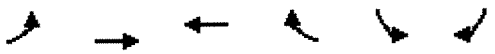
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Yield			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	0	292	0	0	2176	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	317	0	0	2365	0
Pedestrians	43			113		
Lane Width (ft)	12.0			0.0		
Walking Speed (ft/s)	4.0			4.0		
Percent Blockage	4			0		
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)				126		
pX, platoon unblocked						
vC, conflicting volume	2408	944	2408			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2408	944	2408			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	0	100			
cM capacity (veh/h)	26	254	188			

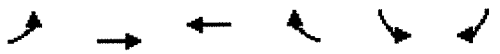
Direction, Lane #	EB 1	EB 2	SB 1	SB 2	SB 3
Volume Total	159	159	788	788	788
Volume Left	0	0	0	0	0
Volume Right	159	159	0	0	0
cSH	254	254	1700	1700	1700
Volume to Capacity	0.63	0.63	0.46	0.46	0.46
Queue Length 95th (ft)	95	95	0	0	0
Control Delay (s)	40.3	40.3	0.0	0.0	0.0
Lane LOS	E	E			
Approach Delay (s)	40.3		0.0		
Approach LOS	E				

Intersection Summary			
Average Delay	4.8		
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑↑↑↑			↱↱↱
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			4.0
Lane Util. Factor			0.86			0.76
Frpb, ped/bikes			1.00			1.00
Flpb, ped/bikes			1.00			1.00
Frt			1.00			0.85
Flt Protected			1.00			1.00
Satd. Flow (prot)			5767			3249
Flt Permitted			1.00			1.00
Satd. Flow (perm)			5767			3249
Volume (vph)	0	0	1387	0	0	1466
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1508	0	0	1593
RTOR Reduction (vph)	0	0	0	0	0	49
Lane Group Flow (vph)	0	0	1508	0	0	1544
Confl. Peds. (#/hr)	119			119	91	
Turn Type						custom
Protected Phases			10 11			
Permitted Phases						1 3
Actuated Green, G (s)			100.0			80.0
Effective Green, g (s)			100.0			80.0
Actuated g/C Ratio			1.00			0.80
Clearance Time (s)						
Lane Grp Cap (vph)			5767			2599
v/s Ratio Prot			c0.26			
v/s Ratio Perm						c0.48
v/c Ratio			0.26			0.59
Uniform Delay, d1			0.0			3.8
Progression Factor			1.00			1.00
Incremental Delay, d2			0.1			1.0
Delay (s)			0.1			4.8
Level of Service			A			A
Approach Delay (s)		0.0	0.1		4.8	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	2.5	HCM Level of Service	A
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	4.0
Intersection Capacity Utilization	67.0%	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)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0		
Lane Util. Factor			0.86	0.86		
Frpb, ped/bikes			0.99	1.00		
Flpb, ped/bikes			1.00	1.00		
Frt			0.99	0.85		
Flt Protected			1.00	1.00		
Satd. Flow (prot)			4251	1226		
Flt Permitted			1.00	1.00		
Satd. Flow (perm)			4251	1226		
Volume (vph)	0	0	1387	532	0	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1508	578	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1612	474	0	0
Confl. Peds. (#/hr)	276			276		322
Turn Type				custom		
Protected Phases			7 9	4 6		
Permitted Phases						
Actuated Green, G (s)			77.0	80.0		
Effective Green, g (s)			77.0	80.0		
Actuated g/C Ratio			0.77	0.80		
Clearance Time (s)						
Lane Grp Cap (vph)			3273	981		
v/s Ratio Prot			c0.38	c0.39		
v/s Ratio Perm						
v/c Ratio			0.49	0.48		
Uniform Delay, d1			4.3	3.3		
Progression Factor			1.15	0.87		
Incremental Delay, d2			0.5	1.7		
Delay (s)			5.4	4.5		
Level of Service			A	A		
Approach Delay (s)		0.0	5.2		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM Average Control Delay	5.2	HCM Level of Service	A
