



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		0.95			0.95
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1681		3539			3539
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1681		3539			3539
Volume (vph)	156	222	468	0	0	1169
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	241	509	0	0	1271
RTOR Reduction (vph)	51	0	0	0	0	0
Lane Group Flow (vph)	360	0	509	0	0	1271
Turn Type						
Protected Phases	3		2			2
Permitted Phases						
Actuated Green, G (s)	34.0		58.0			58.0
Effective Green, g (s)	34.0		58.0			58.0
Actuated g/C Ratio	0.34		0.58			0.58
Clearance Time (s)	4.0		4.0			4.0
Lane Grp Cap (vph)	572		2053			2053
v/s Ratio Prot	c0.21		0.14			c0.36
v/s Ratio Perm						
v/c Ratio	0.63		0.25			0.62
Uniform Delay, d1	27.7		10.3			13.8
Progression Factor	1.00		0.86			1.00
Incremental Delay, d2	5.2		0.3			1.4
Delay (s)	32.9		9.1			15.2
Level of Service	C		A			B
Approach Delay (s)	32.9		9.1			15.2
Approach LOS	C		A			B
Intersection Summary						
HCM Average Control Delay			17.1		HCM Level of Service	B
HCM Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			61.3%		ICU Level of Service	B
Analysis Period (min)			15			

c Critical Lane Group

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		↑↑			↑↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0			4.0
Lane Util. Factor	1.00		0.95			0.95
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1684		3539			3539
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1684		3539			3539
Volume (vph)	156	202	755	0	0	850
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	220	821	0	0	924
RTOR Reduction (vph)	47	0	0	0	0	0
Lane Group Flow (vph)	343	0	821	0	0	924
Turn Type						
Protected Phases	3		2			2
Permitted Phases						
Actuated Green, G (s)	34.0		58.0			58.0
Effective Green, g (s)	34.0		58.0			58.0
Actuated g/C Ratio	0.34		0.58			0.58
Clearance Time (s)	4.0		4.0			4.0
Lane Grp Cap (vph)	573		2053			2053
v/s Ratio Prot	c0.20		0.23			c0.26
v/s Ratio Perm						
v/c Ratio	0.60		0.40			0.45
Uniform Delay, d1	27.3		11.5			11.9
Progression Factor	1.00		0.76			1.00
Incremental Delay, d2	4.6		0.5			0.7
Delay (s)	31.9		9.3			12.7
Level of Service	C		A			B
Approach Delay (s)	31.9		9.3			12.7
Approach LOS	C		A			B
Intersection Summary						
HCM Average Control Delay			14.9		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			51.2%		ICU Level of Service	A
Analysis Period (min)			15			
c Critical Lane Group						

HCS2000: Unsignalized Intersections Release 4.1d

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: CFP
 Agency/Co.: Wells & Associates, LLC
 Date Performed: 1/24/2006
 Analysis Time Period: AM Peak Period
 Intersection: Florida/9th/V Streets
 Jurisdiction: Washington DC
 Units: U. S. Customary
 Analysis Year: 2007 BG Conditions
 Project ID: 2799 Atlantic South (Addendum)
 East/West Street: 9th Street/V Street
 North/South Street: Florida/9th Street

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	21	91	439	65	87	25	159	24	13	14	26	25
% Thrus Left Lane	55						45					

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT	TR	LTR		LT	TR	LTR	
PHF	0.90	0.90	0.90		0.90	0.90	0.90	
Flow Rate	78	532	195		187	29	70	
% Heavy Veh	2	2	2		2	2	2	
No. Lanes	2		1		2		1	
Opposing-Lanes	1		2		1		2	
Conflicting-lanes	2		2		2		2	
Geometry group	5		4b		5		4b	
Duration, T	0.25 hrs.							

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	78	532	195		187	29	70	
Service Time	3.7	2.9	4.1		5.0	4.1	4.7	
Utilization, x	0.13	0.77	0.35		0.38	0.05	0.14	
Dep. headway, hd	6.02	5.22	6.40		7.26	6.44	6.99	
Capacity	328	679	445		437	279	320	
Delay	9.62	23.30	12.45		14.29	9.49	10.78	
LOS	A	C	B		B	A	B	
Approach:								
Delay	21.55		12.45		13.65		10.78	
LOS	C		B		B		B	
Intersection Delay	17.67		Intersection		LOS C			

HCS2000: Unsignalized Intersections Release 4.1d

ALL-WAY STOP CONTROL (AWSC) ANALYSIS

Analyst: CFP
 Agency/Co.: Wells & Associates, LLC
 Date Performed: 1/24/2006
 Analysis Time Period: PM Peak Period
 Intersection: Florida/9th/V Streets
 Jurisdiction: Washington DC
 Units: U. S. Customary
 Analysis Year: 2007 BG Conditions
 Project ID: 2799 Atlantic South (Addendum)
 East/West Street: 9th Street/V Street
 North/South Street: Florida/9th Street
 Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	30	82	260	89	151	27	362	41	12	32	28	24
% Thrus Left Lane	55						45					

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT	TR	LTR		LT	TR	LTR	
PHF	0.90	0.90	0.90		0.90	0.90	0.90	
Flow Rate	83	329	295		422	38	92	
% Heavy Veh	2	2	2		2	2	2	
No. Lanes		2		1		2		1
Opposing-Lanes		1		2		1		2
Conflicting-lanes		2		2		2		2
Geometry group		5		4b		5		4b
Duration, T	0.25 hrs.							

