Permitted Phases				4	4		6	6				Free
Actuated Green, G (s)				34.9	34.9			27.5			20.0	100.0
Effective Green, g (s)				33.5	33.5			26.5			20.0	100.0
Actuated g/C Ratio				0.34	0.34			0.26			0.20	1.00
Clearance Time (s)				3.0	3.0			3.0			4.0	
Vehicle Extension (s)				1.0	1.0			1.0			4.0	
Lane Grp Cap (vph)				566	1127			717			604	1350
v/s Ratio Prot				0.06	c0.17			c0.03			c0.15	
v/s Ratio Perm				0.10	0.28			c0.15				0.08
v/c Ratio				0.40	1.20			0.66			0.74	0.08
Uniform Delay, d1				26.0	33.2			32.7			37.5	0.0
Progression Factor				1.00	1.00			0.38			1.00	1.00
Incremental Delay, d2				2.1	99.7			0.9			7.8	0.1
Delay (s)				28.2	133.0			13.3			45.3	0.1
Level of Service				C	F			B			D	A
Approach Delay (s)		0.0			117.9			13.3			36.2	
Approach LOS		A			F			B			D	

Intersection Summary			
HCM Average Control Delay	81.6	HCM Level of Service	F
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00		1.00			1.00	
Frt	1.00	0.99		1.00	1.00	0.85		0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			1.00	
Satd. Flow (prot)	1304	2594		1304	2608	1167		1298			1339	
Flt Permitted	0.12	1.00		0.11	1.00	1.00		0.79			0.97	
Satd. Flow (perm)	172	2594		152	2608	1167		1046			1310	
Volume (vph)	20	1477	55	67	1459	21	68	83	61	13	121	24
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	1523	57	69	1504	22	70	86	63	13	125	25
RTOR Reduction (vph)	0	2	0	0	0	7	0	18	0	0	8	0
Lane Group Flow (vph)	21	1578	0	69	1504	15	0	201	0	0	155	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	62.2	62.2		62.2	62.2	62.2		18.7			18.7	
Effective Green, g (s)	62.8	62.8		62.8	62.8	62.8		19.2			19.2	
Actuated g/C Ratio	0.70	0.70		0.70	0.70	0.70		0.21			0.21	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6		4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0		2.0			2.0	
Lane Grp Cap (vph)	120	1810		106	1820	814		223			279	
v/s Ratio Prot		c0.61			0.58							
v/s Ratio Perm	0.12			0.45		0.01		c0.19			0.12	
v/c Ratio	0.17	0.87		0.65	0.83	0.02		0.90			0.56	
Uniform Delay, d1	4.7	10.5		7.5	9.7	4.2		34.5			31.6	
Progression Factor	0.38	1.20		0.97	0.97	1.71		1.00			1.00	
Incremental Delay, d2	0.3	0.6		13.7	2.2	0.0		34.1			1.4	
Delay (s)	2.0	13.2		21.0	11.6	7.1		68.6			33.0	
Level of Service	A	B		C	B	A		E			C	
Approach Delay (s)		13.1			11.9			68.6			33.0	
Approach LOS		B			B			E			C	

Intersection Summary			
HCM Average Control Delay	16.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.93			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.98	
Satd. Flow (prot)	1304	2601		1304	2591			1273			1326	
Flt Permitted	0.15	1.00		0.15	1.00			0.95			0.83	
Satd. Flow (perm)	211	2601		211	2591			1218			1125	
Volume (vph)	29	1365	24	67	1266	58	23	90	113	99	165	41
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)	32	1484	26	73	1376	63	25	98	123	108	179	45
RTOR Reduction (vph)	0	2	0	0	6	0	0	6	0	0	8	0
Lane Group Flow (vph)	32	1508	0	73	1433	0	0	240	0	0	324	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	25.5	25.5		25.5	25.5			25.5			25.5	
Effective Green, g (s)	26.0	26.0		26.0	26.0			26.0			26.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.43			0.43	
Clearance Time (s)	4.5	4.5		4.5	4.5			4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0			2.0			2.0	
Lane Grp Cap (vph)	91	1127		91	1123			528			488	
v/s Ratio Prot		c0.58			0.55							
v/s Ratio Perm	0.15			0.35				0.20			c0.29	
v/c Ratio	0.35	1.34		0.80	1.28			0.46			0.66	
Uniform Delay, d1	11.4	17.0		14.8	17.0			12.0			13.5	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	10.4	158.1		51.0	131.4			2.8			7.0	
Delay (s)	21.7	175.1		65.8	148.4			14.8			20.5	
Level of Service	C	F		E	F			B			C	
Approach Delay (s)		171.9			144.4			14.8			20.5	
Approach LOS		F			F			B			C	

Intersection Summary			
HCM Average Control Delay	136.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	114.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	1635		1583	1667	1417	1583	1667	1417	1583	1667	1417
Flt Permitted	0.43	1.00		0.20	1.00	1.00	0.27	1.00	1.00	0.23	1.00	1.00
Satd. Flow (perm)	717	1635		325	1667	1417	458	1667	1417	379	1667	1417
Volume (vph)	100	498	72	46	347	91	84	538	96	80	491	77
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	547	79	51	381	100	92	591	105	88	540	85
RTOR Reduction (vph)	0	9	0	0	0	100	0	0	60	0	0	48
Lane Group Flow (vph)	110	618	0	51	381	0	92	591	46	88	540	37
Turn Type	Perm			Perm		NA	Perm		Perm	Perm		custom
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2		2	2		4
Actuated Green, G (s)	25.5	25.5		25.5	25.5	0.0	25.5	25.5	25.5	25.5	25.5	25.5
Effective Green, g (s)	26.0	26.0		26.0	26.0	0.0	26.0	26.0	26.0	26.0	26.0	26.0
Actuated g/C Ratio	0.43	0.43		0.43	0.43	0.00	0.43	0.43	0.43	0.43	0.43	0.43
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	311	709		141	722	0	198	722	614	164	722	614
v/s Ratio Prot		c0.38			0.23			c0.35			0.32	
v/s Ratio Perm	0.15			0.16			0.20		0.03	0.23		0.03
v/c Ratio	0.35	0.87		0.36	0.53	0.00	0.46	0.82	0.07	0.54	0.75	0.06
Uniform Delay, d1	11.4	15.5		11.4	12.5	30.0	12.1	14.9	10.0	12.6	14.3	9.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.1	13.8		7.1	2.7	0.0	7.6	10.0	0.2	12.0	7.0	0.2
Delay (s)	14.5	29.3		18.5	15.2	30.0	19.7	24.9	10.2	24.6	21.2	10.1
Level of Service	B	C		B	B	C	B	C	B	C	C	B
Approach Delay (s)		27.1			18.3			22.4			20.3	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM Average Control Delay	22.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.84	1.00	1.00	0.95	1.00	1.00	0.94
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2574		1304	2608	979	1303	1373	1105	1303	1373	1098
Flt Permitted	0.13	1.00		0.12	1.00	1.00	0.13	1.00	1.00	0.13	1.00	1.00
Satd. Flow (perm)	175	2574		169	2608	979	177	1373	1105	174	1373	1098
Volume (vph)	87	1201	69	127	1413	92	111	566	176	138	567	95
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	89	1226	70	130	1442	94	113	578	180	141	579	97
RTOR Reduction (vph)	0	5	0	0	0	54	0	0	108	0	0	63
Lane Group Flow (vph)	89	1291	0	130	1442	40	113	578	72	141	579	34
Confl. Peds. (#/hr)	65		58	58		65	44		40	40		44
Confl. Bikes (#/hr)			7			5			3			7
Turn Type	pm+pt			pm+pt		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6		6	8		8	4		4
Actuated Green, G (s)	34.8	30.8		36.8	31.8	31.8	35.5	30.5	30.5	36.5	31.0	31.0
Effective Green, g (s)	36.0	31.4		38.0	32.4	32.4	36.5	31.0	31.0	37.5	31.5	31.5
Actuated g/C Ratio	0.40	0.35		0.42	0.36	0.36	0.41	0.34	0.34	0.42	0.35	0.35
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	128	898		142	939	352	141	473	381	148	481	384
v/s Ratio Prot	0.04	0.50		c0.06	c0.55		0.05	0.42		c0.06	c0.42	
v/s Ratio Perm	0.24			0.33		0.04	0.28		0.07	0.33		0.03
v/c Ratio	0.70	1.44		0.92	1.54	0.11	0.80	1.22	0.19	0.95	1.20	0.09
Uniform Delay, d1	22.9	29.3		23.0	28.8	19.2	21.0	29.5	20.7	22.2	29.2	19.6
Progression Factor	1.33	0.71		1.56	1.20	2.31	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.8	199.5		35.6	244.2	0.4	26.9	117.7	0.2	59.4	110.1	0.1
Delay (s)	36.3	220.3		71.6	278.8	44.8	47.9	147.2	20.9	81.7	139.3	19.7
Level of Service	D	F		E	F	D	D	F	C	F	F	B
Approach Delay (s)		208.5			249.4			108.2			115.2	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	188.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes		1.00	0.96		1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00		1.00		0.99	1.00		1.00	1.00	
Frt		1.00	0.85		0.99		1.00	0.99		1.00	1.00	
Flt Protected		1.00	1.00		1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1654	1356		1638		1563	1650		1583	1657	
Flt Permitted		0.96	1.00		0.88		0.27	1.00		0.20	1.00	
Satd. Flow (perm)		1591	1356		1446		441	1650		336	1657	
Volume (vph)	35	314	103	15	126	9	59	795	36	37	706	18
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	35	317	104	15	127	9	60	803	36	37	713	18
RTOR Reduction (vph)	0	0	79	0	4	0	0	3	0	0	2	0
Lane Group Flow (vph)	0	352	25	0	147	0	60	836	0	37	729	0
Confl. Peds. (#/hr)	28		18	18		28	29		34	34		29
Confl. Bikes (#/hr)			11			9			1			2
Turn Type	Perm		Perm	Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		
Actuated Green, G (s)		14.2	14.2		14.2		36.8	36.8		36.8	36.8	
Effective Green, g (s)		14.7	14.7		14.7		37.3	37.3		37.3	37.3	
Actuated g/C Ratio		0.24	0.24		0.24		0.62	0.62		0.62	0.62	
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		0.2	0.2		0.2		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)		390	332		354		274	1026		209	1030	
v/s Ratio Prot								c0.51			0.44	
v/s Ratio Perm		c0.22	0.02		0.10		0.14			0.11		
v/c Ratio		0.90	0.08		0.42		0.22	0.82		0.18	0.71	
Uniform Delay, d1		22.0	17.4		19.0		5.0	8.7		4.8	7.7	
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		23.0	0.0		0.3		1.8	7.1		1.8	4.1	
Delay (s)		45.0	17.5		19.3		6.8	15.8		6.7	11.8	
Level of Service		D	B		B		A	B		A	B	
Approach Delay (s)		38.7			19.3			15.2			11.5	
Approach LOS		D			B			B			B	

Intersection Summary			
HCM Average Control Delay	19.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	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	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2608	1167	1304	2608	1167	1304	1373	1167	1304	1373	1167
Flt Permitted	0.18	1.00	1.00	0.11	1.00	1.00	0.25	1.00	1.00	0.28	1.00	1.00
Satd. Flow (perm)	252	2608	1167	147	2608	1167	345	1373	1167	381	1373	1167
Volume (vph)	86	1161	69	54	943	209	57	516	97	192	545	92
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	89	1197	71	56	972	215	59	532	100	198	562	95
RTOR Reduction (vph)	0	0	39	0	0	117	0	0	17	0	0	34
Lane Group Flow (vph)	89	1197	32	56	972	98	59	532	83	198	562	61
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5	40.5
Effective Green, g (s)	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0	41.0
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	115	1188	532	67	1188	532	157	625	532	174	625	532
v/s Ratio Prot		c0.46			0.37			0.39			0.41	
v/s Ratio Perm	0.35		0.03	0.38		0.08	0.17		0.07	c0.52		0.05
v/c Ratio	0.77	1.01	0.06	0.84	0.82	0.18	0.38	0.85	0.16	1.14	0.90	0.11
Uniform Delay, d1	20.6	24.5	13.7	21.5	21.3	14.6	16.1	21.8	14.4	24.5	22.6	14.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	38.8	28.0	0.2	70.2	6.3	0.8	1.5	10.8	0.1	110.2	15.7	0.1
Delay (s)	59.4	52.5	13.9	91.7	27.6	15.3	17.6	32.6	14.5	134.7	38.3	14.2
Level of Service	E	D	B	F	C	B	B	C	B	F	D	B
Approach Delay (s)		50.9			28.4			28.7			57.9	
Approach LOS		D			C			C			E	

Intersection Summary			
HCM Average Control Delay	41.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.80	1.00	1.00	0.86	1.00	1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	2608	933	1304	2608	1006	1304	1373	1116	1290	1355	
Flt Permitted	0.11	1.00	1.00	0.09	1.00	1.00	0.12	1.00	1.00	0.26	1.00	
Satd. Flow (perm)	156	2608	933	123	2608	1006	168	1373	1116	352	1355	
Volume (vph)	32	1297	25	104	1209	59	149	472	197	81	568	37
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	34	1365	26	109	1273	62	157	497	207	85	598	39
RTOR Reduction (vph)	0	0	13	0	0	30	0	0	11	0	2	0
Lane Group Flow (vph)	34	1365	13	109	1273	32	157	497	196	85	635	0
Confl. Peds. (#/hr)	50		75	75		50	47		29	29		47
Confl. Bikes (#/hr)			11			2			2			4
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		
Actuated Green, G (s)	45.4	45.4	45.4	45.4	45.4	45.4	35.5	35.5	35.5	35.5	35.5	
Effective Green, g (s)	46.0	46.0	46.0	46.0	46.0	46.0	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	80	1333	477	63	1333	514	67	549	446	141	542	
v/s Ratio Prot		0.52			0.49			0.36			0.47	
v/s Ratio Perm	0.22		0.01	c0.88		0.03	c0.93		0.18	0.24		
v/c Ratio	0.42	1.02	0.03	1.73	0.95	0.06	2.34	0.91	0.44	0.60	1.17	
Uniform Delay, d1	13.7	22.0	10.9	22.0	21.0	11.1	27.0	25.4	19.6	21.3	27.0	
Progression Factor	1.23	0.93	2.25	1.18	1.09	1.53	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.1	22.8	0.0	334.6	2.3	0.0	648.2	18.4	0.7	7.1	95.3	
Delay (s)	23.9	43.2	24.6	360.6	25.3	17.0	675.2	43.8	20.3	28.4	122.3	
Level of Service	C	D	C	F	C	B	F	D	C	C	F	
Approach Delay (s)		42.4			50.2			153.3			111.2	
Approach LOS		D			D			F			F	

Intersection Summary			
HCM Average Control Delay	77.5	HCM Level of Service	E
HCM Volume to Capacity ratio	2.00		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	124.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2578		1304	2558		1304	2534		1304	2560	
Flt Permitted	0.14	1.00		0.14	1.00		0.14	1.00		0.22	1.00	
Satd. Flow (perm)	194	2578		194	2558		196	2534		303	2560	
Volume (vph)	125	1115	93	121	1054	155	46	528	123	14	832	115
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	134	1199	100	130	1133	167	49	568	132	15	895	124
RTOR Reduction (vph)	0	7	0	0	13	0	0	22	0	0	12	0
Lane Group Flow (vph)	134	1292	0	130	1287	0	49	678	0	15	1007	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	53.5	53.5		53.5	53.5		27.5	27.5		27.5	27.5	
Effective Green, g (s)	54.0	54.0		54.0	54.0		28.0	28.0		28.0	28.0	
Actuated g/C Ratio	0.60	0.60		0.60	0.60		0.31	0.31		0.31	0.31	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		4.0	4.0		4.0	4.0	
Lane Grp Cap (vph)	116	1547		116	1535		61	788		94	796	
v/s Ratio Prot		0.50			0.50			0.27			c0.39	
v/s Ratio Perm	c0.69			0.67			0.25			0.05		
v/c Ratio	1.16	0.84		1.12	0.84		0.80	0.86		0.16	1.27	
Uniform Delay, d1	18.0	14.4		18.0	14.5		28.5	29.2		22.5	31.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	131.3	5.5		119.7	5.7		68.1	11.8		3.6	129.4	
Delay (s)	149.3	19.9		137.7	20.1		96.6	41.0		26.1	160.4	
Level of Service	F	B		F	C		F	D		C	F	
Approach Delay (s)		32.0			30.8			44.6			158.4	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM Average Control Delay	61.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	0.98		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.97	1.00		0.98	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.95		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2577		1304	2579		1269	1288		1278	1314	
Flt Permitted	0.12	1.00		0.11	1.00		0.50	1.00		0.45	1.00	
Satd. Flow (perm)	167	2577		150	2579		667	1288		603	1314	
Volume (vph)	61	1321	80	62	1298	47	82	165	77	32	166	45
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	64	1391	84	65	1366	49	86	174	81	34	175	47
RTOR Reduction (vph)	0	4	0	0	2	0	0	16	0	0	13	0
Lane Group Flow (vph)	64	1471	0	65	1413	0	86	239	0	34	209	0
Confl. Peds. (#/hr)	65		30	30		65	31		25	25		31
Confl. Bikes (#/hr)			5			9			3			1
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	55.5	55.5		55.5	55.5		25.4	25.4		25.4	25.4	
Effective Green, g (s)	56.1	56.1		56.1	56.1		25.9	25.9		25.9	25.9	
Actuated g/C Ratio	0.62	0.62		0.62	0.62		0.29	0.29		0.29	0.29	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	0.2	0.2		0.2	0.2		0.2	0.2		0.2	0.2	
Lane Grp Cap (vph)	104	1606		94	1608		192	371		174	378	
v/s Ratio Prot		c0.57			0.55			c0.19			0.16	
v/s Ratio Perm	0.38			0.43			0.13			0.06		
v/c Ratio	0.62	0.92		0.69	0.88		0.45	0.64		0.20	0.55	
Uniform Delay, d1	10.4	14.9		11.2	14.1		26.2	28.0		24.2	27.2	
Progression Factor	0.87	0.88		1.17	1.23		0.79	0.76		1.00	1.00	
Incremental Delay, d2	22.1	8.9		3.8	0.7		0.6	2.8		0.2	1.0	
Delay (s)	31.1	22.0		16.9	18.1		21.3	23.9		24.4	28.1	
Level of Service	C	C		B	B		C	C		C	C	
Approach Delay (s)		22.4			18.0			23.3			27.6	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM Average Control Delay	21.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1663	1417		1657	1417	1583	1667	1417	1583	1648	
Flt Permitted		0.98	1.00		0.86	1.00	0.47	1.00	1.00	0.52	1.00	
Satd. Flow (perm)		1634	1417		1434	1417	779	1667	1417	872	1648	
Volume (vph)	10	240	118	35	268	35	10	287	49	15	327	26
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	12	279	137	41	312	41	12	334	57	17	380	30
RTOR Reduction (vph)	0	0	98	0	0	29	0	0	21	0	2	0
Lane Group Flow (vph)	0	291	39	0	353	12	12	334	36	17	408	0
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4		4	4		4	2		2	2		
Actuated Green, G (s)		25.0	25.0		25.0	25.0	56.0	56.0	56.0	56.0	56.0	
Effective Green, g (s)		25.5	25.5		25.5	25.5	56.5	56.5	56.5	56.5	56.5	
Actuated g/C Ratio		0.28	0.28		0.28	0.28	0.63	0.63	0.63	0.63	0.63	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	0.2	0.2	0.2	0.2	0.2	
Lane Grp Cap (vph)		463	401		406	401	489	1047	890	547	1035	
v/s Ratio Prot								0.20			c0.25	
v/s Ratio Perm		0.18	0.03		c0.25	0.01	0.02		0.03	0.02		
v/c Ratio		0.63	0.10		0.87	0.03	0.02	0.32	0.04	0.03	0.39	
Uniform Delay, d1		28.1	23.8		30.7	23.3	6.3	7.8	6.4	6.4	8.3	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.80	0.78	
Incremental Delay, d2		2.7	0.1		17.6	0.0	0.1	0.8	0.1	0.1	1.0	
Delay (s)		30.8	23.9		48.3	23.3	6.4	8.6	6.5	5.2	7.4	
Level of Service		C	C		D	C	A	A	A	A	A	
Approach Delay (s)		28.6			45.7			8.2			7.3	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.7%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.92		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2583		1304	2584		1304	1257		1304	1339	
Flt Permitted	0.17	1.00		0.17	1.00		0.34	1.00		0.21	1.00	
Satd. Flow (perm)	229	2583		229	2584		466	1257		282	1339	
Volume (vph)	50	948	65	161	908	60	10	260	334	56	380	73
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	55	1042	71	177	998	66	11	286	367	62	418	80
RTOR Reduction (vph)	0	8	0	0	8	0	0	17	0	0	12	0
Lane Group Flow (vph)	55	1105	0	177	1056	0	11	636	0	62	486	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	23.5	23.5		23.5	23.5		27.5	27.5		27.5	27.5	
Effective Green, g (s)	24.0	24.0		24.0	24.0		28.0	28.0		28.0	28.0	
Actuated g/C Ratio	0.40	0.40		0.40	0.40		0.47	0.47		0.47	0.47	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	92	1033		92	1034		217	587		132	625	
v/s Ratio Prot		0.43			0.41			c0.51			0.36	
v/s Ratio Perm	0.24			c0.77			0.02			0.22		
v/c Ratio	0.60	1.07		1.92	1.02		0.05	1.08		0.47	0.78	
Uniform Delay, d1	14.2	18.0		18.0	18.0		8.7	16.0		10.9	13.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	25.5	48.5		453.1	33.5		0.0	61.7		1.0	5.5	
Delay (s)	39.7	66.5		471.1	51.5		8.8	77.7		11.9	18.9	
Level of Service	D	E		F	D		A	E		B	B	
Approach Delay (s)		65.2			111.4			76.6			18.2	
Approach LOS		E			F			E			B	

Intersection Summary			
HCM Average Control Delay	75.8	HCM Level of Service	E
HCM Volume to Capacity ratio	1.48		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	29	1276	37	50	1233	59	15	1272	108	9	1239	55
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	31	1372	40	54	1326	63	16	1368	116	10	1332	59
Pedestrians		16			25			14			67	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		1			2			1			6	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)		801			400							
pX, platoon unblocked	0.61			0.84			0.69	0.69	0.84	0.69	0.69	0.61
vC, conflicting volume	1456			1426			2980	3032	745	3105	3020	778
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1104			1312			2703	2779	497	2885	2762	0
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 %	91			88			0	0	72	0	0	90
cM capacity (veh/h)	360			432			0	10	419	0	10	613

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	NB 2	SB 1	SB 2
Volume Total	31	915	497	54	884	505	1384	116	1342	59
Volume Left	31	0	0	54	0	0	16	0	10	0
Volume Right	0	0	40	0	0	63	0	116	0	59
cSH	360	1700	1700	432	1700	1700	0	419	0	613
Volume to Capacity	0.09	0.54	0.29	0.12	0.52	0.30	Err	0.28	Err	0.10
Queue Length 95th (ft)	7	0	0	11	0	0	Err	28	Err	8
Control Delay (s)	15.9	0.0	0.0	14.5	0.0	0.0	Err	16.9	Err	11.5
Lane LOS	C			B			F	C	F	B
Approach Delay (s)	0.3			0.5			Err		Err	
Approach LOS							F		F	

Intersection Summary			
Average Delay	Err		
Intersection Capacity Utilization	170.2%	ICU Level of Service	H
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.86	1.00	1.00	0.71	1.00	1.00	0.94	1.00	1.00	0.88
Flpb, ped/bikes	0.97	1.00	1.00	0.98	1.00	1.00	0.94	1.00	1.00	0.97	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1264	2608	1002	1275	2608	828	1222	1373	1094	1270	1373	1023
Flt Permitted	0.17	1.00	1.00	0.22	1.00	1.00	0.40	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	225	2608	1002	299	2608	828	509	1373	1094	436	1373	1023
Volume (vph)	38	1022	61	69	1202	75	96	326	104	90	281	67
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	39	1043	62	70	1227	77	98	333	106	92	287	68
RTOR Reduction (vph)	0	0	23	0	0	29	0	0	31	0	0	16
Lane Group Flow (vph)	39	1043	39	70	1227	48	98	333	75	92	287	52
Confl. Peds. (#/hr)	115		91	91		115	110		51	51		110
Confl. Bikes (#/hr)			8			8						5
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	56.0	56.0	56.0	56.0	56.0	56.0	25.0	25.0	25.0	25.0	25.0	25.0
Effective Green, g (s)	56.5	56.5	56.5	56.5	56.5	56.5	25.5	25.5	25.5	25.5	25.5	25.5
Actuated g/C Ratio	0.63	0.63	0.63	0.63	0.63	0.63	0.28	0.28	0.28	0.28	0.28	0.28
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	141	1637	629	188	1637	520	144	389	310	124	389	290
v/s Ratio Prot		0.40			c0.47			c0.24			0.21	
v/s Ratio Perm	0.17		0.04	0.23		0.06	0.19		0.07	0.21		0.05
v/c Ratio	0.28	0.64	0.06	0.37	0.75	0.09	0.68	0.86	0.24	0.74	0.74	0.18
Uniform Delay, d1	7.5	10.4	6.5	8.1	11.8	6.6	28.6	30.5	24.8	29.3	29.2	24.3
Progression Factor	1.20	1.05	2.29	0.72	0.85	0.53	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	1.4	0.1	3.2	1.9	0.2	10.1	16.1	0.1	18.7	6.2	0.1
Delay (s)	12.6	12.4	15.0	9.1	11.9	3.7	38.7	46.6	25.0	48.0	35.4	24.4
Level of Service	B	B	B	A	B	A	D	D	C	D	D	C
Approach Delay (s)		12.5			11.3			40.9			36.3	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM Average Control Delay	19.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00		1.00	1.00	
Frt		1.00	0.85		1.00	0.85	1.00	1.00		1.00	1.00	
Flt Protected		1.00	1.00		0.99	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1660	1417		1653	1417	1583	1661		1583	1659	
Flt Permitted		0.96	1.00		0.92	1.00	0.46	1.00		0.44	1.00	
Satd. Flow (perm)		1605	1417		1538	1417	771	1661		734	1659	
Volume (vph)	13	155	93	45	235	97	54	425	10	30	394	13
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	14	165	99	48	250	103	57	452	11	32	419	14
RTOR Reduction (vph)	0	0	73	0	0	76	0	1	0	0	2	0
Lane Group Flow (vph)	0	179	26	0	298	27	57	462	0	32	431	0
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			4			2			2	
Permitted Phases	4		4	4		4	2			2		
Actuated Green, G (s)		15.0	15.0		15.0	15.0	36.0	36.0		36.0	36.0	
Effective Green, g (s)		15.5	15.5		15.5	15.5	36.5	36.5		36.5	36.5	
Actuated g/C Ratio		0.26	0.26		0.26	0.26	0.61	0.61		0.61	0.61	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	0.2	0.2		0.2	0.2	
Lane Grp Cap (vph)		415	366		397	366	469	1010		447	1009	
v/s Ratio Prot								c0.28			0.26	
v/s Ratio Perm		0.11	0.02		c0.19	0.02	0.07			0.04		
v/c Ratio		0.43	0.07		0.75	0.07	0.12	0.46		0.07	0.43	
Uniform Delay, d1		18.6	16.8		20.5	16.8	5.0	6.4		4.8	6.2	
Progression Factor		1.00	1.00		1.00	1.00	1.70	1.73		1.00	1.00	
Incremental Delay, d2		0.3	0.0		6.9	0.0	0.3	0.8		0.3	1.3	
Delay (s)		18.8	16.8		27.4	16.8	8.7	11.8		5.1	7.5	
Level of Service		B	B		C	B	A	B		A	A	
Approach Delay (s)		18.1			24.7			11.5			7.4	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM Average Control Delay	14.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.7%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2582		1304	2564		1304	1373	1167	1304	1373	1167
Flt Permitted	0.19	1.00		0.20	1.00		0.38	1.00	1.00	0.32	1.00	1.00
Satd. Flow (perm)	255	2582		280	2564		521	1373	1167	435	1373	1167
Volume (vph)	30	851	59	134	847	108	49	405	85	87	355	73
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	33	935	65	147	931	119	54	445	93	96	390	80
RTOR Reduction (vph)	0	7	0	0	14	0	0	0	29	0	0	30
Lane Group Flow (vph)	33	993	0	147	1036	0	54	445	64	96	390	50
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		4
Actuated Green, G (s)	29.1	29.1		29.1	29.1		21.9	21.9	21.9	21.9	21.9	21.9
Effective Green, g (s)	29.6	29.6		29.6	29.6		22.4	22.4	22.4	22.4	22.4	22.4
Actuated g/C Ratio	0.49	0.49		0.49	0.49		0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	126	1274		138	1265		195	513	436	162	513	436
v/s Ratio Prot		0.38			0.40			c0.32			0.28	
v/s Ratio Perm	0.13			c0.53			0.10		0.05	0.22		0.04
v/c Ratio	0.26	0.78		1.07	0.82		0.28	0.87	0.15	0.59	0.76	0.11
Uniform Delay, d1	8.8	12.5		15.2	12.9		13.1	17.4	12.5	15.1	16.5	12.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.65	0.75	0.49
Incremental Delay, d2	5.0	4.8		95.1	6.0		0.3	13.9	0.1	3.5	5.5	0.0
Delay (s)	13.8	17.3		110.3	18.9		13.4	31.3	12.5	13.4	17.7	6.1
Level of Service	B	B		F	B		B	C	B	B	B	A
Approach Delay (s)		17.2			30.2			26.8			15.3	
Approach LOS		B			C			C			B	

Intersection Summary			
HCM Average Control Delay	23.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1304	2608	1167	1304	2590		1304	1373	1167	1304	1373	1167
Flt Permitted	0.12	1.00	1.00	0.18	1.00		0.39	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	168	2608	1167	253	2590		535	1373	1167	416	1373	1167
Volume (vph)	58	1074	63	53	1241	59	103	337	93	54	280	60
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	62	1155	68	57	1334	63	111	362	100	58	301	65
RTOR Reduction (vph)	0	0	26	0	3	0	0	0	25	0	0	14
Lane Group Flow (vph)	62	1155	42	57	1394	0	111	362	75	58	301	51
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8		8	4		4
Actuated Green, G (s)	54.6	54.6	54.6	54.6	54.6		26.3	26.3	26.3	26.3	26.3	26.3
Effective Green, g (s)	55.2	55.2	55.2	55.2	55.2		26.8	26.8	26.8	26.8	26.8	26.8
Actuated g/C Ratio	0.61	0.61	0.61	0.61	0.61		0.30	0.30	0.30	0.30	0.30	0.30
Clearance Time (s)	4.6	4.6	4.6	4.6	4.6		4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	103	1600	716	155	1589		159	409	348	124	409	348
v/s Ratio Prot		0.44			c0.54			c0.26			0.22	
v/s Ratio Perm	0.37		0.04	0.23			0.21		0.06	0.14		0.04
v/c Ratio	0.60	0.72	0.06	0.37	0.88		0.70	0.89	0.21	0.47	0.74	0.15
Uniform Delay, d1	10.7	12.1	7.0	8.7	14.6		28.0	30.1	23.7	25.8	28.4	23.2
Progression Factor	1.12	1.15	0.98	1.07	0.93		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	23.3	2.8	0.2	4.8	5.3		10.3	19.3	0.1	1.0	5.8	0.1
Delay (s)	35.3	16.7	7.0	14.1	18.8		38.3	49.5	23.8	26.8	34.3	23.3
Level of Service	D	B	A	B	B		D	D	C	C	C	C
Approach Delay (s)		17.1			18.6			42.8			31.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1304	2608	1167	1304	2608	1167	1304	1373	1167	1304	2535	
Flt Permitted	0.50	1.00	1.00	0.49	1.00	1.00	0.13	1.00	1.00	0.11	1.00	
Satd. Flow (perm)	682	2608	1167	673	2608	1167	177	1373	1167	153	2535	
Volume (vph)	169	375	344	45	367	9	158	1027	83	29	772	177
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)	184	408	374	49	399	10	172	1116	90	32	839	192
RTOR Reduction (vph)	0	0	32	0	0	5	0	0	35	0	22	0
Lane Group Flow (vph)	184	408	342	49	399	5	172	1116	55	32	1009	0
Turn Type	Perm		Perm	Perm		Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6		6	8		8	4		
Actuated Green, G (s)	45.5	45.5	45.5	45.5	45.5	45.5	35.5	35.5	35.5	35.5	35.5	
Effective Green, g (s)	46.0	46.0	46.0	46.0	46.0	46.0	36.0	36.0	36.0	36.0	36.0	
Actuated g/C Ratio	0.51	0.51	0.51	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.40	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	349	1333	596	344	1333	596	71	549	467	61	1014	
v/s Ratio Prot		0.16			0.15			0.81			0.40	
v/s Ratio Perm	0.27		c0.29	0.07		0.00	c0.97		0.05	0.21		
v/c Ratio	0.53	0.31	0.57	0.14	0.30	0.01	2.42	2.03	0.12	0.52	1.00	
Uniform Delay, d1	14.7	12.8	15.2	11.6	12.7	10.8	27.0	27.0	17.0	20.5	26.9	
Progression Factor	0.78	0.91	0.79	0.41	0.48	0.20	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.5	0.4	2.4	0.5	0.3	0.0	680.7	471.1	0.0	3.7	26.9	
Delay (s)	15.0	12.0	14.5	5.3	6.4	2.2	707.7	498.1	17.0	24.2	53.9	
Level of Service	B	B	B	A	A	A	F	F	B	C	D	
Approach Delay (s)		13.5			6.2			492.9			53.0	
Approach LOS		B			A			F			D	

Intersection Summary			
HCM Average Control Delay	194.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	0.97		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2529		1304	1373	1167	1304	2528		1304	2599	
Flt Permitted	0.27	1.00		0.30	1.00	1.00	0.28	1.00		0.15	1.00	
Satd. Flow (perm)	369	2529		416	1373	1167	388	2528		211	2599	
Volume (vph)	14	553	140	232	524	92	98	859	219	94	714	17
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	15	576	146	242	546	96	102	895	228	98	744	18
RTOR Reduction (vph)	0	37	0	0	0	39	0	38	0	0	3	0
Lane Group Flow (vph)	15	685	0	242	546	57	102	1085	0	98	759	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	25.5	25.5		25.5	25.5	25.5	25.5	25.5		25.5	25.5	
Effective Green, g (s)	26.0	26.0		26.0	26.0	26.0	26.0	26.0		26.0	26.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43	0.43	0.43	0.43		0.43	0.43	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	160	1096		180	595	506	168	1095		91	1126	
v/s Ratio Prot		0.27			0.40			0.43			0.29	
v/s Ratio Perm	0.04			c0.58		0.05	0.26			c0.46		
v/c Ratio	0.09	0.62		1.34	0.92	0.11	0.61	0.99		1.08	0.67	
Uniform Delay, d1	10.0	13.2		17.0	16.0	10.1	13.1	16.9		17.0	13.6	
Progression Factor	0.57	0.54		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.1	2.5		187.3	21.4	0.5	4.2	24.9		116.7	1.3	
Delay (s)	6.8	9.6		204.3	37.4	10.6	17.3	41.7		133.7	14.9	
Level of Service	A	A		F	D	B	B	D		F	B	
Approach Delay (s)		9.5			80.2			39.7			28.4	
Approach LOS		A			F			D			C	