HCM Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	0.0
Intersection Capacity Utilization	67.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Yield		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	525	1395	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	571	1516	0	0	0
Pedestrians	68		71			72
Lane Width (ft)	12.0		12.0			0.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	6		6			0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)						94
pX, platoon unblocked						
vC, conflicting volume	1655	519			1584	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1655	519			1584	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	0			100	
cM capacity (veh/h)	79	473			388	

Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4
Volume Total	285	285	379	379	379	379
Volume Left	0	0	0	0	0	0
Volume Right	285	285	0	0	0	0
cSH	473	473	1700	1700	1700	1700
Volume to Capacity	0.60	0.60	0.22	0.22	0.22	0.22
Queue Length 95th (ft)	98	98	0	0	0	0
Control Delay (s)	23.5	23.5	0.0	0.0	0.0	0.0
Lane LOS	C	C				
Approach Delay (s)	23.5		0.0			
Approach LOS	C					

Intersection Summary			
Average Delay	6.4		
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0			4.0
Lane Util. Factor	1.00		0.91			0.95
Frpb, ped/bikes	0.96		0.94			1.00
Flpb, ped/bikes	0.55		1.00			0.98
Frt	0.99		0.97			1.00
Flt Protected	0.96		1.00			0.99
Satd. Flow (prot)	744		4156			2918
Flt Permitted	0.96		1.00			0.72
Satd. Flow (perm)	744		4156			2105
Volume (vph)	313	25	443	112	203	1092
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	340	27	482	122	221	1187
RTOR Reduction (vph)	3	0	44	0	0	0
Lane Group Flow (vph)	364	0	560	0	0	1408
Confl. Peds. (#/hr)	1095	1412		379	379	
Parking (#/hr)	3	3			3	3
Turn Type					Perm	
Protected Phases			2			6
Permitted Phases	8				6	
Actuated Green, G (s)	27.0		63.0			63.0
Effective Green, g (s)	28.0		64.0			64.0
Actuated g/C Ratio	0.28		0.64			0.64
Clearance Time (s)	5.0		5.0			5.0
Lane Grp Cap (vph)	208		2660			1347
v/s Ratio Prot			0.13			
v/s Ratio Perm	c0.49					c0.67
v/c Ratio	1.75		0.21			1.05
Uniform Delay, d1	36.0		7.5			18.0
Progression Factor	1.00		1.32			1.07
Incremental Delay, d2	356.9		0.2			35.9
Delay (s)	392.9		10.1			55.1
Level of Service	F		B			E
Approach Delay (s)	392.9		10.1			55.1
Approach LOS	F		B			E

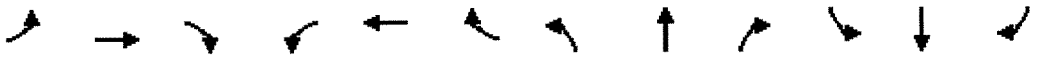
Intersection Summary			
HCM Average Control Delay	95.8	HCM Level of Service	F
HCM Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	125.1%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL2	SBT	SBR	NWL	NWT	NWR	NWR2
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0		4.0
Lane Util. Factor		0.95			0.91			1.00		1.00
Frpb, ped/bikes		0.96			1.00			0.86		1.00
Flpb, ped/bikes		1.00			0.99			1.00		1.00
Frt		0.98			1.00			0.91		0.85
Flt Protected		1.00			1.00			0.99		1.00
Satd. Flow (prot)		2972			4539			1309		1425
Flt Permitted		0.69			0.89			0.99		1.00
Satd. Flow (perm)		2071			4044			1309		1425
Volume (vph)	48	443	63	49	1419	4	9	20	46	8
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)	52	482	68	53	1542	4	10	22	50	9
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	9
Lane Group Flow (vph)	0	602	0	0	1599	0	0	82	0	0
Confl. Peds. (#/hr)	614		382	382		614			229	382
Turn Type	Perm			Perm			Perm			NA
Protected Phases		6			2			4		
Permitted Phases	6			2			4			
Actuated Green, G (s)		56.0			52.0			32.0		0.0
