

Appendix C

Background Future Levels of Service

												
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)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frpb, ped/bikes		0.99			0.99			1.00			1.00	0.78
Flpb, ped/bikes		1.00			1.00			0.92			1.00	1.00
Frt		0.97			1.00			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.97			1.00	1.00
Satd. Flow (prot)		3361			3493			1662			1858	1241
Flt Permitted		0.57			0.95			0.70			0.99	1.00
Satd. Flow (perm)		1924			3329			1193			1844	1241
Volume (vph)	72	234	69	6	1122	21	136	102	5	5	166	221
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)	80	260	77	7	1247	23	151	113	6	6	184	246
RTOR Reduction (vph)	0	20	0	0	1	0	0	1	0	0	0	138
Lane Group Flow (vph)	0	397	0	0	1276	0	0	269	0	0	190	108
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		51.0			36.0			39.0			39.0	39.0
Effective Green, g (s)		52.0			37.0			42.0			42.0	42.0
Actuated g/C Ratio		0.52			0.37			0.42			0.42	0.42
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1173			1232			501			774	521
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.14			c0.38			c0.23			0.10	0.09
v/c Ratio		0.34			1.04			0.54			0.25	0.21
Uniform Delay, d1		14.0			31.5			21.7			18.8	18.4
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		0.8			35.3			4.1			0.8	0.9
Delay (s)		14.8			66.8			25.8			19.5	19.3
Level of Service		B			E			C			B	B
Approach Delay (s)		14.8			66.8			25.8			19.4	
Approach LOS		B			E			C			B	
Intersection Summary												
HCM Average Control Delay		44.5			HCM Level of Service			D				
HCM Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		85.3%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frpb, ped/bikes		0.99			0.99			1.00			1.00	0.78
Flpb, ped/bikes		1.00			1.00			0.92			1.00	1.00
Frt		0.97			1.00			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.97			1.00	1.00
Satd. Flow (prot)		3361			3493			1663			1858	1241
Flt Permitted		0.58			0.95			0.69			0.99	1.00
Satd. Flow (perm)		1954			3329			1174			1844	1241
Volume (vph)	72	234	69	6	1122	21	136	102	5	5	166	221
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)	80	260	77	7	1247	23	151	113	6	6	184	246
RTOR Reduction (vph)	0	19	0	0	1	0	0	1	0	0	0	137
Lane Group Flow (vph)	0	398	0	0	1276	0	0	269	0	0	190	109
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		53.0			38.0			37.0			37.0	37.0
Effective Green, g (s)		54.0			39.0			40.0			40.0	40.0
Actuated g/C Ratio		0.54			0.39			0.40			0.40	0.40
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1224			1298			470			738	496
v/s Ratio Prot		c0.04										
v/s Ratio Perm		0.14			c0.38			c0.23			0.10	0.09
v/c Ratio		0.32			0.98			0.57			0.26	0.22
Uniform Delay, d1		12.8			30.2			23.4			20.1	19.7
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		0.7			21.2			5.0			0.8	1.0
Delay (s)		13.5			51.4			28.4			20.9	20.7
Level of Service		B			D			C			C	C
Approach Delay (s)		13.5			51.4			28.4			20.8	
Approach LOS		B			D			C			C	
Intersection Summary												
HCM Average Control Delay		36.7			HCM Level of Service			D				
HCM Volume to Capacity ratio		0.70										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		85.3%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frbp, ped/bikes		0.99			0.96			1.00			1.00	0.78
Flpb, ped/bikes		0.97			1.00			0.93			1.00	1.00
Frt		0.99			0.99			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.98			0.99	1.00
Satd. Flow (prot)		3347			3378			1697			1846	1241
Flt Permitted		0.73			0.95			0.79			0.96	1.00
Satd. Flow (perm)		2477			3210			1375			1781	1241
Volume (vph)	144	701	91	3	373	26	88	102	3	18	147	247
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)	160	779	101	3	414	29	98	113	3	20	163	274
RTOR Reduction (vph)	0	8	0	0	5	0	0	1	0	0	0	158
Lane Group Flow (vph)	0	1032	0	0	441	0	0	213	0	0	183	116
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		51.0			36.0			39.0			39.0	39.0
Effective Green, g (s)		52.0			37.0			42.0			42.0	42.0
Actuated g/C Ratio		0.52			0.37			0.42			0.42	0.42
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1392			1188			578			748	521
v/s Ratio Prot		c0.09										
v/s Ratio Perm		c0.30			0.14			c0.16			0.10	0.09
v/c Ratio		0.74			0.37			0.37			0.24	0.22
Uniform Delay, d1		18.7			23.0			19.9			18.7	18.5
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		3.6			0.9			1.8			0.8	1.0
Delay (s)		22.3			23.9			21.7			19.5	19.5
Level of Service		C			C			C			B	B
Approach Delay (s)		22.3			23.9			21.7			19.5	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM Average Control Delay		22.0			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.57										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		80.0%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	3.0
Lane Util. Factor		0.95			0.95			1.00			1.00	1.00
Frpb, ped/bikes		0.99			0.96			1.00			1.00	0.78
Flpb, ped/bikes		0.97			1.00			0.93			1.00	1.00
Frt		0.99			0.99			1.00			1.00	0.85
Flt Protected		0.99			1.00			0.98			0.99	1.00
Satd. Flow (prot)		3345			3378			1698			1847	1241
Flt Permitted		0.74			0.95			0.79			0.96	1.00
Satd. Flow (perm)		2498			3211			1374			1780	1241
Volume (vph)	144	701	91	3	373	26	88	102	3	18	147	247
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)	160	779	101	3	414	29	98	113	3	20	163	274
RTOR Reduction (vph)	0	8	0	0	5	0	0	1	0	0	0	162
Lane Group Flow (vph)	0	1032	0	0	441	0	0	213	0	0	183	112
Confl. Peds. (#/hr)	225		18	18		225	111		29	29		111
Turn Type	pm+pt			Perm			Perm			Perm		Perm
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		53.0			38.0			37.0			37.0	37.0
Effective Green, g (s)		54.0			39.0			40.0			40.0	40.0
Actuated g/C Ratio		0.54			0.39			0.40			0.40	0.40
Clearance Time (s)		5.0			4.0			6.0			6.0	6.0
Lane Grp Cap (vph)		1451			1252			550			712	496
v/s Ratio Prot		c0.09										
v/s Ratio Perm		c0.30			0.14			c0.16			0.10	0.09
v/c Ratio		0.71			0.35			0.39			0.26	0.23
Uniform Delay, d1		17.2			21.6			21.3			20.1	19.8
Progression Factor		1.00			1.00			1.00			1.00	1.00
Incremental Delay, d2		3.0			0.8			2.1			0.9	1.1
Delay (s)		20.2			22.3			23.4			20.9	20.8
Level of Service		C			C			C			C	C
Approach Delay (s)		20.2			22.3			23.4			20.9	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM Average Control Delay			21.1			HCM Level of Service			C			
HCM Volume to Capacity ratio			0.57									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			6.0			
Intersection Capacity Utilization			80.0%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	WT		↑			↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	67	162	219	0	0	151
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	74	180	243	0	0	168
Pedestrians	90		45			5
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	8		4			0
Right turn flare (veh)						
Median type	None					
Median storage (veh)						
Upstream signal (ft)	1316					
pX, platoon unblocked						
vC, conflicting volume	546	338			333	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	546	338			333	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	83	72			100	
cM capacity (veh/h)	444	648			1134	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	254	243	168			
Volume Left	74	0	0			
Volume Right	180	0	0			
cSH	571	1700	1700			
Volume to Capacity	0.45	0.14	0.10			
Queue Length 95th (ft)	57	0	0			
Control Delay (s)	16.3	0.0	0.0			
Lane LOS	C					
Approach Delay (s)	16.3	0.0	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay	6.2					
Intersection Capacity Utilization	34.0%		ICU Level of Service		A	
Analysis Period (min)	15					