Intersection Summary			
HCM Average Control Delay	40.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.21		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00			1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.97			0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1304	2595		1304	2585		1304	1333			1343	
Flt Permitted	0.13	1.00		0.20	1.00		0.42	1.00			0.71	
Satd. Flow (perm)	174	2595		273	2585		582	1333			962	
Volume (vph)	27	898	30	56	1070	68	43	293	70	79	277	33
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	29	966	32	60	1151	73	46	315	75	85	298	35
RTOR Reduction (vph)	0	2	0	0	5	0	0	10	0	0	4	0
Lane Group Flow (vph)	29	996	0	60	1219	0	46	380	0	0	414	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		35.5	35.5			35.5	
Effective Green, g (s)	46.0	46.0		46.0	46.0		36.0	36.0			36.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.40	0.40			0.40	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5			4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		2.0	2.0			2.0	
Lane Grp Cap (vph)	89	1326		140	1321		233	533			385	
v/s Ratio Prot		0.38			c0.47			0.29				
v/s Ratio Perm	0.17			0.22			0.08				c0.43	
v/c Ratio	0.33	0.75		0.43	0.92		0.20	0.71			1.08	
Uniform Delay, d1	12.9	17.5		13.8	20.4		17.6	22.7			27.0	
Progression Factor	1.44	1.19		1.05	1.09		1.00	1.00			1.00	
Incremental Delay, d2	9.0	3.7		7.8	10.4		0.2	3.8			67.8	
Delay (s)	27.5	24.5		22.3	32.7		17.7	26.4			94.8	
Level of Service	C	C		C	C		B	C			F	
Approach Delay (s)		24.6			32.2			25.5			94.8	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM Average Control Delay	37.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1304	2582		1304	1373	1167	1304	1361		1304	1352	
Flt Permitted	0.30	1.00		0.40	1.00	1.00	0.34	1.00		0.34	1.00	
Satd. Flow (perm)	412	2582		555	1373	1167	462	1361		464	1352	
Volume (vph)	25	530	38	50	571	92	10	371	22	98	355	39
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	26	546	39	52	589	95	10	382	23	101	366	40
RTOR Reduction (vph)	0	7	0	0	0	46	0	4	0	0	8	0
Lane Group Flow (vph)	26	578	0	52	589	49	10	401	0	101	398	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		
Actuated Green, G (s)	30.7	30.7		30.7	30.7	30.7	20.3	20.3		20.3	20.3	
Effective Green, g (s)	31.2	31.2		31.2	31.2	31.2	20.8	20.8		20.8	20.8	
Actuated g/C Ratio	0.52	0.52		0.52	0.52	0.52	0.35	0.35		0.35	0.35	
Clearance Time (s)	4.5	4.5		4.5	4.5	4.5	4.5	4.5		4.5	4.5	
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lane Grp Cap (vph)	214	1343		289	714	607	160	472		161	469	
v/s Ratio Prot		0.22			c0.43			c0.29			0.29	
v/s Ratio Perm	0.06			0.09		0.04	0.02			0.22		
v/c Ratio	0.12	0.43		0.18	0.82	0.08	0.06	0.85		0.63	0.85	
Uniform Delay, d1	7.4	8.9		7.6	12.1	7.2	13.1	18.2		16.4	18.1	
Progression Factor	1.00	1.00		1.07	0.90	1.43	1.00	1.00		1.00	1.00	
Incremental Delay, d2	1.2	1.0		0.8	6.6	0.2	0.1	12.9		5.4	12.9	
Delay (s)	8.5	9.9		9.0	17.4	10.5	13.1	31.0		21.8	31.1	
Level of Service	A	A		A	B	B	B	C		C	C	
Approach Delay (s)		9.9			15.9			30.6			29.2	
Approach LOS		A			B			C			C	

Intersection Summary			
HCM Average Control Delay	19.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.48	1.00	0.99		1.00	1.00	0.91	1.00	0.93	
Flpb, ped/bikes	0.94	1.00	1.00	0.83	1.00		0.92	1.00	1.00	0.96	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1225	2608	557	1086	2554		1196	1373	1065	1249	1165	
Flt Permitted	0.25	1.00	1.00	0.35	1.00		0.70	1.00	1.00	0.40	1.00	
Satd. Flow (perm)	328	2608	557	404	2554		887	1373	1065	527	1165	
Volume (vph)	15	706	74	92	920	43	132	235	138	35	30	48
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	15	728	76	95	948	44	136	242	142	36	31	49
RTOR Reduction (vph)	0	0	24	0	2	0	0	0	37	0	36	0
Lane Group Flow (vph)	15	728	52	95	990	0	136	242	105	36	44	0
Confl. Peds. (#/hr)	126		228	228		126	86		63	63		86
Confl. Bikes (#/hr)			17			8			10			5
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8		8	4		
Actuated Green, G (s)	61.4	61.4	61.4	61.4	61.4		19.6	19.6	19.6	19.6	19.6	
Effective Green, g (s)	61.9	61.9	61.9	61.9	61.9		20.1	20.1	20.1	20.1	20.1	
Actuated g/C Ratio	0.69	0.69	0.69	0.69	0.69		0.22	0.22	0.22	0.22	0.22	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	226	1794	383	278	1757		198	307	238	118	260	
v/s Ratio Prot		0.28			c0.39			c0.18			0.04	
v/s Ratio Perm	0.05		0.09	0.24			0.15		0.10	0.07		
v/c Ratio	0.07	0.41	0.14	0.34	0.56		0.69	0.79	0.44	0.31	0.17	
Uniform Delay, d1	4.6	6.1	4.8	5.7	7.2		32.1	32.9	30.1	29.1	28.2	
Progression Factor	1.08	0.84	1.43	1.32	1.42		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.5	0.6	1.4	0.5		7.6	11.7	0.5	0.5	0.1	
Delay (s)	5.4	5.6	7.5	8.9	10.7		39.7	44.6	30.6	29.7	28.3	
Level of Service	A	A	A	A	B		D	D	C	C	C	
Approach Delay (s)		5.8			10.5			39.5			28.7	
Approach LOS		A			B			D			C	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	86.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes		1.00	0.93		0.99		1.00	0.98		1.00	1.00	0.92
Flpb, ped/bikes		0.99	1.00		0.99		0.97	1.00		0.95	1.00	1.00
Frt		1.00	0.85		0.98		1.00	0.97		1.00	1.00	0.85
Flt Protected		0.99	1.00		0.99		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)		1629	1310		1588		1531	1584		1510	1667	1298
Flt Permitted		0.90	1.00		0.94		0.48	1.00		0.49	1.00	1.00
Satd. Flow (perm)		1478	1310		1506		766	1584		779	1667	1298
Volume (vph)	22	67	54	52	243	45	31	296	73	14	387	7
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	23	70	56	54	253	47	32	308	76	15	403	7
RTOR Reduction (vph)	0	0	40	0	11	0	0	11	0	0	0	3
Lane Group Flow (vph)	0	93	16	0	343	0	32	373	0	15	403	4
Confl. Peds. (#/hr)	55		60	60		55	40		54	54		40
Confl. Bikes (#/hr)			6						2			3
Turn Type	Perm		Perm	Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2		2	6			8			4		4
Actuated Green, G (s)		16.8	16.8		16.8		34.2	34.2		34.2	34.2	34.2
Effective Green, g (s)		17.3	17.3		17.3		34.7	34.7		34.7	34.7	34.7
Actuated g/C Ratio		0.29	0.29		0.29		0.58	0.58		0.58	0.58	0.58
Clearance Time (s)		4.5	4.5		4.5		4.5	4.5		4.5	4.5	4.5
Vehicle Extension (s)		2.0	2.0		2.0		2.0	2.0		2.0	2.0	2.0
Lane Grp Cap (vph)		426	378		434		443	916		451	964	751
v/s Ratio Prot								0.24			c0.24	
v/s Ratio Perm		0.06	0.01		c0.23		0.04			0.02		0.00
v/c Ratio		0.22	0.04		0.79		0.07	0.41		0.03	0.42	0.01
Uniform Delay, d1		16.2	15.4		19.7		5.6	7.0		5.4	7.0	5.4
Progression Factor		1.00	1.00		1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0		8.6		0.3	1.3		0.1	1.3	0.0
Delay (s)		16.3	15.4		28.2		5.9	8.3		5.6	8.4	5.4
Level of Service		B	B		C		A	A		A	A	A
Approach Delay (s)		16.0			28.2			8.1			8.2	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM Average Control Delay	14.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.0%	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												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.66	1.00	1.00	0.66	1.00	1.00	0.80	1.00	1.00	0.71
Flpb, ped/bikes	0.90	1.00	1.00	0.99	1.00	1.00	0.91	1.00	1.00	0.91	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1179	2608	767	1285	2608	772	1192	1373	931	1192	1373	832
Flt Permitted	0.36	1.00	1.00	0.26	1.00	1.00	0.25	1.00	1.00	0.38	1.00	1.00
Satd. Flow (perm)	451	2608	767	348	2608	772	319	1373	931	471	1373	832
Volume (vph)	20	711	70	127	752	168	68	360	11	93	468	49
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	20	718	71	128	760	170	69	364	11	94	473	49
RTOR Reduction (vph)	0	0	41	0	0	78	0	0	7	0	0	9
Lane Group Flow (vph)	20	718	30	128	760	92	69	364	4	94	473	40
Confl. Peds. (#/hr)	193		324	193		324	205		142	142		205
Confl. Bikes (#/hr)			21			5			5			10
Turn Type	Perm		Perm	pm+pt		Perm	Perm		Perm	Perm		Perm
Protected Phases		2		1	6			8			4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	38.1	38.1	38.1	48.1	48.1	48.1	32.9	32.9	32.9	32.9	32.9	32.9
Effective Green, g (s)	38.6	38.6	38.6	48.6	48.6	48.6	33.4	33.4	33.4	33.4	33.4	33.4
Actuated g/C Ratio	0.43	0.43	0.43	0.54	0.54	0.54	0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	193	1119	329	250	1408	417	118	510	346	175	510	309
v/s Ratio Prot		c0.28		0.03	c0.29			0.27			c0.34	
v/s Ratio Perm	0.04		0.04	0.24		0.12	0.22		0.00	0.20		0.05
v/c Ratio	0.10	0.64	0.09	0.51	0.54	0.22	0.58	0.71	0.01	0.54	0.93	0.13
Uniform Delay, d1	15.4	20.3	15.3	12.0	13.4	10.8	22.7	24.2	17.9	22.2	27.1	18.7
Progression Factor	0.75	0.93	0.70	0.82	0.86	0.63	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	2.7	0.5	0.6	1.2	1.0	4.7	3.9	0.0	1.6	22.8	0.1
Delay (s)	12.6	21.6	11.3	10.4	12.8	7.9	27.4	28.1	17.9	23.8	49.9	18.8
Level of Service	B	C	B	B	B	A	C	C	B	C	D	B
Approach Delay (s)		20.5			11.7			27.8			43.4	
Approach LOS		C			B			C			D	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		0.92			0.97		1.00	1.00	0.69	1.00	0.97	
Flpb, ped/bikes		0.99			0.96		0.90	1.00	1.00	0.87	1.00	
Frt		0.96			0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected		1.00			0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1462			1484		1423	1667	977	1370	3029	
Flt Permitted		0.95			0.82		0.28	1.00	1.00	0.40	1.00	
Satd. Flow (perm)		1396			1239		421	1667	977	576	3029	
Volume (vph)	25	181	83	114	198	67	57	386	77	49	659	60
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	27	193	88	121	211	71	61	411	82	52	701	64
RTOR Reduction (vph)	0	21	0	0	13	0	0	0	46	0	11	0
Lane Group Flow (vph)	0	287	0	0	390	0	61	411	36	52	754	0
Confl. Peds. (#/hr)	164		246	246		164	191		157	157		191
Confl. Bikes (#/hr)			11			14			3			4
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)		25.5			25.5		25.5	25.5	25.5	25.5	25.5	
Effective Green, g (s)		26.0			26.0		26.0	26.0	26.0	26.0	26.0	
Actuated g/C Ratio		0.43			0.43		0.43	0.43	0.43	0.43	0.43	
Clearance Time (s)		4.5			4.5		4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		2.0			2.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)		605			537		182	722	423	250	1313	
v/s Ratio Prot								0.25			c0.25	
v/s Ratio Perm		0.21			c0.31		0.14		0.04	0.09		
v/c Ratio		0.47			0.73		0.34	0.57	0.08	0.21	0.57	
Uniform Delay, d1		12.1			14.1		11.3	12.8	10.0	10.6	12.8	
Progression Factor		1.00			1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.7			8.3		4.9	3.2	0.4	1.9	1.8	
Delay (s)		14.8			22.4		16.2	16.0	10.4	12.5	14.7	
Level of Service		B			C		B	B	B	B	B	
Approach Delay (s)		14.8			22.4			15.2			14.5	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.95	
Frt		1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1373	1167		1373	1167	1304	1373	1167	1304	2520	
Flt Permitted		1.00	1.00		1.00	1.00	0.14	1.00	1.00	0.16	1.00	
Satd. Flow (perm)		1373	1167		1373	1167	188	1373	1167	215	2520	
Volume (vph)	0	351	118	0	299	72	50	486	76	86	644	185
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	403	136	0	344	83	57	559	87	99	740	213
RTOR Reduction (vph)	0	0	102	0	0	62	0	0	55	0	31	0
Lane Group Flow (vph)	0	403	34	0	344	21	57	559	32	99	922	0
Turn Type			Perm			Perm	Perm		Perm	Perm		
Protected Phases		2			6			8			4	
Permitted Phases			2			6	8		8	4		
Actuated Green, G (s)		20.5	20.5		20.5	20.5	30.5	30.5	30.5	30.5	30.5	
Effective Green, g (s)		21.0	21.0		21.0	21.0	31.0	31.0	31.0	31.0	31.0	
Actuated g/C Ratio		0.25	0.25		0.25	0.25	0.36	0.36	0.36	0.36	0.36	
Clearance Time (s)		4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	
Vehicle Extension (s)		2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)		339	288		339	288	69	501	426	78	919	
v/s Ratio Prot		c0.29			c0.25			0.41			0.37	
v/s Ratio Perm			0.03			0.02	0.30		0.03	c0.46		
v/c Ratio		1.19	0.12		1.01	0.07	0.83	1.12	0.07	1.27	1.00	
Uniform Delay, d1		32.0	24.8		32.0	24.5	24.5	27.0	17.6	27.0	27.0	
Progression Factor		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		110.6	0.8		52.7	0.5	66.8	75.9	0.3	190.4	30.4	
Delay (s)		142.6	25.6		84.7	25.0	91.4	102.9	18.0	217.4	57.4	
Level of Service		F	C		F	C	F	F	B	F	E	
Approach Delay (s)		113.1			73.1			91.4			72.5	
Approach LOS		F			E			F			E	

Intersection Summary			
HCM Average Control Delay	85.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.93		1.00	0.79
Flpb, ped/bikes	0.93	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.96		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1216	2608	2327		1304	920
Flt Permitted	0.28	1.00	1.00		0.95	1.00
Satd. Flow (perm)	357	2608	2327		1304	920
Volume (vph)	101	674	669	214	99	48
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	109	725	719	230	106	52
RTOR Reduction (vph)	0	0	18	0	0	43
Lane Group Flow (vph)	109	725	931	0	106	9
Confl. Peds. (#/hr)	122			122	475	186
Confl. Bikes (#/hr)				7		3
Turn Type	Perm					Perm
Protected Phases		2	6		4	
Permitted Phases	2					4
Actuated Green, G (s)	66.0	66.0	66.0		15.0	15.0
Effective Green, g (s)	66.5	66.5	66.5		15.5	15.5
Actuated g/C Ratio	0.74	0.74	0.74		0.17	0.17
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0		2.0	2.0
Lane Grp Cap (vph)	264	1927	1719		225	158
v/s Ratio Prot		0.28	c0.40		c0.08	
v/s Ratio Perm	0.31					0.01
v/c Ratio	0.41	0.38	0.54		0.47	0.06
Uniform Delay, d1	4.4	4.2	5.1		33.6	31.1
Progression Factor	1.29	1.27	0.94		1.00	1.00
Incremental Delay, d2	4.7	0.6	1.1		0.6	0.1
Delay (s)	10.3	6.0	5.9		34.1	31.2
Level of Service	B	A	A		C	C
Approach Delay (s)		6.5	5.9		33.2	
Approach LOS		A	A		C	

Intersection Summary			
HCM Average Control Delay	8.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.99	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	1667	1417		1656	1417	1583	1667	1417	1583	1667	1417
Flt Permitted	0.28	1.00	1.00		0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	466	1667	1417		1588	1417	1583	1667	1417	1583	1667	1417
Volume (vph)	84	60	197	39	250	61	433	611	48	24	516	46
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	89	64	210	41	266	65	461	650	51	26	549	49
RTOR Reduction (vph)	0	0	95	0	0	50	0	0	19	0	0	30
Lane Group Flow (vph)	89	64	115	0	307	15	461	650	32	26	549	19
Turn Type	Perm		pm+ov	Perm		Perm	Prot		Perm	Prot		Perm
Protected Phases		2	3		6		3	8		7	4	
Permitted Phases	2		2	6		6			8			4
Actuated Green, G (s)	19.7	19.7	41.7		19.7	19.7	22.0	55.2	55.2	1.6	34.8	34.8
Effective Green, g (s)	20.2	20.2	42.7		20.2	20.2	22.5	55.7	55.7	2.1	35.3	35.3
Actuated g/C Ratio	0.22	0.22	0.47		0.22	0.22	0.25	0.62	0.62	0.02	0.39	0.39
Clearance Time (s)	4.5	4.5	4.5		4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	1.0	3.0	3.0
Lane Grp Cap (vph)	105	374	735		356	318	396	1032	877	37	654	556
v/s Ratio Prot		0.04	0.04				c0.29	0.39		0.02	c0.33	
v/s Ratio Perm	0.19		0.04		c0.19	0.01			0.02			0.01
v/c Ratio	0.85	0.17	0.16		0.86	0.05	1.16	0.63	0.04	0.70	0.84	0.03
Uniform Delay, d1	33.4	28.1	13.4		33.6	27.3	33.8	10.7	6.7	43.6	24.8	16.9
Progression Factor	1.00	1.00	1.00		1.00	1.00	0.98	1.32	2.39	1.00	1.00	1.00
Incremental Delay, d2	53.5	1.0	0.1		23.1	0.3	94.6	1.0	0.0	39.1	9.3	0.0
Delay (s)	87.0	29.1	13.5		56.6	27.6	127.6	15.1	16.0	82.8	34.1	16.9
Level of Service	F	C	B		E	C	F	B	B	F	C	B
Approach Delay (s)		34.3			51.6			59.8			34.7	
Approach LOS		C			D			E			C	

Intersection Summary			
HCM Average Control Delay	48.7	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	2530	1167	2608	1167	1304	2608
Flt Permitted	0.95	1.00	1.00	1.00	0.26	1.00
Satd. Flow (perm)	2530	1167	2608	1167	351	2608
Volume (vph)	314	256	847	163	170	578
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	327	267	882	170	177	602
RTOR Reduction (vph)	0	176	0	66	0	0
Lane Group Flow (vph)	327	91	882	104	177	602
Turn Type		Perm		Perm	pm+pt	
Protected Phases	6		8		7	4
Permitted Phases		6		8	4	
Actuated Green, G (s)	16.4	16.4	54.6	54.6	64.6	64.6
Effective Green, g (s)	16.9	16.9	55.1	55.1	65.1	65.1
Actuated g/C Ratio	0.19	0.19	0.61	0.61	0.72	0.72
Clearance Time (s)	4.5	4.5	4.5	4.5	3.5	4.5
Vehicle Extension (s)	3.0	3.0	3.0	3.0	1.0	3.0
Lane Grp Cap (vph)	475	219	1597	714	317	1886
v/s Ratio Prot	c0.13		0.34		c0.04	0.23
v/s Ratio Perm		0.08		0.09	c0.37	
v/c Ratio	0.69	0.41	0.55	0.15	0.56	0.32
Uniform Delay, d1	34.1	32.2	10.2	7.4	5.3	4.5
Progression Factor	1.16	2.11	1.00	1.00	3.40	0.34
Incremental Delay, d2	3.6	1.1	1.4	0.4	0.8	0.3
Delay (s)	43.1	69.0	11.6	7.9	19.0	1.8
Level of Service	D	E	B	A	B	A
Approach Delay (s)	54.8		11.0			5.7
Approach LOS	D		B			A

Intersection Summary			
HCM Average Control Delay	20.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1400	1400	1400	1400	1400	1400
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1304	1167	2608	1167	1304	2608
Flt Permitted	0.95	1.00	1.00	1.00	0.29	1.00
Satd. Flow (perm)	1304	1167	2608	1167	404	2608
Volume (vph)	141	171	757	243	213	891
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	145	176	780	251	220	919
RTOR Reduction (vph)	0	109	0	97	0	0
Lane Group Flow (vph)	145	67	780	154	220	919
Turn Type		pm+ov		Perm	pm+pt	
Protected Phases	6	7	8		7	4
Permitted Phases		6		8	4	
Actuated Green, G (s)	16.4	21.9	54.6	54.6	64.6	64.6
Effective Green, g (s)	16.9	22.9	55.1	55.1	65.1	65.1
Actuated g/C Ratio	0.19	0.25	0.61	0.61	0.72	0.72
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5	4.5
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0
Lane Grp Cap (vph)	245	349	1597	714	352	1886
v/s Ratio Prot	c0.11	0.01	0.30		c0.04	0.35
v/s Ratio Perm		0.04		0.13	c0.41	
v/c Ratio	0.59	0.19	0.49	0.22	0.62	0.49
Uniform Delay, d1	33.4	26.3	9.7	7.8	5.2	5.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.1	1.1	0.7	2.5	0.9
Delay (s)	35.9	26.4	10.7	8.5	7.7	6.2
Level of Service	D	C	B	A	A	A
Approach Delay (s)	30.7		10.2			6.5
Approach LOS	C		B			A

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.0%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			0.99	
Flpb, ped/bikes	0.96	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			1.00			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1518	1661		1576	1657			1653			1590	
Flt Permitted	0.28	1.00		0.25	1.00			0.88			0.98	
Satd. Flow (perm)	449	1661		412	1657			1455			1561	
Volume (vph)	155	536	10	127	502	10	59	536	10	18	502	179
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	161	558	10	132	523	10	61	558	10	19	523	186
RTOR Reduction (vph)	0	1	0	0	1	0	0	1	0	0	20	0
Lane Group Flow (vph)	161	567	0	132	532	0	0	628	0	0	708	0
Confl. Peds. (#/hr)	66		13	13		66	21		26	26		21
Confl. Bikes (#/hr)			27			8						6
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	26.0	26.0		26.0	26.0			26.0			26.0	
Effective Green, g (s)	26.0	26.0		26.0	26.0			26.0			26.0	
Actuated g/C Ratio	0.43	0.43		0.43	0.43			0.43			0.43	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	195	720		179	718			631			676	
v/s Ratio Prot		0.34			0.32							
v/s Ratio Perm	c0.36			0.32				0.43			c0.45	
v/c Ratio	0.83	0.79		0.74	0.74			1.00			1.05	
Uniform Delay, d1	15.0	14.6		14.2	14.2			16.9			17.0	
Progression Factor	1.00	1.00		1.06	1.08			2.12			1.00	
Incremental Delay, d2	31.3	8.5		14.2	3.9			31.5			47.5	
Delay (s)	46.3	23.1		29.2	19.2			67.5			64.5	
Level of Service	D	C		C	B			E			E	
Approach Delay (s)		28.2			21.2			67.5			64.5	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM Average Control Delay	45.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor		1.00	0.91	1.00		1.00	0.91	1.00	1.00	1.00		1.00
Frt		1.00	1.00	0.85		1.00	1.00	0.85	1.00	0.99		1.00
Flt Protected		0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00		0.95
Satd. Flow (prot)		1583	4550	1417		1583	4550	1417	1583	1653		1583
Flt Permitted		0.95	1.00	1.00		0.95	1.00	1.00	0.12	1.00		0.32
Satd. Flow (perm)		1583	4550	1417		1583	4550	1417	195	1653		525
Volume (vph)	28	138	1990	45	12	53	2058	206	92	299	17	223
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	28	139	2010	45	12	54	2079	208	93	302	17	225
RTOR Reduction (vph)	0	0	0	17	0	0	0	89	0	1	0	0
Lane Group Flow (vph)	0	167	2010	28	0	66	2079	119	93	318	0	225
Turn Type	Prot	Prot		Perm	Prot	Prot		pm+ov	pm+pt			pm+pt
Protected Phases	1	1	6		5	5	2	7	3	8		7
Permitted Phases				6				2	8			4
Actuated Green, G (s)		16.4	47.3	47.3		9.1	40.0	51.7	42.5	32.9		46.7
Effective Green, g (s)		16.4	48.3	48.3		9.1	41.0	52.7	44.5	34.9		48.7
Actuated g/C Ratio		0.14	0.40	0.40		0.08	0.34	0.44	0.37	0.29		0.41
Clearance Time (s)		4.0	5.0	5.0		4.0	5.0	4.0	4.0	6.0		4.0
Vehicle Extension (s)		3.0	4.4	4.4		3.0	4.3	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		216	1831	570		120	1555	670	183	481		316
v/s Ratio Prot		c0.11	c0.44			0.04	c0.46	0.02	0.04	0.19		c0.07
v/s Ratio Perm				0.02				0.07	0.15			0.22
v/c Ratio		0.77	1.10	0.05		0.55	1.34	0.18	0.51	0.66		0.71
Uniform Delay, d1		50.0	35.9	21.8		53.5	39.5	20.5	28.5	37.3		26.3
Progression Factor		1.00	1.00	1.00		0.80	1.72	3.62	1.00	1.00		1.02
Incremental Delay, d2		15.7	53.1	0.2		0.5	152.1	0.0	2.2	3.4		3.3
Delay (s)		65.7	89.0	22.0		43.2	220.1	74.1	30.7	40.7		30.1
Level of Service		E	F	C		D	F	E	C	D		C
Approach Delay (s)			85.9				202.3			38.5		
Approach LOS			F				F			D		

Intersection Summary			
HCM Average Control Delay	126.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBT	SBR
Lane Configurations		
Ideal Flow (vphpl)	1700	1700
Total Lost time (s)	4.0	
Lane Util. Factor	1.00	
Frt	0.98	
Flt Protected	1.00	
Satd. Flow (prot)	1641	
Flt Permitted	1.00	
Satd. Flow (perm)	1641	
Volume (vph)	450	50
Peak-hour factor, PHF	0.99	0.99
Adj. Flow (vph)	455	51
RTOR Reduction (vph)	3	0
Lane Group Flow (vph)	503	0
Turn Type		
Protected Phases	4	
Permitted Phases		
Actuated Green, G (s)	35.0	
Effective Green, g (s)	37.0	
Actuated g/C Ratio	0.31	
Clearance Time (s)	6.0	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	506	
v/s Ratio Prot	c0.31	
v/s Ratio Perm		
v/c Ratio	0.99	
Uniform Delay, d1	41.4	
Progression Factor	1.02	
Incremental Delay, d2	24.4	
Delay (s)	66.7	
Level of Service	E	
Approach Delay (s)	55.4	
Approach LOS	E	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	1634		1569	1643		1583	3087		1583	3054	
Flt Permitted	0.22	1.00		0.27	1.00		0.12	1.00		0.12	1.00	
Satd. Flow (perm)	366	1634		447	1643		196	3087		196	3054	
Volume (vph)	142	547	57	47	626	47	181	1148	154	43	877	148
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	145	558	58	48	639	48	185	1171	157	44	895	151
RTOR Reduction (vph)	0	4	0	0	3	0	0	12	0	0	15	0
Lane Group Flow (vph)	145	612	0	48	684	0	185	1316	0	44	1031	0
Confl. Peds. (#/hr)	29		30	30		29	48		28	28		48
Confl. Bikes (#/hr)			26			9			4			2
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	47.0	47.0		47.0	47.0		33.1	33.1		33.1	33.1	
Effective Green, g (s)	48.0	48.0		48.0	48.0		34.0	34.0		34.0	34.0	
Actuated g/C Ratio	0.53	0.53		0.53	0.53		0.38	0.38		0.38	0.38	
Clearance Time (s)	5.0	5.0		5.0	5.0		4.9	4.9		4.9	4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	195	871		238	876		74	1166		74	1154	
v/s Ratio Prot		0.37			c0.42			0.43			0.34	
v/s Ratio Perm	0.40			0.11			c0.94			0.22		
v/c Ratio	0.74	0.70		0.20	0.78		2.50	1.13		0.59	0.89	
Uniform Delay, d1	16.2	15.7		11.0	16.8		28.0	28.0		22.5	26.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	22.4	4.7		1.9	6.9		713.4	69.3		30.6	10.7	
Delay (s)	38.7	20.4		12.9	23.7		741.4	97.3		53.0	37.0	
Level of Service	D	C		B	C		F	F		D	D	
Approach Delay (s)		23.9			22.9			176.0			37.6	
Approach LOS		C			C			F			D	

Intersection Summary			
HCM Average Control Delay	83.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	111.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	4550	1417		1583	4550	1417	1583	3167	1417	1583	3167
Flt Permitted	0.95	1.00	1.00		0.95	1.00	1.00	0.17	1.00	1.00	0.11	1.00
Satd. Flow (perm)	1583	4550	1417		1583	4550	1417	287	3167	1417	182	3167
Volume (vph)	148	1495	266	26	155	1397	240	172	954	229	116	753
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	157	1590	283	28	165	1486	255	183	1015	244	123	801
RTOR Reduction (vph)	0	0	54	0	0	0	168	0	0	162	0	0
Lane Group Flow (vph)	157	1590	229	0	193	1486	87	183	1015	82	123	801
Turn Type	Prot		pm+ov	Prot	Prot		Perm	pm+pt		Perm	pm+pt	
Protected Phases	1	6	3	5	5	2		3	8		7	4
Permitted Phases			6				2	8		8	4	
Actuated Green, G (s)	18.0	32.0	41.0		14.0	28.0	28.0	43.8	34.8	34.8	43.2	34.5
Effective Green, g (s)	18.0	33.3	43.3		14.0	29.3	29.3	47.0	37.0	37.0	46.4	36.7
Actuated g/C Ratio	0.16	0.30	0.39		0.13	0.27	0.27	0.43	0.34	0.34	0.42	0.33
Clearance Time (s)	4.0	5.3	5.0		4.0	5.3	5.3	5.0	6.2	6.2	5.0	6.2
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0	3.0	4.2	4.2	3.0	3.6
Lane Grp Cap (vph)	259	1377	609		201	1212	377	240	1065	477	200	1057
v/s Ratio Prot	0.10	c0.35	0.03		0.12	c0.33		c0.07	c0.32		0.05	0.25
v/s Ratio Perm			0.13				0.06	0.26		0.06	0.21	
v/c Ratio	0.61	1.15	0.38		0.96	1.23	0.23	0.76	0.95	0.17	0.61	0.76
Uniform Delay, d1	42.7	38.4	23.7		47.7	40.4	31.5	22.7	35.7	25.7	23.9	32.7
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	78.3	0.4		51.9	109.2	1.4	13.4	17.5	0.3	5.5	3.3
Delay (s)	46.7	116.6	24.1		99.6	149.6	33.0	36.1	53.2	26.0	29.4	36.0
Level of Service	D	F	C		F	F	C	D	D	C	C	D
Approach Delay (s)		98.3				129.2			46.4			32.2
Approach LOS		F				F			D			C

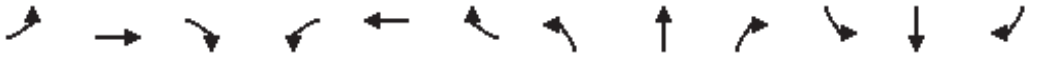
Intersection Summary			
HCM Average Control Delay	84.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	152
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	162
RTOR Reduction (vph)	32
Lane Group Flow (vph)	130
Turn Type	pm+ov
Protected Phases	1
Permitted Phases	4
Actuated Green, G (s)	52.5
Effective Green, g (s)	54.7
Actuated g/C Ratio	0.50
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	705
v/s Ratio Prot	0.03
v/s Ratio Perm	0.06
v/c Ratio	0.18
Uniform Delay, d1	15.3
Progression Factor	1.00
Incremental Delay, d2	0.1
Delay (s)	15.4
Level of Service	B
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.91			0.86	1.00	0.86	0.81	0.86			
Frt	1.00	1.00			1.00	0.85	1.00	0.97	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.99	1.00			
Satd. Flow (prot)	3072	4550			5733	1417	1362	3894	1218			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.99	1.00			
Satd. Flow (perm)	3072	4550			5733	1417	1362	3894	1218			
Volume (vph)	698	1664	0	0	1325	356	774	849	701	0	0	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	751	1789	0	0	1425	383	832	913	754	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	14	0	12	12	0	0	0
Lane Group Flow (vph)	751	1789	0	0	1425	369	504	1515	456	0	0	0
Turn Type	Prot					Perm	Split		Perm			
Protected Phases	1	6			2		4	4				
Permitted Phases						2			4			
Actuated Green, G (s)	25.0	70.0			41.0	41.0	39.2	39.2	39.2			
Effective Green, g (s)	25.0	71.0			42.0	42.0	41.0	41.0	41.0			
Actuated g/C Ratio	0.21	0.59			0.35	0.35	0.34	0.34	0.34			
Clearance Time (s)	4.0	5.0			5.0	5.0	5.8	5.8	5.8			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	640	2692			2007	496	465	1330	416			
v/s Ratio Prot	c0.24	0.39			0.25		0.37	c0.39				
v/s Ratio Perm						c0.26			0.37			
v/c Ratio	1.17	0.66			0.71	0.74	1.08	1.14	1.10			
Uniform Delay, d1	47.5	16.5			33.7	34.3	39.5	39.5	39.5			
Progression Factor	1.02	1.37			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	89.3	0.9			2.2	9.8	66.2	72.2	72.8			
Delay (s)	137.8	23.5			35.9	44.0	105.7	111.7	112.3			
Level of Service	F	C			D	D	F	F	F			
Approach Delay (s)		57.3			37.6			110.6			0.0	
Approach LOS		E			D			F			A	

Intersection Summary			
HCM Average Control Delay	71.6	HCM Level of Service	E
HCM Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.81		0.97	0.91					0.91	0.86	0.91
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (prot)		6612		3072	4550					1441	2803	1289
Flt Permitted		1.00		0.95	1.00					0.95	0.98	1.00
Satd. Flow (perm)		6612		3072	4550					1441	2803	1289
Volume (vph)	0	1557	245	689	1580	0	0	0	0	623	352	135
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1622	255	718	1646	0	0	0	0	649	367	141
RTOR Reduction (vph)	0	23	0	0	0	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	1854	0	718	1646	0	0	0	0	340	676	118
Turn Type				Prot						Split		Perm
Protected Phases		2		1	6					4	4	
Permitted Phases												4
Actuated Green, G (s)		41.7		30.5	76.7					33.6	33.6	33.6
Effective Green, g (s)		42.4		31.0	77.4					34.6	34.6	34.6
Actuated g/C Ratio		0.35		0.26	0.65					0.29	0.29	0.29
Clearance Time (s)		4.7		4.5	4.7					5.0	5.0	5.0
Vehicle Extension (s)		3.0		4.0	3.0					4.0	4.0	4.0
Lane Grp Cap (vph)		2336		794	2935					415	808	372
v/s Ratio Prot		c0.28		c0.23	0.36					0.24	c0.24	
v/s Ratio Perm												0.09
v/c Ratio		0.79		0.90	0.56					0.82	0.84	0.32
Uniform Delay, d1		34.9		43.1	11.8					39.8	40.0	33.4
Progression Factor		1.00		0.50	1.56					1.00	1.00	1.00
Incremental Delay, d2		2.9		8.4	0.4					12.5	7.9	0.7
Delay (s)		37.7		29.9	18.9					52.3	47.9	34.1
Level of Service		D		C	B					D	D	C
Approach Delay (s)		37.7			22.2			0.0			47.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM Average Control Delay	33.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	0.98		1.00	1.00			0.99			0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Frt	1.00	0.97		1.00	0.99			0.97			0.98	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1583	1593		1583	1652			1553			1603	
Flt Permitted	0.15	1.00		0.15	1.00			0.55			0.91	
Satd. Flow (perm)	247	1593		247	1652			869			1460	
Volume (vph)	38	628	140	157	653	30	213	127	110	61	327	73
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	40	668	149	167	695	32	227	135	117	65	348	78
RTOR Reduction (vph)	0	13	0	0	3	0	0	19	0	0	11	0
Lane Group Flow (vph)	40	804	0	167	724	0	0	460	0	0	480	0
Confl. Peds. (#/hr)	10		27	27		10	17		16	16		17
Confl. Bikes (#/hr)			30			16			3			10
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	27.0	27.0		27.0	27.0			25.0			25.0	
Effective Green, g (s)	27.0	27.0		27.0	27.0			25.0			25.0	
Actuated g/C Ratio	0.45	0.45		0.45	0.45			0.42			0.42	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	111	717		111	743			362			608	
v/s Ratio Prot		0.50			0.44							
v/s Ratio Perm	0.16			c0.68				c0.53			0.33	
v/c Ratio	0.36	1.12		1.50	0.97			1.27			0.79	
Uniform Delay, d1	10.8	16.5		16.5	16.2			17.5			15.2	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	8.9	72.1		268.0	27.4			141.6			6.8	
Delay (s)	19.7	88.6		284.5	43.6			159.1			22.0	
Level of Service	B	F		F	D			F			C	
Approach Delay (s)		85.3			88.6			159.1			22.0	
Approach LOS		F			F			F			C	