Effective Green, g (s)		58.0			58.0			34.0		0.0
Actuated g/C Ratio		0.58			0.58			0.34		0.00
Clearance Time (s)		6.0			10.0			6.0		
Lane Grp Cap (vph)		1201			2346			445		0
v/s Ratio Prot										
v/s Ratio Perm		0.29			c0.40			0.06		
v/c Ratio		0.50			0.68			0.18		0.00
Uniform Delay, d1		12.4			14.6			23.2		50.0
Progression Factor		0.32			0.41			1.00		1.00
Incremental Delay, d2		1.4			1.0			0.9		0.0
Delay (s)		5.3			6.9			24.1		50.0
Level of Service		A			A			C		D
Approach Delay (s)		5.3			6.9			26.7		
Approach LOS		A			A			C		

Intersection Summary			
HCM Average Control Delay	7.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.50		
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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		1.00						0.95			0.91	
Frpb, ped/bikes		0.86						0.97			1.00	
Flpb, ped/bikes		1.00						1.00			0.99	
Frt		0.90						0.99			1.00	
Flt Protected		1.00						1.00			1.00	
Satd. Flow (prot)		1297						3038			4359	
Flt Permitted		1.00						1.00			0.86	
Satd. Flow (perm)		1297						3038			3764	
Volume (vph)	34	63	249	0	0	0	0	514	50	70	1359	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)	37	68	271	0	0	0	0	559	54	76	1477	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	7	0	0	0	0
Lane Group Flow (vph)	0	375	0	0	0	0	0	606	0	0	1553	0
Confl. Peds. (#/hr)			196	196			614		382	382		614
Parking (#/hr)											3	3
Turn Type	custom									Perm		
Protected Phases	4	4						2			6	
Permitted Phases	4									6		
Actuated Green, G (s)		32.0						52.0			56.0	
Effective Green, g (s)		34.0						58.0			58.0	
Actuated g/C Ratio		0.34						0.58			0.58	
Clearance Time (s)		6.0						10.0			6.0	
Lane Grp Cap (vph)		441						1762			2183	
v/s Ratio Prot		c0.29						0.20				
v/s Ratio Perm											c0.41	
v/c Ratio		0.85						0.34			0.71	
Uniform Delay, d1		30.6						11.0			15.0	
Progression Factor		1.00						1.00			0.08	
Incremental Delay, d2		18.3						0.5			1.5	
Delay (s)		49.0						11.6			2.7	
Level of Service		D						B			A	
Approach Delay (s)		49.0			0.0			11.6			2.7	
Approach LOS		D			A			B			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.0%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0			4.0				
Lane Util. Factor					0.95			0.91				
Frpb, ped/bikes					1.00			1.00				
Flpb, ped/bikes					1.00			0.94				
Frt					0.94			1.00				
Flt Protected					1.00			0.98				
Satd. Flow (prot)					2824			4227				
Flt Permitted					1.00			0.98				
Satd. Flow (perm)					2824			4227				
Volume (vph)	0	0	0	0	251	165	274	365	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	273	179	298	397	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	109	0	0	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	343	0	0	673	0	0	0	0
Confl. Peds. (#/hr)			50	50			312					312
Parking (#/hr)					3	3						
Turn Type							Perm					
Protected Phases					1 3			2				
Permitted Phases							2					
Actuated Green, G (s)					21.0			71.0				
Effective Green, g (s)					18.0			71.0				
Actuated g/C Ratio					0.18			0.71				
Clearance Time (s)								4.0				
Lane Grp Cap (vph)					508			3001				
v/s Ratio Prot					c0.12							
v/s Ratio Perm								0.16				
v/c Ratio					0.68			0.22				
Uniform Delay, d1					38.3			5.0				
Progression Factor					1.00			0.01				
Incremental Delay, d2					7.0			0.2				
Delay (s)					45.3			0.2				
Level of Service					D			A				