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↰		↑			↑
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	51	35	283	0	0	220
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	57	39	314	0	0	244
Pedestrians	90		45			5
Lane Width (ft)	12.0		12.0			12.0
Walking Speed (ft/s)	4.0		4.0			4.0
Percent Blockage	8		4			0
Right turn flare (veh)						
Median type	None					
Median storage veh)						
Upstream signal (ft)	1316					
pX, platoon unblocked						
vC, conflicting volume	694	409			404	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	694	409			404	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	84	93			100	
cM capacity (veh/h)	364	591			1068	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	96	314	244			
Volume Left	57	0	0			
Volume Right	39	0	0			
cSH	432	1700	1700			
Volume to Capacity	0.22	0.18	0.14			
Queue Length 95th (ft)	21	0	0			
Control Delay (s)	15.7	0.0	0.0			
Lane LOS	C					
Approach Delay (s)	15.7	0.0	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay	2.3					
Intersection Capacity Utilization	28.0%		ICU Level of Service		A	
Analysis Period (min)	15					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕		↕	↕			↕			↕	
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Volume (veh/h)	5	0	10	0	0	0	46	334	0	0	144	42
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	6	0	11	0	0	0	51	371	0	0	160	47
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	657	657	183	668	680	371	207			371		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	657	657	183	668	680	371	207			371		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	98	100	99	100	100	100	96			100		
cM capacity (veh/h)	368	370	859	357	359	675	1365			1187		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	17	0	0	422	207							
Volume Left	6	0	0	51	0							
Volume Right	11	0	0	0	47							
cSH	594	1700	1700	1365	1187							
Volume to Capacity	0.03	0.00	0.00	0.04	0.00							
Queue Length 95th (ft)	2	0	0	3	0							
Control Delay (s)	11.2	0.0	0.0	1.3	0.0							
Lane LOS	B	A	A	A								
Approach Delay (s)	11.2	0.0		1.3	0.0							
Approach LOS	B	A										
Intersection Summary												
Average Delay			1.1									
Intersection Capacity Utilization		43.6%		ICU Level of Service						A		
Analysis Period (min)		15										