Intersection Summary			
HCM Average Control Delay	88.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.39		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	126.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4533		1583	4495		1583	1617		1583	1610	
Flt Permitted	0.12	1.00		0.12	1.00		0.12	1.00		0.47	1.00	
Satd. Flow (perm)	206	4533		206	4495		204	1617		789	1610	
Volume (vph)	47	1370	35	40	1293	112	48	204	50	87	430	125
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	49	1427	36	42	1347	117	50	212	52	91	448	130
RTOR Reduction (vph)	0	2	0	0	8	0	0	8	0	0	9	0
Lane Group Flow (vph)	49	1461	0	42	1456	0	50	256	0	91	569	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			2			4			4	
Permitted Phases	2			2			4			4		
Actuated Green, G (s)	67.6	67.6		67.6	67.6		43.0	43.0		43.0	43.0	
Effective Green, g (s)	68.0	68.0		68.0	68.0		44.0	44.0		44.0	44.0	
Actuated g/C Ratio	0.57	0.57		0.57	0.57		0.37	0.37		0.37	0.37	
Clearance Time (s)	4.4	4.4		4.4	4.4		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	2.0	2.0		2.0	2.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	117	2569		117	2547		75	593		289	590	
v/s Ratio Prot		0.32			c0.32			0.16			c0.35	
v/s Ratio Perm	0.24			0.20			0.25			0.12		
v/c Ratio	0.42	0.57		0.36	0.57		0.67	0.43		0.31	0.96	
Uniform Delay, d1	14.8	16.6		14.1	16.7		31.9	28.6		27.2	37.2	
Progression Factor	0.95	0.96		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.8	0.4		8.4	0.9		20.1	0.5		0.6	28.1	
Delay (s)	18.9	16.3		22.5	17.6		52.0	29.1		27.8	65.4	
Level of Service	B	B		C	B		D	C		C	E	
Approach Delay (s)		16.4			17.7			32.8			60.3	
Approach LOS		B			B			C			E	

Intersection Summary			
HCM Average Control Delay	25.5	HCM Level of Service	C
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	SBL	NWR
Lane Configurations				
Ideal Flow (vphpl)	1700	1700	1700	1700
Total Lost time (s)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Volume (vph)	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	0	0	0	0
Turn Type				
Protected Phases				
Permitted Phases				
Actuated Green, G (s)				
Effective Green, g (s)				
Actuated g/C Ratio				
Clearance Time (s)				
Lane Grp Cap (vph)				
v/s Ratio Prot				
v/s Ratio Perm				
v/c Ratio				
Uniform Delay, d1				
Progression Factor				
Incremental Delay, d2				
Delay (s)				
Level of Service				
Approach Delay (s)	0.0		0.0	0.0
Approach LOS	A		A	A

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	SBT	SBR	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	0.95	1.00	0.97	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1583	4550	3167	1417	3072	1417
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1583	4550	3167	1417	3072	1417
Volume (vph)	355	1191	1199	636	702	345
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	374	1254	1262	669	739	363
RTOR Reduction (vph)	0	0	0	6	0	9
Lane Group Flow (vph)	374	1254	1262	663	739	354
Turn Type	Prot			pm+ov		pt+ov
Protected Phases	5	2	6	4	4	4 5
Permitted Phases				6		
Actuated Green, G (s)	12.5	41.0	37.5	66.5	29.0	45.1
Effective Green, g (s)	12.0	40.9	37.4	66.0	28.6	44.6
Actuated g/C Ratio	0.13	0.45	0.42	0.73	0.32	0.50
Clearance Time (s)	3.5	3.9	3.9	3.6	3.6	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	211	2068	1316	1102	976	702
v/s Ratio Prot	c0.24	c0.28	c0.40	0.19	c0.24	0.25
v/s Ratio Perm				0.28		
v/c Ratio	1.77	0.61	0.96	0.60	0.76	0.50
Uniform Delay, d1	39.0	18.5	25.6	5.7	27.6	15.3
Progression Factor	1.00	1.00	0.56	0.23	1.00	1.00
Incremental Delay, d2	366.2	1.3	2.5	0.1	3.4	0.6
Delay (s)	405.2	19.8	16.9	1.4	31.0	15.8
Level of Service	F	B	B	A	C	B
Approach Delay (s)		108.4	11.5		26.0	
Approach LOS		F	B		C	

Intersection Summary			
HCM Average Control Delay	48.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	SEL	SER	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	SER	NEL	NER
Lane Configurations				
Ideal Flow (vphpl)	1700	1700	1700	1700
Total Lost time (s)				
Lane Util. Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Volume (vph)	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0
RTOR Reduction (vph)	0	0	0	0
Lane Group Flow (vph)	0	0	0	0
Turn Type				
Protected Phases				
Permitted Phases				
Actuated Green, G (s)				
Effective Green, g (s)				
Actuated g/C Ratio				
Clearance Time (s)				
Lane Grp Cap (vph)				
v/s Ratio Prot				
v/s Ratio Perm				
v/c Ratio				
Uniform Delay, d1				
Progression Factor				
Incremental Delay, d2				
Delay (s)				
Level of Service				
Approach Delay (s)	0.0	0.0	0.0	
Approach LOS	A	A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1620	1620	1620	1620	1620	1620
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.95		1.00	0.95	1.00	
Frt	1.00		1.00	1.00	0.92	
Flt Protected	1.00		0.95	1.00	0.98	
Satd. Flow (prot)	3009		1509	3018	1432	
Flt Permitted	1.00		0.15	1.00	0.98	
Satd. Flow (perm)	3009		234	3018	1432	
Volume (vph)	1434	27	48	1310	26	38
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1478	28	49	1351	27	39
RTOR Reduction (vph)	1	0	0	0	34	0
Lane Group Flow (vph)	1505	0	49	1351	32	0
Turn Type			Perm			
Protected Phases	2			6	4	
Permitted Phases			6			
Actuated Green, G (s)	80.5		80.5	80.5	11.5	
Effective Green, g (s)	80.0		80.0	80.0	12.0	
Actuated g/C Ratio	0.80		0.80	0.80	0.12	
Clearance Time (s)	3.5		3.5	3.5	4.5	
Vehicle Extension (s)	0.2		0.2	0.2	3.0	
Lane Grp Cap (vph)	2407		187	2414	172	
v/s Ratio Prot	c0.50			0.45	c0.02	
v/s Ratio Perm			0.21			
v/c Ratio	0.63		0.26	0.56	0.18	
Uniform Delay, d1	4.0		2.5	3.6	39.6	
Progression Factor	1.38		0.15	0.14	1.00	
Incremental Delay, d2	0.1		2.8	0.8	0.5	
Delay (s)	5.6		3.2	1.3	40.1	
Level of Service	A		A	A	D	
Approach Delay (s)	5.6			1.4	40.1	
Approach LOS	A			A	D	

Intersection Summary			
HCM Average Control Delay	4.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)										
Lane Util. Factor										
Frt										
Flt Protected										
Satd. Flow (prot)										
Flt Permitted										
Satd. Flow (perm)										
Volume (vph)	0	0	0	0	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0
Turn Type										
Protected Phases										
Permitted Phases										
Actuated Green, G (s)										
Effective Green, g (s)										
Actuated g/C Ratio										
Clearance Time (s)										
Lane Grp Cap (vph)										
v/s Ratio Prot										
v/s Ratio Perm										
v/c Ratio										
Uniform Delay, d1										
Progression Factor										
Incremental Delay, d2										
Delay (s)										
Level of Service										
Approach Delay (s)	0.0		0.0			0.0			0.0	
Approach LOS	A		A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	EBR2	NBT	NBR	NBR2	SBL2	SBL	SBT	NWR2
Lane Configurations											
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0					4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95					0.95	1.00
Frt	1.00	1.00	0.85	0.85	0.94					1.00	0.86
Flt Protected	0.95	1.00	1.00	1.00	1.00					0.98	1.00
Satd. Flow (prot)	1583	3167	1417	1417	2989					3098	1442
Flt Permitted	0.95	1.00	1.00	1.00	1.00					0.66	1.00
Satd. Flow (perm)	1583	3167	1417	1417	2989					2098	1442
Volume (vph)	68	1558	300	42	357	148	67	151	115	338	51
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	76	1731	333	47	397	164	74	168	128	376	57
RTOR Reduction (vph)	0	0	0	45	10	0	0	0	0	0	0
Lane Group Flow (vph)	76	1731	333	2	625	0	0	0	0	672	57
Turn Type	custom		Perm	Perm					Prot		Free
Protected Phases	3	3			6				2	1	
Permitted Phases	4	4	3	3						2	Free
Actuated Green, G (s)	25.0	25.0	5.0	5.0	22.5					34.9	100.0
Effective Green, g (s)	23.6	23.6	4.0	4.0	22.5					33.9	100.0
Actuated g/C Ratio	0.24	0.24	0.04	0.04	0.22					0.34	1.00
Clearance Time (s)	3.0	3.0	3.0	3.0	4.0					4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	3.0					4.0	
Lane Grp Cap (vph)	437	874	57	57	673					911	1442
v/s Ratio Prot	0.01	c0.08			c0.21					c0.15	
v/s Ratio Perm	0.04	0.47	c0.24	0.00						c0.10	0.04
v/c Ratio	0.17	1.98	5.84	0.03	0.93					0.74	0.04
Uniform Delay, d1	30.7	38.2	48.0	46.1	38.0					29.1	0.0
Progression Factor	1.00	1.00	1.00	1.00	1.00					0.32	1.00
Incremental Delay, d2	0.1	445.4	2216.4	0.1	21.0					4.2	0.1
Delay (s)	30.7	483.6	2264.4	46.2	59.0					13.5	0.1
Level of Service	C	F	F	D	E					B	A
Approach Delay (s)		729.6			59.0					13.5	
Approach LOS		F			E					B	

Intersection Summary			
HCM Average Control Delay	462.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Volume (vph)	0	0	0	0	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type						
Protected Phases						
Permitted Phases						
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s)	0.0			0.0	0.0	
Approach LOS	A			A	A	

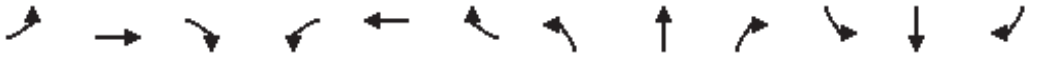
Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
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)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type												
Protected Phases												
Permitted Phases												
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	0.0	HCM Level of Service	A
HCM Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00		0.95	1.00
Frt	1.00	0.98		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1583	4447		1583	4538			3148	1417		3149	1417
Flt Permitted	0.11	1.00		0.95	1.00			0.60	1.00		0.64	1.00
Satd. Flow (perm)	190	4447		1583	4538			1906	1417		2017	1417
Volume (vph)	92	1451	258	66	1687	30	97	738	130	108	865	290
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	97	1527	272	69	1776	32	102	777	137	114	911	305
RTOR Reduction (vph)	0	28	0	0	2	0	0	0	78	0	0	3
Lane Group Flow (vph)	97	1772	0	69	1806	0	0	879	59	0	1025	302
Turn Type	Perm			Prot			Perm		Perm	Perm		Perm
Protected Phases		6		5	2			8			4	
Permitted Phases	6						8		8	4		4
Actuated Green, G (s)	35.0	35.0		4.0	43.0			38.5	38.5		38.5	38.5
Effective Green, g (s)	35.0	35.0		4.0	43.0			39.0	39.0		39.0	39.0
Actuated g/C Ratio	0.39	0.39		0.04	0.48			0.43	0.43		0.43	0.43
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	1729		70	2168			826	614		874	614
v/s Ratio Prot		0.40		0.04	c0.40							
v/s Ratio Perm	c0.51							0.46	0.04		c0.51	0.21
v/c Ratio	1.31	1.02		0.99	0.83			1.06	0.10		1.17	0.49
Uniform Delay, d1	27.5	27.5		43.0	20.4			25.5	15.1		25.5	18.4
Progression Factor	1.49	1.50		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	187.0	23.6		101.9	3.9			49.8	0.3		89.8	2.8
Delay (s)	228.1	64.9		144.9	24.3			75.3	15.4		115.3	21.2
Level of Service	F	E		F	C			E	B		F	C
Approach Delay (s)		73.2			28.8			67.2			93.7	
Approach LOS		E			C			E			F	

Intersection Summary			
HCM Average Control Delay	63.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	4.0
Lane Util. Factor		0.95			0.95			0.95			0.95	1.00
Frpb, ped/bikes		1.00			0.99			0.99			1.00	0.83
Flpb, ped/bikes		1.00			1.00			1.00			1.00	1.00
Frt		0.99			0.99			0.99			1.00	0.85
Flt Protected		1.00			1.00			1.00			1.00	1.00
Satd. Flow (prot)		3125			3089			3129			3167	1171
Flt Permitted		1.00			1.00			1.00			1.00	1.00
Satd. Flow (perm)		3125			3089			3129			3167	1171
Volume (vph)	0	987	59	0	1029	82	0	1224	54	0	1485	108
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	997	60	0	1039	83	0	1236	55	0	1500	109
RTOR Reduction (vph)	0	4	0	0	7	0	0	3	0	0	0	17
Lane Group Flow (vph)	0	1053	0	0	1115	0	0	1288	0	0	1500	92
Confl. Peds. (#/hr)	76		47	47		76	70		83	83		70
Confl. Bikes (#/hr)			7			7			12			9
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)		40.2			40.2			40.2			40.2	40.2
Effective Green, g (s)		41.0			41.0			41.0			41.0	41.0
Actuated g/C Ratio		0.46			0.46			0.46			0.46	0.46
Clearance Time (s)		4.8			4.8			4.8			4.8	4.8
Vehicle Extension (s)		3.0			3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		1424			1407			1425			1443	533
v/s Ratio Prot		0.34			c0.36			0.41			c0.47	
v/s Ratio Perm												0.08
v/c Ratio		0.74			0.79			0.90			1.04	0.17
Uniform Delay, d1		20.1			20.9			22.7			24.5	14.5
Progression Factor		1.00			1.00			0.62			1.00	1.00
Incremental Delay, d2		3.5			4.7			1.0			34.6	0.7
Delay (s)		23.6			25.5			15.0			59.1	15.2
Level of Service		C			C			B			E	B
Approach Delay (s)		23.6			25.5			15.0			56.1	
Approach LOS		C			C			B			E	

Intersection Summary			
HCM Average Control Delay	32.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.97		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4485		1583	4456		1583	3053		1583	3046	
Flt Permitted	0.13	1.00		0.14	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	216	4485		228	4456		230	3053		230	3046	
Volume (vph)	124	1252	52	107	1437	58	157	1008	82	172	1192	147
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	133	1346	56	115	1545	62	169	1084	88	185	1282	158
RTOR Reduction (vph)	0	5	0	0	5	0	0	7	0	0	11	0
Lane Group Flow (vph)	133	1397	0	115	1602	0	169	1165	0	185	1429	0
Confl. Peds. (#/hr)	529		124	124		529	153		349	349		153
Confl. Bikes (#/hr)			4			6			8			9
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	37.1	29.4		34.1	27.9		35.8	27.8		35.8	27.8	
Effective Green, g (s)	38.5	30.8		35.5	29.3		37.0	29.0		37.0	29.0	
Actuated g/C Ratio	0.43	0.34		0.39	0.33		0.41	0.32		0.41	0.32	
Clearance Time (s)	4.0	5.4		4.0	5.4		4.0	5.2		4.0	5.2	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	209	1535		183	1451		215	984		215	981	
v/s Ratio Prot	c0.05	0.31		0.04	c0.36		0.07	0.38		c0.08	c0.47	
v/s Ratio Perm	0.22			0.20			0.25			0.28		
v/c Ratio	0.64	0.91		0.63	1.10		0.79	1.18		0.86	1.46	
Uniform Delay, d1	20.5	28.3		20.1	30.4		41.8	30.5		22.1	30.5	
Progression Factor	1.69	0.86		0.89	0.75		1.13	1.21		1.61	1.46	
Incremental Delay, d2	3.6	6.0		3.9	53.6		8.4	87.9		8.8	207.0	
Delay (s)	38.3	30.3		21.8	76.2		55.5	124.7		44.4	251.6	
Level of Service	D	C		C	E		E	F		D	F	
Approach Delay (s)		31.0			72.5			116.0			228.0	
Approach LOS		C			E			F			F	

Intersection Summary			
HCM Average Control Delay	112.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.97		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3122		1583	3080		1583	3152		1583	3156	
Flt Permitted	0.33	1.00		0.32	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	552	3122		538	3080		163	3152		163	3156	
Volume (vph)	57	537	55	64	472	106	37	1172	37	107	1376	33
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	64	603	62	72	530	119	42	1317	42	120	1546	37
RTOR Reduction (vph)	0	5	0	0	11	0	0	3	0	0	2	0
Lane Group Flow (vph)	64	660	0	72	638	0	42	1356	0	120	1581	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	40.4	40.4		40.4	40.4		40.3	40.3		40.3	40.3	
Effective Green, g (s)	41.0	41.0		41.0	41.0		41.0	41.0		41.0	41.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.46	0.46		0.46	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	251	1422		245	1403		74	1436		74	1438	
v/s Ratio Prot		c0.21			0.21			0.43			0.50	
v/s Ratio Perm	0.12			0.13			0.26			c0.74		
v/c Ratio	0.25	0.46		0.29	0.45		0.57	0.94		1.62	1.10	
Uniform Delay, d1	15.1	16.9		15.4	16.8		18.0	23.4		24.5	24.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.67	0.65	
Incremental Delay, d2	2.4	1.1		3.0	1.1		27.9	13.8		285.3	46.1	
Delay (s)	17.5	18.0		18.4	17.9		45.9	37.2		301.7	62.0	
Level of Service	B	B		B	B		D	D		F	E	
Approach Delay (s)		18.0			17.9			37.4			78.9	
Approach LOS		B			B			D			E	

Intersection Summary			
HCM Average Control Delay	46.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4523		1583	4501		1583	3167	1417	1583	3167	1417
Flt Permitted	0.11	1.00		0.11	1.00		0.12	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	184	4523		192	4501		198	3167	1417	196	3167	1417
Volume (vph)	85	1816	76	59	1610	124	113	992	69	147	1197	148
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	88	1872	78	61	1660	128	116	1023	71	152	1234	153
RTOR Reduction (vph)	0	4	0	0	8	0	0	0	25	0	0	37
Lane Group Flow (vph)	88	1946	0	61	1780	0	116	1023	46	152	1234	116
Turn Type	pm+pt			pm+pt			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8	5	7	4	1
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	42.7	35.2		39.9	33.8		40.4	32.7	38.8	41.0	33.0	40.5
Effective Green, g (s)	43.7	36.2		40.9	34.8		41.4	33.7	39.8	42.0	34.0	41.5
Actuated g/C Ratio	0.44	0.36		0.41	0.35		0.41	0.34	0.40	0.42	0.34	0.42
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	185	1637		163	1566		189	1067	621	193	1077	645
v/s Ratio Prot	c0.04	c0.43		0.02	0.40		0.05	0.32	0.00	c0.06	c0.39	0.01
v/s Ratio Perm	0.17			0.13			0.21		0.03	0.27		0.07
v/c Ratio	0.48	1.19		0.37	1.14		0.61	0.96	0.07	0.79	1.15	0.18
Uniform Delay, d1	22.9	31.9		24.2	32.6		24.0	32.5	18.7	22.5	33.0	18.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.9	91.3		1.4	69.8		5.8	19.3	0.1	18.8	76.8	0.1
Delay (s)	24.8	123.2		25.7	102.4		29.8	51.7	18.7	41.3	109.8	18.6
Level of Service	C	F		C	F		C	D	B	D	F	B
Approach Delay (s)		118.9			99.8			47.7			94.0	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	94.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4508		1583	4516		1583	3128		1583	3073	
Flt Permitted	0.09	1.00		0.09	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	145	4508		145	4516		185	3128		185	3073	
Volume (vph)	150	1611	106	143	1684	89	115	973	87	74	1180	292
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	158	1696	112	151	1773	94	121	1024	92	78	1242	307
RTOR Reduction (vph)	0	8	0	0	6	0	0	7	0	0	5	0
Lane Group Flow (vph)	158	1800	0	151	1861	0	121	1109	0	78	1544	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		35.5	35.5		35.5	35.5	
Effective Green, g (s)	46.0	46.0		46.0	46.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	2304		74	2308		74	1251		74	1229	
v/s Ratio Prot		0.40			0.41			0.35			0.50	
v/s Ratio Perm	c1.09			1.04			c0.65			0.42		
v/c Ratio	2.14	0.78		2.04	0.81		1.64	0.89		1.05	1.26	
Uniform Delay, d1	22.0	17.9		22.0	18.3		27.0	25.1		27.0	27.0	
Progression Factor	1.52	1.57		1.31	1.33		1.00	1.00		1.00	1.00	
Incremental Delay, d2	541.1	1.9		472.5	0.3		338.7	9.5		120.3	122.0	
Delay (s)	574.4	30.1		501.3	24.7		365.7	34.6		147.3	149.0	
Level of Service	F	C		F	C		F	C		F	F	
Approach Delay (s)		73.9			60.4			67.0			148.9	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM Average Control Delay	86.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.95	
Flt Protected	0.95	1.00		0.95	1.00			0.98	1.00		1.00	
Satd. Flow (prot)	1583	4534		1583	4543			1638	1417		1577	
Flt Permitted	0.07	1.00		0.07	1.00			0.65	1.00		0.97	
Satd. Flow (perm)	109	4534		109	4543			1075	1417		1539	
Volume (vph)	30	1698	42	85	2097	23	65	121	125	13	112	76
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	38	2149	53	108	2654	29	82	153	158	16	142	96
RTOR Reduction (vph)	0	2	0	0	1	0	0	0	5	0	2	0
Lane Group Flow (vph)	38	2200	0	108	2682	0	0	235	153	0	252	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	60.9	60.9		60.9	60.9			20.6	20.6		20.6	
Effective Green, g (s)	60.9	60.9		60.9	60.9			21.1	21.1		21.1	
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.23	0.23		0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	74	3068		74	3074			252	332		361	
v/s Ratio Prot		0.49			0.59							
v/s Ratio Perm	0.35			c0.99				c0.22	0.11		0.16	
v/c Ratio	0.51	0.72		1.46	0.87			0.93	0.46		0.70	
Uniform Delay, d1	7.2	9.1		14.6	11.5			33.8	29.6		31.5	
Progression Factor	1.00	1.00		1.20	1.23			1.00	1.00		1.00	
Incremental Delay, d2	23.2	1.5		250.0	2.6			38.6	1.0		5.8	
Delay (s)	30.4	10.6		267.5	16.7			72.4	30.6		37.4	
Level of Service	C	B		F	B			E	C		D	
Approach Delay (s)		10.9			26.4			55.6			37.4	
Approach LOS		B			C			E			D	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	0.91
Frpb, ped/bikes	0.97		1.00	1.00	0.98	0.89
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.98		1.00	1.00	0.98	0.85
Flt Protected	1.00		0.95	1.00	0.96	1.00
Satd. Flow (prot)	4328		1583	4550	2976	1154
Flt Permitted	1.00		0.09	1.00	0.96	1.00
Satd. Flow (perm)	4328		147	4550	2976	1154
Volume (vph)	1354	256	525	1622	675	468
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1410	267	547	1690	703	488
RTOR Reduction (vph)	30	0	0	0	12	3
Lane Group Flow (vph)	1647	0	547	1690	787	389
Confl. Peds. (#/hr)		151	151			98
Confl. Bikes (#/hr)						2
Turn Type			pm+pt			pm+ov
Protected Phases	6		5	2	4	5
Permitted Phases			2			4
Actuated Green, G (s)	40.2		53.2	53.2	27.1	36.1
Effective Green, g (s)	41.2		54.2	54.2	27.8	36.8
Actuated g/C Ratio	0.46		0.60	0.60	0.31	0.41
Clearance Time (s)	5.0		4.0	5.0	4.7	4.0
Vehicle Extension (s)	3.0		2.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1981		232	2740	919	523
v/s Ratio Prot	0.38		c0.24	0.37	c0.26	0.07
v/s Ratio Perm			c1.18			0.26
v/c Ratio	0.83		2.36	0.62	0.86	0.74
Uniform Delay, d1	21.4		24.5	11.3	29.2	22.6
Progression Factor	1.00		1.00	1.00	0.40	0.32
Incremental Delay, d2	4.2		624.2	1.1	6.3	4.1
Delay (s)	25.6		648.6	12.4	18.2	11.3
Level of Service	C		F	B	B	B
Approach Delay (s)	25.6			168.0	15.9	
Approach LOS	C			F	B	

Intersection Summary			
HCM Average Control Delay	85.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3038		1583	1667	1417	1583	3107		1583	3162	
Flt Permitted	0.44	1.00		0.53	1.00	1.00	0.33	1.00		0.17	1.00	
Satd. Flow (perm)	738	3038		876	1667	1417	542	3107		282	3162	
Volume (vph)	7	210	78	218	255	105	115	1013	146	26	719	7
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	7	219	81	227	266	109	120	1055	152	27	749	7
RTOR Reduction (vph)	0	0	0	0	0	76	0	12	0	0	1	0
Lane Group Flow (vph)	7	300	0	227	266	33	120	1195	0	27	755	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)	26.4	26.4		26.4	26.4	26.4	54.3	54.3		54.3	54.3	
Effective Green, g (s)	27.0	27.0		27.0	27.0	27.0	55.0	55.0		55.0	55.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	221	911		263	500	425	331	1899		172	1932	
v/s Ratio Prot		0.10			0.16			c0.38			0.24	
v/s Ratio Perm	0.01			c0.26		0.02	0.22			0.10		
v/c Ratio	0.03	0.33		0.86	0.53	0.08	0.36	0.63		0.16	0.39	
Uniform Delay, d1	22.3	24.5		29.8	26.2	22.6	8.7	11.1		7.5	8.9	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.48	1.77		0.22	0.33	
Incremental Delay, d2	0.3	1.0		29.3	4.0	0.4	0.3	0.1		0.2	0.1	
Delay (s)	22.5	25.4		59.0	30.3	22.9	13.2	19.7		1.9	3.0	
Level of Service	C	C		E	C	C	B	B		A	A	
Approach Delay (s)		25.4			39.8			19.1			2.9	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM Average Control Delay	19.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4485		1583	4527		1583	3141		1583	3167	1417
Flt Permitted	0.15	1.00		0.95	1.00		0.13	1.00		0.15	1.00	1.00
Satd. Flow (perm)	248	4485		1583	4527		222	3141		256	3167	1417
Volume (vph)	67	1516	160	140	2454	87	178	1133	64	62	1015	150
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	74	1666	176	154	2697	96	196	1245	70	68	1115	165
RTOR Reduction (vph)	0	14	0	0	4	0	0	4	0	0	0	117
Lane Group Flow (vph)	74	1828	0	154	2789	0	196	1311	0	68	1115	48
Turn Type	pm+pt			Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2						4			8		8
Actuated Green, G (s)	31.3	26.0		11.1	30.9		39.5	29.4		31.1	25.0	25.0
Effective Green, g (s)	32.6	26.9		10.6	31.8		40.5	30.4		32.1	26.0	26.0
Actuated g/C Ratio	0.36	0.30		0.12	0.35		0.45	0.34		0.36	0.29	0.29
Clearance Time (s)	4.4	4.9		3.5	4.9		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	174	1341		186	1600		259	1061		181	915	409
v/s Ratio Prot	0.03	0.41		c0.10	c0.62		c0.09	c0.42		0.03	0.35	
v/s Ratio Perm	0.13						0.25			0.11		0.03
v/c Ratio	0.43	1.36		0.83	1.74		0.76	1.24		0.38	1.22	0.12
Uniform Delay, d1	23.2	31.6		38.8	29.1		40.1	29.8		23.2	32.0	23.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.79	0.78	0.46
Incremental Delay, d2	1.7	168.3		25.1	337.1		11.9	114.3		1.2	107.8	0.5
Delay (s)	24.9	199.9		63.9	366.2		52.0	144.1		19.7	132.6	11.4
Level of Service	C	F		E	F		D	F		B	F	B
Approach Delay (s)		193.1			350.4			132.1			112.1	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	227.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.97	1.00		0.99	1.00
Satd. Flow (prot)	1583	4523		1583	4538			1622	1417		1647	1417
Flt Permitted	0.09	1.00		0.09	1.00			0.97	1.00		0.99	1.00
Satd. Flow (perm)	144	4523		144	4538			1622	1417		1647	1417
Volume (vph)	20	1526	64	10	2089	39	142	114	20	34	105	10
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	1573	66	10	2154	40	146	118	21	35	108	10
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	16	0	0	9
Lane Group Flow (vph)	21	1639	0	10	2192	0	0	264	5	0	143	1
Turn Type	Perm			Perm			Split		Perm	Split		Perm
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2					4			3
Actuated Green, G (s)	44.5	44.5		44.5	44.5			19.0	19.0		9.6	9.6
Effective Green, g (s)	46.4	46.4		46.4	46.4			20.5	20.5		11.1	11.1
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.23	0.23		0.12	0.12
Clearance Time (s)	5.9	5.9		5.9	5.9			5.5	5.5		5.5	5.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	2332		74	2340			369	323		203	175
v/s Ratio Prot		0.36			c0.48			c0.16			c0.09	
v/s Ratio Perm	0.15			0.07					0.00			0.00
v/c Ratio	0.28	0.70		0.14	0.94			0.72	0.01		0.70	0.01
Uniform Delay, d1	12.4	16.6		11.4	20.4			32.1	26.9		37.9	34.6
Progression Factor	0.57	0.50		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	6.8	1.3		3.8	8.7			6.5	0.0		10.6	0.0
Delay (s)	13.8	9.6		15.1	29.1			38.5	26.9		48.4	34.6
Level of Service	B	A		B	C			D	C		D	C
Approach Delay (s)		9.6			29.1			37.7			47.5	
Approach LOS		A			C			D			D	

Intersection Summary			
HCM Average Control Delay	22.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.96	1.00
Satd. Flow (prot)	1583	4539		1583	4456			1583			1605	1417
Flt Permitted	0.10	1.00		0.14	1.00			0.98			0.96	1.00
Satd. Flow (perm)	161	4539		233	4456			1583			1605	1417
Volume (vph)	91	1233	21	16	1821	290	83	70	44	325	98	289
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	93	1258	21	16	1858	296	85	71	45	332	100	295
RTOR Reduction (vph)	0	2	0	0	24	0	0	11	0	0	0	64
Lane Group Flow (vph)	93	1277	0	16	2130	0	0	190	0	0	432	231
Turn Type	Perm			Perm			Split			Split		Perm
Protected Phases		6			2		3	3		4	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	39.8	39.8		39.8	39.8			9.6			24.7	24.7
Effective Green, g (s)	41.3	41.3		41.3	41.3			11.0			25.7	25.7
Actuated g/C Ratio	0.46	0.46		0.46	0.46			0.12			0.29	0.29
Clearance Time (s)	5.5	5.5		5.5	5.5			5.4			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	74	2083		107	2045			193			458	405
v/s Ratio Prot		0.28			0.48			c0.12			c0.27	
v/s Ratio Perm	c0.58			0.07								0.16
v/c Ratio	1.26	0.61		0.15	1.04			0.98			0.94	0.57
Uniform Delay, d1	24.4	18.3		14.1	24.4			39.4			31.4	27.4
Progression Factor	1.00	1.00		1.44	1.14			1.00			1.00	1.00
Incremental Delay, d2	188.5	1.4		1.1	25.0			59.3			28.1	1.8
Delay (s)	212.9	19.7		21.5	52.7			98.7			59.5	29.3
Level of Service	F	B		C	D			F			E	C
Approach Delay (s)		32.8			52.4			98.7			47.3	
Approach LOS		C			D			F			D	

Intersection Summary			
HCM Average Control Delay	47.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor		0.91		1.00	0.91			1.00			1.00	
Frpb, ped/bikes		1.00		1.00	1.00			0.98			0.99	
Flpb, ped/bikes		1.00		0.99	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.92			0.95	
Flt Protected		1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)		4256		1473	4263			1407			1463	
Flt Permitted		1.00		0.17	1.00			0.95			0.98	
Satd. Flow (perm)		4256		267	4263			1349			1440	
Volume (vph)	0	1257	31	38	1878	37	10	17	39	9	65	51
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1337	33	40	1998	39	11	18	41	10	69	54
RTOR Reduction (vph)	0	2	0	0	1	0	0	34	0	0	7	0
Lane Group Flow (vph)	0	1368	0	40	2036	0	0	36	0	0	126	0
Confl. Peds. (#/hr)	25		36	36		25	8		5	5		8
Confl. Bikes (#/hr)			5			4						
Turn Type				Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases				2			8			4		
Actuated Green, G (s)		67.2		67.2	67.2			15.3			15.3	
Effective Green, g (s)		66.7		66.7	66.7			15.3			15.3	
Actuated g/C Ratio		0.74		0.74	0.74			0.17			0.17	
Clearance Time (s)		3.5		3.5	3.5			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		3154		198	3159			229			245	
v/s Ratio Prot		0.32			c0.48							
v/s Ratio Perm				0.15				0.03			c0.09	
v/c Ratio		0.43		0.20	0.64			0.16			0.52	
Uniform Delay, d1		4.4		3.5	5.8			31.9			34.0	
Progression Factor		0.30		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.0		2.3	1.0			0.3			1.8	
Delay (s)		1.4		5.8	6.8			32.2			35.8	
Level of Service		A		A	A			C			D	
Approach Delay (s)		1.4			6.8			32.2			35.8	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	6.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.6%	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												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2965		1490	4259		1490	4208	
Flt Permitted	0.13	1.00	1.00	0.12	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	202	2980	1333	194	2965		216	4259		213	4208	
Volume (vph)	96	932	88	159	1624	58	90	1382	51	117	2032	268
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	101	981	93	167	1709	61	95	1455	54	123	2139	282
RTOR Reduction (vph)	0	0	22	0	3	0	0	4	0	0	19	0
Lane Group Flow (vph)	101	981	71	167	1767	0	95	1505	0	123	2402	0
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	3	8	1	7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	35.6	30.0	36.5	38.4	31.4		34.5	28.0		35.5	28.5	
Effective Green, g (s)	36.6	31.0	37.5	39.4	32.4		35.5	29.0		36.5	29.5	
Actuated g/C Ratio	0.41	0.34	0.42	0.44	0.36		0.39	0.32		0.41	0.33	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.8	3.0	3.0	4.6		3.0	4.3		3.0	5.5	
Lane Grp Cap (vph)	162	1026	615	186	1067		177	1372		186	1379	
v/s Ratio Prot	0.04	0.33	0.01	c0.07	c0.60		0.04	0.35		c0.05	c0.57	
v/s Ratio Perm	0.21		0.04	0.32			0.17			0.22		
v/c Ratio	0.62	0.96	0.12	0.90	1.66		0.54	1.10		0.66	1.74	
Uniform Delay, d1	22.3	28.8	16.1	19.6	28.8		41.4	30.5		20.8	30.2	
Progression Factor	0.82	0.74	0.55	1.00	1.00		1.47	0.36		1.70	1.47	
Incremental Delay, d2	5.2	15.2	0.1	38.3	299.6		1.0	47.9		2.5	334.8	
Delay (s)	23.5	36.6	8.9	57.8	328.4		61.7	58.9		38.0	379.4	
Level of Service	C	D	A	E	F		E	E		D	F	
Approach Delay (s)		33.3			305.1			59.0			362.8	
Approach LOS		C			F			E			F	

Intersection Summary			
HCM Average Control Delay	227.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.41		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	134.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.99		1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2966		1490	4254		1490	4279	
Flt Permitted	0.11	1.00	1.00	0.10	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	179	2980	1333	162	2966		161	4254		161	4279	
Volume (vph)	54	1026	156	132	1453	50	102	1656	75	68	2059	10
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	55	1047	159	135	1483	51	104	1690	77	69	2101	10
RTOR Reduction (vph)	0	0	12	0	3	0	0	6	0	0	1	0
Lane Group Flow (vph)	55	1047	147	135	1531	0	104	1761	0	69	2110	0
Turn Type	Perm		Perm	pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	34.0	34.0	34.0	42.0	42.0		38.0	38.0		38.0	38.0	
Effective Green, g (s)	35.0	35.0	35.0	43.0	43.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.39	0.39	0.39	0.48	0.48		0.43	0.43		0.43	0.43	
Clearance Time (s)	5.0	5.0	5.0	3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	70	1159	518	136	1417		70	1843		70	1854	
v/s Ratio Prot		0.35		0.04	c0.52			0.41			0.49	
v/s Ratio Perm	0.31		0.11	0.43			c0.65			0.43		
v/c Ratio	0.79	0.90	0.28	0.99	1.08		1.49	0.96		0.99	1.14	
Uniform Delay, d1	24.2	25.9	18.9	21.1	23.5		25.5	24.7		25.2	25.5	
Progression Factor	0.88	0.91	0.78	1.00	1.00		1.00	1.00		2.03	2.01	
Incremental Delay, d2	46.6	8.8	1.0	74.6	48.9		280.0	12.8		29.0	63.0	
Delay (s)	68.0	32.3	15.8	95.7	72.4		305.5	37.5		80.1	114.1	
Level of Service	E	C	B	F	E		F	D		F	F	
Approach Delay (s)		31.8			74.3			52.4			113.1	
Approach LOS		C			E			D			F	