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	83	329	295		422	38	92	
Service Time	5.3	4.5	5.2		5.3	4.6	6.0	
Utilization, x	0.18	0.62	0.62		0.89	0.07	0.21	
Dep. headway, hd	7.62	6.79	7.54		7.61	6.88	8.25	
Capacity	333	507	456		468	288	342	
Delay	11.94	19.95	21.65		46.32	10.12	13.14	
LOS	B	C	C		E	B	B	
Approach:								
Delay		18.33		21.65		43.33		13.14
LOS		C		C		E		B
Intersection Delay	27.87		Intersection LOS D					

2007 Background Condition
6: V Street & 8th Street

AM Peak Period
1/24/2006

												
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)	24	87	7	15	148	29	11	45	29	15	16	17
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)	26	95	8	16	161	32	12	49	32	16	17	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (ft)	305											
pX, platoon unblocked												
vC, conflicting volume	192			102			387	376	98	416	364	177
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	192			102			387	376	98	416	364	177
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			98	91	97	97	97	98
cM capacity (veh/h)	1381			1490			534	539	958	481	548	866
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	128	209	92	52								
Volume Left	26	16	12	16								
Volume Right	8	32	32	18								
cSH	1381	1490	633	600								
Volume to Capacity	0.02	0.01	0.15	0.09								
Queue Length 95th (ft)	1	1	13	7								
Control Delay (s)	1.7	0.7	11.7	11.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.7	0.7	11.7	11.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			4.2									
Intersection Capacity Utilization			24.2%	ICU Level of Service					A			
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕			↕			↕			↕		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	9	107	10	19	211	73	24	27	45	33	28	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	116	11	21	229	79	26	29	49	36	30	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (ft)	304											
pX, platoon unblocked	0.96						0.96	0.96				
vC, conflicting volume	309	127					502	491	122	515	457	269
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	282	127					483	472	122	497	436	241
tC, single (s)	4.1	4.1					7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2	2.2					3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99	99					94	94	95	91	94	95
cM capacity (veh/h)	1233	1459					425	462	929	413	484	768
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	137	329	104	101								
Volume Left	10	21	26	36								
Volume Right	11	79	49	35								
cSH	1233	1459	588	518								
Volume to Capacity	0.01	0.01	0.18	0.20								
Queue Length 95th (ft)	1	1	16	18								
Control Delay (s)	0.6	0.6	12.4	13.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	0.6	0.6	12.4	13.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay				4.4								
Intersection Capacity Utilization				35.7%	ICU Level of Service				A			
Analysis Period (min)				15								

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑	↑		↑↑		↑	↑↑	
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		4.0	4.0	
Lane Util. Factor		0.95			0.95	1.00		0.95		1.00	0.95	
Frt		0.98			1.00	0.85		1.00		1.00	1.00	
Flt Protected		1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)		3458			3539	1583		3502		1770	3524	
Flt Permitted		1.00			1.00	1.00		0.63		0.36	1.00	
Satd. Flow (perm)		3458			3539	1583		2230		664	3524	
Volume (vph)	0	552	99	0	846	154	68	361	8	272	1103	32
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	600	108	0	920	167	74	392	9	296	1199	35
RTOR Reduction (vph)	0	15	0	0	0	99	0	1	0	0	2	0
Lane Group Flow (vph)	0	693	0	0	920	68	0	474	0	296	1232	0
Turn Type						Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases						8	2			6		
Actuated Green, G (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Effective Green, g (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Actuated g/C Ratio		0.41			0.41	0.41		0.36		0.51	0.51	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Grp Cap (vph)		1418			1451	649		803		460	1797	
v/s Ratio Prot		0.20			c0.26					0.07	c0.35	
v/s Ratio Perm						0.04		0.21		0.26		
v/c Ratio		0.49			0.63	0.11		0.59		0.64	0.69	
Uniform Delay, d1		21.8			23.5	18.2		26.0		15.2	18.5	
Progression Factor		1.00			1.00	1.00		1.00		0.94	0.94	
Incremental Delay, d2		1.2			2.1	0.3		3.2		6.8	2.1	
Delay (s)		23.0			25.6	18.5		29.2		21.0	19.5	
Level of Service		C			C	B		C		C	B	
Approach Delay (s)		23.0			24.5			29.2			19.8	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM Average Control Delay		22.9			HCM Level of Service					C		
HCM Volume to Capacity ratio		0.66										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		77.1%			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)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
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	
Fr _t		0.98			1.00	0.85		1.00		1.00	0.99	
Fl _t Protected		1.00			1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		3470			3539	1583		3525		1770	3510	
Fl _t Permitted		1.00			1.00	1.00		0.88		0.10	1.00	
Satd. Flow (perm)		3470			3539	1583		3098		186	3510	
Volume (vph)	0	760	114	0	702	201	49	921	9	268	590	35
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	826	124	0	763	218	53	1001	10	291	641	38
RTOR Reduction (vph)	0	12	0	0	0	129	0	1	0	0	4	0
Lane Group Flow (vph)	0	938	0	0	763	89	0	1063	0	291	675	0
Turn Type						Perm	Perm			pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases						8	2			6		
Actuated Green, G (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Effective Green, g (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Actuated g/C Ratio		0.41			0.41	0.41		0.36		0.51	0.51	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Grp Cap (vph)		1423			1451	649		1115		269	1790	
v/s Ratio Prot		c0.27			0.22					c0.12	0.19	
v/s Ratio Perm						0.06		0.34		c0.43		
v/c Ratio		0.66			0.53	0.14		0.95		1.08	0.38	
Uniform Delay, d ₁		23.9			22.2	18.4		31.2		27.9	14.9	
Progression Factor		1.00			1.00	1.00		1.00		0.83	0.91	
Incremental Delay, d ₂		2.4			1.4	0.4		17.9		77.2	0.6	
Delay (s)		26.3			23.6	18.9		49.1		100.4	14.2	
Level of Service		C			C	B		D		F	B	
Approach Delay (s)		26.3			22.5			49.1			40.0	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM Average Control Delay		34.8			HCM Level of Service					C		
HCM Volume to Capacity ratio		0.88										
Actuated Cycle Length (s)		100.0			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												