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Volume (veh/h)	40	0	53	0	0	0	9	292	0	0	167	6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	44	0	59	0	0	0	10	324	0	0	186	7
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	533	533	189	592	537	324	192			324		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	533	533	189	592	537	324	192			324		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	90	100	93	100	100	100	99			100		
cM capacity (veh/h)	455	449	853	387	447	717	1381			1235		
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	SB 1							
Volume Total	103	0	0	334	192							
Volume Left	44	0	0	10	0							
Volume Right	59	0	0	0	7							
cSH	620	1700	1700	1381	1235							
Volume to Capacity	0.17	0.00	0.00	0.01	0.00							
Queue Length 95th (ft)	15	0	0	1	0							
Control Delay (s)	12.0	0.0	0.0	0.3	0.0							
Lane LOS	B	A	A	A								
Approach Delay (s)	12.0	0.0		0.3	0.0							
Approach LOS	B	A										
Intersection Summary												
Average Delay	2.1											
Intersection Capacity Utilization	34.8%			ICU Level of Service			A					
Analysis Period (min)	15											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	2	2	4	29	13	38	20	290	103	19	177	8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	2	2	4	32	14	42	22	322	114	21	197	9
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	9	89	459	227								
Volume Left (vph)	2	32	22	21								
Volume Right (vph)	4	42	114	9								
Hadj (s)	-0.22	-0.18	-0.11	0.03								
Departure Headway (s)	5.4	5.3	4.3	4.7								
Degree Utilization, x	0.01	0.13	0.55	0.30								
Capacity (veh/h)	569	605	814	735								
Control Delay (s)	8.5	9.0	12.5	9.6								
Approach Delay (s)	8.5	9.0	12.5	9.6								
Approach LOS	A	A	B	A								
Intersection Summary												
Delay				11.2								
HCM Level of Service				B								
Intersection Capacity Utilization				44.0%	ICU Level of Service	A						
Analysis Period (min)				15								