Approach Delay (s)		0.0			45.3			0.2			0.0	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM Average Control Delay	18.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.8%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0				
Lane Util. Factor		0.95						0.91				
Frpb, ped/bikes		1.00						1.00				
Flpb, ped/bikes		1.00						1.00				
Frt		1.00						0.99				
Flt Protected		1.00						1.00				
Satd. Flow (prot)		3172						4546				
Flt Permitted		1.00						1.00				
Satd. Flow (perm)		3172						4546				
Volume (vph)	15	302	0	0	0	0	0	623	23	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)	16	328	0	0	0	0	0	677	25	0	0	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	4	0	0	0	0
Lane Group Flow (vph)	0	340	0	0	0	0	0	698	0	0	0	0
Confl. Peds. (#/hr)	50		50	50		50	248		50	50		248
Turn Type	Perm											
Protected Phases		4 6						5				
Permitted Phases	4 6											
Actuated Green, G (s)		41.0						51.0				
Effective Green, g (s)		41.0						51.0				
Actuated g/C Ratio		0.41						0.51				
Clearance Time (s)								4.0				
Lane Grp Cap (vph)		1301						2318				
v/s Ratio Prot								c0.15				
v/s Ratio Perm		0.11										
v/c Ratio		0.26						0.30				
Uniform Delay, d1		19.5						14.2				
Progression Factor		0.48						0.32				
Incremental Delay, d2		0.5						0.2				
Delay (s)		9.8						4.7				
Level of Service		A						A				
Approach Delay (s)		9.8			0.0			4.7			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM Average Control Delay	6.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	34.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	
Lane Util. Factor		0.91	0.76			0.91	
Frpb, ped/bikes		1.00	1.00			0.98	
Flpb, ped/bikes		1.00	1.00			1.00	
Frt		1.00	0.85			0.95	
Flt Protected		1.00	1.00			0.99	
Satd. Flow (prot)		4575	3124			4221	
Flt Permitted		1.00	1.00			0.99	
Satd. Flow (perm)		4575	3124			4221	
Volume (vph)	2	661	736	224	137	421	261
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	718	800	243	149	458	284
RTOR Reduction (vph)	0	0	41	0	0	84	0
Lane Group Flow (vph)	0	720	1002	0	0	807	0
Confl. Peds. (#/hr)	47		13	47	13		43
Parking (#/hr)			3	3			
Turn Type	custom		custom		Perm		
Protected Phases	9	7 9	7			8	
Permitted Phases	7				8		
Actuated Green, G (s)		53.0	28.0			35.0	
Effective Green, g (s)		51.0	28.0			37.0	
Actuated g/C Ratio		0.51	0.28			0.37	
Clearance Time (s)			4.0			6.0	
Lane Grp Cap (vph)		2516	875			1562	
v/s Ratio Prot		c0.07	c0.32				
v/s Ratio Perm		0.09				0.19	
v/c Ratio		0.29	1.15			0.52	
Uniform Delay, d1		14.1	36.0			24.5	
Progression Factor		0.78	1.00			1.00	
Incremental Delay, d2		0.3	78.8			1.2	
Delay (s)		11.3	114.8			25.8	
Level of Service		B	F			C	
Approach Delay (s)		11.3				25.8	
Approach LOS		B				C	

Intersection Summary			
HCM Average Control Delay	56.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.7%	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												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	247	70	0	0	223	96	84	292	96	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	268	76	0	0	242	104	91	317	104	0	0	0

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total (vph)	345	347	250	263
Volume Left (vph)	268	0	91	0
Volume Right (vph)	0	104	0	104
Hadj (s)	0.19	-0.15	0.22	-0.24
Departure Headway (s)	6.1	5.8	6.7	6.2
Degree Utilization, x	0.58	0.56	0.47	0.46
Capacity (veh/h)	572	599	510	556
Control Delay (s)	17.2	15.8	14.2	13.1
Approach Delay (s)	17.2	15.8	13.6	
Approach LOS	C	C	B	