2007 Background Condition
8: Florida Avenue & 8th Street

AM Peak Period
1/24/2006

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)	32	767	32	17	983	36	8	15	3	8	20	9
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)	35	834	35	18	1068	39	9	16	3	9	22	10
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None				None	
Median storage (veh)												
Upstream signal (ft)		301										
pX, platoon unblocked				0.87			0.87	0.87	0.87	0.87	0.87	
vC, conflicting volume	1108			868			1334	2065	434	1623	2063	376
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1108			693			1231	2075	192	1564	2073	376
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 %	94			98			86	62	100	80	49	98
cM capacity (veh/h)	626			778			64	42	708	43	43	622
Direction, Lane #												
	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	452	452	286	534	306	28	40					
Volume Left	35	0	18	0	0	9	9					
Volume Right	0	35	0	0	39	3	10					
cSH	626	1700	778	1700	1700	54	55					
Volume to Capacity	0.06	0.27	0.02	0.31	0.18	0.52	0.73					
Queue Length 95th (ft)	4	0	2	0	0	51	77					
Control Delay (s)	1.6	0.0	0.9	0.0	0.0	129.9	168.0					
Lane LOS	A		A			F	F					
Approach Delay (s)	0.8		0.2			129.9	168.0					
Approach LOS						F	F					
Intersection Summary												
Average Delay			5.4									
Intersection Capacity Utilization			55.8%			ICU Level of Service			B			
Analysis Period (min)			15									

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↔↔			↔↔↔			↔			↔		
Sign Control	Free			Free			Stop			Stop		
Grade	0%			0%			0%			0%		
Volume (veh/h)	53	960	23	24	874	27	9	17	4	15	23	19
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)	58	1043	25	26	950	29	10	18	4	16	25	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)	301											
pX, platoon unblocked				0.79			0.79			0.79		
vC, conflicting volume	979				1068				1573	2203	534	1667
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	979				821				1460	2257	145	1579
tC, single (s)	4.1				4.1				7.5	6.5	6.9	7.5
tC, 2 stage (s)												
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5
p0 queue free %	92				96				38	35	99	35
cM capacity (veh/h)	700				635				16	28	692	25
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	579	547	264	475	267	33	62					
Volume Left	58	0	26	0	0	10	16					
Volume Right	0	25	0	0	29	4	21					
cSH	700	1700	635	1700	1700	26	40					
Volume to Capacity	0.08	0.32	0.04	0.28	0.16	1.27	1.56					
Queue Length 95th (ft)	7	0	3	0	0	99	160					
Control Delay (s)	2.2	0.0	1.5	0.0	0.0	498.4	501.5					
Lane LOS	A		A			F	F					
Approach Delay (s)	1.1		0.4			498.4	501.5					
Approach LOS						F	F					
Intersection Summary												
Average Delay	22.0											
Intersection Capacity Utilization	60.8%			ICU Level of Service			B					
Analysis Period (min)	15											

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
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			4.0	
Lane Util. Factor		1.00		1.00	1.00			0.95			0.95	
Frt		0.97		1.00	0.95			0.99			0.99	
Flt Protected		0.98		0.95	1.00			1.00			1.00	
Satd. Flow (prot)		1767		1770	1775			3497			3488	
Flt Permitted		0.87		0.58	1.00			0.77			0.93	
Satd. Flow (perm)		1563		1077	1775			2690			3251	
Volume (vph)	46	50	33	28	48	22	40	339	18	33	1033	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)	50	54	36	30	52	24	43	368	20	36	1123	111
RTOR Reduction (vph)	0	12	0	0	16	0	0	3	0	0	7	0
Lane Group Flow (vph)	0	128	0	30	60	0	0	428	0	0	1263	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		18.0		18.0	18.0			74.0			74.0	
Effective Green, g (s)		18.0		18.0	18.0			74.0			74.0	
Actuated g/C Ratio		0.18		0.18	0.18			0.74			0.74	
Clearance Time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Grp Cap (vph)		281		194	320			1991			2406	
v/s Ratio Prot					0.03							
v/s Ratio Perm		c0.08		0.03				0.16			c0.39	
v/c Ratio		0.45		0.15	0.19			0.21			0.52	
Uniform Delay, d1		36.6		34.6	34.8			4.0			5.5	
Progression Factor		1.02		1.00	1.00			1.00			0.26	
Incremental Delay, d2		5.2		1.7	1.3			0.2			0.6	
Delay (s)		42.7		36.3	36.1			4.3			2.1	
Level of Service		D		D	D			A			A	
Approach Delay (s)		42.7			36.1			4.3			2.1	
Approach LOS		D			D			A			A	
Intersection Summary												
HCM Average Control Delay		7.4						HCM Level of Service			A	
HCM Volume to Capacity ratio		0.51										
Actuated Cycle Length (s)		100.0						Sum of lost time (s)		8.0		
Intersection Capacity Utilization		67.7%						ICU Level of Service		C		
Analysis Period (min)		15										
c Critical Lane Group												