Background Conditions
4: I Street & 2nd Street

PM Peak Period
11/18/2005

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	8	13	8	62	0	9	0	271	106	54	172	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	14	9	69	0	10	0	301	118	60	191	2
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total (vph)	32	79	419	253								
Volume Left (vph)	9	69	0	60								
Volume Right (vph)	9	10	118	2								
Hadj (s)	-0.08	0.13	-0.13	0.08								
Departure Headway (s)	5.5	5.6	4.4	4.8								
Degree Utilization, x	0.05	0.12	0.51	0.34								
Capacity (veh/h)	563	567	798	724								
Control Delay (s)	8.8	9.4	11.9	10.1								
Approach Delay (s)	8.8	9.4	11.9	10.1								
Approach LOS	A	A	B	B								
Intersection Summary												
Delay				10.9								
HCM Level of Service				B								
Intersection Capacity Utilization				56.0%	ICU Level of Service	B						
Analysis Period (min)				15								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.96			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			0.99			1.00			1.00	
Frt		0.97			1.00			1.00			0.96	
Flt Protected		1.00			1.00			0.99			1.00	
Satd. Flow (prot)		3309			3490			1843			1768	
Flt Permitted		0.95			0.94			0.91			0.97	
Satd. Flow (perm)		3141			3274			1697			1717	
Volume (vph)	2	131	28	39	970	24	72	371	6	9	95	49
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)	2	146	31	43	1078	27	80	412	7	10	106	54
RTOR Reduction (vph)	0	11	0	0	2	0	0	1	0	0	17	0
Lane Group Flow (vph)	0	168	0	0	1146	0	0	498	0	0	153	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		63.0			63.0			29.0			29.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		2010			2095			509			515	
v/s Ratio Prot												
v/s Ratio Perm		0.05			c0.35			c0.29			0.09	
v/c Ratio		0.08			0.55			0.98			0.30	
Uniform Delay, d1		6.8			10.0			34.7			26.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			1.0			35.0			1.5	
Delay (s)		6.9			11.0			69.7			28.4	
Level of Service		A			B			E			C	
Approach Delay (s)		6.9			11.0			69.7			28.4	
Approach LOS		A			B			E			C	
Intersection Summary												
HCM Average Control Delay		26.8			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		92.6%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.96			1.00			1.00			0.99	
Flpb, ped/bikes		1.00			0.99			1.00			1.00	
Frt		0.97			1.00			1.00			0.96	
Flt Protected		1.00			1.00			0.99			1.00	
Satd. Flow (prot)		3309			3490			1843			1768	
Flt Permitted		0.95			0.94			0.93			0.97	
Satd. Flow (perm)		3140			3274			1720			1720	
Volume (vph)	2	131	28	39	970	24	72	371	6	9	95	49
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)	2	146	31	43	1078	27	80	412	7	10	106	54
RTOR Reduction (vph)	0	13	0	0	2	0	0	1	0	0	17	0
Lane Group Flow (vph)	0	166	0	0	1146	0	0	498	0	0	153	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		56.0			56.0			36.0			36.0	
Effective Green, g (s)		57.0			57.0			37.0			37.0	
Actuated g/C Ratio		0.57			0.57			0.37			0.37	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		1790			1866			636			636	
v/s Ratio Prot												
v/s Ratio Perm		0.05			0.35			0.29			0.09	
v/c Ratio		0.09			0.61			0.78			0.24	
Uniform Delay, d1		9.8			14.2			27.9			21.8	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.1			1.5			9.4			0.9	
Delay (s)		9.9			15.7			37.3			22.7	
Level of Service		A			B			D			C	
Approach Delay (s)		9.9			15.7			37.3			22.7	
Approach LOS		A			B			D			C	
Intersection Summary												
HCM Average Control Delay		21.2			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.68										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		92.6%			ICU Level of Service			F				
Analysis Period (min)		15										
c Critical Lane Group												