Intersection Summary			
Delay	15.3		
HCM Level of Service	C		
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0			4.0			4.0	
Lane Util. Factor					0.95			0.95			1.00	
Frpb, ped/bikes					1.00			1.00			0.97	
Flpb, ped/bikes					1.00			1.00			1.00	
Frt					1.00			1.00			0.93	
Flt Protected					1.00			0.99			1.00	
Satd. Flow (prot)					2993			3154			1521	
Flt Permitted					1.00			0.54			1.00	
Satd. Flow (perm)					2993			1712			1521	
Volume (vph)	0	0	0	0	926	17	57	276	0	0	349	331
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	1007	18	62	300	0	0	379	360
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	34	0
Lane Group Flow (vph)	0	0	0	0	1024	0	0	362	0	0	705	0
Confl. Peds. (#/hr)	13					13	61					61
Parking (#/hr)					3	3						
Turn Type				Perm			Perm					
Protected Phases					9 11			10			10	
Permitted Phases				9 11			10					
Actuated Green, G (s)					54.0			38.0			38.0	
Effective Green, g (s)					54.0			38.0			38.0	
Actuated g/C Ratio					0.54			0.38			0.38	
Clearance Time (s)								4.0			4.0	
Lane Grp Cap (vph)					1616			651			578	
v/s Ratio Prot					c0.34						c0.46	
v/s Ratio Perm								0.21				
v/c Ratio					0.63			0.93dl			1.22	
Uniform Delay, d1					16.1			24.4			31.0	
Progression Factor					0.31			0.68			0.47	
Incremental Delay, d2					1.5			3.2			100.3	
Delay (s)					6.5			19.6			114.8	
Level of Service					A			B			F	
Approach Delay (s)		0.0			6.5			19.6			114.8	
Approach LOS		A			A			B			F	

Intersection Summary			
HCM Average Control Delay	46.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0						4.0			4.0	
Lane Util. Factor		0.95						1.00			1.00	
Frpb, ped/bikes		1.00						0.99			1.00	
Flpb, ped/bikes		1.00						1.00			1.00	
Frt		1.00						0.98			1.00	
Flt Protected		0.98						1.00			1.00	
Satd. Flow (prot)		2949						1633			1673	
Flt Permitted		0.98						1.00			0.99	
Satd. Flow (perm)		2949						1633			1659	
Volume (vph)	115	242	4	0	0	0	0	218	37	11	349	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)	125	263	4	0	0	0	0	237	40	12	379	0
RTOR Reduction (vph)	0	1	0	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	0	391	0	0	0	0	0	271	0	0	391	0
Confl. Peds. (#/hr)			40	40					40	40		
Parking (#/hr)	3	3	3									
Turn Type	Perm									D.P+P		
Protected Phases		3 7						2		1	1 2	
Permitted Phases	3 7									2		
Actuated Green, G (s)		49.0						34.0			38.0	
Effective Green, g (s)		49.0						34.0			39.0	
Actuated g/C Ratio		0.49						0.34			0.39	
Clearance Time (s)								4.0				
Lane Grp Cap (vph)		1445						555			648	
v/s Ratio Prot								0.17			c0.03	
v/s Ratio Perm		0.13									c0.21	
v/c Ratio		0.27						0.49			0.60	
Uniform Delay, d1		15.0						26.1			24.3	
Progression Factor		1.00						1.00			0.11	
Incremental Delay, d2		0.5						3.1			0.4	
Delay (s)		15.5						29.2			3.1	
Level of Service		B						C			A	
Approach Delay (s)		15.5			0.0			29.2			3.1	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM Average Control Delay	14.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		1.00			1.00			0.91			0.95	
Frpb, ped/bikes		0.96			0.97			0.98			0.98	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.90			0.95			0.99			0.99	
Flt Protected		1.00			1.00			1.00			1.00	
Satd. Flow (prot)		1437			1549			4414			3081	
Flt Permitted		0.98			0.98			0.90			0.93	
Satd. Flow (perm)		1410			1525			3970			2875	
Volume (vph)	13	29	127	8	76	45	11	457	46	29	1286	111