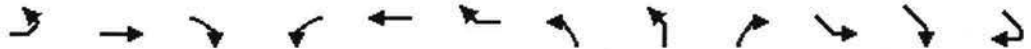
												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor		1.00		1.00	1.00			0.95			0.95	
Frt		0.96		1.00	0.96			1.00			0.98	
Flt Protected		0.99		0.95	1.00			0.99			1.00	
Satd. Flow (prot)		1763		1770	1785			3511			3470	
Flt Permitted		0.79		0.45	1.00			0.71			0.93	
Satd. Flow (perm)		1421		844	1785			2519			3237	
Volume (vph)	51	78	55	62	99	39	97	665	8	17	727	106
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	85	60	67	108	42	105	723	9	18	790	115
RTOR Reduction (vph)	0	16	0	0	14	0	0	1	0	0	11	0
Lane Group Flow (vph)	0	184	0	67	136	0	0	836	0	0	912	0
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases	4		8		2		2		6			
Permitted Phases	4		8		2		6					
Actuated Green, G (s)	18.0		18.0		18.0		74.0		74.0			
Effective Green, g (s)	18.0		18.0		18.0		74.0		74.0			
Actuated g/C Ratio	0.18		0.18		0.18		0.74		0.74			
Clearance Time (s)	4.0		4.0		4.0		4.0		4.0			
Lane Grp Cap (vph)	256		152		321		1864		2395			
v/s Ratio Prot			0.08									
v/s Ratio Perm	c0.13		0.08				c0.33		0.28			
v/c Ratio	0.72		0.44		0.42		0.45		0.38			
Uniform Delay, d1	38.6		36.5		36.4		5.1		4.7			
Progression Factor	0.94		1.00		1.00		1.00		0.41			
Incremental Delay, d2	15.9		9.0		4.1		0.8		0.4			
Delay (s)	52.1		45.5		40.5		5.8		2.4			
Level of Service	D		D		D		A		A			
Approach Delay (s)	52.1				42.0		5.8		2.4			
Approach LOS	D				D		A		A			
Intersection Summary												
HCM Average Control Delay	12.2		HCM Level of Service		B							
HCM Volume to Capacity ratio	0.50											
Actuated Cycle Length (s)	100.0		Sum of lost time (s)		8.0							
Intersection Capacity Utilization	76.6%		ICU Level of Service		D							
Analysis Period (min)	15											
c Critical Lane Group												

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	373	6	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	405	7	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)						299
pX, platoon unblocked						
vC, conflicting volume	409	206			412	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	409	206			412	
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	100			100	
cM capacity (veh/h)	571	800			1143	
Direction, Lane #	WB 1	NB 1	NB 2			
Volume Total	0	270	142			
Volume Left	0	0	0			
Volume Right	0	0	7			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.16	0.08			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	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		13.8%		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)	0	1	1004	3	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1	1091	3	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)					309	
pX, platoon unblocked						
vC, conflicting volume	1093	547			1095	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1093	547			1095	
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	100			100	
cM capacity (veh/h)	209	481			633	
Direction, Lane #	WB 1	NB 1	NB 2			
Volume Total	1	728	367			
Volume Left	0	0	0			
Volume Right	1	0	3			
cSH	481	1700	1700			
Volume to Capacity	0.00	0.43	0.22			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	12.5	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	12.5	0.0				
Approach LOS	B					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		37.8%		ICU Level of Service	A	
Analysis Period (min)		15				

2007 Total Future Condition
15: 10th Avenue & Florida Avenue

AM Peak Period
1/24/2006



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL2	NBL	NBR	SEL	SER	SER2
Lane Configurations		↕			↕			↕		↕	↕	↕
Sign Control		Stop			Stop			Stop		Stop		
Volume (vph)	11	33	6	28	27	243	10	223	15	165	170	29
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)	12	36	7	30	29	264	11	242	16	179	185	32

Direction, Lane #	EB 1	WB 1	NB 1	SE 1	SE 2
Volume Total (vph)	54	324	270	179	216
Volume Left (vph)	12	30	11	179	0
Volume Right (vph)	7	264	16	0	32
Hadj (s)	0.01	-0.44	0.01	0.53	-0.07
Departure Headway (s)	6.3	5.3	5.7	6.5	5.9
Degree Utilization, x	0.10	0.48	0.43	0.33	0.36
Capacity (veh/h)	473	631	586	525	578
Control Delay (s)	10.0	13.1	12.9	11.4	10.9
Approach Delay (s)	10.0	13.1	12.9	11.2	
Approach LOS	B	B	B	B	

Intersection Summary				
Delay		12.2		
HCM Level of Service		B		
Intersection Capacity Utilization		53.0%	ICU Level of Service	A
Analysis Period (min)		15		

2007 Total Future Condition
15: 10th Avenue & Florida Avenue

PM Peak Period
1/24/2006

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL2	NBL	NBR	SEL	SER	SER2
Lane Configurations												
Sign Control		Stop			Stop			Stop		Stop		
Volume (vph)	13	10	2	1	13	184	10	263	6	278	225	9
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)	14	11	2	1	14	200	11	286	7	302	245	10
Direction, Lane #	EB 1	WB 1	NB 1	SE 1	SE 2							
Volume Total (vph)	27	215	303	302	254							
Volume Left (vph)	14	1	11	302	0							
Volume Right (vph)	2	200	7	0	10							
Hadj (s)	0.09	-0.52	0.03	0.53	0.01							
Departure Headway (s)	6.5	5.4	5.4	6.1	5.6							
Degree Utilization, x	0.05	0.33	0.46	0.51	0.40							
Capacity (veh/h)	462	605	636	573	627							
Control Delay (s)	9.9	11.1	13.0	14.2	11.0							
Approach Delay (s)	9.9	11.1	13.0	12.7								
Approach LOS	A	B	B	B								
Intersection Summary												
Delay			12.4									
HCM Level of Service			B									
Intersection Capacity Utilization			53.0%			ICU Level of Service			A			
Analysis Period (min)			15									