Background Conditions
5: K Street & 2nd Street

PM Peak Period
11/18/2005

												
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)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			1.00			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		3479			3495			1798			1819	
Flt Permitted		0.95			0.89			0.85			0.91	
Satd. Flow (perm)		3296			3118			1554			1665	
Volume (vph)	15	722	31	17	235	6	95	214	47	22	103	14
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)	17	802	34	19	261	7	106	238	52	24	114	16
RTOR Reduction (vph)	0	3	0	0	2	0	0	6	0	0	4	0
Lane Group Flow (vph)	0	850	0	0	285	0	0	390	0	0	150	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		63.0			63.0			29.0			29.0	
Effective Green, g (s)		64.0			64.0			30.0			30.0	
Actuated g/C Ratio		0.64			0.64			0.30			0.30	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		2109			1996			466			500	
v/s Ratio Prot												
v/s Ratio Perm		c0.26			0.09			c0.25			0.09	
v/c Ratio		0.40			0.14			0.84			0.30	
Uniform Delay, d1		8.7			7.1			32.7			26.9	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.6			0.2			16.3			1.5	
Delay (s)		9.3			7.3			49.0			28.5	
Level of Service		A			A			D			C	
Approach Delay (s)		9.3			7.3			49.0			28.5	
Approach LOS		A			A			D			C	
Intersection Summary												
HCM Average Control Delay		20.0			HCM Level of Service			C				
HCM Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			6.0				
Intersection Capacity Utilization		64.7%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.95			0.95			1.00			1.00	
Frpb, ped/bikes		0.99			1.00			1.00			1.00	
Flpb, ped/bikes		1.00			1.00			1.00			1.00	
Frt		0.99			1.00			0.98			0.99	
Flt Protected		1.00			1.00			0.99			0.99	
Satd. Flow (prot)		3479			3497			1798			1818	
Flt Permitted		0.95			0.89			0.88			0.92	
Satd. Flow (perm)		3296			3116			1599			1684	
Volume (vph)	15	722	31	17	235	6	95	214	47	22	103	14
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)	17	802	34	19	261	7	106	238	52	24	114	16
RTOR Reduction (vph)	0	3	0	0	2	0	0	6	0	0	4	0
Lane Group Flow (vph)	0	850	0	0	285	0	0	390	0	0	150	0
Confl. Peds. (#/hr)	25		68	68		25	3		6	6		3
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases	4			8			2			6		
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	56.0			56.0			36.0			36.0		
Effective Green, g (s)	57.0			57.0			37.0			37.0		
Actuated g/C Ratio	0.57			0.57			0.37			0.37		
Clearance Time (s)	4.0			4.0			4.0			4.0		
Lane Grp Cap (vph)	1879			1776			592			623		
v/s Ratio Prot												
v/s Ratio Perm	c0.26			0.09			c0.24			0.09		
v/c Ratio	0.45			0.16			0.66			0.24		
Uniform Delay, d1	12.5			10.2			26.2			21.8		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.8			0.2			5.7			0.9		
Delay (s)	13.2			10.4			31.9			22.7		
Level of Service	B			B			C			C		
Approach Delay (s)	13.2			10.4			31.9			22.7		
Approach LOS	B			B			C			C		
Intersection Summary												
HCM Average Control Delay	18.0			HCM Level of Service			B					
HCM Volume to Capacity ratio	0.53											
Actuated Cycle Length (s)	100.0			Sum of lost time (s)			6.0					
Intersection Capacity Utilization	64.7%			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												
Sign Control	Stop				Stop			Stop			Stop	
Volume (vph)	0	0	0	27	127	85	41	105	0	0	128	62
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	30	141	94	46	117	0	0	142	69
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total (vph)	266	162	211									
Volume Left (vph)	30	46	0									
Volume Right (vph)	94	0	69									
Hadj (s)	-0.16	0.09	-0.16									
Departure Headway (s)	4.6	4.9	4.6									
Degree Utilization, x	0.34	0.22	0.27									
Capacity (veh/h)	727	689	732									
Control Delay (s)	10.0	9.3	9.3									
Approach Delay (s)	10.0	9.3	9.3									
Approach LOS	B	A	A									
Intersection Summary												
Delay			9.6									
HCM Level of Service			A									