Intersection Summary			
HCM Average Control Delay	72.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	127.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.91		1.00	0.91	
Frt		0.99			0.99		1.00	1.00		1.00	0.99	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2939			2945		1490	4267		1490	4238	
Flt Permitted		1.00			1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)		2939			2945		287	4267		287	4238	
Volume (vph)	0	624	63	0	1135	98	59	1704	41	168	1977	147
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	630	64	0	1146	99	60	1721	41	170	1997	148
RTOR Reduction (vph)	0	0	0	0	0	0	0	4	0	0	13	0
Lane Group Flow (vph)	0	694	0	0	1245	0	60	1758	0	170	2132	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		29.2			29.2		21.2	21.2		21.2	21.2	
Effective Green, g (s)		30.1			30.1		21.9	21.9		21.9	21.9	
Actuated g/C Ratio		0.50			0.50		0.36	0.36		0.36	0.36	
Clearance Time (s)		4.9			4.9		4.7	4.7		4.7	4.7	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1474			1477		105	1557		105	1547	
v/s Ratio Prot		0.24			c0.42			0.41			0.50	
v/s Ratio Perm							0.21			c0.59		
v/c Ratio		0.47			0.84		0.57	1.13		1.62	1.38	
Uniform Delay, d1		9.8			12.9		15.3	19.1		19.1	19.1	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2			4.6		20.6	66.9		317.9	174.2	
Delay (s)		10.0			17.5		35.9	86.0		336.9	193.3	
Level of Service		A			B		D	F		F	F	
Approach Delay (s)		10.0			17.5			84.3			203.8	
Approach LOS		A			B			F			F	

Intersection Summary			
HCM Average Control Delay	107.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4123		1488	4232		1490	4217		1490	4140	
Flt Permitted	0.14	1.00		0.14	1.00		0.13	1.00		0.95	1.00	
Satd. Flow (perm)	216	4123		215	4232		202	4217		1490	4140	
Volume (vph)	120	1115	160	182	1633	74	136	1532	112	181	1559	228
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	121	1126	162	184	1649	75	137	1547	113	183	1575	230
RTOR Reduction (vph)	0	21	0	0	5	0	0	9	0	0	22	0
Lane Group Flow (vph)	121	1267	0	184	1719	0	137	1651	0	183	1783	0
Confl. Peds. (#/hr)	95		120	120		95	89		57	57		89
Confl. Bikes (#/hr)			8			5			3			4
Turn Type	pm+pt			pm+pt			pm+pt			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					
Actuated Green, G (s)	36.4	29.0		36.6	29.1		38.4	31.0		7.5	31.1	
Effective Green, g (s)	35.9	29.0		36.1	29.1		37.9	31.0		7.0	31.1	
Actuated g/C Ratio	0.40	0.32		0.40	0.32		0.42	0.34		0.08	0.35	
Clearance Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	184	1329		185	1368		184	1453		116	1431	
v/s Ratio Prot	0.05	0.31		c0.08	c0.41		0.06	0.39		c0.12	c0.43	
v/s Ratio Perm	0.21			0.32			0.26					
v/c Ratio	0.66	0.95		0.99	1.26		0.74	1.14		1.58	1.25	
Uniform Delay, d1	22.3	29.8		22.3	30.4		21.7	29.5		41.5	29.4	
Progression Factor	1.46	0.77		1.39	0.82		1.72	0.73		1.00	1.00	
Incremental Delay, d2	7.9	15.3		56.1	120.1		11.7	68.3		297.0	116.9	
Delay (s)	40.4	38.3		87.1	144.9		49.0	89.7		338.5	146.3	
Level of Service	D	D		F	F		D	F		F	F	
Approach Delay (s)		38.5			139.3			86.6			164.0	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	112.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	112.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.95			0.98		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1457			1520		1490	4269		1488	4249	
Flt Permitted		0.88			0.91		0.07	1.00		0.09	1.00	
Satd. Flow (perm)		1300			1393		110	4269		140	4249	
Volume (vph)	40	59	57	52	147	26	89	1700	26	9	1837	81
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	41	61	59	54	152	27	92	1753	27	9	1894	84
RTOR Reduction (vph)	0	2	0	0	4	0	0	1	0	0	4	0
Lane Group Flow (vph)	0	159	0	0	229	0	92	1779	0	9	1974	0
Confl. Peds. (#/hr)	6		10	10		6	21		10	10		5
Confl. Bikes (#/hr)			2			2			2			
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		23.7			23.7		56.8	56.8		56.8	56.8	
Effective Green, g (s)		24.7			24.7		57.3	57.3		57.3	57.3	
Actuated g/C Ratio		0.27			0.27		0.64	0.64		0.64	0.64	
Clearance Time (s)		5.0			5.0		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		357			382		70	2718		89	2705	
v/s Ratio Prot								0.42			0.46	
v/s Ratio Perm		0.12			c0.16		c0.84			0.06		
v/c Ratio		0.44			0.60		1.31	0.65		0.10	0.73	
Uniform Delay, d1		27.0			28.4		16.4	10.2		6.3	11.1	
Progression Factor		1.00			1.00		1.00	1.00		0.56	0.79	
Incremental Delay, d2		0.9			2.7		212.9	1.2		0.2	0.2	
Delay (s)		27.9			31.0		229.2	11.4		3.8	8.9	
Level of Service		C			C		F	B		A	A	
Approach Delay (s)		27.9			31.0			22.1			8.9	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM Average Control Delay	16.6	HCM Level of Service	B
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4242		1490	4248		1490	4263		1490	4195	
Flt Permitted	0.12	1.00		0.10	1.00		0.95	1.00		0.13	1.00	
Satd. Flow (perm)	182	4242		163	4248		1490	4263		209	4195	
Volume (vph)	82	1269	86	63	1577	88	125	1672	52	143	1678	264
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	87	1350	91	67	1678	94	133	1779	55	152	1785	281
RTOR Reduction (vph)	0	7	0	0	6	0	0	3	0	0	21	0
Lane Group Flow (vph)	87	1434	0	67	1766	0	133	1831	0	152	2045	0
Turn Type	Perm			pm+pt			Prot			pm+pt		
Protected Phases		8		7	4		5			1	6	
Permitted Phases	8			4				2		6		
Actuated Green, G (s)	33.1	33.1		44.1	44.1		12.5	29.1		40.6	28.6	
Effective Green, g (s)	34.5	34.5		45.5	45.5		12.5	30.5		42.0	30.0	
Actuated g/C Ratio	0.34	0.34		0.46	0.46		0.12	0.30		0.42	0.30	
Clearance Time (s)	5.4	5.4		4.0	5.4		4.0	5.4		4.0	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		4.0	3.0	
Lane Grp Cap (vph)	63	1463		167	1933		186	1300		242	1259	
v/s Ratio Prot		0.34		0.03	c0.42		c0.09			0.08	c0.49	
v/s Ratio Perm	c0.48			0.15				0.43		0.19		
v/c Ratio	1.38	0.98		0.40	0.91		0.72	1.41		0.63	1.62	
Uniform Delay, d1	32.8	32.4		19.8	25.4		42.0	34.8		43.1	35.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	244.2	19.2		1.6	8.1		12.3	188.3		5.7	284.6	
Delay (s)	276.9	51.6		21.3	33.6		54.3	223.1		48.8	319.6	
Level of Service	F	D		C	C		D	F		D	F	
Approach Delay (s)		64.5			33.1			211.6			301.1	
Approach LOS		E			C			F			F	

Intersection Summary			
HCM Average Control Delay	164.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.35		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	113.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91			0.91			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.96		0.99	
Flpb, ped/bikes	0.98	1.00			1.00			1.00	1.00		0.99	
Frt	1.00	1.00			0.99			1.00	0.85		0.96	
Flt Protected	0.95	1.00			1.00			0.99	1.00		0.98	
Satd. Flow (prot)	1466	4255			4197			1545	1287		1434	
Flt Permitted	0.08	1.00			1.00			0.94	1.00		0.83	
Satd. Flow (perm)	124	4255			4197			1464	1287		1225	
Volume (vph)	52	1114	24	0	1839	71	11	38	33	57	23	36
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	54	1148	25	0	1896	73	11	39	34	59	24	37
RTOR Reduction (vph)	0	2	0	0	3	0	0	0	28	0	5	0
Lane Group Flow (vph)	54	1171	0	0	1966	0	0	50	6	0	115	0
Confl. Peds. (#/hr)	151		56	56		151	25		19	19		25
Confl. Bikes (#/hr)			4			7			1			1
Turn Type	Perm						Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6						8		8	4		
Actuated Green, G (s)	66.5	66.5			66.5			16.0	16.0		16.0	
Effective Green, g (s)	66.0	66.0			66.0			16.0	16.0		16.0	
Actuated g/C Ratio	0.73	0.73			0.73			0.18	0.18		0.18	
Clearance Time (s)	3.5	3.5			3.5			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	91	3120			3078			260	229		218	
v/s Ratio Prot		0.28			c0.47							
v/s Ratio Perm	0.44							0.03	0.00		c0.09	
v/c Ratio	0.59	0.38			0.64			0.19	0.03		0.53	
Uniform Delay, d1	5.7	4.4			6.0			31.5	30.6		33.6	
Progression Factor	1.43	1.17			0.68			1.00	1.00		1.00	
Incremental Delay, d2	20.2	0.3			0.1			0.4	0.0		2.3	
Delay (s)	28.4	5.5			4.2			31.9	30.6		35.9	
Level of Service	C	A			A			C	C		D	
Approach Delay (s)		6.5			4.2			31.4			35.9	
Approach LOS		A			A			C			D	

Intersection Summary			
HCM Average Control Delay	6.8	HCM Level of Service	A
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.93			0.95	
Flt Protected	0.95	1.00		0.95	1.00	1.00		1.00			0.99	
Satd. Flow (prot)	1583	4543		1583	4300	1218		1547			1574	
Flt Permitted	0.08	1.00		0.16	1.00	1.00		0.92			0.71	
Satd. Flow (perm)	133	4543		273	4300	1218		1424			1130	
Volume (vph)	44	1099	12	64	1642	135	26	147	178	115	256	193
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	51	1263	14	74	1887	155	30	169	205	132	294	222
RTOR Reduction (vph)	0	1	0	0	0	69	0	34	0	0	6	0
Lane Group Flow (vph)	51	1276	0	74	1887	86	0	370	0	0	642	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	50.0	50.0		50.0	50.0	50.0		32.0			32.0	
Effective Green, g (s)	50.0	50.0		50.0	50.0	50.0		32.0			32.0	
Actuated g/C Ratio	0.56	0.56		0.56	0.56	0.56		0.36			0.36	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	74	2524		152	2389	677		506			402	
v/s Ratio Prot		0.28			c0.44							
v/s Ratio Perm	0.38			0.27		0.07		0.26			c0.57	
v/c Ratio	0.69	0.51		0.49	0.79	0.13		0.73			1.60	
Uniform Delay, d1	14.4	12.4		12.2	15.8	9.6		25.3			29.0	
Progression Factor	1.83	1.98		0.81	0.86	0.85		1.00			1.00	
Incremental Delay, d2	40.0	0.7		8.8	2.3	0.3		5.4			279.7	
Delay (s)	66.4	25.2		18.8	15.9	8.4		30.7			308.7	
Level of Service	E	C		B	B	A		C			F	
Approach Delay (s)		26.8			15.5			30.7			308.7	
Approach LOS		C			B			C			F	

Intersection Summary			
HCM Average Control Delay	62.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	116.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	1.00		1.00	1.00	0.90	
Flt Protected	1.00		0.95	1.00	0.99	
Satd. Flow (prot)	4537		1583	4550	1483	
Flt Permitted	1.00		0.21	1.00	0.99	
Satd. Flow (perm)	4537		344	4550	1483	
Volume (vph)	1073	21	106	1961	10	28
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1129	22	112	2064	11	29
RTOR Reduction (vph)	2	0	0	0	20	0
Lane Group Flow (vph)	1149	0	112	2064	20	0
Turn Type			Perm			
Protected Phases	6			2	8	
Permitted Phases			2			
Actuated Green, G (s)	54.8		54.8	54.8	26.0	
Effective Green, g (s)	55.3		55.3	55.3	26.7	
Actuated g/C Ratio	0.61		0.61	0.61	0.30	
Clearance Time (s)	4.5		4.5	4.5	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2788		211	2796	440	
v/s Ratio Prot	0.25			c0.45	c0.01	
v/s Ratio Perm			0.33			
v/c Ratio	0.41		0.53	0.74	0.04	
Uniform Delay, d1	9.0		9.9	12.2	22.6	
Progression Factor	1.00		1.30	1.43	1.00	
Incremental Delay, d2	0.5		4.6	0.9	0.0	
Delay (s)	9.4		17.5	18.3	22.6	
Level of Service	A		B	B	C	
Approach Delay (s)	9.4			18.3	22.6	
Approach LOS	A			B	C	

Intersection Summary			
HCM Average Control Delay	15.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417	1583	3167	1417	1583	3123	
Flt Permitted	0.13	1.00	1.00	0.13	1.00	1.00	0.14	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	215	3167	1417	222	3167	1417	238	3167	1417	223	3123	
Volume (vph)	75	864	104	224	1467	150	83	803	133	114	1316	133
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	77	882	106	229	1497	153	85	819	136	116	1343	136
RTOR Reduction (vph)	0	0	31	0	0	14	0	0	94	0	9	0
Lane Group Flow (vph)	77	882	75	229	1497	139	85	819	42	116	1470	0
Turn Type	Perm		Perm	pm+pt		pm+ov	Perm		Perm	pm+pt		
Protected Phases		6		5	2	7		8		7	4	
Permitted Phases	6		6	2		2	8		8	4		
Actuated Green, G (s)	30.0	30.0	30.0	43.0	43.0	48.7	28.1	28.1	28.1	37.0	37.0	
Effective Green, g (s)	31.0	31.0	31.0	44.0	44.0	50.0	28.0	28.0	28.0	38.0	38.0	
Actuated g/C Ratio	0.34	0.34	0.34	0.49	0.49	0.56	0.31	0.31	0.31	0.42	0.42	
Clearance Time (s)	5.0	5.0	5.0	3.2	5.0	4.3	3.9	3.9	3.9	4.3	5.0	
Vehicle Extension (s)	4.7	4.7	4.7	3.0	4.2	3.0	4.3	4.3	4.3	3.0	4.5	
Lane Grp Cap (vph)	74	1091	488	245	1548	850	74	985	441	185	1319	
v/s Ratio Prot		0.28		0.09	c0.47	0.01		0.26		0.04	c0.47	
v/s Ratio Perm	0.36		0.05	0.36		0.09	0.36		0.03	0.22		
v/c Ratio	1.04	0.81	0.15	0.93	0.97	0.16	1.15	0.83	0.10	0.63	1.11	
Uniform Delay, d1	29.5	26.8	20.4	18.4	22.3	9.8	31.0	28.8	22.0	18.9	26.0	
Progression Factor	1.00	1.00	1.00	2.02	0.30	0.32	0.50	0.48	0.15	0.62	0.50	
Incremental Delay, d2	116.2	6.5	0.7	6.8	2.6	0.0	97.9	2.1	0.1	2.9	56.9	
Delay (s)	145.7	33.3	21.1	44.0	9.4	3.1	113.5	15.8	3.4	14.6	69.8	
Level of Service	F	C	C	D	A	A	F	B	A	B	E	
Approach Delay (s)		40.2			13.1			22.2			65.8	
Approach LOS		D			B			C			E	

Intersection Summary			
HCM Average Control Delay	35.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	120.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3141		1583	3167	1417	1583	3110		1583	3147	
Flt Permitted	0.11	1.00		0.25	1.00	1.00	0.14	1.00		0.12	1.00	
Satd. Flow (perm)	190	3141		425	3167	1417	230	3110		202	3147	
Volume (vph)	101	626	35	170	1536	163	68	928	125	188	1346	59
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	112	696	39	189	1707	181	76	1031	139	209	1496	66
RTOR Reduction (vph)	0	4	0	0	0	32	0	12	0	0	3	0
Lane Group Flow (vph)	112	731	0	189	1707	149	76	1158	0	209	1559	0
Turn Type	pm+pt			pm+pt		pm+ov	Perm			pm+pt		
Protected Phases	1	6		5	2	7		8		7	4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	38.9	33.1		38.9	33.1	38.9	27.1	27.1		36.1	36.1	
Effective Green, g (s)	40.0	35.0		40.0	35.0	40.0	29.0	29.0		38.0	38.0	
Actuated g/C Ratio	0.44	0.39		0.44	0.39	0.44	0.32	0.32		0.42	0.42	
Clearance Time (s)	3.2	5.9		3.2	5.9	3.2	5.9	5.9		3.2	5.9	
Vehicle Extension (s)	3.0	4.6		3.0	4.7	3.0	4.7	4.7		3.0	4.7	
Lane Grp Cap (vph)	162	1222		253	1232	693	74	1002		162	1329	
v/s Ratio Prot	0.04	0.23		c0.04	c0.54	0.01		0.37		0.07	c0.50	
v/s Ratio Perm	0.27			0.29		0.09	0.33			c0.47		
v/c Ratio	0.69	0.60		0.75	1.39	0.21	1.03	1.16		1.29	1.17	
Uniform Delay, d1	43.2	21.9		19.4	27.5	15.4	30.5	30.5		25.4	26.0	
Progression Factor	1.00	1.00		0.65	0.82	0.72	1.43	1.45		0.93	0.54	
Incremental Delay, d2	12.0	2.2		5.9	176.1	0.1	110.3	81.3		142.7	80.1	
Delay (s)	55.2	24.1		18.5	198.7	11.2	153.8	125.6		166.3	94.2	
Level of Service	E	C		B	F	B	F	F		F	F	
Approach Delay (s)		28.2			165.9			127.3			102.7	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	119.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	119.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.94	1.00	1.00	0.91	1.00	0.99	
Flpb, ped/bikes	0.98	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.98	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1547	1644		3072	1667	1337	1583	3167	1287	1548	3091	
Flt Permitted	0.47	1.00		0.95	1.00	1.00	0.09	1.00	1.00	0.29	1.00	
Satd. Flow (perm)	772	1644		3072	1667	1337	142	3167	1287	464	3091	
Volume (vph)	24	240	20	301	444	103	10	760	68	45	1342	116
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	25	250	21	314	462	107	10	792	71	47	1398	121
RTOR Reduction (vph)	0	3	0	0	0	65	0	0	0	0	7	0
Lane Group Flow (vph)	25	268	0	314	462	42	10	792	71	47	1512	0
Confl. Peds. (#/hr)	28		6	6		28	43		36	36		43
Confl. Bikes (#/hr)			4			1			5			7
Turn Type	Perm			Prot		Perm	Perm		pm+ov	Perm		
Protected Phases		8		7	4			6	7		2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	20.2	20.2		10.0	34.2	34.2	46.2	46.2	56.2	46.2	46.2	
Effective Green, g (s)	21.0	21.0		10.0	35.0	35.0	47.0	47.0	57.0	47.0	47.0	
Actuated g/C Ratio	0.23	0.23		0.11	0.39	0.39	0.52	0.52	0.63	0.52	0.52	
Clearance Time (s)	4.8	4.8		4.0	4.8	4.8	4.8	4.8	4.0	4.8	4.8	
Vehicle Extension (s)	5.9	5.9		3.0	5.2	5.2	4.8	4.8	3.0	4.4	4.4	
Lane Grp Cap (vph)	180	384		341	648	520	74	1654	872	242	1614	
v/s Ratio Prot		0.16		c0.10	c0.28			0.25	0.01		c0.49	
v/s Ratio Perm	0.03					0.03	0.07		0.05	0.10		
v/c Ratio	0.14	0.70		0.92	0.71	0.08	0.14	0.48	0.08	0.19	0.94	
Uniform Delay, d1	27.3	31.6		39.6	23.3	17.3	11.1	13.7	6.4	11.4	20.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.32	0.27	0.23	0.24	0.44	
Incremental Delay, d2	1.6	10.1		29.4	6.6	0.3	0.3	0.1	0.0	0.2	1.4	
Delay (s)	28.9	41.7		69.0	29.8	17.6	3.8	3.8	1.4	3.0	10.3	
Level of Service	C	D		E	C	B	A	A	A	A	B	
Approach Delay (s)		40.6			42.3			3.6			10.0	
Approach LOS		D			D			A			B	

Intersection Summary			
HCM Average Control Delay	18.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	0.98		1.00	1.00	0.84
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4499		1577	4505		1583	3075		1583	3167	1190
Flt Permitted	0.14	1.00		0.16	1.00		0.13	1.00		0.95	1.00	1.00
Satd. Flow (perm)	236	4499		267	4505		222	3075		1583	3167	1190
Volume (vph)	123	907	31	126	1705	37	275	1013	65	151	1591	239
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	131	965	33	134	1814	39	293	1078	69	161	1693	254
RTOR Reduction (vph)	0	4	0	0	3	0	0	5	0	0	0	103
Lane Group Flow (vph)	131	994	0	134	1850	0	293	1142	0	161	1693	151
Confl. Peds. (#/hr)	227		147	147		227	137		176	176		137
Confl. Bikes (#/hr)			2			6			8			6
Turn Type	pm+pt			pm+pt			pm+pt			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					4
Actuated Green, G (s)	33.1	27.3		33.1	27.3		36.8	29.0		11.5	32.7	32.7
Effective Green, g (s)	33.3	28.3		33.3	28.3		37.0	30.0		10.7	33.7	33.7
Actuated g/C Ratio	0.37	0.31		0.37	0.31		0.41	0.33		0.12	0.37	0.37
Clearance Time (s)	3.2	5.0		3.2	5.0		3.2	5.0		3.2	5.0	5.0
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	162	1415		172	1417		197	1025		188	1186	446
v/s Ratio Prot	c0.04	0.22		0.04	c0.41		c0.12	0.37		0.10	c0.53	
v/s Ratio Perm	0.25			0.25			0.49					0.13
v/c Ratio	0.81	0.70		0.78	1.31		1.49	1.11		0.86	1.43	0.34
Uniform Delay, d1	24.3	27.1		21.1	30.9		43.7	30.0		38.9	28.1	20.2
Progression Factor	1.17	1.15		1.00	1.00		1.54	0.84		0.84	1.30	1.97
Incremental Delay, d2	20.9	2.4		19.7	142.8		240.2	62.7		20.4	195.5	1.3
Delay (s)	49.3	33.7		40.8	173.7		307.6	87.8		53.3	232.0	41.0
Level of Service	D	C		D	F		F	F		D	F	D
Approach Delay (s)		35.5			164.7			132.5			195.3	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	145.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.34		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	125.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor			1.00	0.95	0.91	0.95		0.95		1.00	0.95	
Frpb, ped/bikes			0.98	1.00	0.98	0.97		0.99		1.00	1.00	
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00	1.00	
Frt			0.86	1.00	0.92	0.85		0.98		1.00	1.00	
Flt Protected			1.00	0.95	0.98	1.00		1.00		0.95	1.00	
Satd. Flow (prot)			1412	1502	1339	1303		3066		1576	3167	
Flt Permitted			1.00	0.95	0.98	1.00		1.00		0.14	1.00	
Satd. Flow (perm)			1412	1502	1339	1303		3066		237	3167	
Volume (vph)	0	0	24	176	0	219	0	1073	177	137	1203	0
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	25	185	0	231	0	1129	186	144	1266	0
RTOR Reduction (vph)	0	0	24	0	47	120	0	12	0	0	0	0
Lane Group Flow (vph)	0	0	1	117	99	33	0	1303	0	144	1266	0
Confl. Peds. (#/hr)	11		1	1		11	8		23	23		8
Confl. Bikes (#/hr)						5			5			1
Turn Type			custom	Perm		Perm				Perm		
Protected Phases					3			2			2	
Permitted Phases			4	3		3				2		
Actuated Green, G (s)			2.2	18.5	18.5	18.5		54.9		54.9	54.9	
Effective Green, g (s)			3.1	19.4	19.4	19.4		55.5		55.5	55.5	
Actuated g/C Ratio			0.03	0.22	0.22	0.22		0.62		0.62	0.62	
Clearance Time (s)			4.9	4.9	4.9	4.9		4.6		4.6	4.6	
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)			49	324	289	281		1891		146	1953	
v/s Ratio Prot								0.42			0.40	
v/s Ratio Perm			c0.00	c0.08	0.07	0.03				c0.61		
v/c Ratio			0.02	0.36	0.34	0.12		0.69		0.99	0.65	
Uniform Delay, d1			42.0	30.0	29.9	28.4		11.5		16.9	11.0	
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.53	0.93	
Incremental Delay, d2			0.1	0.7	0.7	0.2		2.1		19.3	0.2	
Delay (s)			42.1	30.7	30.6	28.6		13.6		45.1	10.5	
Level of Service			D	C	C	C		B		D	B	
Approach Delay (s)		42.1			29.9			13.6			14.0	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.91		1.00	0.86			0.86	
Frt		0.99			0.96		1.00	1.00			1.00	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		4491			4372		1583	5733			5733	
Flt Permitted		1.00			1.00		0.17	1.00			1.00	
Satd. Flow (perm)		4491			4372		284	5733			5733	
Volume (vph)	0	1364	130	0	1733	611	195	1340	0	0	1370	0
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	0	1378	131	0	1751	617	197	1354	0	0	1384	0
RTOR Reduction (vph)	0	12	0	0	63	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	1497	0	0	2305	0	197	1354	0	0	1384	0
Turn Type							Perm					
Protected Phases		6			6			2			2	
Permitted Phases							2					
Actuated Green, G (s)		22.1			22.1		24.5	24.5			24.5	
Effective Green, g (s)		23.0			23.0		23.5	23.5			23.5	
Actuated g/C Ratio		0.23			0.23		0.24	0.24			0.24	
Clearance Time (s)		4.9			4.9		3.0	3.0			3.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1033			1006		67	1347			1347	
v/s Ratio Prot		0.33			c0.53			0.24			0.24	
v/s Ratio Perm							c0.69					
v/c Ratio		1.45			2.29		2.94	1.01			1.03	
Uniform Delay, d1		38.5			38.5		38.2	38.2			38.2	
Progression Factor		0.69			1.00		1.00	1.00			0.59	
Incremental Delay, d2		202.8			584.2		912.1	25.8			15.9	
Delay (s)		229.5			622.7		950.4	64.0			38.5	
Level of Service		F			F		F	E			D	
Approach Delay (s)		229.5			622.7			176.6			38.5	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	315.3	HCM Level of Service	F
HCM Volume to Capacity ratio	2.63		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	53.5
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86	1.00		0.91	1.00		0.95		1.00	0.95	
Frt	1.00	1.00	0.85		1.00	0.85		1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1583	5733	1417		4550	1417		3166		1583	3139	
Flt Permitted	0.17	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	284	5733	1417		4550	1417		3166		1583	3139	
Volume (vph)	75	1136	40	0	1709	276	0	881	2	190	1186	75
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	77	1171	41	0	1762	285	0	908	2	196	1223	77
RTOR Reduction (vph)	0	0	31	0	0	175	0	0	0	0	5	0
Lane Group Flow (vph)	77	1171	10	0	1762	110	0	910	0	196	1295	0
Turn Type	Perm		Perm			Perm				Prot		
Protected Phases		2			2			8		7	4	
Permitted Phases	2		2			2						
Actuated Green, G (s)	24.5	24.5	24.5		24.5	24.5		31.0		5.0	31.0	
Effective Green, g (s)	23.5	23.5	23.5		23.5	23.5		32.5		5.0	32.5	
Actuated g/C Ratio	0.24	0.24	0.24		0.24	0.24		0.32		0.05	0.32	
Clearance Time (s)	3.0	3.0	3.0		3.0	3.0		5.5		4.0	5.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		5.0		3.0	4.0	
Lane Grp Cap (vph)	67	1347	333		1069	333		1029		79	1020	
v/s Ratio Prot		0.20			c0.39			0.29		c0.12	c0.41	
v/s Ratio Perm	0.27		0.01			0.08						
v/c Ratio	1.15	0.87	0.03		1.65	0.33		0.88		2.48	1.27	
Uniform Delay, d1	38.2	36.8	29.5		38.2	31.7		32.0		47.5	33.8	
Progression Factor	1.00	1.00	1.00		0.93	1.34		0.19		1.00	1.00	
Incremental Delay, d2	156.1	7.8	0.2		292.1	0.2		6.1		702.7	129.2	
Delay (s)	194.4	44.6	29.6		327.6	42.6		12.3		750.2	163.0	
Level of Service	F	D	C		F	D		B		F	F	
Approach Delay (s)		53.1			287.9			12.3			239.9	
Approach LOS		D			F			B			F	

Intersection Summary			
HCM Average Control Delay	179.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.0
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	1.00		1.00	1.00		1.00	1.00			0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4539		1583	4549		1583	3157			3021	
Flt Permitted	0.17	1.00		0.17	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	290	4539		290	4549		1583	3157			3021	
Volume (vph)	37	1460	24	42	1709	2	55	848	18	0	815	362
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	38	1490	24	43	1744	2	56	865	18	0	832	369
RTOR Reduction (vph)	0	2	0	0	0	0	0	1	0	0	51	0
Lane Group Flow (vph)	38	1512	0	43	1746	0	56	882	0	0	1150	0
Turn Type	Perm			Perm			Prot					
Protected Phases		6			6		3	8			4	
Permitted Phases	6			6								
Actuated Green, G (s)	22.1	22.1		22.1	22.1		5.0	31.0			31.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		5.0	32.5			32.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.05	0.32			0.32	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.0	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	5.0			4.0	
Lane Grp Cap (vph)	67	1044		67	1046		79	1026			982	
v/s Ratio Prot		0.33			c0.38		c0.04	0.28			c0.38	
v/s Ratio Perm	0.13			0.15								
v/c Ratio	0.57	1.45		0.64	1.67		0.71	0.86			1.17	
Uniform Delay, d1	34.1	38.5		34.8	38.5		46.8	31.6			33.8	
Progression Factor	1.00	1.00		0.70	0.69		1.00	1.00			0.30	
Incremental Delay, d2	30.4	207.3		4.2	301.5		25.1	9.3			78.3	
Delay (s)	64.5	245.8		28.6	328.1		71.9	40.9			88.4	
Level of Service	E	F		C	F		E	D			F	
Approach Delay (s)		241.4			320.9			42.8			88.4	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	199.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.32		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.5
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	3135		1583	3150		1583	3167	1417	1583	3167	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	222	3135		222	3150		1583	3167	1417	1583	3167	1417
Volume (vph)	70	863	61	89	1462	54	148	912	133	43	881	88
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	890	63	92	1507	56	153	940	137	44	908	91
RTOR Reduction (vph)	0	6	0	0	3	0	0	0	72	0	0	27
Lane Group Flow (vph)	72	947	0	92	1560	0	153	940	65	44	908	64
Turn Type	Perm			Perm			Prot		Perm	Prot		Perm
Protected Phases		6			2		3	8		7	4	
Permitted Phases	6			2					8			4
Actuated Green, G (s)	29.0	29.0		29.0	29.0		10.0	41.6	41.6	5.4	37.0	37.0
Effective Green, g (s)	30.0	30.0		30.0	30.0		10.0	42.6	42.6	5.4	38.0	38.0
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.11	0.47	0.47	0.06	0.42	0.42
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	74	1045		74	1050		176	1499	671	95	1337	598
v/s Ratio Prot		0.30			c0.50		c0.10	0.30		0.03	c0.29	
v/s Ratio Perm	0.32			0.41					0.05			0.05
v/c Ratio	0.97	0.91		1.24	1.49		0.87	0.63	0.10	0.46	0.68	0.11
Uniform Delay, d1	29.6	28.7		30.0	30.0		39.4	17.8	13.1	40.9	21.1	15.7
Progression Factor	0.52	0.53		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	25.5	1.4		183.6	223.8		33.6	2.0	0.3	3.5	2.8	0.4
Delay (s)	40.9	16.6		213.6	253.8		73.0	19.7	13.4	44.4	23.9	16.1
Level of Service	D	B		F	F		E	B	B	D	C	B
Approach Delay (s)		18.3			251.6			25.7			24.0	
Approach LOS		B			F			C			C	

Intersection Summary			
HCM Average Control Delay	99.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	105.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	1.00			0.96			0.98	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1583	4501		1583	4540			3047			3089	
Flt Permitted	0.09	1.00		0.17	1.00			1.00			0.78	
Satd. Flow (perm)	152	4501		277	4540			3047			2428	
Volume (vph)	57	1040	81	213	1852	28	0	485	163	78	979	178
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	61	1118	87	229	1991	30	0	522	175	84	1053	191
RTOR Reduction (vph)	0	10	0	0	2	0	0	29	0	0	2	0
Lane Group Flow (vph)	61	1195	0	229	2019	0	0	668	0	0	1326	0
Turn Type	Perm			Perm						Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2						4		
Actuated Green, G (s)	42.3	42.3		42.3	42.3			36.0			36.0	
Effective Green, g (s)	44.0	44.0		44.0	44.0			38.0			38.0	
Actuated g/C Ratio	0.49	0.49		0.49	0.49			0.42			0.42	
Clearance Time (s)	5.7	5.7		5.7	5.7			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	74	2200		135	2220			1287			1025	
v/s Ratio Prot		0.27			0.44			0.22				
v/s Ratio Perm	0.40			c0.83							c0.55	
v/c Ratio	0.82	0.54		1.70	0.91			0.52			1.29	
Uniform Delay, d1	19.7	16.0		23.0	21.2			19.2			26.0	
Progression Factor	0.45	0.44		0.53	0.44			1.00			1.00	
Incremental Delay, d2	30.9	0.4		316.2	0.7			0.4			139.3	
Delay (s)	39.8	7.4		328.5	10.1			19.6			165.3	
Level of Service	D	A		F	B			B			F	
Approach Delay (s)		8.9			42.5			19.6			165.3	
Approach LOS		A			D			B			F	

Intersection Summary			
HCM Average Control Delay	61.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	122.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	1.00
Frt	1.00	0.99		1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4486		1583	4460		1583	4503		1583	4550	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	215	4486		215	4460		1583	4503		1583	4550	1417
Volume (vph)	53	1188	123	71	1487	227	453	1269	93	247	1042	186
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	57	1277	132	76	1599	244	487	1365	100	266	1120	200
RTOR Reduction (vph)	0	14	0	0	23	0	0	9	0	0	0	5
Lane Group Flow (vph)	57	1395	0	76	1820	0	487	1456	0	266	1120	195
Turn Type	Perm			Perm			Prot			Prot		Perm
Protected Phases		4			8		5			1	6	
Permitted Phases	4			8				2				6
Actuated Green, G (s)	29.0	29.0		29.0	29.0		14.0	31.0		15.0	31.0	31.0
Effective Green, g (s)	31.0	31.0		31.0	31.0		15.0	32.0		15.0	32.0	32.0
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.17	0.36		0.17	0.36	0.36
Clearance Time (s)	6.0	6.0		6.0	6.0		5.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	74	1545		74	1536		264	1601		264	1618	504
v/s Ratio Prot		0.31			c0.41		c0.31			0.17	0.25	
v/s Ratio Perm	0.27			0.35				c0.32				0.14
v/c Ratio	0.77	0.90		1.03	1.18		1.84	0.91		1.01	0.69	0.39
Uniform Delay, d1	26.3	28.1		29.5	29.5		37.5	27.6		37.5	24.8	21.7
Progression Factor	1.00	1.00		0.42	0.37		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	53.7	9.0		67.9	85.7		394.5	9.2		57.3	2.5	2.2
Delay (s)	80.0	37.1		80.2	96.5		432.0	36.8		94.8	27.2	23.9
Level of Service	F	D		F	F		F	D		F	C	C
Approach Delay (s)		38.7			95.9			135.4			38.2	
Approach LOS		D			F			F			D	