2007 Total Future Condition
12: Barry Place & Sherman Street

AM Peak Period
1/24/2006

												
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	4.0
Lane Util. Factor		1.00			1.00			0.95			0.95	1.00
Frt		1.00			0.97			0.98			1.00	0.85
Flt Protected		0.98			1.00			1.00			1.00	1.00
Satd. Flow (prot)		1823			1806			3482			3528	1583
Flt Permitted		0.80			0.99			0.81			0.81	1.00
Satd. Flow (perm)		1498			1790			2815			2852	1583
Volume (vph)	91	121	1	7	132	37	2	330	40	72	1089	165
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)	99	132	1	8	143	40	2	359	43	78	1184	179
RTOR Reduction (vph)	0	0	0	0	10	0	0	9	0	0	0	107
Lane Group Flow (vph)	0	232	0	0	181	0	0	395	0	0	1262	72
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases	4				8		2				6	
Permitted Phases	4				8		2				6	
Actuated Green, G (s)	65.0				65.0		25.0				25.0	
Effective Green, g (s)	66.0				66.0		26.0				26.0	
Actuated g/C Ratio	0.66				0.66		0.26				0.26	
Clearance Time (s)	5.0				5.0		5.0				5.0	
Lane Grp Cap (vph)	989				1181		732				742	
v/s Ratio Prot												
v/s Ratio Perm	c0.15				0.10		0.14				c0.44	
v/c Ratio	0.23				0.15		0.54				1.70	
Uniform Delay, d1	6.8				6.4		31.8				37.0	
Progression Factor	1.00				1.00		1.46				1.00	
Incremental Delay, d2	0.6				0.3		2.7				321.1	
Delay (s)	7.4				6.7		49.1				358.1	
Level of Service	A				A		D				F	
Approach Delay (s)	7.4				6.7		49.1				317.3	
Approach LOS	A				A		D				F	
Intersection Summary												
HCM Average Control Delay	211.7				HCM Level of Service				F			
HCM Volume to Capacity ratio	0.65											
Actuated Cycle Length (s)	100.0				Sum of lost time (s)				8.0			
Intersection Capacity Utilization	77.0%				ICU Level of Service				D			
Analysis Period (min)	15											
c Critical Lane Group												

2007 Total Future Condition
12: Barry Place & Sherman Street

PM Peak Period
1/24/2006

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Movement												
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	4.0
Lane Util. Factor		1.00			1.00			0.95			0.95	1.00
Frt		1.00			0.96			1.00			1.00	0.85
Flt Protected		0.98			0.99			1.00			1.00	1.00
Satd. Flow (prot)		1822			1769			3524			3522	1583
Flt Permitted		0.80			0.94			0.95			0.52	1.00
Satd. Flow (perm)		1482			1677			3345			1837	1583
Volume (vph)	120	169	5	23	100	60	8	970	26	52	483	90
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)	130	184	5	25	109	65	9	1054	28	57	525	98
RTOR Reduction (vph)	0	1	0	0	1	0	0	1	0	0	0	73
Lane Group Flow (vph)	0	318	0	0	198	0	0	1090	0	0	582	25
Turn Type	Perm			Perm			Perm			Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)		65.0			65.0			25.0			25.0	25.0
Effective Green, g (s)		66.0			66.0			26.0			26.0	26.0
Actuated g/C Ratio		0.66			0.66			0.26			0.26	0.26
Clearance Time (s)		5.0			5.0			5.0			5.0	5.0
Lane Grp Cap (vph)		978			1107			870			478	412
v/s Ratio Prot												
v/s Ratio Perm		c0.21			0.12			c0.33			0.32	0.02
v/c Ratio		0.33			0.18			1.25			1.22	0.06
Uniform Delay, d1		7.4			6.6			37.0			37.0	27.8
Progression Factor		1.00			1.00			1.45			1.00	1.00
Incremental Delay, d2		0.9			0.4			120.5			115.7	0.3
Delay (s)		8.2			6.9			174.1			152.7	28.1
Level of Service		A			A			F			F	C
Approach Delay (s)		8.2			6.9			174.1			134.8	
Approach LOS		A			A			F			F	
Intersection Summary												
HCM Average Control Delay		124.8										
HCM Volume to Capacity ratio		0.59										
Actuated Cycle Length (s)		100.0										
Intersection Capacity Utilization		82.1%										
Analysis Period (min)		15										
c Critical Lane Group												

2007 Total Future Condition
9: Barry Place & 9th Street

AM Peak Period
1/24/2006

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	15	218	0	0	166	39	0	0	0	17	0	11
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)	16	237	0	0	180	42	0	0	0	18	0	12
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total (vph)	253	223	18	12								
Volume Left (vph)	16	0	18	0								
Volume Right (vph)	0	42	0	12								
Hadj (s)	0.05	-0.08	0.53	-0.67								
Departure Headway (s)	4.3	4.2	6.1	4.9								
Degree Utilization, x	0.30	0.26	0.03	0.02								
Capacity (veh/h)	832	840	548	672								
Control Delay (s)	9.1	8.6	8.1	6.7								
Approach Delay (s)	9.1	8.6	7.5									
Approach LOS	A	A	A									
Intersection Summary												
Delay			8.8									
HCM Level of Service			A									
Intersection Capacity Utilization		33.8%			ICU Level of Service		A					
Analysis Period (min)		15										

2007 Total Future Condition
9: Barry Place & 9th Street

PM Peak Period
1/24/2006

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Volume (vph)	20	226	0	0	147	53	0	0	0	34	0	35
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)	22	246	0	0	160	58	0	0	0	37	0	38
Direction, Lane #	EB 1	WB 1	SB 1	SB 2								
Volume Total (vph)	267	217	37	38								
Volume Left (vph)	22	0	37	0								
Volume Right (vph)	0	58	0	38								
Hadj (s)	0.05	-0.12	0.53	-0.67								
Departure Headway (s)	4.4	4.3	6.1	4.9								
Degree Utilization, x	0.33	0.26	0.06	0.05								
Capacity (veh/h)	802	812	546	669								
Control Delay (s)	9.5	8.7	8.3	7.0								
Approach Delay (s)	9.5	8.7	7.6									
Approach LOS	A	A	A									
Intersection Summary												
Delay			9.0									
HCM Level of Service			A									
Intersection Capacity Utilization			37.3%		ICU Level of Service				A			
Analysis Period (min)			15									