Intersection Capacity Utilization		54.4%										
ICU Level of Service										A		
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	0	0	0	13	19	37	20	109	0	0	174	40
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	0	14	21	41	22	121	0	0	193	44
Direction, Lane #	WB 1	NB 1	SB 1									
Volume Total (vph)	77	143	238									
Volume Left (vph)	14	22	0									
Volume Right (vph)	41	0	44									
Hadj (s)	-0.25	0.07	-0.08									
Departure Headway (s)	4.5	4.4	4.2									
Degree Utilization, x	0.10	0.17	0.27									
Capacity (veh/h)	735	793	837									
Control Delay (s)	8.0	8.3	8.7									
Approach Delay (s)	8.0	8.3	8.7									
Approach LOS	A	A	A									
Intersection Summary												
Delay	8.5											
HCM Level of Service	A											
Intersection Capacity Utilization	42.0%			ICU Level of Service			A					
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)	3.0			3.0			3.0			3.0		
Lane Util. Factor	0.91			0.91			1.00			1.00		
Frpb, ped/bikes	0.99			0.99			0.99			0.98		
Flpb, ped/bikes	1.00			1.00			0.99			1.00		
Frt	0.98			0.99			0.99			0.96		
Flt Protected	1.00			1.00			0.99			0.99		
Satd. Flow (prot)	4953			4970			1791			1728		
Flt Permitted	0.77			0.91			0.73			0.82		
Satd. Flow (perm)	3837			4532			1334			1433		
Volume (vph)	33	373	51	43	1661	161	60	122	20	49	97	64
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)	37	414	57	48	1846	179	67	136	22	54	108	71
RTOR Reduction (vph)	0	16	0	0	11	0	0	4	0	0	16	0
Lane Group Flow (vph)	0	492	0	0	2062	0	0	221	0	0	217	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt		Perm			Perm			Perm			
Protected Phases	7	4	8			2			6			
Permitted Phases	4		8			2			6			
Actuated Green, G (s)	69.0			59.0			19.0			19.0		
Effective Green, g (s)	72.0			62.0			22.0			22.0		
Actuated g/C Ratio	0.72			0.62			0.22			0.22		
Clearance Time (s)	6.0			6.0			6.0			6.0		
Lane Grp Cap (vph)	2841			2810			293			315		
v/s Ratio Prot	c0.01											
v/s Ratio Perm	0.11			c0.45			c0.17			0.15		
v/c Ratio	0.17			0.73			0.75			0.69		
Uniform Delay, d1	4.5			13.2			36.5			35.9		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.1			1.7			16.4			11.7		
Delay (s)	4.6			15.0			52.9			47.6		
Level of Service	A			B			D			D		
Approach Delay (s)	4.6			15.0			52.9			47.6		
Approach LOS	A			B			D			D		
Intersection Summary												
HCM Average Control Delay	18.6			HCM Level of Service			B					
HCM Volume to Capacity ratio	0.70											
Actuated Cycle Length (s)	100.0			Sum of lost time (s)			9.0					
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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0			3.0			3.0		
Lane Util. Factor	0.91			0.91			1.00			1.00		
Frpb, ped/bikes	0.99			0.99			0.99			0.98		
Flpb, ped/bikes	1.00			1.00			0.99			0.99		
Frt	0.98			0.99			0.99			0.96		
Flt Protected	1.00			1.00			0.99			0.99		
Satd. Flow (prot)	4953			4970			1790			1727		
Flt Permitted	0.76			0.91			0.83			0.89		
Satd. Flow (perm)	3762			4530			1510			1548		
Volume (vph)	33	373	51	43	1661	161	60	122	20	49	97	64
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)	37	414	57	48	1846	179	67	136	22	54	108	71
RTOR Reduction (vph)	0	16	0	0	11	0	0	4	0	0	16	0
Lane Group Flow (vph)	0	492	0	0	2062	0	0	221	0	0	217	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	59.0			49.0			29.0			29.0		
Effective Green, g (s)	62.0			52.0			32.0			32.0		
Actuated g/C Ratio	0.62			0.52			0.32			0.32		
Clearance Time (s)	6.0			6.0			6.0			6.0		
Lane Grp Cap (vph)	2416			2356			483			495		
v/s Ratio Prot	c0.01											
v/s Ratio Perm	0.11			c0.46			c0.15			0.14		
v/c Ratio	0.20			0.88			0.46			0.44		
Uniform Delay, d1	8.3			21.1			27.1			26.9		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	0.2			4.9			3.1			2.8		
Delay (s)	8.5			26.1			30.2			29.7		
Level of Service	A			C			C			C		
Approach Delay (s)	8.5			26.1			30.2			29.7		
Approach LOS	A			C			C			C		