Intersection Summary			
HCM Average Control Delay	81.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	110.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.96
Flpb, ped/bikes	1.00	1.00		0.99	1.00			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	1.00
Satd. Flow (prot)	1577	4530		1565	4517			1592			1657	1364
Flt Permitted	0.07	1.00		0.16	1.00			0.94			0.97	1.00
Satd. Flow (perm)	117	4530		258	4517			1506			1611	1364
Volume (vph)	84	1240	21	26	1744	47	27	166	48	17	200	102
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	93	1378	23	29	1938	52	30	184	53	19	222	113
RTOR Reduction (vph)	0	2	0	0	3	0	0	9	0	0	0	14
Lane Group Flow (vph)	93	1399	0	29	1987	0	0	258	0	0	241	99
Confl. Peds. (#/hr)	47		44	44		47	18		31	31		18
Confl. Bikes (#/hr)			3			2			4			1
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	69.0	69.0		69.0	69.0			25.0			25.0	25.0
Effective Green, g (s)	68.0	68.0		68.0	68.0			24.0			24.0	24.0
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.24			0.24	0.24
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	3.0
Lane Grp Cap (vph)	80	3080		175	3072			361			387	327
v/s Ratio Prot		0.31			0.44							
v/s Ratio Perm	c0.79			0.11				c0.17			0.15	0.07
v/c Ratio	1.16	0.45		0.17	0.65			0.71			0.62	0.30
Uniform Delay, d1	16.0	7.4		5.8	9.1			34.9			34.0	31.1
Progression Factor	0.77	0.38		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	114.0	0.2		2.0	1.1			11.4			7.4	2.4
Delay (s)	126.3	3.0		7.8	10.2			46.3			41.3	33.5
Level of Service	F	A		A	B			D			D	C
Approach Delay (s)		10.7			10.2			46.3			38.8	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM Average Control Delay	15.2	HCM Level of Service	B
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.91	1.00	0.99		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3167	1295	1569	3107		3072	4446		3072	4432	
Flt Permitted	0.11	1.00	1.00	0.34	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	188	3167	1295	562	3107		3072	4446		3072	4432	
Volume (vph)	181	441	42	297	1217	97	176	1224	86	64	1779	209
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)	197	479	46	323	1323	105	191	1330	93	70	1934	227
RTOR Reduction (vph)	0	0	32	0	5	0	0	6	0	0	12	0
Lane Group Flow (vph)	197	479	14	323	1423	0	191	1417	0	70	2149	0
Confl. Peds. (#/hr)	63		49	49		63	51		51	51		51
Confl. Bikes (#/hr)			3			3			6			3
Turn Type	pm+pt		Perm	pm+pt			Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								
Actuated Green, G (s)	48.4	34.0	34.0	49.6	34.6		12.8	46.8		6.8	40.8	
Effective Green, g (s)	48.8	35.4	35.4	50.0	36.0		12.8	47.8		6.8	41.8	
Actuated g/C Ratio	0.41	0.29	0.29	0.42	0.30		0.11	0.40		0.06	0.35	
Clearance Time (s)	3.0	5.4	5.4	3.0	5.4		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	232	934	382	352	932		328	1771		174	1544	
v/s Ratio Prot	0.09	0.15		c0.11	c0.46		0.06	c0.32		0.02	c0.48	
v/s Ratio Perm	0.25		0.01	0.28								
v/c Ratio	0.85	0.51	0.04	0.92	1.53		0.58	0.80		0.40	1.39	
Uniform Delay, d1	30.4	35.1	30.1	29.3	42.0		51.1	31.9		54.6	39.1	
Progression Factor	1.63	0.73	0.56	1.00	1.00		0.75	0.62		1.20	0.41	
Incremental Delay, d2	21.3	0.4	0.0	27.8	242.6		2.3	3.5		0.1	176.6	
Delay (s)	70.9	26.1	17.0	57.1	284.6		40.5	23.2		65.7	192.7	
Level of Service	E	C	B	E	F		D	C		E	F	
Approach Delay (s)		37.7			242.6			25.3			188.7	
Approach LOS		D			F			C			F	

Intersection Summary			
HCM Average Control Delay	144.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		0.91		1.00	0.86	0.86	1.00		1.00	0.97	
Frt	1.00		0.99		1.00	1.00	0.85	1.00		0.85	1.00	
Flt Protected	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (prot)	1583		4521		1583	4300	1218	1583		1417	3072	
Flt Permitted	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (perm)	1583		4521		1583	4300	1218	1583		1417	3072	
Volume (vph)	2	0	599	27	6	1384	815	16	0	13	664	0
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	2	0	644	29	6	1488	876	17	0	14	714	0
RTOR Reduction (vph)	0	0	3	0	0	0	340	0	0	13	0	0
Lane Group Flow (vph)	2	0	670	0	6	1488	536	17	0	1	714	0
Turn Type	Prot				Prot		Perm	Prot		custom	custom	
Protected Phases	5		2		1	6		7				
Permitted Phases							6			7	8	
Actuated Green, G (s)	2.8		70.1		1.4	67.8	67.8	4.6		4.6	22.1	
Effective Green, g (s)	4.7		71.1		3.3	69.7	69.7	5.6		5.6	24.0	
Actuated g/C Ratio	0.04		0.59		0.03	0.58	0.58	0.05		0.05	0.20	
Clearance Time (s)	5.9		5.0		5.9	5.9	5.9	5.0		5.0	5.9	
Vehicle Extension (s)	3.0		3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	62		2679		44	2498	707	74		66	614	
v/s Ratio Prot	0.00		c0.15		0.00	0.35		c0.01				
v/s Ratio Perm							c0.44			0.00	c0.23	
v/c Ratio	0.03		0.25		0.14	0.60	0.76	0.23		0.01	1.16	
Uniform Delay, d1	55.5		11.7		57.0	16.1	18.8	55.1		54.6	48.0	
Progression Factor	1.14		1.52		1.16	0.87	8.29	1.00		1.00	1.15	
Incremental Delay, d2	0.1		0.1		0.1	0.1	0.7	1.6		0.1	85.0	
Delay (s)	63.5		17.9		66.2	14.1	156.7	56.7		54.6	140.0	
Level of Service	E		B		E	B	F	E		D	F	
Approach Delay (s)			18.1			66.9			55.8			149.5
Approach LOS			B			E			E			F

Intersection Summary			
HCM Average Control Delay	78.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	211
Peak-hour factor, PHF	0.93
Adj. Flow (vph)	227
RTOR Reduction (vph)	182
Lane Group Flow (vph)	45
Turn Type	custom
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	22.1
Effective Green, g (s)	24.0
Actuated g/C Ratio	0.20
Clearance Time (s)	5.9
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	283
v/s Ratio Prot	
v/s Ratio Perm	0.03
v/c Ratio	0.16
Uniform Delay, d1	39.7
Progression Factor	4.50
Incremental Delay, d2	0.8
Delay (s)	179.4
Level of Service	F
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor		0.86	1.00		0.86	1.00	1.00	0.91			0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00			0.98	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)		5733	1417		5733	1417	1583	4548			4461	
Flt Permitted		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)		5733	1417		5733	1417	1583	4548			4461	
Volume (vph)	0	978	265	0	1538	254	364	1291	4	0	1797	269
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	998	270	0	1569	259	371	1317	4	0	1834	274
RTOR Reduction (vph)	0	0	2	0	0	36	0	0	0	0	1	0
Lane Group Flow (vph)	0	998	268	0	1569	223	371	1321	0	0	2107	0
Turn Type			pm+ov			Perm	Prot					
Protected Phases		8	1		4		1	6			2	
Permitted Phases		8	8			4						
Actuated Green, G (s)		39.0	49.0		39.0	39.0	10.0	69.0			53.5	
Effective Green, g (s)		41.0	52.5		41.0	41.0	11.5	71.0			55.5	
Actuated g/C Ratio		0.34	0.44		0.34	0.34	0.10	0.59			0.46	
Clearance Time (s)		6.0	5.5		6.0	6.0	5.5	6.0			6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)		1959	667		1959	484	152	2691			2063	
v/s Ratio Prot		0.17	0.04		c0.27		c0.23	0.29			c0.47	
v/s Ratio Perm			0.15			0.16						
v/c Ratio		0.51	0.40		0.80	0.46	2.44	0.49			1.02	
Uniform Delay, d1		31.5	23.0		35.8	30.9	54.2	14.1			32.2	
Progression Factor		1.19	1.76		1.00	1.00	1.23	0.77			0.27	
Incremental Delay, d2		0.7	0.3		3.6	3.1	665.1	0.6			12.5	
Delay (s)		38.1	40.7		39.4	34.0	731.9	11.5			21.1	
Level of Service		D	D		D	C	F	B			C	
Approach Delay (s)		38.6			38.6			169.4			21.1	
Approach LOS		D			D			F			C	

Intersection Summary			
HCM Average Control Delay	65.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	103.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.95			0.99		1.00	1.00		1.00	0.99	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1557			1628		1583	4533		1583	4487	
Flt Permitted		0.85			0.88		0.07	1.00		0.11	1.00	
Satd. Flow (perm)		1349			1453		122	4533		184	4487	
Volume (vph)	54	60	72	38	103	12	117	1549	39	72	1700	174
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	63	76	40	108	13	123	1631	41	76	1789	183
RTOR Reduction (vph)	0	19	0	0	2	0	0	2	0	0	10	0
Lane Group Flow (vph)	0	177	0	0	159	0	123	1670	0	76	1962	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0		83.4	83.4		83.4	83.4	
Effective Green, g (s)		29.0			29.0		83.0	83.0		83.0	83.0	
Actuated g/C Ratio		0.24			0.24		0.69	0.69		0.69	0.69	
Clearance Time (s)		3.0			3.0		3.6	3.6		3.6	3.6	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		326			351		84	3135		127	3104	
v/s Ratio Prot								0.37			0.44	
v/s Ratio Perm		c0.13			0.11		c1.01			0.41		
v/c Ratio		0.54			0.45		1.46	0.53		0.60	0.63	
Uniform Delay, d1		39.7			38.7		18.5	9.0		9.7	10.1	
Progression Factor		1.00			1.00		1.00	1.00		0.79	0.37	
Incremental Delay, d2		6.4			4.2		262.7	0.7		6.9	0.3	
Delay (s)		46.1			42.9		281.2	9.7		14.6	4.1	
Level of Service		D			D		F	A		B	A	
Approach Delay (s)		46.1			42.9			28.3			4.5	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM Average Control Delay	18.1	HCM Level of Service	B
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4352		1583	4468		1583	4423		1583	4343	
Flt Permitted	0.11	1.00		0.11	1.00		0.11	1.00		0.12	1.00	
Satd. Flow (perm)	192	4352		191	4468		183	4423		193	4343	
Volume (vph)	120	1127	199	127	1782	118	336	1577	219	86	1507	286
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	126	1186	209	134	1876	124	354	1660	231	91	1586	301
RTOR Reduction (vph)	0	25	0	0	7	0	0	17	0	0	27	0
Lane Group Flow (vph)	126	1370	0	134	1993	0	354	1874	0	91	1860	0
Confl. Peds. (#/hr)	90		93	93		90	90		48	48		90
Confl. Bikes (#/hr)			4			7			3			1
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	43.8	35.3		44.0	35.4		44.5	36.5		40.7	34.6	
Effective Green, g (s)	42.3	34.8		42.5	34.9		43.5	36.5		39.7	34.6	
Actuated g/C Ratio	0.42	0.35		0.42	0.35		0.44	0.36		0.40	0.35	
Clearance Time (s)	3.0	3.5		3.0	3.5		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	186	1514		187	1559		178	1614		148	1503	
v/s Ratio Prot	0.05	0.31		c0.05	c0.45		c0.14	0.42		0.03	0.43	
v/s Ratio Perm	0.24			0.25			c0.73			0.21		
v/c Ratio	0.68	0.91		0.72	1.28		1.99	1.16		0.61	1.24	
Uniform Delay, d1	46.5	31.0		21.3	32.5		48.7	31.8		25.1	32.7	
Progression Factor	0.99	1.16		1.70	1.21		1.93	0.85		1.00	1.00	
Incremental Delay, d2	6.8	8.5		8.3	129.3		455.0	76.3		5.2	112.7	
Delay (s)	52.8	44.6		44.6	168.6		549.0	103.2		30.3	145.4	
Level of Service	D	D		D	F		F	F		C	F	
Approach Delay (s)		45.2			160.8			173.5			140.1	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	136.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.55		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	123.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.96			1.00		1.00	0.99		1.00	0.97	
Flpb, ped/bikes		1.00			0.98		0.99	1.00		1.00	1.00	
Frt		0.95			0.99		1.00	0.99		1.00	0.99	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1500			1584		1565	4453		1583	4368	
Flt Permitted		0.84			0.55		0.08	1.00		0.06	1.00	
Satd. Flow (perm)		1270			881		138	4453		104	4368	
Volume (vph)	58	150	128	181	237	35	125	2047	194	20	1558	173
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	61	158	135	191	249	37	132	2155	204	21	1640	182
RTOR Reduction (vph)	0	16	0	0	3	0	0	11	0	0	14	0
Lane Group Flow (vph)	0	338	0	0	474	0	132	2348	0	21	1808	0
Confl. Peds. (#/hr)	39		76	76		39	104		34	34		104
Confl. Bikes (#/hr)			2			2			6			4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		64.2	64.2		64.2	64.2	
Effective Green, g (s)		28.0			28.0		64.0	64.0		64.0	64.0	
Actuated g/C Ratio		0.28			0.28		0.64	0.64		0.64	0.64	
Clearance Time (s)		3.0			3.0		3.8	3.8		3.8	3.8	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		356			247		88	2850		67	2796	
v/s Ratio Prot								0.53			0.41	
v/s Ratio Perm		0.27			c0.54		c0.95			0.20		
v/c Ratio		0.95			1.92		1.50	0.82		0.31	0.65	
Uniform Delay, d1		35.3			36.0		18.0	13.7		8.1	11.1	
Progression Factor		1.00			1.00		1.00	1.00		1.47	1.31	
Incremental Delay, d2		36.6			428.5		275.2	2.9		1.1	0.1	
Delay (s)		71.9			464.5		293.2	16.6		13.0	14.6	
Level of Service		E			F		F	B		B	B	
Approach Delay (s)		71.9			464.5			31.2			14.6	
Approach LOS		E			F			C			B	

Intersection Summary			
HCM Average Control Delay	68.1	HCM Level of Service	E
HCM Volume to Capacity ratio	1.62		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.98		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4482		1583	4528		1583	4525		1583	4447	
Flt Permitted	0.15	1.00		0.13	1.00		0.11	1.00		0.12	1.00	
Satd. Flow (perm)	256	4482		222	4528		188	4525		196	4447	
Volume (vph)	188	1457	162	159	2195	73	179	2022	77	68	1512	269
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	194	1502	167	164	2263	75	185	2085	79	70	1559	277
RTOR Reduction (vph)	0	15	0	0	4	0	0	4	0	0	17	0
Lane Group Flow (vph)	194	1654	0	164	2334	0	185	2160	0	70	1819	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	25.0	25.0		36.0	36.0		41.5	34.5		38.5	33.0	
Effective Green, g (s)	26.0	26.0		37.0	37.0		42.5	35.5		39.5	34.0	
Actuated g/C Ratio	0.29	0.29		0.41	0.41		0.47	0.39		0.44	0.38	
Clearance Time (s)	5.0	5.0		3.5	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1295		197	1862		197	1785		171	1680	
v/s Ratio Prot		0.37		0.06	c0.52		c0.07	c0.48		0.03	0.41	
v/s Ratio Perm	c0.76			0.28			0.37			0.15		
v/c Ratio	2.62	1.28		0.83	1.25		0.94	1.21		0.41	1.08	
Uniform Delay, d1	32.0	32.0		42.7	26.5		20.3	27.2		41.5	28.0	
Progression Factor	0.66	0.65		1.00	1.00		1.70	0.30		1.00	1.00	
Incremental Delay, d2	747.2	127.6		24.9	118.6		8.6	95.0		1.6	48.0	
Delay (s)	768.2	148.4		67.6	145.1		43.1	103.1		43.1	76.0	
Level of Service	F	F		E	F		D	F		D	E	
Approach Delay (s)		212.9			140.1			98.4			74.8	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	130.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.65		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	124.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3073		1583	3122		1583	4513		1583	4497	
Flt Permitted	0.15	1.00		0.13	1.00		0.12	1.00		0.14	1.00	
Satd. Flow (perm)	252	3073		219	3122		202	4513		230	4497	
Volume (vph)	72	830	204	139	1372	144	321	2114	120	75	1643	139
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	74	856	210	143	1414	148	331	2179	124	77	1694	143
RTOR Reduction (vph)	0	24	0	0	1	0	0	7	0	0	11	0
Lane Group Flow (vph)	74	1042	0	143	1561	0	331	2296	0	77	1826	0
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		8		7	4		1	6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	25.5	25.5		38.0	38.0		42.0	42.0		28.0	28.0	
Effective Green, g (s)	26.5	26.5		39.0	39.0		43.0	43.0		29.0	29.0	
Actuated g/C Ratio	0.29	0.29		0.43	0.43		0.48	0.48		0.32	0.32	
Clearance Time (s)	5.0	5.0		3.0	5.0		4.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	905		224	1353		250	2156		74	1449	
v/s Ratio Prot		0.34		0.06	c0.50		c0.15	0.51			0.41	
v/s Ratio Perm	0.29			0.22			c0.49			0.33		
v/c Ratio	1.00	1.15		0.64	1.15		1.32	1.07		1.04	1.26	
Uniform Delay, d1	31.8	31.8		20.7	25.5		42.2	23.5		30.5	30.5	
Progression Factor	1.00	1.00		0.73	0.97		1.00	1.00		0.99	0.96	
Incremental Delay, d2	104.6	80.9		0.5	70.0		170.9	39.4		42.4	117.7	
Delay (s)	136.4	112.6		15.6	94.7		213.1	62.9		72.7	146.9	
Level of Service	F	F		B	F		F	E		E	F	
Approach Delay (s)		114.2			88.0			81.8			143.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	104.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	128.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		0.98	1.00		0.98	1.00		0.99	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.99		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3087		1557	3095		1558	3140		1568	3013	
Flt Permitted	0.06	1.00		0.32	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	100	3087		519	3095		223	3140		230	3013	
Volume (vph)	67	571	76	73	1357	130	119	811	31	87	698	152
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	75	642	85	82	1525	146	134	911	35	98	784	171
RTOR Reduction (vph)	0	8	0	0	6	0	0	2	0	0	12	0
Lane Group Flow (vph)	75	719	0	82	1665	0	134	944	0	98	943	0
Confl. Peds. (#/hr)	50		50	50		50	50		50	50		50
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	64.6	64.6		64.6	64.6		44.1	44.1		44.1	44.1	
Effective Green, g (s)	66.5	66.5		66.5	66.5		45.5	45.5		45.5	45.5	
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.38	0.38		0.38	0.38	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	55	1711		288	1715		85	1191		87	1142	
v/s Ratio Prot		0.23			0.54			0.30			0.31	
v/s Ratio Perm	c0.75			0.16			c0.60			0.43		
v/c Ratio	1.36	0.42		0.28	0.97		1.58	0.79		1.13	0.83	
Uniform Delay, d1	26.8	15.5		14.2	25.8		37.2	33.1		37.2	33.7	
Progression Factor	1.00	1.00		0.42	0.75		1.21	1.22		1.00	1.00	
Incremental Delay, d2	245.5	0.8		0.2	2.6		296.9	4.1		134.7	6.9	
Delay (s)	272.2	16.3		6.2	22.0		341.9	44.3		172.0	40.5	
Level of Service	F	B		A	C		F	D		F	D	
Approach Delay (s)		40.2			21.3			81.2			52.7	
Approach LOS		D			C			F			D	

Intersection Summary			
HCM Average Control Delay	45.4	HCM Level of Service	D
HCM Volume to Capacity ratio	1.45		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.98			0.96	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1583	4528		1583	4540			1607			1593	
Flt Permitted	0.06	1.00		0.15	1.00			0.79			0.92	
Satd. Flow (perm)	100	4528		257	4540			1289			1481	
Volume (vph)	21	1308	44	44	2197	32	93	177	52	22	100	48
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	22	1362	46	46	2289	33	97	184	54	23	104	50
RTOR Reduction (vph)	0	4	0	0	1	0	0	7	0	0	8	0
Lane Group Flow (vph)	22	1404	0	46	2321	0	0	328	0	0	170	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.0	68.0		68.0	68.0			26.0			26.0	
Effective Green, g (s)	67.0	67.0		67.0	67.0			25.0			25.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.25			0.25	
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	67	3034		172	3042			322			370	
v/s Ratio Prot		0.31			c0.51							
v/s Ratio Perm	0.22			0.18				c0.25			0.11	
v/c Ratio	0.33	0.46		0.27	0.76			1.02			0.46	
Uniform Delay, d1	7.0	7.9		6.6	11.1			37.5			31.8	
Progression Factor	0.58	0.19		0.33	0.67			1.00			1.00	
Incremental Delay, d2	8.4	0.3		0.3	0.2			55.2			4.0	
Delay (s)	12.5	1.9		2.6	7.6			92.7			35.8	
Level of Service	B	A		A	A			F			D	
Approach Delay (s)		2.0			7.5			92.7			35.8	
Approach LOS		A			A			F			D	

Intersection Summary			
HCM Average Control Delay	13.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	4550	1417	1583	1667	1417	1583	1642	
Flt Permitted	0.23	1.00	1.00	0.23	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	388	3167	1417	388	4550	1417	1583	1667	1417	1583	1642	
Volume (vph)	86	665	97	108	1270	56	88	581	36	40	668	74
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	92	715	104	116	1366	60	95	625	39	43	718	80
RTOR Reduction (vph)	0	0	74	0	0	43	0	0	22	0	7	0
Lane Group Flow (vph)	92	715	30	116	1366	17	95	625	17	43	791	0
Turn Type	Perm		Perm	Perm		Perm	Prot		Perm	Prot		
Protected Phases		4			4		1	2		1	6	
Permitted Phases	4		4	4		4			2			
Actuated Green, G (s)	16.2	16.2	16.2	16.2	16.2	16.2	4.2	25.8	25.8	4.2	25.8	
Effective Green, g (s)	17.2	17.2	17.2	17.2	17.2	17.2	4.2	26.6	26.6	4.2	26.6	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	0.07	0.44	0.44	0.07	0.44	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.8	4.8	4.0	4.8	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	908	406	111	1304	406	111	739	628	111	728	
v/s Ratio Prot		0.23			c0.30		c0.06	0.38		0.03	c0.48	
v/s Ratio Perm	0.24		0.02	0.30		0.01			0.01			
v/c Ratio	0.83	0.79	0.07	1.05	1.05	0.04	0.86	0.85	0.03	0.39	1.09	
Uniform Delay, d1	20.0	19.7	15.6	21.4	21.4	15.5	27.6	14.9	9.4	26.7	16.7	
Progression Factor	1.00	1.00	1.00	1.33	1.37	1.51	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.3	6.9	0.4	91.6	36.6	0.2	43.7	11.5	0.1	2.2	59.5	
Delay (s)	68.3	26.6	15.9	120.1	65.9	23.4	71.3	26.3	9.5	28.9	76.2	
Level of Service	E	C	B	F	E	C	E	C	A	C	E	
Approach Delay (s)		29.6			68.3			31.1			73.8	
Approach LOS		C			E			C			E	

Intersection Summary			
HCM Average Control Delay	53.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.98		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4485		1583	4524		1583	3098		1583	3086	
Flt Permitted	0.10	1.00		0.09	1.00		0.13	1.00		0.16	1.00	
Satd. Flow (perm)	161	4485		155	4524		215	3098		259	3086	
Volume (vph)	83	1187	125	123	1985	78	204	657	111	53	677	139
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	89	1276	134	132	2134	84	219	706	119	57	728	149
RTOR Reduction (vph)	0	13	0	0	4	0	0	13	0	0	17	0
Lane Group Flow (vph)	89	1397	0	132	2214	0	219	812	0	57	860	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	48.9	42.5		51.9	44.0		40.0	32.0		35.2	29.6	
Effective Green, g (s)	46.9	41.5		49.9	43.0		38.0	31.0		33.2	28.6	
Actuated g/C Ratio	0.47	0.42		0.50	0.43		0.38	0.31		0.33	0.29	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	152	1861		176	1945		177	960		147	883	
v/s Ratio Prot	0.03	0.31		c0.05	c0.49		c0.09	0.26		0.02	0.28	
v/s Ratio Perm	0.24			0.32			c0.38			0.11		
v/c Ratio	0.59	0.75		0.75	1.14		1.24	0.85		0.39	0.97	
Uniform Delay, d1	23.5	24.9		17.6	28.5		26.9	32.3		24.5	35.3	
Progression Factor	2.30	1.99		1.40	1.58		1.00	1.00		1.00	1.00	
Incremental Delay, d2	3.0	2.3		9.5	66.6		145.7	9.1		0.6	24.6	
Delay (s)	56.9	51.9		34.1	111.7		172.5	41.4		25.1	59.9	
Level of Service	E	D		C	F		F	D		C	E	
Approach Delay (s)		52.2			107.4			68.9			57.8	
Approach LOS		D			F			E			E	

Intersection Summary			
HCM Average Control Delay	78.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4490		1583	4539		1583	3095		1583	3093	
Flt Permitted	0.11	1.00		0.10	1.00		0.14	1.00		0.17	1.00	
Satd. Flow (perm)	186	4490		174	4539		239	3095		275	3093	
Volume (vph)	67	1452	140	235	2220	38	155	924	165	47	754	138
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	71	1545	149	250	2362	40	165	983	176	50	802	147
RTOR Reduction (vph)	0	13	0	0	2	0	0	15	0	0	16	0
Lane Group Flow (vph)	71	1681	0	250	2400	0	165	1144	0	50	933	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	42.3	36.8		47.3	39.3		36.2	28.9		29.5	25.2	
Effective Green, g (s)	40.3	35.8		45.3	38.3		34.9	27.9		27.5	24.2	
Actuated g/C Ratio	0.45	0.40		0.50	0.43		0.39	0.31		0.31	0.27	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	153	1786		197	1932		197	959		132	832	
v/s Ratio Prot	0.02	0.37		c0.10	0.53		c0.07	c0.37		0.01	0.30	
v/s Ratio Perm	0.18			c0.54			0.26			0.10		
v/c Ratio	0.46	0.94		1.27	1.24		0.84	1.19		0.38	1.12	
Uniform Delay, d1	42.5	26.1		21.3	25.9		22.6	31.1		25.6	32.9	
Progression Factor	1.00	1.00		1.91	0.41		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.8	11.3		124.8	109.5		24.5	97.1		0.7	70.1	
Delay (s)	43.3	37.4		165.5	120.0		47.1	128.1		26.3	103.0	
Level of Service	D	D		F	F		D	F		C	F	
Approach Delay (s)		37.7			124.3			118.0			99.2	
Approach LOS		D			F			F			F	

Intersection Summary			
HCM Average Control Delay	96.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4513		1583	4538		1583	1667	1417	1583	3018	
Flt Permitted	0.09	1.00		0.12	1.00		0.12	1.00	1.00	0.22	1.00	
Satd. Flow (perm)	156	4513		195	4538		206	1667	1417	359	3018	
Volume (vph)	116	1206	69	69	2104	39	137	435	98	52	559	255
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	122	1269	73	73	2215	41	144	458	103	55	588	268
RTOR Reduction (vph)	0	6	0	0	2	0	0	0	70	0	52	0
Lane Group Flow (vph)	122	1336	0	73	2254	0	144	458	33	55	804	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	50.8	43.8		48.0	42.4		40.3	33.3	33.3	36.9	31.6	
Effective Green, g (s)	48.8	42.8		46.0	41.4		38.3	32.3	32.3	34.9	30.6	
Actuated g/C Ratio	0.49	0.43		0.46	0.41		0.38	0.32	0.32	0.35	0.31	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	162	1932		154	1879		162	538	458	178	924	
v/s Ratio Prot	c0.05	0.30		0.02	c0.50		c0.05	0.27		0.01	0.27	
v/s Ratio Perm	0.32			0.20			c0.29		0.02	0.09		
v/c Ratio	0.75	0.69		0.47	1.20		0.89	0.85	0.07	0.31	0.87	
Uniform Delay, d1	47.9	23.2		17.0	29.3		24.3	31.6	23.5	23.6	32.8	
Progression Factor	0.90	1.15		2.02	1.67		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.1	1.8		0.1	90.4		39.1	15.5	0.3	0.4	11.0	
Delay (s)	57.1	28.5		34.3	139.3		63.4	47.2	23.8	23.9	43.8	
Level of Service	E	C		C	F		E	D	C	C	D	
Approach Delay (s)		30.9			136.0			47.1			42.6	
Approach LOS		C			F			D			D	

Intersection Summary			
HCM Average Control Delay	80.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	101.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	0.99			0.97			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1583	3158		1583	3150			1615			1631	
Flt Permitted	0.12	1.00		0.24	1.00			0.96			0.93	
Satd. Flow (perm)	202	3158		394	3150			1555			1523	
Volume (vph)	29	921	17	94	1358	50	11	86	24	62	261	35
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	949	18	97	1400	52	11	89	25	64	269	36
RTOR Reduction (vph)	0	2	0	0	3	0	0	17	0	0	6	0
Lane Group Flow (vph)	30	965	0	97	1449	0	0	108	0	0	363	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	32.7	32.7		32.7	32.7			18.1			18.1	
Effective Green, g (s)	33.0	33.0		33.0	33.0			19.0			19.0	
Actuated g/C Ratio	0.55	0.55		0.55	0.55			0.32			0.32	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	111	1737		217	1733			492			482	
v/s Ratio Prot		0.31			c0.46							
v/s Ratio Perm	0.15			0.25				0.07			c0.24	
v/c Ratio	0.27	0.56		0.45	0.84			0.22			0.75	
Uniform Delay, d1	7.1	8.7		8.1	11.2			15.1			18.4	
Progression Factor	0.78	0.65		1.00	1.00			1.00			1.00	
Incremental Delay, d2	5.4	1.2		6.5	5.0			0.2			6.6	
Delay (s)	11.0	6.8		14.6	16.2			15.3			24.9	
Level of Service	B	A		B	B			B			C	
Approach Delay (s)		7.0			16.1			15.3			24.9	
Approach LOS		A			B			B			C	

Intersection Summary			
HCM Average Control Delay	14.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0			4.0		4.0	4.0	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frpb, ped/bikes					1.00			1.00		1.00	1.00	
Flpb, ped/bikes					1.00			1.00		1.00	1.00	
Frt					0.94			1.00		1.00	1.00	
Flt Protected					0.97			1.00		0.95	1.00	
Satd. Flow (prot)					1529			3145		1583	3167	
Flt Permitted					0.82			1.00		0.18	1.00	
Satd. Flow (perm)					1288			3145		304	3167	
Volume (vph)	0	0	0	149	0	103	0	1066	27	32	1876	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	159	0	110	0	1134	29	34	1996	0
RTOR Reduction (vph)	0	0	0	0	25	0	0	2	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	244	0	0	1161	0	34	1996	0
Confl. Peds. (#/hr)							10		32	32		10
Confl. Bikes (#/hr)			1						2			4
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)					29.5			62.0		62.0	62.0	
Effective Green, g (s)					30.0			62.0		62.0	62.0	
Actuated g/C Ratio					0.30			0.62		0.62	0.62	
Clearance Time (s)					4.5			4.0		4.0	4.0	
Vehicle Extension (s)					3.0			5.0		5.0	5.0	
Lane Grp Cap (vph)					386			1950		188	1964	
v/s Ratio Prot								0.37			c0.63	
v/s Ratio Perm					c0.19					0.11		
v/c Ratio					0.63			0.60		0.18	1.02	
Uniform Delay, d1					30.2			11.4		8.1	19.0	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					7.6			1.3		2.1	24.5	
Delay (s)					37.9			12.8		10.2	43.5	
Level of Service					D			B		B	D	
Approach Delay (s)		0.0			37.9			12.8			42.9	
Approach LOS		A			D			B			D	

Intersection Summary			
HCM Average Control Delay	32.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.93	1.00	1.00		1.00	1.00	0.95	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	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		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3072	3167	1324	3072	3144		1583	3167	1352	1583	4373	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	3072	3167	1324	3072	3144		162	3167	1352	164	4373	
Volume (vph)	84	556	76	280	1111	30	99	1033	295	67	1613	277
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	87	573	78	289	1145	31	102	1065	304	69	1663	286
RTOR Reduction (vph)	0	0	1	0	2	0	0	0	91	0	20	0
Lane Group Flow (vph)	87	573	77	289	1174	0	102	1065	213	69	1929	0
Confl. Peds. (#/hr)	73		41	41		73	67		26	26		67
Confl. Bikes (#/hr)			3			4			1			4
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2				8		8	4		
Actuated Green, G (s)	8.0	48.0	54.0	8.0	48.0		45.7	39.7	47.7	44.9	39.3	
Effective Green, g (s)	8.0	49.3	55.3	8.0	49.3		47.1	41.1	49.1	46.3	40.7	
Actuated g/C Ratio	0.07	0.41	0.46	0.07	0.41		0.39	0.34	0.41	0.39	0.34	
Clearance Time (s)	4.0	5.3	4.0	4.0	5.3		4.0	5.4	4.0	4.0	5.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	205	1301	654	205	1292		135	1085	598	129	1483	
v/s Ratio Prot	0.03	c0.18	0.01	c0.09	c0.37		c0.04	0.34	0.02	0.02	c0.44	
v/s Ratio Perm			0.05				0.26		0.13	0.18		
v/c Ratio	0.42	0.44	0.12	1.41	0.91		0.76	0.98	0.36	0.53	1.30	
Uniform Delay, d1	53.8	25.4	18.4	56.0	33.2		57.9	39.1	24.5	28.2	39.6	
Progression Factor	0.75	0.39	0.41	0.91	1.27		1.27	1.25	2.46	1.00	1.00	
Incremental Delay, d2	1.3	1.0	0.1	199.6	6.5		11.6	15.6	0.2	4.2	140.4	
Delay (s)	41.6	11.0	7.7	250.4	48.7		84.9	64.5	60.5	32.4	180.1	
Level of Service	D	B	A	F	D		F	E	E	C	F	
Approach Delay (s)		14.2			88.5			65.1			175.0	
Approach LOS		B			F			E			F	

Intersection Summary			
HCM Average Control Delay	103.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3103		1583	3167	1417	1583	3082	
Flt Permitted	0.08	1.00	1.00	0.31	1.00		0.14	1.00	1.00	0.27	1.00	
Satd. Flow (perm)	139	3167	1417	519	3103		233	3167	1417	447	3082	
Volume (vph)	64	646	142	217	1062	164	140	724	36	125	848	183
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	680	149	228	1118	173	147	762	38	132	893	193
RTOR Reduction (vph)	0	0	44	0	10	0	0	0	20	0	15	0
Lane Group Flow (vph)	67	680	105	228	1281	0	147	762	18	132	1071	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6		6	2			8		8	4		
Actuated Green, G (s)	54.6	54.6	54.6	54.6	54.6		54.0	54.0	54.0	54.0	54.0	
Effective Green, g (s)	56.5	56.5	56.5	56.5	56.5		55.5	55.5	55.5	55.5	55.5	
Actuated g/C Ratio	0.47	0.47	0.47	0.47	0.47		0.46	0.46	0.46	0.46	0.46	
Clearance Time (s)	5.9	5.9	5.9	5.9	5.9		5.5	5.5	5.5	5.5	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	65	1491	667	244	1461		108	1465	655	207	1425	
v/s Ratio Prot		0.21			0.41			0.24			0.35	
v/s Ratio Perm	c0.48		0.07	0.44			c0.63		0.01	0.30		
v/c Ratio	1.03	0.46	0.16	0.93	0.88		1.36	0.52	0.03	0.64	0.75	
Uniform Delay, d1	31.8	21.4	18.1	30.0	28.6		32.2	22.8	17.6	24.6	26.6	
Progression Factor	1.20	1.16	1.59	1.01	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	104.0	0.7	0.4	18.3	2.4		210.9	1.3	0.1	14.1	3.7	
Delay (s)	142.3	25.5	29.2	48.5	30.9		243.2	24.1	17.6	38.7	30.3	
Level of Service	F	C	C	D	C		F	C	B	D	C	
Approach Delay (s)		34.9			33.6			57.9			31.2	
Approach LOS		C			C			E			C	

Intersection Summary			
HCM Average Control Delay	38.2	HCM Level of Service	D
HCM Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3115		1583	3122		1583	1667	1417	1583	1599	
Flt Permitted	0.20	1.00		0.20	1.00		0.14	1.00	1.00	0.45	1.00	
Satd. Flow (perm)	327	3115		327	3122		236	1667	1417	745	1599	
Volume (vph)	51	700	86	95	1241	130	55	380	117	46	542	202
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)	55	761	93	103	1349	141	60	413	127	50	589	220
RTOR Reduction (vph)	0	16	0	0	13	0	0	0	26	0	2	0
Lane Group Flow (vph)	55	838	0	103	1477	0	60	413	101	50	807	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	20.1	20.1		20.1	20.1		31.0	31.0	31.0	31.0	31.0	
Effective Green, g (s)	20.4	20.4		20.4	20.4		31.6	31.6	31.6	31.6	31.6	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.53	0.53	0.53	0.53	0.53	
Clearance Time (s)	4.3	4.3		4.3	4.3		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	1059		111	1061		124	878	746	392	842	
v/s Ratio Prot		0.27			c0.47			0.25			c0.50	
v/s Ratio Perm	0.17			0.32			0.25		0.07	0.07		
v/c Ratio	0.50	0.79		0.93	1.39		0.48	0.47	0.14	0.13	0.96	
Uniform Delay, d1	15.7	17.9		19.1	19.8		9.0	8.9	7.2	7.2	13.6	
Progression Factor	1.00	1.00		0.93	0.98		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.9	6.1		45.5	179.5		12.9	1.8	0.4	0.7	22.4	
Delay (s)	30.7	23.9		63.2	198.8		21.9	10.7	7.6	7.9	36.0	
Level of Service	C	C		E	F		C	B	A	A	D	
Approach Delay (s)		24.3			190.1			11.2			34.4	
Approach LOS		C			F			B			C	