2007 Total Future Condition
4: Barry Place & 8th Street

AM Peak Period
1/24/2006

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↶			↷	↶	↷
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	152	33	10	159	46	39
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	165	36	11	173	50	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh						
Upstream signal (ft)				282		
pX, platoon unblocked						
vC, conflicting volume			201		378	183
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			201		378	183
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		92	95
cM capacity (veh/h)			1371		619	859
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	201	184	92			
Volume Left	0	11	50			
Volume Right	36	0	42			
cSH	1700	1371	710			
Volume to Capacity	0.12	0.01	0.13			
Queue Length 95th (ft)	0	1	11			
Control Delay (s)	0.0	0.5	10.8			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.5	10.8			
Approach LOS			B			
Intersection Summary						
Average Delay		2.3				
Intersection Capacity Utilization		28.2%	ICU Level of Service	A		
Analysis Period (min)		15				

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑			↑	↘	↗
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Volume (veh/h)	193	68	13	177	23	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	210	74	14	192	25	92
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type					None	
Median storage veh						
Upstream signal (ft)				282		
pX, platoon unblocked						
vC, conflicting volume			284		467	247
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			284		467	247
tC, single (s)			4.1		6.4	6.2
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			99		95	88
cM capacity (veh/h)			1279		548	792
Direction, Lane #	EB 1	WB 1	NB 1			
Volume Total	284	207	117			
Volume Left	0	14	25			
Volume Right	74	0	92			
cSH	1700	1279	723			
Volume to Capacity	0.17	0.01	0.16			
Queue Length 95th (ft)	0	1	14			
Control Delay (s)	0.0	0.6	10.9			
Lane LOS		A	B			
Approach Delay (s)	0.0	0.6	10.9			
Approach LOS			B			
Intersection Summary						
Average Delay			2.3			
Intersection Capacity Utilization		33.2%		ICU Level of Service		A
Analysis Period (min)			15			

2007 Total Future Condition
1: Barry Place & Georgia Avenue

AM Peak Period
1/24/2006



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	W			↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	0.93			1.00	0.99	
Flt Protected	0.98			0.99	1.00	
Satd. Flow (prot)	1695			3512	3515	
Flt Permitted	0.98			0.56	1.00	
Satd. Flow (perm)	1695			1977	3515	
Volume (vph)	95	95	95	521	1361	64
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	103	103	103	566	1479	70
RTOR Reduction (vph)	36	0	0	0	3	0
Lane Group Flow (vph)	170	0	0	669	1546	0
Turn Type	D.P+P					
Protected Phases	4		3	2 3	2	
Permitted Phases			2			
Actuated Green, G (s)	14.0			74.0	54.0	
Effective Green, g (s)	14.0			74.0	54.0	
Actuated g/C Ratio	0.14			0.74	0.54	
Clearance Time (s)	4.0				4.0	
Lane Grp Cap (vph)	237			1770	1898	
v/s Ratio Prot	c0.10			c0.08	c0.44	
v/s Ratio Perm				0.20		
v/c Ratio	0.72			0.38	0.81	
Uniform Delay, d1	41.1			4.7	18.9	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	17.0			0.6	4.0	
Delay (s)	58.1			5.3	22.9	
Level of Service	E			A	C	
Approach Delay (s)	58.1			5.3	22.9	
Approach LOS	E			A	C	

Intersection Summary

HCM Average Control Delay	21.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

2007 Total Future Condition
1: Barry Place & Georgia Avenue

PM Peak Period
1/24/2006



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations	Y			↑↑	↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	0.95			1.00	0.99	
Flt Protected	0.97			1.00	1.00	
Satd. Flow (prot)	1714			3526	3490	
Flt Permitted	0.97			0.67	1.00	
Satd. Flow (perm)	1714			2389	3490	
Volume (vph)	172	106	65	792	1212	125
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	187	115	71	861	1317	136
RTOR Reduction (vph)	22	0	0	0	8	0
Lane Group Flow (vph)	280	0	0	932	1445	0
Turn Type	D,P+P					
Protected Phases	4		3	2 3	2	
Permitted Phases			2			
Actuated Green, G (s)	14.0			74.0	54.0	
Effective Green, g (s)	14.0			74.0	54.0	
Actuated g/C Ratio	0.14			0.74	0.54	
Clearance Time (s)	4.0				4.0	
Lane Grp Cap (vph)	240			1995	1885	
v/s Ratio Prot	c0.16			c0.09	c0.41	
v/s Ratio Perm				0.25		
v/c Ratio	1.17			0.47	0.77	
Uniform Delay, d1	43.0			5.2	18.1	
Progression Factor	1.00			1.00	1.00	
Incremental Delay, d2	110.1			0.8	3.0	
Delay (s)	153.1			6.0	21.1	
Level of Service	F			A	C	
Approach Delay (s)	153.1			6.0	21.1	
Approach LOS	F			A	C	

Intersection Summary			
HCM Average Control Delay	30.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