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)	14	32	138	9	83	49	12	497	50	32	1398	121
RTOR Reduction (vph)	0	12	0	0	19	0	0	12	0	0	6	0
Lane Group Flow (vph)	0	172	0	0	122	0	0	547	0	0	1545	0
Confl. Peds. (#/hr)	57		37	37		57	286		286	286		286
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		27.0			27.0			65.0			65.0	
Effective Green, g (s)		27.0			27.0			65.0			65.0	
Actuated g/C Ratio		0.27			0.27			0.65			0.65	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		381			412			2581			1869	
v/s Ratio Prot												
v/s Ratio Perm		c0.12			0.08			0.14			c0.54	
v/c Ratio		0.45			0.30			0.21			0.83	
Uniform Delay, d1		30.3			29.0			7.1			13.2	
Progression Factor		1.00			1.00			1.05			0.64	
Incremental Delay, d2		3.8			1.8			0.2			0.4	
Delay (s)		34.1			30.8			7.6			8.8	
Level of Service		C			C			A			A	
Approach Delay (s)		34.1			30.8			7.6			8.8	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM Average Control Delay	11.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.5%	ICU Level of Service	F
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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)					4.0			4.0				
Lane Util. Factor					0.95			0.91				
Frpb, ped/bikes					1.00			1.00				
Flpb, ped/bikes					1.00			1.00				
Frt					1.00			1.00				
Flt Protected					1.00			1.00				
Satd. Flow (prot)					3185			4577				
Flt Permitted					1.00			1.00				
Satd. Flow (perm)					3185			4577				
Volume (vph)	0	0	0	0	943	0	0	1015	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	1025	0	0	1103	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	1025	0	0	1103	0	0	0	0
Confl. Peds. (#/hr)									60	60		
Turn Type												
Protected Phases					2			1 3				
Permitted Phases												
Actuated Green, G (s)					52.0			40.0				
Effective Green, g (s)					52.0			40.0				
Actuated g/C Ratio					0.52			0.40				
Clearance Time (s)					4.0							
Lane Grp Cap (vph)					1656			1831				
v/s Ratio Prot					c0.32			c0.24				
v/s Ratio Perm												
v/c Ratio					0.62			0.60				
Uniform Delay, d1					17.0			23.7				
Progression Factor					0.97			0.12				
Incremental Delay, d2					1.6			0.1				
Delay (s)					18.1			2.9				
Level of Service					B			A				
Approach Delay (s)		0.0			18.1			2.9			0.0	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	10.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	446	0	268	371	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	485	0	291	403	0	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)					304	
pX, platoon unblocked						
vC, conflicting volume	717	0	0			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	717	0	0			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	100	82			
cM capacity (veh/h)	299	1084	1622			

Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3
Volume Total	242	242	372	161	161
Volume Left	242	242	291	0	0
Volume Right	0	0	0	0	0
cSH	299	299	1622	1700	1700
Volume to Capacity	0.81	0.81	0.18	0.09	0.09
Queue Length 95th (ft)	166	166	16	0	0
Control Delay (s)	53.3	53.3	6.3	0.0	0.0
Lane LOS	F	F	A		
Approach Delay (s)	53.3		3.4		
Approach LOS	F				

Intersection Summary			
Average Delay	23.9		
Intersection Capacity Utilization	37.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations		↑↑									↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.95									0.91	
Frpb, ped/bikes		1.00									1.00	
Flpb, ped/bikes		1.00									1.00	