Intersection Summary			
HCM Average Control Delay	91.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	112.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00		0.95	1.00
Frt	1.00	0.98		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1583	4439		1583	4491			3139	1417		3148	1417
Flt Permitted	0.12	1.00		0.95	1.00			0.57	1.00		0.55	1.00
Satd. Flow (perm)	206	4439		1583	4491			1803	1417		1745	1417
Volume (vph)	279	1405	273	66	1387	130	177	832	147	91	666	72
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	294	1479	287	69	1460	137	186	876	155	96	701	76
RTOR Reduction (vph)	0	31	0	0	12	0	0	0	98	0	0	18
Lane Group Flow (vph)	294	1735	0	69	1585	0	0	1062	57	0	797	58
Turn Type	Perm			Prot			Perm		Perm	Perm		Perm
Protected Phases		6		5	2			8			4	
Permitted Phases	6						8		8	4		4
Actuated Green, G (s)	39.4	39.4		5.6	49.0			32.5	32.5		32.5	32.5
Effective Green, g (s)	39.4	39.4		5.6	49.0			33.0	33.0		33.0	33.0
Actuated g/C Ratio	0.44	0.44		0.06	0.54			0.37	0.37		0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	4.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	90	1943		98	2445			661	520		640	520
v/s Ratio Prot		0.39		0.04	c0.35							
v/s Ratio Perm	c1.43							c0.59	0.04		0.46	0.04
v/c Ratio	3.27	0.89		0.70	0.65			1.61	0.11		1.30dl	0.11
Uniform Delay, d1	25.3	23.4		41.4	14.4			28.5	18.8		28.5	18.8
Progression Factor	1.46	1.48		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	1039.9	4.9		20.5	1.3			280.0	0.4		123.2	0.4
Delay (s)	1076.9	39.6		61.8	15.8			308.5	19.2		151.7	19.2
Level of Service	F	D		E	B			F	B		F	B
Approach Delay (s)		187.7			17.7			271.7			140.2	
Approach LOS		F			B			F			F	

Intersection Summary			
HCM Average Control Delay	149.4	HCM Level of Service	F
HCM Volume to Capacity ratio	2.39		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0			4.0			4.0	4.0
Lane Util. Factor		0.95			0.95			0.95			0.95	1.00
Frpb, ped/bikes		0.99			0.96			0.99			1.00	0.75
Flpb, ped/bikes		1.00			1.00			1.00			1.00	1.00
Frt		0.99			0.98			0.99			1.00	0.85
Flt Protected		1.00			1.00			1.00			1.00	1.00
Satd. Flow (prot)		3112			2986			3105			3167	1066
Flt Permitted		1.00			1.00			1.00			1.00	1.00
Satd. Flow (perm)		3112			2986			3105			3167	1066
Volume (vph)	0	1128	77	0	1147	165	0	1438	96	0	1609	107
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1175	80	0	1195	172	0	1498	100	0	1676	111
RTOR Reduction (vph)	0	2	0	0	3	0	0	5	0	0	0	7
Lane Group Flow (vph)	0	1253	0	0	1364	0	0	1593	0	0	1676	104
Confl. Peds. (#/hr)	136		73	73		136	120		104	120		104
Confl. Bikes (#/hr)			5			7			19			15
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		4
Actuated Green, G (s)		40.2			40.2			40.2			40.2	40.2
Effective Green, g (s)		41.0			41.0			41.0			41.0	41.0
Actuated g/C Ratio		0.46			0.46			0.46			0.46	0.46
Clearance Time (s)		4.8			4.8			4.8			4.8	4.8
Vehicle Extension (s)		3.0			3.0			3.0			3.0	3.0
Lane Grp Cap (vph)		1418			1360			1415			1443	486
v/s Ratio Prot		0.40			c0.46			0.51			c0.53	
v/s Ratio Perm												0.10
v/c Ratio		0.88			1.00			1.13			1.16	0.21
Uniform Delay, d1		22.3			24.5			24.5			24.5	14.8
Progression Factor		1.00			1.00			0.73			1.00	1.00
Incremental Delay, d2		8.3			25.1			57.5			80.7	1.0
Delay (s)		30.7			49.6			75.4			105.2	15.8
Level of Service		C			D			E			F	B
Approach Delay (s)		30.7			49.6			75.4			99.7	
Approach LOS		C			D			E			F	

Intersection Summary			
HCM Average Control Delay	67.4	HCM Level of Service	E
HCM Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.97		1.00	0.96		1.00	0.96		1.00	0.90	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4390		1583	4281		1583	2992		1583	2741	
Flt Permitted	0.13	1.00		0.13	1.00		0.13	1.00		0.13	1.00	
Satd. Flow (perm)	216	4390		219	4281		222	2992		222	2741	
Volume (vph)	170	1134	84	125	1477	171	101	1481	167	98	987	366
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)	185	1233	91	136	1605	186	110	1610	182	107	1073	398
RTOR Reduction (vph)	0	9	0	0	15	0	0	9	0	0	43	0
Lane Group Flow (vph)	185	1315	0	136	1776	0	110	1783	0	107	1428	0
Confl. Peds. (#/hr)	663		371	371		663	453		618	618		453
Confl. Bikes (#/hr)			12			12			20			20
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	37.4	29.4		36.6	29.0		34.4	28.8		34.4	28.8	
Effective Green, g (s)	38.8	30.8		38.0	30.4		35.6	30.0		35.6	30.0	
Actuated g/C Ratio	0.43	0.34		0.42	0.34		0.40	0.33		0.40	0.33	
Clearance Time (s)	4.0	5.4		4.0	5.4		4.0	5.2		4.0	5.2	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	215	1502		208	1446		172	997		172	914	
v/s Ratio Prot	c0.08	0.30		0.06	c0.41		c0.04	c0.60		0.04	0.52	
v/s Ratio Perm	0.29			0.22			0.21			0.21		
v/c Ratio	0.86	0.88		0.65	1.23		0.64	1.79		0.62	1.56	
Uniform Delay, d1	21.7	27.8		18.7	29.8		22.7	30.0		22.6	30.0	
Progression Factor	1.81	0.90		0.74	0.79		0.80	0.94		1.63	1.46	
Incremental Delay, d2	14.4	3.5		5.5	107.4		4.4	356.9		0.6	253.7	
Delay (s)	53.7	28.7		19.3	130.9		22.5	385.2		37.6	297.5	
Level of Service	D	C		B	F		C	F		D	F	
Approach Delay (s)		31.7			123.1			364.2			279.9	
Approach LOS		C			F			F			F	

Intersection Summary			
HCM Average Control Delay	205.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	120.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.98		1.00	1.00		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3138		1583	3108		1583	3151		1583	3152	
Flt Permitted	0.28	1.00		0.35	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	459	3138		580	3108		163	3151		163	3152	
Volume (vph)	51	547	35	95	626	87	73	1344	45	106	1407	45
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	54	582	37	101	666	93	78	1430	48	113	1497	48
RTOR Reduction (vph)	0	5	0	0	8	0	0	3	0	0	3	0
Lane Group Flow (vph)	54	614	0	101	751	0	78	1475	0	113	1542	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	40.4	40.4		40.4	40.4		40.3	40.3		40.3	40.3	
Effective Green, g (s)	41.0	41.0		41.0	41.0		41.0	41.0		41.0	41.0	
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.46	0.46		0.46	0.46	
Clearance Time (s)	4.6	4.6		4.6	4.6		4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	209	1430		264	1416		74	1435		74	1436	
v/s Ratio Prot		0.20			c0.24			0.47			0.49	
v/s Ratio Perm	0.12			0.17			0.48			c0.69		
v/c Ratio	0.26	0.43		0.38	0.53		1.05	1.03		1.53	1.07	
Uniform Delay, d1	15.1	16.6		16.2	17.6		24.5	24.5		24.5	24.5	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.49	0.51	
Incremental Delay, d2	3.0	0.9		4.2	1.4		120.3	31.2		243.3	34.9	
Delay (s)	18.1	17.5		20.3	19.0		144.8	55.7		255.3	47.4	
Level of Service	B	B		C	B		F	E		F	D	
Approach Delay (s)		17.6			19.2			60.2			61.6	
Approach LOS		B			B			E			E	

Intersection Summary			
HCM Average Control Delay	47.2	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	4528		1583	4490		1583	3167	1417	1583	3167	1417
Flt Permitted	0.11	1.00		0.12	1.00		0.12	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)	190	4528		194	4490		196	3167	1417	195	3167	1417
Volume (vph)	91	1917	65	134	1479	142	122	1197	85	182	1213	151
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	92	1936	66	135	1494	143	123	1209	86	184	1225	153
RTOR Reduction (vph)	0	3	0	0	11	0	0	0	18	0	0	35
Lane Group Flow (vph)	92	1999	0	135	1626	0	123	1209	68	184	1225	118
Turn Type	pm+pt			pm+pt			pm+pt		pm+ov	pm+pt		pm+ov
Protected Phases	1	6		5	2		3	8	5	7	4	1
Permitted Phases	6			2			8		8	4		4
Actuated Green, G (s)	41.6	34.0		40.4	33.4		40.8	33.0	40.0	41.2	33.2	40.8
Effective Green, g (s)	42.6	35.0		41.4	34.4		41.8	34.0	41.0	42.2	34.2	41.8
Actuated g/C Ratio	0.43	0.35		0.41	0.34		0.42	0.34	0.41	0.42	0.34	0.42
Clearance Time (s)	4.0	5.0		4.0	5.0		4.0	5.0	4.0	4.0	5.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	187	1585		178	1545		190	1077	638	193	1083	649
v/s Ratio Prot	0.04	c0.44		c0.05	0.36		0.05	0.38	0.01	c0.08	c0.39	0.01
v/s Ratio Perm	0.17			0.26			0.22		0.04	0.33		0.07
v/c Ratio	0.49	1.26		0.76	1.05		0.65	1.12	0.11	0.95	1.13	0.18
Uniform Delay, d1	22.2	32.5		47.3	32.8		23.8	33.0	18.2	24.4	32.9	18.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	122.7		16.8	38.0		7.4	67.6	0.1	51.1	70.9	0.1
Delay (s)	24.2	155.2		64.1	70.8		31.2	100.6	18.3	75.5	103.8	18.5
Level of Service	C	F		E	E		C	F	B	E	F	B
Approach Delay (s)		149.5			70.3			89.6			92.1	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	103.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	0.99		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4510		1583	4507		1583	3138		1583	3126	
Flt Permitted	0.09	1.00		0.09	1.00		0.11	1.00		0.11	1.00	
Satd. Flow (perm)	145	4510		145	4507		185	3138		185	3126	
Volume (vph)	233	1855	115	112	1643	110	76	1118	73	80	1436	135
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	238	1893	117	114	1677	112	78	1141	74	82	1465	138
RTOR Reduction (vph)	0	3	0	0	8	0	0	4	0	0	7	0
Lane Group Flow (vph)	238	2007	0	114	1781	0	78	1211	0	82	1596	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	45.5	45.5		45.5	45.5		35.5	35.5		35.5	35.5	
Effective Green, g (s)	46.0	46.0		46.0	46.0		36.0	36.0		36.0	36.0	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.40	0.40		0.40	0.40	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	2305		74	2304		74	1255		74	1250	
v/s Ratio Prot		0.44			0.40			0.39			c0.51	
v/s Ratio Perm	c1.64			0.79			0.42			0.44		
v/c Ratio	3.22	0.87		1.54	0.77		1.05	0.96		1.11	1.28	
Uniform Delay, d1	22.0	19.4		22.0	17.8		27.0	26.4		27.0	27.0	
Progression Factor	1.18	1.25		1.18	1.24		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1023.9	3.8		249.3	0.2		120.3	18.3		137.1	130.8	
Delay (s)	1050.0	28.1		275.3	22.2		147.3	44.6		164.1	157.8	
Level of Service	F	C		F	C		F	D		F	F	
Approach Delay (s)		136.3			37.4			50.8			158.1	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM Average Control Delay	99.6	HCM Level of Service	F
HCM Volume to Capacity ratio	2.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	
Frt	1.00	1.00		1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.98	
Satd. Flow (prot)	1583	4540		1583	4536			1643	1417		1510	
Flt Permitted	0.10	1.00		0.06	1.00			0.92	1.00		0.89	
Satd. Flow (perm)	162	4540		99	4536			1525	1417		1358	
Volume (vph)	39	2015	31	77	1667	34	27	65	82	26	8	50
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)	42	2190	34	84	1812	37	29	71	89	28	9	54
RTOR Reduction (vph)	0	1	0	0	1	0	0	0	5	0	13	0
Lane Group Flow (vph)	42	2223	0	84	1848	0	0	100	84	0	78	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	68.7	68.7		68.7	68.7			12.8	12.8		12.8	
Effective Green, g (s)	68.7	68.7		68.7	68.7			13.3	13.3		13.3	
Actuated g/C Ratio	0.76	0.76		0.76	0.76			0.15	0.15		0.15	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.5	4.5		4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	124	3466		76	3462			225	209		201	
v/s Ratio Prot		0.49			0.41							
v/s Ratio Perm	0.26			c0.85				c0.07	0.06		0.06	
v/c Ratio	0.34	0.64		1.11	0.53			0.44	0.40		0.39	
Uniform Delay, d1	3.4	4.9		10.6	4.3			35.0	34.7		34.7	
Progression Factor	1.00	1.00		1.36	0.86			1.00	1.00		1.00	
Incremental Delay, d2	7.3	0.9		108.7	0.3			1.4	1.3		1.2	
Delay (s)	10.7	5.9		123.2	4.0			36.4	36.0		35.9	
Level of Service	B	A		F	A			D	D		D	
Approach Delay (s)		6.0			9.2			36.2			35.9	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	9.2	HCM Level of Service	A
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	0.91		1.00	0.91	0.97	0.91
Frpb, ped/bikes	0.96		1.00	1.00	0.98	0.96
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00
Frt	0.97		1.00	1.00	0.96	0.85
Flt Protected	1.00		0.95	1.00	0.97	1.00
Satd. Flow (prot)	4210		1583	4550	2938	1241
Flt Permitted	1.00		0.09	1.00	0.97	1.00
Satd. Flow (perm)	4210		150	4550	2938	1241
Volume (vph)	1587	456	497	1342	570	626
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1619	465	507	1369	582	639
RTOR Reduction (vph)	57	0	0	0	52	1
Lane Group Flow (vph)	2027	0	507	1369	769	399
Confl. Peds. (#/hr)		182	182			20
Confl. Bikes (#/hr)		4				5
Turn Type			pm+pt			pm+ov
Protected Phases	6		5	2	4	5
Permitted Phases			2			4
Actuated Green, G (s)	39.3		51.3	51.3	29.0	37.0
Effective Green, g (s)	40.3		52.3	52.3	29.7	37.7
Actuated g/C Ratio	0.45		0.58	0.58	0.33	0.42
Clearance Time (s)	5.0		4.0	5.0	4.7	4.0
Vehicle Extension (s)	3.0		2.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1885		215	2644	970	575
v/s Ratio Prot	0.48		c0.21	0.30	c0.26	0.06
v/s Ratio Perm			c1.16			0.26
v/c Ratio	1.08		2.36	0.52	0.79	0.69
Uniform Delay, d1	24.9		25.3	11.3	27.4	21.4
Progression Factor	1.00		1.00	1.00	0.61	0.29
Incremental Delay, d2	44.2		625.4	0.7	3.1	2.2
Delay (s)	69.1		650.7	12.0	19.8	8.5
Level of Service	E		F	B	B	A
Approach Delay (s)	69.1			184.6	16.1	
Approach LOS	E			F	B	

Intersection Summary			
HCM Average Control Delay	98.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.76		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	114.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.96		1.00	1.00	0.85	1.00	0.98		1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3041		1583	1667	1417	1583	3111		1583	3163	
Flt Permitted	0.51	1.00		0.38	1.00	1.00	0.26	1.00		0.13	1.00	
Satd. Flow (perm)	852	3041		630	1667	1417	434	3111		221	3163	
Volume (vph)	20	336	121	183	216	59	163	1168	156	20	895	7
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	20	343	123	187	220	60	166	1192	159	20	913	7
RTOR Reduction (vph)	0	0	0	0	0	42	0	12	0	0	1	0
Lane Group Flow (vph)	20	466	0	187	220	18	166	1339	0	20	919	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4		4	6			2		
Actuated Green, G (s)	26.4	26.4		26.4	26.4	26.4	54.3	54.3		54.3	54.3	
Effective Green, g (s)	27.0	27.0		27.0	27.0	27.0	55.0	55.0		55.0	55.0	
Actuated g/C Ratio	0.30	0.30		0.30	0.30	0.30	0.61	0.61		0.61	0.61	
Clearance Time (s)	4.6	4.6		4.6	4.6	4.6	4.7	4.7		4.7	4.7	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	256	912		189	500	425	265	1901		135	1933	
v/s Ratio Prot		0.15			0.13			c0.43			0.29	
v/s Ratio Perm	0.02			c0.30		0.01	0.38			0.09		
v/c Ratio	0.08	0.51		0.99	0.44	0.04	0.63	0.70		0.15	0.48	
Uniform Delay, d1	22.6	26.0		31.4	25.4	22.3	11.0	12.0		7.5	9.6	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.57	1.69		0.30	0.37	
Incremental Delay, d2	0.6	2.0		62.8	2.8	0.2	1.0	0.2		0.2	0.1	
Delay (s)	23.2	28.1		94.1	28.2	22.5	18.3	20.4		2.5	3.6	
Level of Service	C	C		F	C	C	B	C		A	A	
Approach Delay (s)		27.9			53.9			20.2			3.6	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM Average Control Delay	21.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	89.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4518		1583	4515		1583	3160		1583	3167	1417
Flt Permitted	0.14	1.00		0.95	1.00		0.13	1.00		0.13	1.00	1.00
Satd. Flow (perm)	241	4518		1583	4515		212	3160		216	3167	1417
Volume (vph)	66	2136	106	92	1610	88	98	1447	21	85	1167	96
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	69	2248	112	97	1695	93	103	1523	22	89	1228	101
RTOR Reduction (vph)	0	6	0	0	7	0	0	1	0	0	0	64
Lane Group Flow (vph)	69	2354	0	97	1781	0	103	1544	0	89	1228	37
Turn Type	pm+pt			Prot			pm+pt			pm+pt		Perm
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2						4			8		8
Actuated Green, G (s)	32.1	26.8		8.5	29.1		38.0	30.5		36.6	29.8	29.8
Effective Green, g (s)	33.4	27.7		8.0	30.0		39.0	31.5		37.6	30.8	30.8
Actuated g/C Ratio	0.37	0.31		0.09	0.33		0.43	0.35		0.42	0.34	0.34
Clearance Time (s)	4.4	4.9		3.5	4.9		4.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	174	1391		141	1505		206	1106		194	1084	485
v/s Ratio Prot	0.03	c0.52		c0.06	0.39		c0.04	c0.49		0.03	0.39	
v/s Ratio Perm	0.12						0.18			0.16		0.03
v/c Ratio	0.40	1.69		0.69	1.18		0.50	1.40		0.46	1.13	0.08
Uniform Delay, d1	22.9	31.1		39.8	30.0		20.5	29.2		21.4	29.6	20.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.99	0.82	0.64
Incremental Delay, d2	1.5	314.8		13.1	89.7		1.9	183.7		1.5	70.5	0.3
Delay (s)	24.4	346.0		52.9	119.7		22.4	212.9		22.7	94.7	13.1
Level of Service	C	F		D	F		C	F		C	F	B
Approach Delay (s)		336.8			116.3			201.0			84.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	201.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	1.00			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1583	4514		1583	4534			1642	1417		1645	1417
Flt Permitted	0.09	1.00		0.09	1.00			0.99	1.00		0.99	1.00
Satd. Flow (perm)	147	4514		147	4534			1642	1417		1645	1417
Volume (vph)	67	1872	104	6	1781	44	80	187	42	63	172	29
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	74	2057	114	7	1957	48	88	205	46	69	189	32
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	36	0	0	28
Lane Group Flow (vph)	74	2171	0	7	2002	0	0	293	10	0	258	4
Turn Type	Perm			Perm			Split		Perm	Split		Perm
Protected Phases		6			2		4	4		3	3	
Permitted Phases	6			2					4			3
Actuated Green, G (s)	43.6	43.6		43.6	43.6			19.0	19.0		10.5	10.5
Effective Green, g (s)	45.5	45.5		45.5	45.5			20.5	20.5		12.0	12.0
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.23	0.23		0.13	0.13
Clearance Time (s)	5.9	5.9		5.9	5.9			5.5	5.5		5.5	5.5
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	74	2282		74	2292			374	323		219	189
v/s Ratio Prot		0.48			0.44			c0.18			c0.16	
v/s Ratio Perm	c0.51			0.05					0.01			0.00
v/c Ratio	1.00	0.95		0.09	0.87			0.78	0.03		1.18	0.02
Uniform Delay, d1	22.2	21.2		11.6	19.7			32.7	27.0		39.0	33.9
Progression Factor	0.74	0.74		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	98.7	9.6		2.5	5.0			10.3	0.0		117.3	0.0
Delay (s)	115.2	25.2		14.1	24.7			42.9	27.1		156.3	34.0
Level of Service	F	C		B	C			D	C		F	C
Approach Delay (s)		28.1			24.7			40.8			142.8	
Approach LOS		C			C			D			F	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.99			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	1.00
Satd. Flow (prot)	1583	4541		1583	4537			1656			1646	1417
Flt Permitted	0.15	1.00		0.09	1.00			1.00			0.99	1.00
Satd. Flow (perm)	246	4541		153	4537			1656			1646	1417
Volume (vph)	188	1646	22	22	1324	25	5	224	10	11	32	217
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	196	1715	23	23	1379	26	5	233	10	11	33	226
RTOR Reduction (vph)	0	1	0	0	2	0	0	2	0	0	0	189
Lane Group Flow (vph)	196	1737	0	23	1403	0	0	246	0	0	44	37
Turn Type	Perm			Perm			Split			Split		Perm
Protected Phases		6			2		3	3		4	4	
Permitted Phases	6			2								4
Actuated Green, G (s)	53.9	53.9		53.9	53.9			9.6			10.6	10.6
Effective Green, g (s)	55.4	55.4		55.4	55.4			11.0			11.6	11.6
Actuated g/C Ratio	0.62	0.62		0.62	0.62			0.12			0.13	0.13
Clearance Time (s)	5.5	5.5		5.5	5.5			5.4			5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Lane Grp Cap (vph)	151	2795		94	2793			202			212	183
v/s Ratio Prot		0.38			0.31			c0.15			c0.03	
v/s Ratio Perm	c0.80			0.15								0.03
v/c Ratio	1.30	0.62		0.24	0.50			1.22			0.21	0.20
Uniform Delay, d1	17.3	10.8		7.8	9.6			39.5			35.1	35.1
Progression Factor	1.00	1.00		1.46	1.56			1.00			1.00	1.00
Incremental Delay, d2	174.1	1.1		3.0	0.3			134.8			0.5	0.5
Delay (s)	191.4	11.8		14.4	15.4			174.3			35.6	35.6
Level of Service	F	B		B	B			F			D	D
Approach Delay (s)		30.0			15.4			174.3			35.6	
Approach LOS		C			B			F			D	

Intersection Summary			
HCM Average Control Delay	34.2	HCM Level of Service	C
HCM Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.8%	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												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor		0.91		1.00	0.91			1.00			1.00	
Frpb, ped/bikes		1.00		1.00	1.00			0.99			0.98	
Flpb, ped/bikes		1.00		0.99	1.00			1.00			1.00	
Frt		1.00		1.00	1.00			0.97			0.93	
Flt Protected		1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)		4248		1479	4267			1486			1420	
Flt Permitted		1.00		0.08	1.00			0.96			0.95	
Satd. Flow (perm)		4248		119	4267			1435			1356	
Volume (vph)	0	1784	43	36	1515	22	18	83	33	10	16	27
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1960	47	40	1665	24	20	91	36	11	18	30
RTOR Reduction (vph)	0	2	0	0	1	0	0	6	0	0	15	0
Lane Group Flow (vph)	0	2005	0	40	1688	0	0	141	0	0	44	0
Confl. Peds. (#/hr)	34		71	71		34	15		9	9		15
Confl. Bikes (#/hr)			8			12			4			2
Turn Type				Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases				2			8			4		
Actuated Green, G (s)		66.9		66.9	66.9			15.6			15.6	
Effective Green, g (s)		66.4		66.4	66.4			15.6			15.6	
Actuated g/C Ratio		0.74		0.74	0.74			0.17			0.17	
Clearance Time (s)		3.5		3.5	3.5			4.0			4.0	
Vehicle Extension (s)		3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)		3134		88	3148			249			235	
v/s Ratio Prot		c0.47			0.40							
v/s Ratio Perm				0.34				c0.10			0.03	
v/c Ratio		0.64		0.45	0.54			0.57			0.19	
Uniform Delay, d1		5.9		4.7	5.1			34.1			31.8	
Progression Factor		0.83		1.00	1.00			1.00			1.00	
Incremental Delay, d2		0.1		16.0	0.7			2.9			0.4	
Delay (s)		5.0		20.7	5.8			37.1			32.2	
Level of Service		A		C	A			D			C	
Approach Delay (s)		5.0			6.1			37.1			32.2	
Approach LOS		A			A			D			C	

Intersection Summary			
HCM Average Control Delay	7.1	HCM Level of Service	A
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.7%	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												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2952		1490	4243		1490	4218	
Flt Permitted	0.13	1.00	1.00	0.13	1.00		0.14	1.00		0.14	1.00	
Satd. Flow (perm)	202	2980	1333	202	2952		216	4243		216	4218	
Volume (vph)	111	1404	102	149	1221	81	123	1887	123	190	1846	206
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	114	1447	105	154	1259	84	127	1945	127	196	1903	212
RTOR Reduction (vph)	0	0	25	0	5	0	0	8	0	0	15	0
Lane Group Flow (vph)	114	1447	80	154	1338	0	127	2064	0	196	2100	0
Turn Type	pm+pt		pm+ov	pm+pt			pm+pt			pm+pt		
Protected Phases	3	8	1	7	4		1	6		5	2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	36.9	30.0	37.0	37.1	30.1		35.0	28.0		35.0	28.0	
Effective Green, g (s)	37.9	31.0	38.0	38.1	31.1		36.0	29.0		36.0	29.0	
Actuated g/C Ratio	0.42	0.34	0.42	0.42	0.35		0.40	0.32		0.40	0.32	
Clearance Time (s)	4.0	5.0	4.0	4.0	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	4.8	3.0	3.0	4.6		3.0	4.3		3.0	5.5	
Lane Grp Cap (vph)	184	1026	622	186	1020		185	1367		185	1359	
v/s Ratio Prot	0.05	c0.49	0.01	c0.06	0.45		0.05	0.49		c0.08	c0.50	
v/s Ratio Perm	0.21		0.05	0.29			0.22			0.34		
v/c Ratio	0.62	1.41	0.13	0.83	1.31		0.69	1.51		1.06	1.55	
Uniform Delay, d1	21.7	29.5	15.9	42.7	29.4		41.8	30.5		43.7	30.5	
Progression Factor	0.83	0.72	0.55	1.00	1.00		1.62	1.43		1.69	1.42	
Incremental Delay, d2	0.6	185.2	0.0	25.1	147.3		1.0	229.8		62.5	247.2	
Delay (s)	18.5	206.5	8.7	67.7	176.7		68.7	273.3		136.3	290.5	
Level of Service	B	F	A	E	F		E	F		F	F	
Approach Delay (s)		181.1			165.5			261.5			277.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	230.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	128.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	2980	1333	1490	2926		1490	4215		1490	4256	
Flt Permitted	0.17	1.00	1.00	0.27	1.00		0.10	1.00		0.10	1.00	
Satd. Flow (perm)	271	2980	1333	423	2926		161	4215		161	4256	
Volume (vph)	35	645	153	161	979	136	148	1850	217	99	1794	78
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	35	652	155	163	989	137	149	1869	219	100	1812	79
RTOR Reduction (vph)	0	0	24	0	2	0	0	16	0	0	5	0
Lane Group Flow (vph)	35	652	131	163	1124	0	149	2072	0	100	1886	0
Turn Type	Perm		Perm	pm+pt			Perm			Perm		
Protected Phases		8		7	4			6			2	
Permitted Phases	8		8	4			6			2		
Actuated Green, G (s)	34.0	34.0	34.0	42.0	42.0		38.0	38.0		38.0	38.0	
Effective Green, g (s)	35.0	35.0	35.0	43.0	43.0		39.0	39.0		39.0	39.0	
Actuated g/C Ratio	0.39	0.39	0.39	0.48	0.48		0.43	0.43		0.43	0.43	
Clearance Time (s)	5.0	5.0	5.0	3.0	5.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	105	1159	518	250	1398		70	1827		70	1844	
v/s Ratio Prot		0.22		0.03	c0.38			0.49			0.44	
v/s Ratio Perm	0.13		0.10	0.28			c0.93			0.62		
v/c Ratio	0.33	0.56	0.25	0.65	0.80		2.13	1.13		1.43	1.02	
Uniform Delay, d1	19.3	21.5	18.6	18.1	19.9		25.5	25.5		25.5	25.5	
Progression Factor	1.39	1.42	1.63	1.00	1.00		1.00	1.00		0.38	0.37	
Incremental Delay, d2	0.8	0.2	0.1	6.0	5.0		552.4	67.8		200.3	13.3	
Delay (s)	27.7	30.7	30.5	24.1	24.9		577.9	93.3		210.0	22.7	
Level of Service	C	C	C	C	C		F	F		F	C	
Approach Delay (s)		30.5			24.8			125.6			32.1	
Approach LOS		C			C			F			C	

Intersection Summary			
HCM Average Control Delay	63.3	HCM Level of Service	E
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		0.95			0.95		1.00	0.91		1.00	0.91	
Frt		0.99			0.98		1.00	1.00		1.00	0.99	
Flt Protected		1.00			1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		2952			2927		1490	4279		1490	4256	
Flt Permitted		1.00			1.00		0.18	1.00		0.18	1.00	
Satd. Flow (perm)		2952			2927		284	4279		284	4256	
Volume (vph)	0	1159	77	0	934	125	71	2099	10	77	1918	81
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1183	79	0	953	128	72	2142	10	79	1957	83
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	0	0	7	0
Lane Group Flow (vph)	0	1262	0	0	1081	0	72	2151	0	79	2033	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		29.0			29.0		21.4	21.4		21.4	21.4	
Effective Green, g (s)		29.9			29.9		22.1	22.1		22.1	22.1	
Actuated g/C Ratio		0.50			0.50		0.37	0.37		0.37	0.37	
Clearance Time (s)		4.9			4.9		4.7	4.7		4.7	4.7	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		1471			1459		105	1576		105	1568	
v/s Ratio Prot		c0.43			0.37			c0.50			0.48	
v/s Ratio Perm							0.25			0.28		
v/c Ratio		0.86			0.74		0.69	1.37		0.75	1.30	
Uniform Delay, d1		13.2			12.0		16.0	18.9		16.6	18.9	
Progression Factor		1.00			1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		5.2			2.1		30.7	168.5		38.7	138.3	
Delay (s)		18.4			14.0		46.7	187.4		55.2	157.3	
Level of Service		B			B		D	F		E	F	
Approach Delay (s)		18.4			14.0			182.8			153.5	
Approach LOS		B			B			F			F	

Intersection Summary			
HCM Average Control Delay	115.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.98		1.00	0.98		1.00	1.00		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1488	4130		1490	4127		1490	4256		1490	4163	
Flt Permitted	0.14	1.00		0.13	1.00		0.13	1.00		0.95	1.00	
Satd. Flow (perm)	216	4130		209	4127		202	4256		1490	4163	
Volume (vph)	192	1576	188	240	1172	149	124	1763	43	162	1623	141
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	196	1608	192	245	1196	152	127	1799	44	165	1656	144
RTOR Reduction (vph)	0	16	0	0	18	0	0	3	0	0	11	0
Lane Group Flow (vph)	196	1784	0	245	1330	0	127	1840	0	165	1789	0
Confl. Peds. (#/hr)	144		153	153		144	164		88	88		164
Confl. Bikes (#/hr)			13			8			6			17
Turn Type	pm+pt			pm+pt			pm+pt			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					
Actuated Green, G (s)	35.5	29.0		37.5	30.0		37.5	31.0		7.5	32.0	
Effective Green, g (s)	35.0	29.0		37.0	30.0		37.0	31.0		7.0	32.0	
Actuated g/C Ratio	0.39	0.32		0.41	0.33		0.41	0.34		0.08	0.36	
Clearance Time (s)	3.5	4.0		3.5	4.0		3.5	4.0		3.5	4.0	
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		2.0	4.0	
Lane Grp Cap (vph)	169	1331		186	1376		169	1466		116	1480	
v/s Ratio Prot	0.08	0.43		c0.10	0.32		0.05	c0.43		c0.11	0.43	
v/s Ratio Perm	0.37			c0.44			0.26					
v/c Ratio	1.16	1.34		1.32	0.97		0.75	1.26		1.42	1.21	
Uniform Delay, d1	23.9	30.5		43.7	29.5		21.8	29.5		41.5	29.0	
Progression Factor	1.41	0.73		1.29	0.81		1.99	1.10		1.00	1.00	
Incremental Delay, d2	105.7	156.4		171.4	15.8		8.6	117.7		232.8	100.5	
Delay (s)	139.4	178.8		227.7	39.7		52.0	150.1		274.3	129.5	
Level of Service	F	F		F	D		D	F		F	F	
Approach Delay (s)		174.9			68.6			143.7			141.7	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	135.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.99			1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes		1.00			1.00		1.00	1.00		1.00	1.00	
Frt		0.96			0.99		1.00	1.00		1.00	1.00	
Flt Protected		0.99			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1491			1523		1490	4262		1490	4235	
Flt Permitted		0.94			0.75		0.09	1.00		0.09	1.00	
Satd. Flow (perm)		1405			1161		137	4262		137	4235	
Volume (vph)	61	315	138	58	132	20	58	1831	36	19	1974	68
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	62	321	141	59	135	20	59	1868	37	19	2014	69
RTOR Reduction (vph)	0	1	0	0	2	0	0	2	0	0	4	0
Lane Group Flow (vph)	0	523	0	0	212	0	59	1903	0	19	2079	0
Confl. Peds. (#/hr)	10		12	12		10	57		25	25		57
Confl. Bikes (#/hr)			2						1			15
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		8			4			6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)		35.1			35.1		45.4	45.4		45.4	45.4	
Effective Green, g (s)		36.1			36.1		45.9	45.9		45.9	45.9	
Actuated g/C Ratio		0.40			0.40		0.51	0.51		0.51	0.51	
Clearance Time (s)		5.0			5.0		4.5	4.5		4.5	4.5	
Vehicle Extension (s)		3.0			3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		564			466		70	2174		70	2160	
v/s Ratio Prot								0.45			c0.49	
v/s Ratio Perm		c0.37			0.18		0.43			0.14		
v/c Ratio		0.93			0.45		0.84	0.88		0.27	0.96	
Uniform Delay, d1		25.7			19.7		19.0	19.5		12.5	21.2	
Progression Factor		1.00			1.00		1.00	1.00		0.42	0.45	
Incremental Delay, d2		21.4			0.7		69.5	5.3		0.9	1.7	
Delay (s)		47.1			20.4		88.5	24.8		6.2	11.2	
Level of Service		D			C		F	C		A	B	
Approach Delay (s)		47.1			20.4			26.7			11.2	
Approach LOS		D			C			C			B	

Intersection Summary			
HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1490	4259		1490	4219		1490	4274		1490	4220	
Flt Permitted	0.15	1.00		0.11	1.00		0.95	1.00		0.11	1.00	
Satd. Flow (perm)	234	4259		167	4219		1490	4274		172	4220	
Volume (vph)	244	1868	71	65	1193	131	56	1862	25	163	1978	211
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	252	1926	73	67	1230	135	58	1920	26	168	2039	218
RTOR Reduction (vph)	0	4	0	0	13	0	0	1	0	0	12	0
Lane Group Flow (vph)	252	1995	0	67	1352	0	58	1945	0	168	2245	0
Turn Type	Perm			pm+pt			Prot			pm+pt		
Protected Phases		8		7	4		5			1	6	
Permitted Phases	8			4				2		6		
Actuated Green, G (s)	32.2	32.2		42.8	42.8		7.4	33.4		44.0	35.0	
Effective Green, g (s)	33.6	33.6		44.2	44.2		7.4	34.8		45.4	36.4	
Actuated g/C Ratio	0.34	0.34		0.44	0.44		0.07	0.35		0.45	0.36	
Clearance Time (s)	5.4	5.4		4.0	5.4		4.0	5.4		4.0	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		4.0	3.0	
Lane Grp Cap (vph)	79	1431		161	1865		110	1487		197	1536	
v/s Ratio Prot		0.47		0.03	c0.32		0.04			c0.08	c0.53	
v/s Ratio Perm	c1.08			0.16				0.46		0.31		
v/c Ratio	3.19	1.39		0.42	0.72		0.53	1.31		0.85	1.46	
Uniform Delay, d1	33.2	33.2		23.4	22.9		44.6	32.6		46.7	31.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	1017.6	181.7		1.7	2.5		4.5	143.5		29.1	211.3	
Delay (s)	1050.8	214.9		25.1	25.4		49.1	176.1		75.7	243.1	
Level of Service	F	F		C	C		D	F		E	F	
Approach Delay (s)		308.5			25.4			172.4			231.5	
Approach LOS		F			C			F			F	