	↑	↗	↘	↓	↙	↖
Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑			↑	↗	↖
Ideal Flow (vphpl)	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	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	1863			1863	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	1863			1863	1770	1583
Volume (vph)	246	0	0	204	1092	5
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	267	0	0	222	1187	5
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	267	0	0	222	1187	3
Turn Type					Perm	
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	32.0			32.0	60.0	60.0
Effective Green, g (s)	32.0			32.0	60.0	60.0
Actuated g/C Ratio	0.32			0.32	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Lane Grp Cap (vph)	596			596	1062	950
v/s Ratio Prot	c0.14			0.12	c0.67	
v/s Ratio Perm						0.00
v/c Ratio	0.45			0.37	1.12	0.00
Uniform Delay, d1	27.0			26.2	20.0	8.0
Progression Factor	1.47			1.00	2.30	2.64
Incremental Delay, d2	2.3			1.8	54.4	0.0
Delay (s)	41.9			28.0	100.3	21.1
Level of Service	D			C	F	C
Approach Delay (s)	41.9			28.0	100.0	
Approach LOS	D			C	F	
Intersection Summary						
HCM Average Control Delay		81.3		HCM Level of Service		F
HCM Volume to Capacity ratio		0.88				
Actuated Cycle Length (s)		100.0		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	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations	↑			↑	↗	↖
Ideal Flow (vphpl)	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	1.00
Frt	1.00			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	1863			1863	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	1863			1863	1770	1583
Volume (vph)	279	0	0	228	511	5
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	303	0	0	248	555	5
RTOR Reduction (vph)	0	0	0	0	0	2
Lane Group Flow (vph)	303	0	0	248	555	3
Turn Type					Perm	
Protected Phases	2			6	8	
Permitted Phases						8
Actuated Green, G (s)	32.0			32.0	60.0	60.0
Effective Green, g (s)	32.0			32.0	60.0	60.0
Actuated g/C Ratio	0.32			0.32	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Lane Grp Cap (vph)	596			596	1062	950
v/s Ratio Prot	c0.16			0.13	c0.31	
v/s Ratio Perm						0.00
v/c Ratio	0.51			0.42	0.52	0.00
Uniform Delay, d1	27.6			26.7	11.7	8.0
Progression Factor	1.60			1.00	2.54	2.70
Incremental Delay, d2	2.2			2.1	0.2	0.0
Delay (s)	46.4			28.8	29.7	21.6
Level of Service	D			C	C	C
Approach Delay (s)	46.4			28.8	29.7	
Approach LOS	D			C	C	
Intersection Summary						
HCM Average Control Delay		34.0		HCM Level of Service		C
HCM Volume to Capacity ratio		0.52				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		49.7%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

2007 Total Future Condition
2: Bryant Street & Georgia Avenue

AM Peak Period
1/24/2006

												
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			0.95	
Frt								0.98			1.00	
Flt Protected								1.00			0.99	
Satd. Flow (prot)								3481			3505	
Flt Permitted								1.00			0.63	
Satd. Flow (perm)								3481			2239	
Volume (vph)	0	0	0	0	0	0	0	616	75	287	1169	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	670	82	312	1271	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	740	0	0	1583	0
Turn Type										Prot		
Protected Phases								2		1	12	
Permitted Phases												
Actuated Green, G (s)								46.0			72.0	
Effective Green, g (s)								46.0			72.0	
Actuated g/C Ratio								0.57			0.90	
Clearance Time (s)								4.0				
Lane Grp Cap (vph)								2002			2427	
v/s Ratio Prot								0.21			c0.21	
v/s Ratio Perm											c0.38	
v/c Ratio								0.37			0.65	
Uniform Delay, d1								9.2			1.0	
Progression Factor								1.00			1.00	
Incremental Delay, d2								0.5			1.4	
Delay (s)								9.7			2.3	
Level of Service								A			A	
Approach Delay (s)		0.0			0.0			9.7			2.3	
Approach LOS		A			A			A			A	
Intersection Summary												
HCM Average Control Delay			4.7									
HCM Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			80.0									
Intersection Capacity Utilization			66.7%									
Analysis Period (min)			15									
c Critical Lane Group												

2007 Total Future Condition
2: Bryant Street & Georgia Avenue

PM Peak Period
1/24/2006

												
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			0.95	
Frt								0.98			1.00	
Flt Protected								1.00			0.99	
Satd. Flow (prot)								3482			3473	
Flt Permitted								1.00			0.53	
Satd. Flow (perm)								3482			1862	
Volume (vph)	0	0	0	0	0	0	0	858	103	386	894	38
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	933	112	420	972	41
RTOR Reduction (vph)	0	0	0	0	0	0	0	11	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	1034	0	0	1433	0
Turn Type										Prot		
Protected Phases								2		1	1	2
Permitted Phases												
Actuated Green, G (s)								46.0			72.0	
Effective Green, g (s)								46.0			72.0	
Actuated g/C Ratio								0.57			0.90	
Clearance Time (s)								4.0				
Lane Grp Cap (vph)								2002			2199	
v/s Ratio Prot								0.30			c0.21	
v/s Ratio Perm											c0.37	
v/c Ratio								0.52			0.65	
Uniform Delay, d1								10.3			1.0	
Progression Factor								1.00			1.00	
Incremental Delay, d2								1.0			1.5	
Delay (s)								11.2			2.5	
Level of Service								B			A	
Approach Delay (s)		0.0			0.0			11.2			2.5	
Approach LOS		A			A			B			A	
Intersection Summary												
HCM Average Control Delay		6.2						HCM Level of Service		A		
HCM Volume to Capacity ratio		0.65										
Actuated Cycle Length (s)		80.0						Sum of lost time (s)		8.0		
Intersection Capacity Utilization		70.8%						ICU Level of Service		C		
Analysis Period (min)		15										
c Critical Lane Group												

2007 Total Future Condition
14: W Street & Florida Avenue

AM Peak Period
1/24/2006

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	12	116	0	609	1297	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	126	0	662	1410	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)					318	
pX, platoon unblocked						
vC, conflicting volume	2072	705	1410			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2072	705	1410			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	72	67	100			
cM capacity (veh/h)	47	379	480			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1	SB 2	
Volume Total	13	126	662	705	705	
Volume Left	13	0	0	0	0	
Volume Right	0	126	0	0	0	
cSH	47	379	1700	1700	1700	
Volume to Capacity	0.28	0.33	0.39	0.41	0.41	
Queue Length 95th (ft)	24	36	0	0	0	
Control Delay (s)	110.0	19.2	0.0	0.0	0.0	
Lane LOS	F	C				
Approach Delay (s)	27.7		0.0	0.0		
Approach LOS	D					
Intersection Summary						
Average Delay			1.7			
Intersection Capacity Utilization			49.7%	ICU Level of Service		A
Analysis Period (min)			15			