Intersection Summary

HCM Average Control Delay	23.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Background Conditions
7: H Street & 3rd Street

PM Peak Period
11/18/2005



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)		3.0			3.0			3.0			3.0	
Lane Util. Factor		0.91			0.91			1.00			1.00	
Frpb, ped/bikes		1.00			0.99			0.99			0.99	
Flpb, ped/bikes		1.00			1.00			1.00			0.99	
Frt		0.99			0.99			0.97			0.97	
Flt Protected		1.00			1.00			0.99			0.98	
Satd. Flow (prot)		5012			4974			1765			1735	
Flt Permitted		0.85			0.80			0.77			0.72	
Satd. Flow (perm)		4293			4009			1374			1280	
Volume (vph)	83	1470	88	27	487	44	43	74	30	110	114	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)	92	1633	98	30	541	49	48	82	33	122	127	70
RTOR Reduction (vph)	0	6	0	0	10	0	0	9	0	0	10	0
Lane Group Flow (vph)	0	1817	0	0	610	0	0	154	0	0	309	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		69.0			59.0			19.0			19.0	
Effective Green, g (s)		72.0			62.0			22.0			22.0	
Actuated g/C Ratio		0.72			0.62			0.22			0.22	
Clearance Time (s)		6.0			6.0			6.0			6.0	
Lane Grp Cap (vph)		3141			2486			302			282	
v/s Ratio Prot		c0.04										
v/s Ratio Perm		c0.38			0.15			0.11			c0.24	
v/c Ratio		0.58			0.25			0.51			1.10	
Uniform Delay, d1		6.7			8.5			34.3			39.0	
Progression Factor		1.00			1.00			1.00			1.00	
Incremental Delay, d2		0.8			0.2			6.0			81.5	
Delay (s)		7.5			8.8			40.3			120.5	
Level of Service		A			A			D			F	
Approach Delay (s)		7.5			8.8			40.3			120.5	
Approach LOS		A			A			D			F	

Intersection Summary

HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	6.0
Intersection Capacity Utilization	78.5%	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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.0			3.0			3.0			3.0		
Lane Util. Factor	0.91			0.91			1.00			1.00		
Frpb, ped/bikes	1.00			0.99			0.99			0.99		
Flpb, ped/bikes	1.00			1.00			1.00			0.99		
Frt	0.99			0.99			0.97			0.97		
Flt Protected	1.00			1.00			0.99			0.98		
Satd. Flow (prot)	5012			4974			1757			1734		
Flt Permitted	0.85			0.80			0.83			0.79		
Satd. Flow (perm)	4294			3994			1477			1402		
Volume (vph)	83	1470	88	27	487	44	43	74	30	110	114	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)	92	1633	98	30	541	49	48	82	33	122	127	70
RTOR Reduction (vph)	0	6	0	0	10	0	0	9	0	0	10	0
Lane Group Flow (vph)	0	1817	0	0	610	0	0	154	0	0	309	0
Confl. Peds. (#/hr)	25		10	10		25	23		24	24		23
Turn Type	pm+pt			Perm			Perm			Perm		
Protected Phases	7	4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	59.0			49.0			29.0			29.0		
Effective Green, g (s)	62.0			52.0			32.0			32.0		
Actuated g/C Ratio	0.62			0.52			0.32			0.32		
Clearance Time (s)	6.0			6.0			6.0			6.0		
Lane Grp Cap (vph)	2713			2077			473			449		
v/s Ratio Prot	c0.05											
v/s Ratio Perm	c0.37			0.15			0.10			c0.22		
v/c Ratio	0.67			0.29			0.33			0.69		
Uniform Delay, d1	12.3			13.6			25.8			29.6		
Progression Factor	1.00			1.00			1.00			1.00		
Incremental Delay, d2	1.3			0.4			1.8			8.3		
Delay (s)	13.7			14.0			27.6			38.0		
Level of Service	B			B			C			D		
Approach Delay (s)	13.7			14.0			27.6			38.0		
Approach LOS	B			B			C			D		
Intersection Summary												
HCM Average Control Delay	17.2			HCM Level of Service			B					
HCM Volume to Capacity ratio	0.68											
Actuated Cycle Length (s)	100.0			Sum of lost time (s)			6.0					
Intersection Capacity Utilization	78.5%			ICU Level of Service			D					
Analysis Period (min)	15											
c Critical Lane Group												