Intersection Summary			
HCM Average Control Delay	201.9	HCM Level of Service	F
HCM Volume to Capacity ratio	2.08		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	117.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600	1600
Total Lost time (s)	4.0	4.0			4.0			4.0	4.0		4.0	
Lane Util. Factor	1.00	0.91			0.91			1.00	1.00		1.00	
Frpb, ped/bikes	1.00	0.97			0.99			1.00	0.96		0.99	
Flpb, ped/bikes	0.98	1.00			1.00			0.99	1.00		1.00	
Frt	1.00	0.99			0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00			1.00			0.99	1.00		0.99	
Satd. Flow (prot)	1460	4101			4201			1526	1280		1503	
Flt Permitted	0.13	1.00			1.00			0.86	1.00		0.69	
Satd. Flow (perm)	200	4101			4201			1331	1280		1048	
Volume (vph)	260	1708	185	0	1325	65	66	181	189	44	87	15
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	289	1898	206	0	1472	72	73	201	210	49	97	17
RTOR Reduction (vph)	0	12	0	0	5	0	0	0	6	0	5	0
Lane Group Flow (vph)	289	2092	0	0	1539	0	0	274	204	0	158	0
Confl. Peds. (#/hr)	95		113	113		95	73		22	22		73
Confl. Bikes (#/hr)			13			15			3			3
Turn Type	Perm						Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6						8		8	4		
Actuated Green, G (s)	60.8	60.8			60.8			21.7	21.7		21.7	
Effective Green, g (s)	60.3	60.3			60.3			21.7	21.7		21.7	
Actuated g/C Ratio	0.67	0.67			0.67			0.24	0.24		0.24	
Clearance Time (s)	3.5	3.5			3.5			4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0			3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	134	2748			2815			321	309		253	
v/s Ratio Prot		0.51			0.37							
v/s Ratio Perm	c1.45							c0.21	0.16		0.15	
v/c Ratio	2.16	0.76			0.55			0.85	0.66		0.62	
Uniform Delay, d1	14.9	10.0			7.7			32.6	30.8		30.5	
Progression Factor	1.39	1.30			0.24			1.00	1.00		1.00	
Incremental Delay, d2	538.7	1.5			0.3			19.2	5.0		4.7	
Delay (s)	559.3	14.5			2.1			51.9	35.9		35.2	
Level of Service	F	B			A			D	D		D	
Approach Delay (s)		80.3			2.1			44.9			35.2	
Approach LOS		F			A			D			D	

Intersection Summary			
HCM Average Control Delay	48.6	HCM Level of Service	D
HCM Volume to Capacity ratio	1.81		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			1.00	
Frt	1.00	1.00		1.00	1.00	0.85		0.95			0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.99	
Satd. Flow (prot)	1583	4536		1583	4300	1218		1575			1578	
Flt Permitted	0.12	1.00		0.08	1.00	1.00		0.91			0.79	
Satd. Flow (perm)	197	4536		128	4300	1218		1435			1253	
Volume (vph)	107	1708	35	72	1312	74	36	178	126	77	197	134
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	118	1877	38	79	1442	81	40	196	138	85	216	147
RTOR Reduction (vph)	0	2	0	0	0	34	0	9	0	0	19	0
Lane Group Flow (vph)	118	1913	0	79	1442	47	0	365	0	0	429	0
Turn Type	Perm			Perm		Perm	Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	52.0	52.0		52.0	52.0	52.0		30.0			30.0	
Effective Green, g (s)	52.0	52.0		52.0	52.0	52.0		30.0			30.0	
Actuated g/C Ratio	0.58	0.58		0.58	0.58	0.58		0.33			0.33	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	
Lane Grp Cap (vph)	114	2621		74	2484	704		478			418	
v/s Ratio Prot		0.42			0.34							
v/s Ratio Perm	0.60			c0.62		0.04		0.25			c0.34	
v/c Ratio	1.04	0.73		1.07	0.58	0.07		0.76			1.03	
Uniform Delay, d1	19.0	13.9		19.0	12.1	8.3		26.8			30.0	
Progression Factor	1.91	2.07		1.03	0.88	0.64		1.00			1.00	
Incremental Delay, d2	82.5	1.4		115.8	0.8	0.2		7.1			50.7	
Delay (s)	118.7	30.1		135.3	11.5	5.5		34.0			80.7	
Level of Service	F	C		F	B	A		C			F	
Approach Delay (s)		35.3			17.3			34.0			80.7	
Approach LOS		D			B			C			F	

Intersection Summary			
HCM Average Control Delay	33.2	HCM Level of Service	C
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91		1.00	0.91	1.00	
Frt	1.00		1.00	1.00	0.95	
Flt Protected	1.00		0.95	1.00	0.97	
Satd. Flow (prot)	4546		1583	4550	1530	
Flt Permitted	1.00		0.07	1.00	0.97	
Satd. Flow (perm)	4546		121	4550	1530	
Volume (vph)	1818	10	48	1410	80	54
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1914	11	51	1484	84	57
RTOR Reduction (vph)	0	0	0	0	6	0
Lane Group Flow (vph)	1925	0	51	1484	135	0
Turn Type			Perm			
Protected Phases	6			2	8	
Permitted Phases			2			
Actuated Green, G (s)	54.8		54.8	54.8	26.0	
Effective Green, g (s)	55.3		55.3	55.3	26.7	
Actuated g/C Ratio	0.61		0.61	0.61	0.30	
Clearance Time (s)	4.5		4.5	4.5	4.7	
Vehicle Extension (s)	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	2793		74	2796	454	
v/s Ratio Prot	c0.42			0.33	c0.09	
v/s Ratio Perm			0.42			
v/c Ratio	0.69		0.69	0.53	0.30	
Uniform Delay, d1	11.6		11.6	9.9	24.4	
Progression Factor	1.00		1.59	1.63	1.00	
Incremental Delay, d2	1.4		33.8	0.6	0.4	
Delay (s)	13.0		52.3	16.8	24.8	
Level of Service	B		D	B	C	
Approach Delay (s)	13.0			18.0	24.8	
Approach LOS	B			B	C	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.9%	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												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3167	1417	1583	3167	1417	1583	3130	
Flt Permitted	0.19	1.00	1.00	0.10	1.00	1.00	0.15	1.00	1.00	0.13	1.00	
Satd. Flow (perm)	319	3167	1417	167	3167	1417	247	3167	1417	215	3130	
Volume (vph)	106	1375	106	176	1075	211	117	1149	250	134	1193	99
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	110	1432	110	183	1120	220	122	1197	260	140	1243	103
RTOR Reduction (vph)	0	0	19	0	0	2	0	0	118	0	7	0
Lane Group Flow (vph)	110	1432	91	183	1120	218	122	1197	142	140	1339	0
Turn Type	Perm		Perm	pm+pt		pm+ov	Perm		Perm	pm+pt		
Protected Phases		6		5	2	7		8		7	4	
Permitted Phases	6		6	2		2	8		8	4		
Actuated Green, G (s)	35.0	35.0	35.0	44.0	44.0	49.7	27.1	27.1	27.1	36.0	36.0	
Effective Green, g (s)	36.0	36.0	36.0	45.0	45.0	51.0	27.0	27.0	27.0	37.0	37.0	
Actuated g/C Ratio	0.40	0.40	0.40	0.50	0.50	0.57	0.30	0.30	0.30	0.41	0.41	
Clearance Time (s)	5.0	5.0	5.0	3.2	5.0	4.3	3.9	3.9	3.9	4.3	5.0	
Vehicle Extension (s)	4.7	4.7	4.7	3.0	4.2	3.0	4.3	4.3	4.3	3.0	4.5	
Lane Grp Cap (vph)	128	1267	567	162	1584	866	74	950	425	180	1287	
v/s Ratio Prot		0.45		c0.06	0.35	0.02		0.38		0.05	c0.43	
v/s Ratio Perm	0.34		0.06	c0.50		0.14	c0.49		0.10	0.27		
v/c Ratio	0.86	1.13	0.16	1.13	0.71	0.25	1.65	1.26	0.33	0.78	1.04	
Uniform Delay, d1	24.7	27.0	17.3	21.7	17.4	9.9	31.5	31.5	24.5	43.0	26.5	
Progression Factor	1.00	1.00	1.00	2.27	0.29	0.37	0.51	0.50	0.14	1.11	1.13	
Incremental Delay, d2	48.6	69.1	0.6	66.0	0.2	0.0	297.4	117.8	0.2	14.0	32.5	
Delay (s)	73.3	96.1	17.9	115.3	5.3	3.7	313.3	133.6	3.6	61.8	62.4	
Level of Service	E	F	B	F	A	A	F	F	A	E	E	
Approach Delay (s)		89.3			18.3			126.1			62.4	
Approach LOS		F			B			F			E	

Intersection Summary			
HCM Average Control Delay	74.9	HCM Level of Service	E
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3142		1583	3167	1417	1583	3142		1583	3120	
Flt Permitted	0.22	1.00		0.12	1.00	1.00	0.14	1.00		0.12	1.00	
Satd. Flow (perm)	373	3142		196	3167	1417	238	3142		208	3120	
Volume (vph)	175	1229	69	129	764	194	82	1127	61	276	1228	133
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	179	1254	70	132	780	198	84	1150	62	282	1253	136
RTOR Reduction (vph)	0	4	0	0	0	39	0	4	0	0	9	0
Lane Group Flow (vph)	179	1320	0	132	780	159	84	1208	0	282	1380	0
Turn Type	pm+pt			pm+pt		pm+ov	Perm			pm+pt		
Protected Phases	1	6		5	2	7		8		7	4	
Permitted Phases	6			2		2	8			4		
Actuated Green, G (s)	40.1	32.3		39.7	32.1	37.9	26.1	26.1		35.1	35.1	
Effective Green, g (s)	41.2	34.2		40.8	34.0	39.0	28.0	28.0		37.0	37.0	
Actuated g/C Ratio	0.46	0.38		0.45	0.38	0.43	0.31	0.31		0.41	0.41	
Clearance Time (s)	3.2	5.9		3.2	5.9	3.2	5.9	5.9		3.2	5.9	
Vehicle Extension (s)	3.0	4.6		3.0	4.7	3.0	4.7	4.7		3.0	4.7	
Lane Grp Cap (vph)	265	1194		194	1196	677	74	978		162	1283	
v/s Ratio Prot	c0.05	c0.42		0.05	0.25	0.01		0.38		c0.10	0.44	
v/s Ratio Perm	0.26			0.26		0.10	0.35			c0.62		
v/c Ratio	0.68	1.11		0.68	0.65	0.24	1.14	1.24		1.74	1.08	
Uniform Delay, d1	16.2	27.9		20.4	23.1	16.1	31.0	31.0		44.7	26.5	
Progression Factor	1.00	1.00		1.69	1.05	0.84	1.55	1.54		0.95	0.54	
Incremental Delay, d2	6.7	59.9		2.6	0.7	0.0	138.1	113.5		343.4	40.5	
Delay (s)	22.9	87.8		37.0	25.1	13.6	186.1	161.1		385.8	54.8	
Level of Service	C	F		D	C	B	F	F		F	D	
Approach Delay (s)		80.0			24.5			162.7			110.7	
Approach LOS		F			C			F			F	

Intersection Summary			
HCM Average Control Delay	97.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.8%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		0.97	1.00	1.00	1.00	0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	1.00	0.75	1.00	1.00	0.65	1.00	0.98	
Flpb, ped/bikes	0.85	1.00		1.00	1.00	1.00	1.00	1.00	1.00	0.94	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1346	1632		3072	1667	1060	1583	3167	918	1490	3081	
Flt Permitted	0.55	1.00		0.95	1.00	1.00	0.11	1.00	1.00	0.19	1.00	
Satd. Flow (perm)	786	1632		3072	1667	1060	184	3167	918	302	3081	
Volume (vph)	19	440	25	124	329	133	5	987	187	20	1185	66
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	20	458	26	129	343	139	5	1028	195	21	1234	69
RTOR Reduction (vph)	0	2	0	0	0	20	0	0	0	0	4	0
Lane Group Flow (vph)	20	482	0	129	343	119	5	1028	195	21	1299	0
Confl. Peds. (#/hr)	152		159	159		152	117		165	165		117
Confl. Bikes (#/hr)			5			9			7			6
Turn Type	Perm			Prot		Perm	Perm		pm+ov	Perm		
Protected Phases		8		7	4			6	7		2	
Permitted Phases	8					4	6		6	2		
Actuated Green, G (s)	20.2	20.2		10.0	34.2	34.2	46.2	46.2	56.2	46.2	46.2	
Effective Green, g (s)	21.0	21.0		10.0	35.0	35.0	47.0	47.0	57.0	47.0	47.0	
Actuated g/C Ratio	0.23	0.23		0.11	0.39	0.39	0.52	0.52	0.63	0.52	0.52	
Clearance Time (s)	4.8	4.8		4.0	4.8	4.8	4.8	4.8	4.0	4.8	4.8	
Vehicle Extension (s)	5.9	5.9		3.0	5.2	5.2	4.8	4.8	3.0	4.4	4.4	
Lane Grp Cap (vph)	183	381		341	648	412	96	1654	622	158	1609	
v/s Ratio Prot		c0.30		0.04	c0.21			0.32	0.03		c0.42	
v/s Ratio Perm	0.03					0.11	0.03		0.18	0.07		
v/c Ratio	0.11	1.26		0.38	0.53	0.29	0.05	0.62	0.31	0.13	0.81	
Uniform Delay, d1	27.1	34.5		37.1	21.2	18.9	10.6	15.2	7.5	11.0	17.8	
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.30	0.24	0.24	0.41	0.78	
Incremental Delay, d2	1.2	138.4		0.7	3.1	1.8	0.1	0.2	0.0	0.2	0.4	
Delay (s)	28.3	172.9		37.8	24.2	20.7	3.3	3.7	1.8	4.7	14.3	
Level of Service	C	F		D	C	C	A	A	A	A	B	
Approach Delay (s)		167.1			26.3			3.4			14.1	
Approach LOS		F			C			A			B	

Intersection Summary			
HCM Average Control Delay	33.6	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	0.97		1.00	0.98		1.00	0.95		1.00	1.00	0.82
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4315		1583	4404		1583	2949		1583	3167	1163
Flt Permitted	0.14	1.00		0.14	1.00		0.13	1.00		0.95	1.00	1.00
Satd. Flow (perm)	230	4315		238	4404		222	2949		1583	3167	1163
Volume (vph)	234	1929	336	190	1103	101	105	1180	178	139	1462	243
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	246	2031	354	200	1161	106	111	1242	187	146	1539	256
RTOR Reduction (vph)	0	27	0	0	12	0	0	13	0	0	0	139
Lane Group Flow (vph)	246	2358	0	200	1255	0	111	1416	0	146	1539	117
Confl. Peds. (#/hr)	152		159	159		152	158		206	206		158
Turn Type	pm+pt			pm+pt			pm+pt			Prot		Perm
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6			2			8					4
Actuated Green, G (s)	35.8	28.0		33.8	27.0		34.8	29.0		9.8	33.0	33.0
Effective Green, g (s)	36.0	29.0		34.0	28.0		35.0	30.0		9.0	34.0	34.0
Actuated g/C Ratio	0.40	0.32		0.38	0.31		0.39	0.33		0.10	0.38	0.38
Clearance Time (s)	3.2	5.0		3.2	5.0		3.2	5.0		3.2	5.0	5.0
Vehicle Extension (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	4.0
Lane Grp Cap (vph)	197	1390		180	1370		162	983		158	1196	439
v/s Ratio Prot	c0.10	c0.55		0.07	0.29		0.04	c0.48		c0.09	c0.49	
v/s Ratio Perm	0.40			0.35			0.23					0.10
v/c Ratio	1.25	1.70		1.11	0.92		0.69	1.44		0.92	1.29	0.27
Uniform Delay, d1	22.7	30.5		44.2	29.9		43.2	30.0		40.2	28.0	19.4
Progression Factor	1.31	1.20		1.00	1.00		1.11	0.83		0.83	1.51	3.31
Incremental Delay, d2	139.0	315.6		100.0	11.1		10.1	203.2		44.2	134.5	1.2
Delay (s)	168.8	352.3		144.2	41.0		58.0	228.0		77.5	176.7	65.4
Level of Service	F	F		F	D		E	F		E	F	E
Approach Delay (s)		335.1			55.1			215.8			154.6	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	210.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.47		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	128.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor			1.00	0.95	0.91	0.95		0.95		1.00	0.95	
Frpb, ped/bikes			0.98	1.00	0.98	0.97		0.99		1.00	1.00	
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		0.99	1.00	
Frt			0.86	1.00	0.93	0.85		0.98		1.00	1.00	
Flt Protected			1.00	0.95	0.98	1.00		1.00		0.95	1.00	
Satd. Flow (prot)			1412	1501	1345	1300		3083		1572	3167	
Flt Permitted			1.00	0.95	0.98	1.00		1.00		0.16	1.00	
Satd. Flow (perm)			1412	1501	1345	1300		3083		266	3167	
Volume (vph)	0	0	81	136	0	151	0	1118	140	190	1123	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	0	83	139	0	154	0	1141	143	194	1146	0
RTOR Reduction (vph)	0	0	78	0	43	86	0	8	0	0	0	0
Lane Group Flow (vph)	0	0	5	86	62	16	0	1276	0	194	1146	0
Confl. Peds. (#/hr)	10		1	1		10	18		29	29		18
Confl. Bikes (#/hr)			1			2			3			3
Turn Type			custom	Perm		Perm				Perm		
Protected Phases					3			2			2	
Permitted Phases			4	3		3				2		
Actuated Green, G (s)			4.6	13.0	13.0	13.0		58.0		58.0	58.0	
Effective Green, g (s)			5.5	13.9	13.9	13.9		58.6		58.6	58.6	
Actuated g/C Ratio			0.06	0.15	0.15	0.15		0.65		0.65	0.65	
Clearance Time (s)			4.9	4.9	4.9	4.9		4.6		4.6	4.6	
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0	3.0	
Lane Grp Cap (vph)			86	232	208	201		2007		173	2062	
v/s Ratio Prot								0.41			0.36	
v/s Ratio Perm			c0.00	c0.06	0.05	0.01				c0.73		
v/c Ratio			0.06	0.37	0.30	0.08		0.64		1.12	0.56	
Uniform Delay, d1			39.8	34.1	33.7	32.6		9.3		15.7	8.6	
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.10	0.69	
Incremental Delay, d2			0.3	1.0	0.8	0.2		1.5		62.2	0.1	
Delay (s)			40.1	35.1	34.5	32.7		10.9		79.5	6.0	
Level of Service			D	D	C	C		B		E	A	
Approach Delay (s)		40.1			34.1			10.9			16.6	
Approach LOS		D			C			B			B	

Intersection Summary			
HCM Average Control Delay	16.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0			4.0	
Lane Util. Factor		0.91			0.91		1.00	0.86			0.86	
Frt		0.98			0.96		1.00	1.00			1.00	
Flt Protected		1.00			1.00		0.95	1.00			1.00	
Satd. Flow (prot)		4458			4371		1583	5733			5733	
Flt Permitted		1.00			1.00		0.17	1.00			1.00	
Satd. Flow (perm)		4458			4371		284	5733			5733	
Volume (vph)	0	1885	294	0	1197	424	157	1120	0	0	1445	0
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1923	300	0	1221	433	160	1143	0	0	1474	0
RTOR Reduction (vph)	0	21	0	0	64	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	2202	0	0	1590	0	160	1143	0	0	1474	0
Turn Type							Perm					
Protected Phases		6			6			2			2	
Permitted Phases							2					
Actuated Green, G (s)		22.1			22.1		24.5	24.5			24.5	
Effective Green, g (s)		23.0			23.0		23.5	23.5			23.5	
Actuated g/C Ratio		0.23			0.23		0.24	0.24			0.24	
Clearance Time (s)		4.9			4.9		3.0	3.0			3.0	
Vehicle Extension (s)		3.0			3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)		1025			1005		67	1347			1347	
v/s Ratio Prot		c0.49			0.36			0.20			0.26	
v/s Ratio Perm							c0.56					
v/c Ratio		2.15			1.58		2.39	0.85			1.09	
Uniform Delay, d1		38.5			38.5		38.2	36.5			38.2	
Progression Factor		0.69			1.00		1.00	1.00			0.68	
Incremental Delay, d2		517.1			266.8		667.9	6.8			43.8	
Delay (s)		543.9			305.3		706.1	43.4			69.7	
Level of Service		F			F		F	D			E	
Approach Delay (s)		543.9			305.3			124.7			69.7	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	297.4	HCM Level of Service	F
HCM Volume to Capacity ratio	2.27		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	53.5
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0		4.0		4.0	4.0	
Lane Util. Factor	1.00	0.86	1.00		0.91	1.00		0.95		1.00	0.95	
Frt	1.00	1.00	0.85		1.00	0.85		1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)	1583	5733	1417		4550	1417		3165		1583	3135	
Flt Permitted	0.17	1.00	1.00		1.00	1.00		1.00		0.95	1.00	
Satd. Flow (perm)	284	5733	1417		4550	1417		3165		1583	3135	
Volume (vph)	24	1350	34	0	1241	265	0	952	3	119	1142	81
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	24	1378	35	0	1266	270	0	971	3	121	1165	83
RTOR Reduction (vph)	0	0	27	0	0	207	0	0	0	0	5	0
Lane Group Flow (vph)	24	1378	8	0	1266	63	0	974	0	121	1243	0
Turn Type	Perm		Perm			Perm				Prot		
Protected Phases		2			2			8		7	4	
Permitted Phases	2		2			2						
Actuated Green, G (s)	24.5	24.5	24.5		24.5	24.5		31.0		5.0	31.0	
Effective Green, g (s)	23.5	23.5	23.5		23.5	23.5		32.5		5.0	32.5	
Actuated g/C Ratio	0.24	0.24	0.24		0.24	0.24		0.32		0.05	0.32	
Clearance Time (s)	3.0	3.0	3.0		3.0	3.0		5.5		4.0	5.5	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0		5.0		3.0	4.0	
Lane Grp Cap (vph)	67	1347	333		1069	333		1029		79	1019	
v/s Ratio Prot		0.24			c0.28			0.31		c0.08	c0.40	
v/s Ratio Perm	0.08		0.01			0.04						
v/c Ratio	0.36	1.02	0.02		1.18	0.19		0.95		1.53	1.22	
Uniform Delay, d1	32.0	38.2	29.4		38.2	30.6		32.9		47.5	33.8	
Progression Factor	1.00	1.00	1.00		0.76	1.38		0.33		1.00	1.00	
Incremental Delay, d2	14.3	30.5	0.1		83.9	0.1		11.1		292.9	107.7	
Delay (s)	46.2	68.8	29.6		112.9	42.5		21.9		340.4	141.5	
Level of Service	D	E	C		F	D		C		F	F	
Approach Delay (s)		67.4			100.5			21.9			159.1	
Approach LOS		E			F			C			F	

Intersection Summary			
HCM Average Control Delay	92.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95			0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1583	4526		1583	4545		1583	3147			3067	
Flt Permitted	0.17	1.00		0.17	1.00		0.95	1.00			1.00	
Satd. Flow (perm)	290	4526		290	4545		1583	3147			3067	
Volume (vph)	122	2154	77	68	1268	9	34	734	32	0	920	244
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	124	2198	79	69	1294	9	35	749	33	0	939	249
RTOR Reduction (vph)	0	4	0	0	1	0	0	3	0	0	24	0
Lane Group Flow (vph)	124	2273	0	69	1302	0	35	779	0	0	1164	0
Turn Type	Perm			Perm			Prot					
Protected Phases		6			6		3	8			4	
Permitted Phases	6			6								
Actuated Green, G (s)	22.1	22.1		22.1	22.1		5.0	31.0			31.0	
Effective Green, g (s)	23.0	23.0		23.0	23.0		5.0	32.5			32.5	
Actuated g/C Ratio	0.23	0.23		0.23	0.23		0.05	0.32			0.32	
Clearance Time (s)	4.9	4.9		4.9	4.9		4.0	5.5			5.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	5.0			4.0	
Lane Grp Cap (vph)	67	1041		67	1045		79	1023			997	
v/s Ratio Prot		c0.50			0.29		c0.02	0.25			c0.38	
v/s Ratio Perm	0.43			0.24								
v/c Ratio	1.85	2.18		1.03	1.25		0.44	0.76			1.17	
Uniform Delay, d1	38.5	38.5		38.5	38.5		46.1	30.3			33.8	
Progression Factor	1.00	1.00		0.70	0.69		1.00	1.00			0.26	
Incremental Delay, d2	434.3	535.8		40.9	111.5		3.9	5.3			76.7	
Delay (s)	472.8	574.3		67.7	138.0		50.1	35.6			85.5	
Level of Service	F	F		E	F		D	D			F	
Approach Delay (s)		569.1			134.5			36.2			85.5	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	291.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	39.5
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.99		1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1583	3144		1583	3153		1583	3167	1417	1583	3167	1417
Flt Permitted	0.15	1.00		0.13	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	243	3144		222	3153		1583	3167	1417	1583	3167	1417
Volume (vph)	88	1369	70	51	812	25	97	710	180	79	894	80
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	92	1426	73	53	846	26	101	740	188	82	931	83
RTOR Reduction (vph)	0	4	0	0	3	0	0	0	61	0	0	46
Lane Group Flow (vph)	92	1495	0	53	869	0	101	740	127	82	931	37
Turn Type	Perm			Perm			Prot		Perm	Prot		Perm
Protected Phases		6			2		3	8		7	4	
Permitted Phases	6			2					8			4
Actuated Green, G (s)	29.0	29.0		29.0	29.0		7.8	39.3	39.3	7.7	39.2	39.2
Effective Green, g (s)	30.0	30.0		30.0	30.0		7.8	40.3	40.3	7.7	40.2	40.2
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.09	0.45	0.45	0.09	0.45	0.45
Clearance Time (s)	5.0	5.0		5.0	5.0		4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	1048		74	1051		137	1418	635	135	1415	633
v/s Ratio Prot		c0.48			0.28		c0.06	0.23		0.05	c0.29	
v/s Ratio Perm	0.38			0.24					0.09			0.03
v/c Ratio	1.14	1.43		0.72	0.83		0.74	0.52	0.20	0.61	0.66	0.06
Uniform Delay, d1	30.0	30.0		26.3	27.6		40.1	17.9	15.1	39.7	19.5	14.1
Progression Factor	0.86	0.85		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	74.8	192.5		45.3	7.5		18.5	1.4	0.7	7.5	2.4	0.2
Delay (s)	100.7	218.0		71.6	35.1		58.6	19.3	15.8	47.2	21.9	14.3
Level of Service	F	F		E	D		E	B	B	D	C	B
Approach Delay (s)		211.2			37.2			22.5			23.2	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM Average Control Delay	90.3	HCM Level of Service	F
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	100.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95			0.95	
Frt	1.00	0.99		1.00	0.99			0.99			0.99	
Flt Protected	0.95	1.00		0.95	1.00			1.00			1.00	
Satd. Flow (prot)	1583	4506		1583	4494			3122			3129	
Flt Permitted	0.12	1.00		0.08	1.00			1.00			0.87	
Satd. Flow (perm)	201	4506		142	4494			3122			2734	
Volume (vph)	180	1886	128	91	1302	116	0	902	93	19	801	64
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	184	1924	131	93	1329	118	0	920	95	19	817	65
RTOR Reduction (vph)	0	8	0	0	10	0	0	3	0	0	7	0
Lane Group Flow (vph)	184	2047	0	93	1437	0	0	1012	0	0	894	0
Turn Type	Perm			Perm						Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2						4		
Actuated Green, G (s)	45.4	45.4		45.4	45.4			32.9			32.9	
Effective Green, g (s)	47.1	47.1		47.1	47.1			34.9			34.9	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.39			0.39	
Clearance Time (s)	5.7	5.7		5.7	5.7			6.0			6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	105	2358		74	2352			1211			1060	
v/s Ratio Prot		0.45			0.32			0.32				
v/s Ratio Perm	c0.91			0.66							c0.33	
v/c Ratio	1.75	0.87		1.26	0.61			0.84			0.84	
Uniform Delay, d1	21.4	18.7		21.4	15.0			25.0			25.1	
Progression Factor	0.42	0.35		0.56	0.31			1.00			1.00	
Incremental Delay, d2	342.1	0.4		162.3	0.7			5.1			6.3	
Delay (s)	351.2	7.0		174.3	5.4			30.1			31.3	
Level of Service	F	A		F	A			C			C	
Approach Delay (s)		35.3			15.6			30.1			31.3	
Approach LOS		D			B			C			C	

Intersection Summary			
HCM Average Control Delay	28.4	HCM Level of Service	C
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1583	4477		1583	4481		1583	4360		1583	4550	1417
Flt Permitted	0.13	1.00		0.13	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	222	4477		222	4481		1583	4360		1583	4550	1417
Volume (vph)	294	1690	204	326	1145	130	71	906	349	246	1606	244
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	306	1760	212	340	1193	135	74	944	364	256	1673	254
RTOR Reduction (vph)	0	17	0	0	15	0	0	30	0	0	0	117
Lane Group Flow (vph)	306	1955	0	340	1313	0	74	1278	0	256	1673	137
Turn Type	Perm			Perm			Prot			Prot		Perm
Protected Phases		4			8		5			1	6	
Permitted Phases	4			8				2				6
Actuated Green, G (s)	28.0	28.0		28.0	28.0		7.5	32.0		15.0	38.5	38.5
Effective Green, g (s)	30.0	30.0		30.0	30.0		8.5	33.0		15.0	39.5	39.5
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.09	0.37		0.17	0.44	0.44
Clearance Time (s)	6.0	6.0		6.0	6.0		5.0	5.0		4.0	5.0	5.0
Vehicle Extension (s)	4.0	4.0		4.0	4.0		2.0	4.0		2.0	4.0	4.0
Lane Grp Cap (vph)	74	1492		74	1494		150	1599		264	1997	622
v/s Ratio Prot		0.44			0.29		0.05			c0.16	c0.37	
v/s Ratio Perm	1.38			c1.53				0.29				0.10
v/c Ratio	4.14	1.31		4.59	0.88		0.49	0.80		0.97	0.84	0.22
Uniform Delay, d1	30.0	30.0		30.0	28.3		38.7	25.5		37.3	22.4	15.7
Progression Factor	1.00	1.00		0.38	0.32		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1442.2	144.7		1644.1	6.7		0.9	4.3		46.2	4.4	0.8
Delay (s)	1472.2	174.7		1655.5	15.9		39.6	29.8		83.4	26.8	16.5
Level of Service	F	F		F	B		D	C		F	C	B
Approach Delay (s)		349.0			350.1			30.3			32.2	
Approach LOS		F			F			C			C	

Intersection Summary			
HCM Average Control Delay	198.5	HCM Level of Service	F
HCM Volume to Capacity ratio	2.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	0.92
Flpb, ped/bikes	0.98	1.00		0.99	1.00			1.00			1.00	1.00
Frt	1.00	1.00		1.00	1.00			0.97			1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	1.00
Satd. Flow (prot)	1559	4539		1575	4510			1585			1650	1306
Flt Permitted	0.14	1.00		0.07	1.00			0.96			0.93	1.00
Satd. Flow (perm)	232	4539		114	4510			1527			1551	1306
Volume (vph)	80	1874	14	25	1355	39	25	182	50	23	155	196
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	1994	15	27	1441	41	27	194	53	24	165	209
RTOR Reduction (vph)	0	1	0	0	3	0	0	8	0	0	0	37
Lane Group Flow (vph)	85	2008	0	27	1479	0	0	266	0	0	189	172
Confl. Peds. (#/hr)	67		64	64		67	46		45	45		46
Confl. Bikes (#/hr)			7			5			5			6
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		4
Actuated Green, G (s)	69.0	69.0		69.0	69.0			25.0			25.0	25.0
Effective Green, g (s)	68.0	68.0		68.0	68.0			24.0			24.0	24.0
Actuated g/C Ratio	0.68	0.68		0.68	0.68			0.24			0.24	0.24
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	3.0
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	3.0
Lane Grp Cap (vph)	158	3087		78	3067			366			372	313
v/s Ratio Prot		c0.44			0.33							
v/s Ratio Perm	0.37			0.24				c0.17			0.12	0.13
v/c Ratio	0.54	0.65		0.35	0.48			0.73			0.51	0.55
Uniform Delay, d1	8.1	9.2		6.7	7.6			35.0			32.9	33.3
Progression Factor	0.65	0.33		1.00	1.00			1.00			1.00	1.00
Incremental Delay, d2	1.2	0.1		11.7	0.5			11.9			4.9	6.8
Delay (s)	6.4	3.2		18.4	8.2			46.8			37.8	40.0
Level of Service	A	A		B	A			D			D	D
Approach Delay (s)		3.3			8.3			46.8			39.0	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.97	0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.75	1.00	0.93		1.00	0.96		1.00	0.95	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3167	1061	1583	2843		3072	4336		3072	4227	
Flt Permitted	0.12	1.00	1.00	0.11	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	192	3167	1061	190	2843		3072	4336		3072	4227	
Volume (vph)	291	1018	136	228	588	172	61	1860	155	157	1394	233
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	310	1083	145	243	626	183	65	1979	165	167	1483	248
RTOR Reduction (vph)	0	0	84	0	23	0	0	8	0	0	19	0
Lane Group Flow (vph)	310	1083	61	243	786	0	65	2136	0	167	1712	0
Confl. Peds. (#/hr)	211		160	160		211	310		128	128		310
Confl. Bikes (#/hr)			10			8			9			7
Turn Type	pm+pt		Perm	pm+pt			Prot			Prot		
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases	6		6	2								
Actuated Green, G (s)	51.6	36.6	36.6	45.6	33.6		9.6	43.8		10.2	44.4	
Effective Green, g (s)	52.0	38.0	38.0	46.0	35.0		9.6	44.8		10.2	45.4	
Actuated g/C Ratio	0.43	0.32	0.32	0.38	0.29		0.08	0.37		0.08	0.38	
Clearance Time (s)	3.0	5.4	5.4	3.0	5.4		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	245	1003	336	201	829		246	1619		261	1599	
v/s Ratio Prot	c0.15	0.34		0.11	0.28		0.02	c0.49		0.05	c0.41	
v/s Ratio Perm	c0.40		0.06	0.35								
v/c Ratio	1.27	1.08	0.18	1.21	0.95		0.26	1.32		0.64	1.07	
Uniform Delay, d1	32.8	41.0	29.7	32.0	41.6		51.9	37.6		53.1	37.3	
Progression Factor	1.45	1.00	1.47	1.00	1.00		0.96	0.92		1.19	0.43	
Incremental Delay, d2	132.8	44.3	0.1	131.2	21.0		0.4	146.8		0.5	33.4	
Delay (s)	180.4	85.5	43.9	163.2	62.6		50.4	181.3		63.5	49.5	
Level of Service	F	F	D	F	E		D	F		E	D	
Approach Delay (s)		100.7			85.8			177.4			50.7	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM Average Control Delay	109.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0		4.0		4.0	4.0	4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00		0.91		1.00	0.86	0.86	1.00		1.00	0.97	
Frt	1.00		1.00		1.00	0.97	0.85	1.00		0.85	1.00	
Flt Protected	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (prot)	1583		4538		1583	4160	1218	1583		1417	3072	
Flt Permitted	0.95		1.00		0.95	1.00	1.00	0.95		1.00	0.95	
Satd. Flow (perm)	1583		4538		1583	4160	1218	1583		1417	3072	
Volume (vph)	21	0	1165	22	14	885	856	30	0	46	958	0
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	22	0	1239	23	15	941	911	32	0	49	1019	0
RTOR Reduction (vph)	0	0	1	0	0	36	394	0	0	47	0	0
Lane Group Flow (vph)	22	0	1261	0	15	1167	255	32	0	2	1019	0
Turn Type	Prot				Prot		Perm	Prot		custom	custom	
Protected Phases	5		2		1	6		7				
Permitted Phases							6			7	8	
Actuated Green, G (s)	2.0		46.1		2.0	45.2	45.2	4.0		4.0	46.1	
Effective Green, g (s)	3.9		47.1		3.9	47.1	47.1	5.0		5.0	48.0	
Actuated g/C Ratio	0.03		0.39		0.03	0.39	0.39	0.04		0.04	0.40	
Clearance Time (s)	5.9		5.0		5.9	5.9	5.9	5.0		5.0	5.9	
Vehicle Extension (s)	3.0		3.0		3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	51		1781		51	1633	478	66		59	1229	
v/s Ratio Prot	0.01		c0.28		0.01	c0.28		c0.02				
v/s Ratio Perm							0.21			0.00	c0.33	
v/c Ratio	0.43		0.71		0.29	0.71	0.53	0.48		0.03	0.83	
Uniform Delay, d1	57.0		30.7		56.7	30.8	28.0	56.2		55.2	32.3	
Progression Factor	1.34		1.57		1.01	1.72	9.45	1.00		1.00	1.17	
Incremental Delay, d2	0.5		0.2		1.9	1.6	2.5	5.5		0.2	3.5	
Delay (s)	76.8		48.5		59.3	54.6	266.9	61.8		55.4	41.3	
Level of Service	E		D		E	D	F	E		E	D	
Approach Delay (s)			49.0			128.4			57.9			42.5
Approach LOS			D			F			E			D