Frt		1.00									1.00	
Flt Protected		1.00									1.00	
Satd. Flow (prot)		3185									4577	
Flt Permitted		1.00									1.00	
Satd. Flow (perm)		3185									4577	
Volume (vph)	0	316	0	0	0	0	0	0	0	0	874	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	343	0	0	0	0	0	0	0	0	950	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	343	0	0	0	0	0	0	0	0	950	0
Confl. Peds. (#/hr)	732					732			16	16		
Turn Type												
Protected Phases		10									11	
Permitted Phases												
Actuated Green, G (s)		33.0									58.0	
Effective Green, g (s)		34.0									58.0	
Actuated g/C Ratio		0.34									0.58	
Clearance Time (s)		5.0									4.0	
Lane Grp Cap (vph)		1083									2655	
v/s Ratio Prot		c0.11									c0.21	
v/s Ratio Perm												
v/c Ratio		0.32									0.36	
Uniform Delay, d1		24.4									11.1	
Progression Factor		0.98									0.12	
Incremental Delay, d2		0.7									0.0	
Delay (s)		24.7									1.4	
Level of Service		C									A	
Approach Delay (s)		24.7			0.0			0.0			1.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM Average Control Delay	7.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	
Lane Util. Factor		0.91	0.76			0.91	
Frpb, ped/bikes		1.00	1.00			0.99	
Flpb, ped/bikes		1.00	1.00			1.00	
Frt		1.00	0.85			0.97	
Flt Protected		1.00	1.00			1.00	
Satd. Flow (prot)		4576	3124			4407	
Flt Permitted		1.00	1.00			1.00	
Satd. Flow (perm)		4576	3124			4407	
Volume (vph)	2	1154	291	188	69	601	134
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	1254	316	204	75	653	146
RTOR Reduction (vph)	0	0	116	0	0	30	0
Lane Group Flow (vph)	0	1256	404	0	0	844	0
Confl. Peds. (#/hr)	34		16	34	16		21
Parking (#/hr)			3	3			
Turn Type	custom				Perm		
Protected Phases	9	7 9	7			8	
Permitted Phases	7				8		
Actuated Green, G (s)		64.0	32.0			24.0	
Effective Green, g (s)		62.0	32.0			26.0	
Actuated g/C Ratio		0.62	0.32			0.26	
Clearance Time (s)			4.0			6.0	
Lane Grp Cap (vph)		3020	1000			1146	
v/s Ratio Prot		c0.12	0.13				
v/s Ratio Perm		0.15				0.19	
v/c Ratio		0.42	0.40			0.74	
Uniform Delay, d1		9.7	26.6			33.9	
Progression Factor		0.18	1.00			0.86	
Incremental Delay, d2		0.4	1.2			3.0	
Delay (s)		2.1	27.8			32.2	
Level of Service		A	C			C	
Approach Delay (s)		2.1				32.2	
Approach LOS		A				C	

Intersection Summary			
HCM Average Control Delay	17.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.3%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0			4.0				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frpb, ped/bikes	1.00	1.00			0.77			0.97				
Flpb, ped/bikes	0.76	1.00			1.00			0.99				
Frt	1.00	1.00			0.94			0.97				
Flt Protected	0.95	1.00			1.00			1.00				
Satd. Flow (prot)	1068	1484			1065			2796				
Flt Permitted	0.65	1.00			1.00			1.00				
Satd. Flow (perm)	728	1484			1065			2796				
Volume (vph)	446	142	0	0	33	30	31	501	120	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)	485	154	0	0	36	33	34	545	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	20	0	0	19	0	0	0	0
Lane Group Flow (vph)	485	154	0	0	49	0	0	690	0	0	0	0
Confl. Peds. (#/hr)	652		677	677		652	86		63	63		86
Parking (#/hr)	3	3			3	3	3	3	3			
Turn Type	pm+pt						Perm					
Protected Phases	7	4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)	63.0	63.0			39.0			27.0				
Effective Green, g (s)	64.0	64.0			40.0			28.0				
Actuated g/C Ratio	0.64	0.64			0.40			0.28				
Clearance Time (s)	5.0	5.0			5.0			5.0				