Background Conditions
8: I Street & 3rd Street

AM Peak Period
11/18/2005

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕						↕			↕		
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	23	29	65	0	0	0	56	212	18	13	130	20
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	26	32	72	0	0	0	62	236	20	14	144	22
Direction, Lane #	EB 1	NB 1	SB 1									
Volume Total (vph)	130	318	181									
Volume Left (vph)	26	62	14									
Volume Right (vph)	72	20	22									
Hadj (s)	-0.26	0.04	-0.02									
Departure Headway (s)	4.8	4.5	4.6									
Degree Utilization, x	0.17	0.40	0.23									
Capacity (veh/h)	686	779	751									
Control Delay (s)	8.8	10.4	8.9									
Approach Delay (s)	8.8	10.4	8.9									
Approach LOS	A	B	A									
Intersection Summary												
Delay			9.6									
HCM Level of Service			A									
Intersection Capacity Utilization			49.4%	ICU Level of Service		A						
Analysis Period (min)			15									

Background Conditions
8: I Street & 3rd Street

PM Peak Period
11/18/2005

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control	Stop			Stop			Stop			Stop		
Volume (vph)	28	59	83	0	0	0	38	157	22	16	176	32
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	31	66	92	0	0	0	42	174	24	18	196	36
Direction, Lane #	EB 1	NB 1	SB 1									
Volume Total (vph)	189	241	249									
Volume Left (vph)	31	42	18									
Volume Right (vph)	92	24	36									
Hadj (s)	-0.23	0.01	-0.04									
Departure Headway (s)	4.8	4.7	4.6									
Degree Utilization, x	0.25	0.31	0.32									
Capacity (veh/h)	686	732	737									
Control Delay (s)	9.4	9.8	9.8									
Approach Delay (s)	9.4	9.8	9.8									
Approach LOS	A	A	A									
Intersection Summary												
Delay	9.7											
HCM Level of Service	A											
Intersection Capacity Utilization	45.2%			ICU Level of Service			A					
Analysis Period (min)	15											



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↑			↑
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	0	232	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	258	0	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)						
pX, platoon unblocked						
vC, conflicting volume	258				258	258
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	258				258	258
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1307				731	781
Direction, Lane #	WB 1	SB 1				
Volume Total	258	0				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1700				
Volume to Capacity	0.15	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS		A				
Approach Delay (s)	0.0	0.0				
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		15.5%		ICU Level of Service		A
Analysis Period (min)		15				



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations			↩			↗
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Volume (veh/h)	0	0	87	0	0	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	0	97	0	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)						
pX, platoon unblocked						
vC, conflicting volume	97				97	97
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	97				97	97
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	100
cM capacity (veh/h)	1497				903	960
Direction, Lane #	WB 1	SB 1				
Volume Total	97	0				
Volume Left	0	0				
Volume Right	0	0				
cSH	1700	1700				
Volume to Capacity	0.06	0.00				
Queue Length 95th (ft)	0	0				
Control Delay (s)	0.0	0.0				
Lane LOS		A				
Approach Delay (s)	0.0	0.0				
Approach LOS		A				
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		7.9%		ICU Level of Service		A
Analysis Period (min)		15				