Intersection Summary			
HCM Average Control Delay	81.7	HCM Level of Service	F
HCM Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBR
Lane Configurations	
Ideal Flow (vphpl)	1700
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1417
Flt Permitted	1.00
Satd. Flow (perm)	1417
Volume (vph)	79
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	84
RTOR Reduction (vph)	50
Lane Group Flow (vph)	34
Turn Type	custom
Protected Phases	
Permitted Phases	8
Actuated Green, G (s)	46.1
Effective Green, g (s)	48.0
Actuated g/C Ratio	0.40
Clearance Time (s)	5.9
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	567
v/s Ratio Prot	
v/s Ratio Perm	0.02
v/c Ratio	0.06
Uniform Delay, d1	22.1
Progression Factor	2.61
Incremental Delay, d2	0.1
Delay (s)	57.9
Level of Service	E
Approach Delay (s)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0	4.0		4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor		0.86	1.00		0.86	1.00	1.00	0.91			0.91	
Frt		1.00	0.85		1.00	0.85	1.00	1.00			0.98	
Flt Protected		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)		5733	1417		5733	1417	1583	4549			4460	
Flt Permitted		1.00	1.00		1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)		5733	1417		5733	1417	1583	4549			4460	
Volume (vph)	0	1616	419	0	1285	390	211	1810	2	0	1675	256
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1666	432	0	1325	402	218	1866	2	0	1727	264
RTOR Reduction (vph)	0	0	3	0	0	14	0	0	0	0	17	0
Lane Group Flow (vph)	0	1666	429	0	1325	388	218	1868	0	0	1974	0
Turn Type			pm+ov			Perm	Prot					
Protected Phases		8	1		4		1	6			2	
Permitted Phases		8	8			4						
Actuated Green, G (s)		34.2	49.2		34.2	34.2	15.0	73.8			53.3	
Effective Green, g (s)		36.2	52.7		36.2	36.2	16.5	75.8			55.3	
Actuated g/C Ratio		0.30	0.44		0.30	0.30	0.14	0.63			0.46	
Clearance Time (s)		6.0	5.5		6.0	6.0	5.5	6.0			6.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)		1729	670		1729	427	218	2873			2055	
v/s Ratio Prot		c0.29	0.09		0.23		c0.14	0.41			c0.44	
v/s Ratio Perm			0.21			0.27						
v/c Ratio		0.96	0.64		0.77	0.91	1.00	0.65			0.96	
Uniform Delay, d1		41.3	26.2		38.1	40.3	51.8	13.8			31.3	
Progression Factor		1.16	1.08		1.00	1.00	1.09	0.76			0.34	
Incremental Delay, d2		11.1	1.4		3.3	25.8	51.6	0.8			5.2	
Delay (s)		59.1	29.6		41.4	66.1	107.9	11.3			15.7	
Level of Service		E	C		D	E	F	B			B	
Approach Delay (s)		53.1			47.1			21.4			15.7	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	34.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frt		0.97			0.97		1.00	0.99		1.00	0.99	
Flt Protected		0.98			0.99		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1586			1599		1583	4524		1583	4504	
Flt Permitted		0.83			0.93		0.08	1.00		0.08	1.00	
Satd. Flow (perm)		1348			1494		131	4524		134	4504	
Volume (vph)	209	176	100	10	40	17	19	1793	72	120	1757	128
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	213	180	102	10	41	17	19	1830	73	122	1793	131
RTOR Reduction (vph)	0	8	0	0	10	0	0	3	0	0	7	0
Lane Group Flow (vph)	0	487	0	0	58	0	19	1900	0	122	1917	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		30.0			30.0		83.4	83.4		83.4	83.4	
Effective Green, g (s)		29.0			29.0		83.0	83.0		83.0	83.0	
Actuated g/C Ratio		0.24			0.24		0.69	0.69		0.69	0.69	
Clearance Time (s)		3.0			3.0		3.6	3.6		3.6	3.6	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		326			361		91	3129		93	3115	
v/s Ratio Prot								0.42			0.43	
v/s Ratio Perm		c0.36			0.04		0.15			c0.91		
v/c Ratio		1.50			0.16		0.21	0.61		1.31	0.62	
Uniform Delay, d1		45.5			35.9		6.7	9.8		18.5	9.9	
Progression Factor		1.00			1.00		1.00	1.00		0.61	0.37	
Incremental Delay, d2		238.4			1.0		5.1	0.9		168.7	0.4	
Delay (s)		283.9			36.9		11.8	10.7		179.9	4.1	
Level of Service		F			D		B	B		F	A	
Approach Delay (s)		283.9			36.9			10.7			14.5	
Approach LOS		F			D			B			B	

Intersection Summary			
HCM Average Control Delay	42.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.36		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	0.96		1.00	1.00		1.00	0.99		1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4258		1583	4512		1583	4460		1583	4405	
Flt Permitted	0.11	1.00		0.11	1.00		0.12	1.00		0.12	1.00	
Satd. Flow (perm)	190	4258		190	4512		196	4460		196	4405	
Volume (vph)	228	1727	394	194	1394	47	240	1686	128	151	1616	185
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	243	1837	419	206	1483	50	255	1794	136	161	1719	197
RTOR Reduction (vph)	0	37	0	0	3	0	0	9	0	0	14	0
Lane Group Flow (vph)	243	2219	0	206	1530	0	255	1921	0	161	1902	0
Confl. Peds. (#/hr)	63		133	133		63	103		84	84		103
Confl. Bikes (#/hr)			6			13			4			11
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	44.5	35.5		44.5	35.5		42.0	34.0		42.0	34.0	
Effective Green, g (s)	43.0	35.0		43.0	35.0		41.0	34.0		41.0	34.0	
Actuated g/C Ratio	0.43	0.35		0.43	0.35		0.41	0.34		0.41	0.34	
Clearance Time (s)	3.0	3.5		3.0	3.5		3.0	4.0		3.0	4.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	193	1490		193	1579		177	1516		177	1498	
v/s Ratio Prot	c0.10	c0.52		0.09	0.34		c0.10	0.43		0.06	0.43	
v/s Ratio Perm	0.44			0.37			c0.49			0.31		
v/c Ratio	1.26	1.49		1.07	0.97		1.44	1.27		0.91	1.27	
Uniform Delay, d1	23.3	32.5		48.2	32.0		48.7	33.0		48.1	33.0	
Progression Factor	0.75	0.95		1.57	0.98		1.87	0.77		1.00	1.00	
Incremental Delay, d2	142.5	222.7		80.1	15.1		217.8	123.9		41.5	126.8	
Delay (s)	159.9	253.4		155.9	46.6		308.9	149.2		89.7	159.8	
Level of Service	F	F		F	D		F	F		F	F	
Approach Delay (s)		244.3			59.5			167.9			154.4	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM Average Control Delay	164.9	HCM Level of Service	F
HCM Volume to Capacity ratio	1.44		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	128.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)		4.0			4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor		1.00			1.00		1.00	0.91		1.00	0.91	
Frpb, ped/bikes		0.96			1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes		1.00			0.99		1.00	1.00		1.00	1.00	
Frt		0.94			0.99		1.00	0.99		1.00	1.00	
Flt Protected		0.99			0.98		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1502			1588		1583	4482		1583	4496	
Flt Permitted		0.93			0.35		0.06	1.00		0.06	1.00	
Satd. Flow (perm)		1407			570		104	4482		104	4496	
Volume (vph)	56	237	203	116	106	19	57	1930	116	71	1953	60
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	59	249	214	122	112	20	60	2032	122	75	2056	63
RTOR Reduction (vph)	0	6	0	0	3	0	0	6	0	0	3	0
Lane Group Flow (vph)	0	516	0	0	251	0	60	2148	0	75	2116	0
Confl. Peds. (#/hr)	29		64	64		29	102		42	42		102
Confl. Bikes (#/hr)			4			5			5			15
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		29.0			29.0		64.2	64.2		64.2	64.2	
Effective Green, g (s)		28.0			28.0		64.0	64.0		64.0	64.0	
Actuated g/C Ratio		0.28			0.28		0.64	0.64		0.64	0.64	
Clearance Time (s)		3.0			3.0		3.8	3.8		3.8	3.8	
Vehicle Extension (s)		3.0			3.0		5.0	5.0		5.0	5.0	
Lane Grp Cap (vph)		394			160		67	2868		67	2877	
v/s Ratio Prot								0.48			0.47	
v/s Ratio Perm		0.37			c0.44		0.58			c0.72		
v/c Ratio		1.31			1.57		0.90	0.75		1.12	0.74	
Uniform Delay, d1		36.0			36.0		15.2	12.4		18.0	12.2	
Progression Factor		1.00			1.00		1.00	1.00		1.41	1.20	
Incremental Delay, d2		156.8			284.2		83.2	1.8		70.9	0.2	
Delay (s)		192.8			320.2		98.3	14.3		96.3	14.9	
Level of Service		F			F		F	B		F	B	
Approach Delay (s)		192.8			320.2			16.6			17.7	
Approach LOS		F			F			B			B	

Intersection Summary			
HCM Average Control Delay	49.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.91		1.00	0.91	
Frt	1.00	0.99		1.00	1.00		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4502		1583	4530		1583	4510		1583	4451	
Flt Permitted	0.15	1.00		0.13	1.00		0.12	1.00		0.12	1.00	
Satd. Flow (perm)	247	4502		215	4530		196	4510		194	4451	
Volume (vph)	293	2251	170	146	1557	47	108	1719	106	228	1669	285
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	315	2420	183	157	1674	51	116	1848	114	245	1795	306
RTOR Reduction (vph)	0	10	0	0	4	0	0	7	0	0	26	0
Lane Group Flow (vph)	315	2593	0	157	1721	0	116	1955	0	245	2075	0
Turn Type	Perm			pm+pt			pm+pt			pm+pt		
Protected Phases		6		5	2		3	8		7	4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	26.0	26.0		36.0	36.0		39.6	33.0		40.4	33.4	
Effective Green, g (s)	27.0	27.0		37.0	37.0		40.6	34.0		41.4	34.4	
Actuated g/C Ratio	0.30	0.30		0.41	0.41		0.45	0.38		0.46	0.38	
Clearance Time (s)	5.0	5.0		3.5	5.0		4.0	5.0		4.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	74	1351		180	1862		190	1704		197	1701	
v/s Ratio Prot		0.58		0.06	c0.38		0.04	0.43		c0.10	0.47	
v/s Ratio Perm	c1.28			0.30			0.23			c0.48		
v/c Ratio	4.26	1.92		0.87	0.92		0.61	1.15		1.24	1.22	
Uniform Delay, d1	31.5	31.5		43.5	25.2		21.1	28.0		21.8	27.8	
Progression Factor	1.38	1.38		1.00	1.00		1.54	0.41		1.00	1.00	
Incremental Delay, d2	1468.4	414.0		34.0	9.3		1.6	68.3		144.9	104.5	
Delay (s)	1511.8	457.6		77.5	34.5		34.0	79.8		166.7	132.3	
Level of Service	F	F		E	C		C	E		F	F	
Approach Delay (s)		571.4			38.1			77.2			135.9	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM Average Control Delay	240.5	HCM Level of Service	F
HCM Volume to Capacity ratio	2.22		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	129.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.91		1.00	0.91	
Frt	1.00	0.97		1.00	0.99		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	3073		1583	3126		1583	4476		1583	4498	
Flt Permitted	0.29	1.00		0.13	1.00		0.12	1.00		0.14	1.00	
Satd. Flow (perm)	492	3073		221	3126		202	4476		230	4498	
Volume (vph)	154	1181	288	153	773	73	328	1735	212	223	1750	145
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	166	1270	310	165	831	78	353	1866	228	240	1882	156
RTOR Reduction (vph)	0	23	0	0	3	0	0	17	0	0	11	0
Lane Group Flow (vph)	166	1557	0	165	906	0	353	2077	0	240	2027	0
Turn Type	Perm			pm+pt			pm+pt			Perm		
Protected Phases		8		7	4		1	6			2	
Permitted Phases	8			4			6			2		
Actuated Green, G (s)	25.1	25.1		38.0	38.0		42.0	42.0		28.0	28.0	
Effective Green, g (s)	26.1	26.1		39.0	39.0		43.0	43.0		29.0	29.0	
Actuated g/C Ratio	0.29	0.29		0.43	0.43		0.48	0.48		0.32	0.32	
Clearance Time (s)	5.0	5.0		3.0	5.0		4.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	143	891		230	1355		250	2139		74	1449	
v/s Ratio Prot		c0.51		0.07	c0.29		c0.16	0.46			0.45	
v/s Ratio Perm	0.34			0.24			0.52			c1.04		
v/c Ratio	1.16	1.75		0.72	0.67		1.41	0.97		3.24	1.40	
Uniform Delay, d1	31.9	31.9		21.2	20.3		42.2	22.9		30.5	30.5	
Progression Factor	1.00	1.00		1.82	1.79		1.00	1.00		0.86	0.86	
Incremental Delay, d2	125.0	340.8		7.1	1.8		207.5	13.8		1012.6	179.9	
Delay (s)	156.9	372.8		45.6	38.2		249.7	36.7		1038.7	206.1	
Level of Service	F	F		D	D		F	D		F	F	
Approach Delay (s)		352.2			39.4			67.4			293.8	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM Average Control Delay	197.7	HCM Level of Service	F
HCM Volume to Capacity ratio	2.17		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	131.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.98		1.00	0.97		1.00	0.98		1.00	0.98	
Flpb, ped/bikes	0.96	1.00		0.99	1.00		1.00	1.00		0.98	1.00	
Frt	1.00	0.98		1.00	0.98		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1521	3057		1567	3014		1583	3011		1548	3044	
Flt Permitted	0.23	1.00		0.11	1.00		0.11	1.00		0.18	1.00	
Satd. Flow (perm)	373	3057		186	3014		178	3011		292	3044	
Volume (vph)	139	1063	158	27	743	121	86	735	153	211	968	111
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	143	1096	163	28	766	125	89	758	158	218	998	114
RTOR Reduction (vph)	0	10	0	0	11	0	0	14	0	0	8	0
Lane Group Flow (vph)	143	1249	0	28	880	0	89	902	0	218	1104	0
Confl. Peds. (#/hr)	100		100	100		100	100		100	100		100
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	59.6	59.6		59.6	59.6		49.1	49.1		49.1	49.1	
Effective Green, g (s)	61.5	61.5		61.5	61.5		50.5	50.5		50.5	50.5	
Actuated g/C Ratio	0.51	0.51		0.51	0.51		0.42	0.42		0.42	0.42	
Clearance Time (s)	5.9	5.9		5.9	5.9		5.4	5.4		5.4	5.4	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	191	1567		95	1545		75	1267		123	1281	
v/s Ratio Prot		c0.41			0.29			0.30			0.36	
v/s Ratio Perm	0.38			0.15			0.50			c0.75		
v/c Ratio	0.75	0.80		0.29	0.57		1.19	0.71		1.77	0.86	
Uniform Delay, d1	23.1	24.1		16.8	20.1		34.8	28.7		34.8	31.6	
Progression Factor	1.00	1.00		0.54	0.53		0.78	0.77		1.00	1.00	
Incremental Delay, d2	23.3	4.3		2.9	0.6		149.5	2.6		378.4	7.8	
Delay (s)	46.4	28.4		12.0	11.1		176.6	24.8		413.2	39.4	
Level of Service	D	C		B	B		F	C		F	D	
Approach Delay (s)		30.3			11.2			38.3			100.7	
Approach LOS		C			B			D			F	

Intersection Summary			
HCM Average Control Delay	48.3	HCM Level of Service	D
HCM Volume to Capacity ratio	1.24		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.98			0.99	
Flt Protected	0.95	1.00		0.95	1.00			0.99			1.00	
Satd. Flow (prot)	1583	4541		1583	4542			1607			1638	
Flt Permitted	0.08	1.00		0.06	1.00			0.69			0.98	
Satd. Flow (perm)	141	4541		100	4542			1127			1614	
Volume (vph)	46	2114	30	71	1703	21	53	103	31	14	247	33
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	49	2273	32	76	1831	23	57	111	33	15	266	35
RTOR Reduction (vph)	0	1	0	0	1	0	0	7	0	0	5	0
Lane Group Flow (vph)	49	2304	0	76	1853	0	0	194	0	0	312	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	68.0	68.0		68.0	68.0			26.0			26.0	
Effective Green, g (s)	67.0	67.0		67.0	67.0			25.0			25.0	
Actuated g/C Ratio	0.67	0.67		0.67	0.67			0.25			0.25	
Clearance Time (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Vehicle Extension (s)	5.0	5.0		5.0	5.0			3.0			3.0	
Lane Grp Cap (vph)	94	3042		67	3043			282			404	
v/s Ratio Prot		0.51			0.41							
v/s Ratio Perm	0.35			c0.76				0.17			c0.19	
v/c Ratio	0.52	0.76		1.13	0.61			0.69			0.77	
Uniform Delay, d1	8.4	11.1		16.5	9.2			34.0			34.8	
Progression Factor	0.55	0.44		0.84	0.46			1.00			1.00	
Incremental Delay, d2	1.9	0.2		76.6	0.1			12.9			13.3	
Delay (s)	6.5	5.0		90.4	4.3			46.9			48.1	
Level of Service	A	A		F	A			D			D	
Approach Delay (s)		5.0			7.7			46.9			48.1	
Approach LOS		A			A			D			D	

Intersection Summary			
HCM Average Control Delay	10.7	HCM Level of Service	B
HCM Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	4550	1417	1583	1667	1417	1583	1646	
Flt Permitted	0.27	1.00	1.00	0.27	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	444	3167	1417	444	4550	1417	1583	1667	1417	1583	1646	
Volume (vph)	133	961	166	111	969	58	91	670	34	148	704	63
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	141	1022	177	118	1031	62	97	713	36	157	749	67
RTOR Reduction (vph)	0	0	133	0	0	47	0	0	7	0	5	0
Lane Group Flow (vph)	141	1022	44	118	1031	16	97	713	29	157	811	0
Turn Type	Perm		Perm	Perm		Perm	Prot		Perm	Prot		
Protected Phases		4			4		1	2		1	6	
Permitted Phases	4		4	4		4			2			
Actuated Green, G (s)	14.0	14.0	14.0	14.0	14.0	14.0	4.0	28.2	28.2	4.0	28.2	
Effective Green, g (s)	15.0	15.0	15.0	15.0	15.0	15.0	4.0	29.0	29.0	4.0	29.0	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.48	0.48	0.07	0.48	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.8	4.8	4.0	4.8	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	792	354	111	1138	354	106	806	685	106	796	
v/s Ratio Prot		c0.32			0.23		0.06	0.43		c0.10	c0.49	
v/s Ratio Perm	0.32		0.03	0.27		0.01			0.02			
v/c Ratio	1.27	1.29	0.12	1.06	0.91	0.04	0.92	0.88	0.04	1.48	1.02	
Uniform Delay, d1	22.5	22.5	17.4	22.5	21.8	17.1	27.8	14.0	8.2	28.0	15.5	
Progression Factor	1.00	1.00	1.00	1.30	1.28	1.12	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	174.7	140.1	0.7	96.8	10.4	0.2	60.6	13.6	0.1	260.0	36.7	
Delay (s)	197.2	162.6	18.1	126.0	38.3	19.3	88.4	27.6	8.3	288.0	52.2	
Level of Service	F	F	B	F	D	B	F	C	A	F	D	
Approach Delay (s)		147.2			45.9			33.7			90.2	
Approach LOS		F			D			C			F	

Intersection Summary			
HCM Average Control Delay	84.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	0.99		1.00	1.00		1.00	0.97		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4496		1583	4533		1583	3059		1583	3102	
Flt Permitted	0.10	1.00		0.10	1.00		0.13	1.00		0.18	1.00	
Satd. Flow (perm)	161	4496		161	4533		218	3059		292	3102	
Volume (vph)	143	2073	177	191	1637	43	174	586	172	73	719	113
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	147	2137	182	197	1688	44	179	604	177	75	741	116
RTOR Reduction (vph)	0	10	0	0	3	0	0	26	0	0	12	0
Lane Group Flow (vph)	147	2309	0	197	1729	0	179	755	0	75	845	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.4	42.4		50.4	42.4		39.6	31.6		35.6	29.6	
Effective Green, g (s)	48.4	41.4		48.4	41.4		37.6	30.6		33.6	28.6	
Actuated g/C Ratio	0.48	0.41		0.48	0.41		0.38	0.31		0.34	0.29	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	177	1861		177	1877		178	936		163	887	
v/s Ratio Prot	0.06	c0.51		c0.08	0.38		c0.07	0.25		0.02	0.27	
v/s Ratio Perm	0.34			0.46			c0.31			0.13		
v/c Ratio	0.83	1.24		1.11	0.92		1.01	0.81		0.46	0.95	
Uniform Delay, d1	20.2	29.3		48.7	27.8		27.1	32.0		24.4	35.0	
Progression Factor	1.81	1.44		1.63	1.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.8	110.1		93.8	7.3		68.9	7.4		0.8	20.7	
Delay (s)	47.5	152.4		173.0	55.5		96.1	39.3		25.1	55.7	
Level of Service	D	F		F	E		F	D		C	E	
Approach Delay (s)		146.1			67.5			49.9			53.3	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM Average Control Delay	93.5	HCM Level of Service	F
HCM Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	111.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95		1.00	0.95	
Frt	1.00	1.00		1.00	1.00		1.00	0.97		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1583	4532		1583	4530		1583	3058		1583	3046	
Flt Permitted	0.11	1.00		0.10	1.00		0.15	1.00		0.17	1.00	
Satd. Flow (perm)	183	4532		173	4530		257	3058		282	3046	
Volume (vph)	92	2377	65	333	1477	44	159	831	246	60	715	243
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	98	2529	69	354	1571	47	169	884	262	64	761	259
RTOR Reduction (vph)	0	3	0	0	3	0	0	29	0	0	37	0
Lane Group Flow (vph)	98	2595	0	354	1615	0	169	1117	0	64	983	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	43.3	37.4		47.5	39.5		34.9	26.9		30.3	24.6	
Effective Green, g (s)	41.3	36.4		45.5	38.5		32.9	25.9		28.3	23.6	
Actuated g/C Ratio	0.46	0.40		0.51	0.43		0.37	0.29		0.31	0.26	
Clearance Time (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Vehicle Extension (s)	2.0	5.0		2.0	5.0		2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	160	1833		197	1938		197	880		157	799	
v/s Ratio Prot	0.03	0.57		c0.14	0.36		c0.07	c0.37		0.02	0.32	
v/s Ratio Perm	0.25			c0.77			0.25			0.11		
v/c Ratio	0.61	1.42		1.80	0.83		0.86	1.27		0.41	1.23	
Uniform Delay, d1	16.8	26.8		43.7	22.9		42.8	32.0		25.1	33.2	
Progression Factor	1.00	1.00		1.43	0.73		1.00	1.00		1.00	1.00	
Incremental Delay, d2	4.8	190.4		365.2	1.5		28.0	130.1		0.6	114.6	
Delay (s)	21.6	217.2		427.8	18.2		70.8	162.1		25.8	147.8	
Level of Service	C	F		F	B		E	F		C	F	
Approach Delay (s)		210.1			91.7			150.4			140.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM Average Control Delay	155.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	127.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91			0.91		1.00	1.00	1.00	1.00	0.95	
Frt	1.00	0.99			0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00			1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	4490			4521		1583	1667	1417	1583	3111	
Flt Permitted	0.09	1.00			1.00		0.21	1.00	1.00	0.30	1.00	
Satd. Flow (perm)	148	4490			4521		353	1667	1417	492	3111	
Volume (vph)	166	2083	202	0	1857	84	123	401	46	25	556	74
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	177	2216	215	0	1976	89	131	427	49	27	591	79
RTOR Reduction (vph)	0	10	0	0	5	0	0	0	32	0	10	0
Lane Group Flow (vph)	177	2421	0	0	2060	0	131	427	17	27	660	0
Turn Type	pm+pt			pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	52.0	52.0			42.0		42.0	35.3	35.3	35.8	32.1	
Effective Green, g (s)	51.0	51.0			41.0		40.2	34.3	34.3	33.8	31.1	
Actuated g/C Ratio	0.51	0.51			0.41		0.40	0.34	0.34	0.34	0.31	
Clearance Time (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	
Vehicle Extension (s)	2.0	5.0			5.0		2.0	3.0	3.0	2.0	3.0	
Lane Grp Cap (vph)	162	2290			1854		214	572	486	196	968	
v/s Ratio Prot	0.07	c0.54			0.46		c0.04	c0.26		0.00	0.21	
v/s Ratio Perm	c0.49						0.21		0.01	0.04		
v/c Ratio	1.09	1.06			1.11		0.61	0.75	0.03	0.14	0.68	
Uniform Delay, d1	25.1	24.5			29.5		21.1	29.0	21.8	23.2	30.1	
Progression Factor	1.21	1.27			1.78		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	93.2	35.1			54.0		3.6	8.6	0.1	0.1	3.9	
Delay (s)	123.6	66.2			106.5		24.7	37.6	22.0	23.3	34.0	
Level of Service	F	E			F		C	D	C	C	C	
Approach Delay (s)		70.1			106.5			33.6			33.6	
Approach LOS		E			F			C			C	

Intersection Summary			
HCM Average Control Delay	74.7	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95			1.00			1.00	
Frt	1.00	1.00		1.00	1.00			0.97			0.97	
Flt Protected	0.95	1.00		0.95	1.00			1.00			0.99	
Satd. Flow (prot)	1583	3164		1583	3154			1617			1602	
Flt Permitted	0.16	1.00		0.12	1.00			0.99			0.87	
Satd. Flow (perm)	274	3164		197	3154			1596			1404	
Volume (vph)	64	1754	10	40	1119	32	13	264	72	41	124	46
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	67	1827	10	42	1166	33	14	275	75	43	129	48
RTOR Reduction (vph)	0	0	0	0	3	0	0	4	0	0	19	0
Lane Group Flow (vph)	67	1837	0	42	1196	0	0	360	0	0	201	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8			4		
Actuated Green, G (s)	33.5	33.5		33.5	33.5			17.3			17.3	
Effective Green, g (s)	33.8	33.8		33.8	33.8			18.2			18.2	
Actuated g/C Ratio	0.56	0.56		0.56	0.56			0.30			0.30	
Clearance Time (s)	4.3	4.3		4.3	4.3			4.9			4.9	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	154	1782		111	1777			484			426	
v/s Ratio Prot		c0.58			0.38							
v/s Ratio Perm	0.24			0.21				c0.23			0.14	
v/c Ratio	0.44	1.03		0.38	0.67			0.74			0.47	
Uniform Delay, d1	7.6	13.1		7.3	9.2			18.8			17.0	
Progression Factor	1.53	1.88		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.8	16.4		9.5	2.1			6.1			0.8	
Delay (s)	12.4	41.0		16.8	11.3			24.9			17.8	
Level of Service	B	D		B	B			C			B	
Approach Delay (s)		40.0			11.5			24.9			17.8	
Approach LOS		D			B			C			B	

Intersection Summary			
HCM Average Control Delay	27.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	97.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)					4.0			4.0		4.0	4.0	
Lane Util. Factor					1.00			0.95		1.00	0.95	
Frpb, ped/bikes					1.00			0.99		1.00	1.00	
Flpb, ped/bikes					0.98			1.00		1.00	1.00	
Frt					0.95			0.99		1.00	1.00	
Flt Protected					0.97			1.00		0.95	1.00	
Satd. Flow (prot)					1506			3091		1583	3167	
Flt Permitted					0.81			1.00		0.06	1.00	
Satd. Flow (perm)					1255			3091		104	3167	
Volume (vph)	0	0	0	112	0	65	0	1781	126	52	1455	0
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	0	0	129	0	75	0	2047	145	60	1672	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	5	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	197	0	0	2187	0	60	1672	0
Confl. Peds. (#/hr)			20	20			47		58	58		47
Confl. Bikes (#/hr)			1						7			1
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)					27.5			64.0		64.0	64.0	
Effective Green, g (s)					28.0			64.0		64.0	64.0	
Actuated g/C Ratio					0.28			0.64		0.64	0.64	
Clearance Time (s)					4.5			4.0		4.0	4.0	
Vehicle Extension (s)					3.0			5.0		5.0	5.0	
Lane Grp Cap (vph)					351			1978		67	2027	
v/s Ratio Prot								c0.71			0.53	
v/s Ratio Perm					c0.16					0.58		
v/c Ratio					0.56			1.11		0.90	0.82	
Uniform Delay, d1					30.7			18.0		15.2	13.7	
Progression Factor					1.00			1.00		1.00	1.00	
Incremental Delay, d2					6.3			55.7		83.2	4.0	
Delay (s)					37.1			73.7		98.3	17.7	
Level of Service					D			E		F	B	
Approach Delay (s)		0.0			37.1			73.7			20.5	
Approach LOS		A			D			E			C	

Intersection Summary			
HCM Average Control Delay	49.6	HCM Level of Service	D
HCM Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95		1.00	0.95	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.74	1.00	0.97		1.00	1.00	0.79	1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3072	3167	1048	3072	3007		1583	3167	1117	1583	4393	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.10	1.00	1.00	0.10	1.00	
Satd. Flow (perm)	3072	3167	1048	3072	3007		168	3167	1117	168	4393	
Volume (vph)	245	1451	115	335	770	149	317	1574	461	95	1264	111
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	258	1527	121	353	811	157	334	1657	485	100	1331	117
RTOR Reduction (vph)	0	0	1	0	14	0	0	0	23	0	9	0
Lane Group Flow (vph)	258	1527	120	353	954	0	334	1657	462	100	1439	0
Confl. Peds. (#/hr)	102		193	193		102	173		149	149		173
Confl. Bikes (#/hr)			6			6			9			5
Turn Type	Prot		pm+ov	Prot			pm+pt		pm+ov	pm+pt		
Protected Phases	5	2	3	1	6		3	8	1	7	4	
Permitted Phases			2				8		8	4		
Actuated Green, G (s)	8.0	48.0	55.0	8.0	48.0		45.3	38.3	46.3	45.3	38.3	
Effective Green, g (s)	8.0	49.3	56.3	8.0	49.3		46.7	39.7	47.7	46.7	39.7	
Actuated g/C Ratio	0.07	0.41	0.47	0.07	0.41		0.39	0.33	0.40	0.39	0.33	
Clearance Time (s)	4.0	5.3	4.0	4.0	5.3		4.0	5.4	4.0	4.0	5.4	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	205	1301	527	205	1235		148	1048	481	148	1453	
v/s Ratio Prot	0.08	c0.48	0.01	c0.11	0.32		c0.13	0.52	0.06	0.04	0.33	
v/s Ratio Perm			0.10				c0.75		0.35	0.22		
v/c Ratio	1.26	1.17	0.23	1.72	0.77		2.26	1.58	0.96	0.68	0.99	
Uniform Delay, d1	56.0	35.4	18.9	56.0	30.5		31.1	40.1	35.2	56.8	40.0	
Progression Factor	0.88	0.79	0.68	1.07	0.75		1.20	1.12	1.52	1.00	1.00	
Incremental Delay, d2	128.5	81.0	0.1	340.5	3.7		567.5	261.9	5.6	11.6	21.5	
Delay (s)	177.6	109.1	12.9	400.7	26.6		605.0	306.8	59.0	68.3	61.4	
Level of Service	F	F	B	F	C		F	F	E	E	E	
Approach Delay (s)		112.3			126.6			298.5			61.9	
Approach LOS		F			F			F			E	

Intersection Summary			
HCM Average Control Delay	167.7	HCM Level of Service	F
HCM Volume to Capacity ratio	1.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	123.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00	1.00	0.95	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3167	1417	1583	3038		1583	3167	1417	1583	3095	
Flt Permitted	0.17	1.00	1.00	0.07	1.00		0.14	1.00	1.00	0.21	1.00	
Satd. Flow (perm)	291	3167	1417	117	3038		235	3167	1417	358	3095	
Volume (vph)	174	1443	105	117	688	256	171	825	205	175	857	153
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	185	1535	112	124	732	272	182	878	218	186	912	163
RTOR Reduction (vph)	0	0	40	0	32	0	0	0	7	0	12	0
Lane Group Flow (vph)	185	1535	72	124	972	0	182	878	211	186	1063	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6		6	2			8		8	4		
Actuated Green, G (s)	55.1	55.1	55.1	55.1	55.1		53.5	53.5	53.5	53.5	53.5	
Effective Green, g (s)	57.0	57.0	57.0	57.0	57.0		55.0	55.0	55.0	55.0	55.0	
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.48		0.46	0.46	0.46	0.46	0.46	
Clearance Time (s)	5.9	5.9	5.9	5.9	5.9		5.5	5.5	5.5	5.5	5.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	138	1504	673	56	1443		108	1452	649	164	1419	
v/s Ratio Prot		0.48			0.32			0.28			0.34	
v/s Ratio Perm	0.64		0.05	c1.06			c0.77		0.15	0.52		
v/c Ratio	1.34	1.02	0.11	2.21	0.67		1.69	0.60	0.33	1.13	0.75	
Uniform Delay, d1	31.5	31.5	17.4	31.5	24.3		32.5	24.4	20.7	32.5	26.8	
Progression Factor	1.19	1.20	1.72	0.62	0.64		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	157.8	13.1	0.0	551.7	0.2		345.0	1.9	1.3	110.9	3.7	
Delay (s)	195.4	50.8	30.1	571.3	15.8		377.5	26.2	22.0	143.4	30.5	
Level of Service	F	D	C	F	B		F	C	C	F	C	
Approach Delay (s)		64.2			76.9			75.5			47.1	
Approach LOS		E			E			E			D	

Intersection Summary			
HCM Average Control Delay	65.5	HCM Level of Service	E
HCM Volume to Capacity ratio	1.97		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1583	3150		1583	3100		1583	1667	1417	1583	1625	
Flt Permitted	0.20	1.00		0.20	1.00		0.22	1.00	1.00	0.32	1.00	
Satd. Flow (perm)	327	3150		327	3100		371	1667	1417	535	1625	
Volume (vph)	93	1388	51	89	790	129	74	545	184	5	560	110
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	97	1446	53	93	823	134	77	568	192	5	583	115
RTOR Reduction (vph)	0	5	0	0	22	0	0	0	1	0	12	0
Lane Group Flow (vph)	97	1494	0	93	935	0	77	568	191	5	686	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		6			2			8			4	
Permitted Phases	6			2			8		8	4		
Actuated Green, G (s)	20.1	20.1		20.1	20.1		31.0	31.0	31.0	31.0	31.0	
Effective Green, g (s)	20.4	20.4		20.4	20.4		31.6	31.6	31.6	31.6	31.6	
Actuated g/C Ratio	0.34	0.34		0.34	0.34		0.53	0.53	0.53	0.53	0.53	
Clearance Time (s)	4.3	4.3		4.3	4.3		4.6	4.6	4.6	4.6	4.6	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	111	1071		111	1054		195	878	746	282	856	
v/s Ratio Prot		c0.47			0.30			0.34			c0.42	
v/s Ratio Perm	0.30			0.28			0.21		0.13	0.01		
v/c Ratio	0.87	1.40		0.84	0.89		0.39	0.65	0.26	0.02	0.80	
Uniform Delay, d1	18.6	19.8		18.3	18.7		8.5	10.2	7.8	6.8	11.6	
Progression Factor	1.00	1.00		1.02	1.01		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	56.4	183.6		28.8	5.8		5.9	3.7	0.8	0.1	7.8	
Delay (s)	75.0	203.4		47.5	24.7		14.4	13.9	8.6	6.9	19.4	
Level of Service	E	F		D	C		B	B	A	A	B	
Approach Delay (s)		195.6			26.8			12.7			19.4	
Approach LOS		F			C			B			B	

Intersection Summary			
HCM Average Control Delay	87.1	HCM Level of Service	F
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	60.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			