Lane Grp Cap (vph)	534	950			426			783				
v/s Ratio Prot	c0.18	0.10			0.05							
v/s Ratio Perm	c0.40							0.25				
v/c Ratio	0.91	0.16			0.12			0.88				
Uniform Delay, d1	13.8	7.2			18.9			34.4				
Progression Factor	0.38	0.15			1.00			1.00				
Incremental Delay, d2	20.0	0.3			0.6			13.5				
Delay (s)	25.3	1.4			19.4			48.0				
Level of Service	C	A			B			D				
Approach Delay (s)		19.5			19.4			48.0			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM Average Control Delay	33.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0			4.0	
Lane Util. Factor		0.91	0.76			0.91	
Frpb, ped/bikes		1.00	1.00			0.98	
Flpb, ped/bikes		1.00	1.00			1.00	
Frt		1.00	0.85			0.95	
Flt Protected		1.00	1.00			0.99	
Satd. Flow (prot)		4575	3124			4221	
Flt Permitted		1.00	1.00			0.99	
Satd. Flow (perm)		4575	3124			4221	
Volume (vph)	2	661	736	224	137	421	261
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	718	800	243	149	458	284
RTOR Reduction (vph)	0	0	41	0	0	84	0
Lane Group Flow (vph)	0	720	1002	0	0	807	0
Confl. Peds. (#/hr)	47		13	47	13		43
Parking (#/hr)			3	3			
Turn Type	custom		custom		Perm		
Protected Phases	9	7 9	7			8	
Permitted Phases	7				8		
Actuated Green, G (s)		53.0	28.0			35.0	
Effective Green, g (s)		51.0	28.0			37.0	
Actuated g/C Ratio		0.51	0.28			0.37	
Clearance Time (s)			4.0			6.0	
Lane Grp Cap (vph)		2516	875			1562	
v/s Ratio Prot		c0.07	c0.32				
v/s Ratio Perm		0.09				0.19	
v/c Ratio		0.29	1.15			0.52	
Uniform Delay, d1		14.1	36.0			24.5	
Progression Factor		0.76	1.00			0.89	
Incremental Delay, d2		0.3	78.8			1.2	
Delay (s)		10.9	114.8			23.1	
Level of Service		B	F			C	
Approach Delay (s)		10.9				23.1	
Approach LOS		B				C	

Intersection Summary			
HCM Average Control Delay	55.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.7%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0			4.0				
Lane Util. Factor	1.00	1.00			1.00			0.95				
Frpb, ped/bikes	1.00	1.00			0.88			0.94				
Flpb, ped/bikes	0.95	1.00			1.00			0.96				
Frt	1.00	1.00			0.96			0.97				
Flt Protected	0.95	1.00			1.00			0.99				
Satd. Flow (prot)	1335	1484			1251			2605				
Flt Permitted	0.40	1.00			1.00			0.99				
Satd. Flow (perm)	561	1484			1251			2605				
Volume (vph)	247	70	0	0	223	96	84	292	96	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)	268	76	0	0	242	104	91	317	104	0	0	0
RTOR Reduction (vph)	0	0	0	0	16	0	0	22	0	0	0	0
Lane Group Flow (vph)	268	76	0	0	330	0	0	490	0	0	0	0
Confl. Peds. (#/hr)	427		617	617		427	74		87	87		74
Parking (#/hr)	3	3			3	3	3	3	3			
Turn Type	pm+pt						Perm					
Protected Phases	7	4			8			2				
Permitted Phases	4						2					
Actuated Green, G (s)	60.0	60.0			44.0			32.0				
Effective Green, g (s)	60.0	60.0			44.0			32.0				
Actuated g/C Ratio	0.60	0.60			0.44			0.32				
Clearance Time (s)	4.0	4.0			4.0			4.0				
Lane Grp Cap (vph)	429	890			550			834				
v/s Ratio Prot	c0.07	0.05			0.26							
v/s Ratio Perm	c0.30							0.19				
v/c Ratio	0.62	0.09			0.60			0.59				
Uniform Delay, d1	11.4	8.4			21.3			28.5				
Progression Factor	0.51	0.37			1.00			1.00				
Incremental Delay, d2	3.9	0.1			4.8			3.0				
Delay (s)	9.8	3.2			26.1			31.5				
Level of Service	A	A			C			C				
Approach Delay (s)		8.3			26.1			31.5			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM Average Control Delay	23.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	100.0	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