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Volume (veh/h)	44	179	0	1246	739	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	48	195	0	1354	803	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None					
Median storage veh						
Upstream signal (ft)				318		
pX, platoon unblocked						
vC, conflicting volume	2158	402	803			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	2158	402	803			
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	67	100			
cM capacity (veh/h)	41	598	816			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1	SB 2	
Volume Total	48	195	1354	402	402	
Volume Left	48	0	0	0	0	
Volume Right	0	195	0	0	0	
cSH	41	598	1700	1700	1700	
Volume to Capacity	1.17	0.33	0.80	0.24	0.24	
Queue Length 95th (ft)	118	35	0	0	0	
Control Delay (s)	352.5	13.9	0.0	0.0	0.0	
Lane LOS	F	B				
Approach Delay (s)	80.7		0.0	0.0		
Approach LOS	F					
Intersection Summary						
Average Delay			8.1			
Intersection Capacity Utilization			75.6%	ICU Level of Service		D
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		0.95			0.95
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1681		3539			3539
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1681		3539			3539
Volume (vph)	156	222	469	0	0	1169
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	170	241	510	0	0	1271
RTOR Reduction (vph)	51	0	0	0	0	0
Lane Group Flow (vph)	360	0	510	0	0	1271
Turn Type						
Protected Phases	3		2			2
Permitted Phases						
Actuated Green, G (s)	34.0		58.0			58.0
Effective Green, g (s)	34.0		58.0			58.0
Actuated g/C Ratio	0.34		0.58			0.58
Clearance Time (s)	4.0		4.0			4.0
Lane Grp Cap (vph)	572		2053			2053
v/s Ratio Prot	c0.21		0.14			c0.36
v/s Ratio Perm						
v/c Ratio	0.63		0.25			0.62
Uniform Delay, d1	27.7		10.3			13.8
Progression Factor	1.00		0.82			1.00
Incremental Delay, d2	5.2		0.3			1.4
Delay (s)	32.9		8.8			15.2
Level of Service	C		A			B
Approach Delay (s)	32.9		8.8			15.2
Approach LOS	C		A			B
Intersection Summary						
HCM Average Control Delay			17.0		HCM Level of Service	B
HCM Volume to Capacity ratio			0.62			
Actuated Cycle Length (s)			100.0		Sum of lost time (s)	8.0
Intersection Capacity Utilization			61.3%		ICU Level of Service	B
Analysis Period (min)			15			
c Critical Lane Group						



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W	R	T	R	L	T
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0			4.0
Lane Util. Factor	1.00		0.95			0.95
Frt	0.92		1.00			1.00
Flt Protected	0.98		1.00			1.00
Satd. Flow (prot)	1680		3539			3539
Flt Permitted	0.98		1.00			1.00
Satd. Flow (perm)	1680		3539			3539
Volume (vph)	142	202	757	0	0	855
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	154	220	823	0	0	929
RTOR Reduction (vph)	51	0	0	0	0	0
Lane Group Flow (vph)	323	0	823	0	0	929
Turn Type						
Protected Phases	3		2			2
Permitted Phases						
Actuated Green, G (s)	34.0		58.0			58.0
Effective Green, g (s)	34.0		58.0			58.0
Actuated g/C Ratio	0.34		0.58			0.58
Clearance Time (s)	4.0		4.0			4.0
Lane Grp Cap (vph)	571		2053			2053
v/s Ratio Prot	c0.19		0.23			c0.26
v/s Ratio Perm						
v/c Ratio	0.56		0.40			0.45
Uniform Delay, d1	27.0		11.5			12.0
Progression Factor	1.00		0.75			1.00
Incremental Delay, d2	4.0		0.5			0.7
Delay (s)	31.0		9.1			12.7
Level of Service	C		A			B
Approach Delay (s)	31.0		9.1			12.7
Approach LOS	C		A			B
Intersection Summary						
HCM Average Control Delay		14.5		HCM Level of Service		B
HCM Volume to Capacity ratio		0.49				
Actuated Cycle Length (s)		100.0		Sum of lost time (s)		8.0
Intersection Capacity Utilization		50.6%		ICU Level of Service		A
Analysis Period (min)		15				
c Critical Lane Group						

HCS2000: Unsignalized Intersections Release 4.1d

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: CFP
 Agency/Co.: Wells & Associates, LLC
 Date Performed: 1/24/2006
 Analysis Time Period: AM Peak Period
 Intersection: Florida/9th/V Streets
 Jurisdiction: Washington DC
 Units: U. S. Customary
 Analysis Year: 2007 TF Conditions
 Project ID: 2799 Atlantic South (Addendum)
 East/West Street: 9th Street/V Street
 North/South Street: Florida/9th Street

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	21	97	438	79	102	25	158	24	18	14	26	25
% Thrus Left Lane			55						45			

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT	TR	LTR		LT	TR	LTR	
PHF	0.90	0.90	0.90		0.90	0.90	0.90	
Flow Rate	81	534	227		186	35	70	
% Heavy Veh	2	2	2		2	2	2	
No. Lanes		2		1		2		1
Opposing-Lanes		1		2		1		2
Conflicting-lanes		2		2		2		2
Geometry group		5		4b		5		4b
Duration, T	0.25 hrs.							

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	81	534	227		186	35	70	
Service Time	3.8	3.0	4.2		5.1	4.2	4.9	
Utilization, x	0.14	0.79	0.41		0.38	0.06	0.14	
Dep. headway, hd	6.10	5.32	6.46		7.39	6.51	7.15	
Capacity	331	668	477		436	285	320	
Delay	9.77	24.88	13.53		14.58	9.64	11.00	
LOS	A	C	B		B	A	B	
Approach:								
Delay		22.89		13.53		13.80		11.00
LOS		C		B		B		B
Intersection Delay	18.51		Intersection LOS C					

HCS2000: Unsignalized Intersections Release 4.1d

ALL-WAY STOP CONTROL(AWSC) ANALYSIS

Analyst: CFP
 Agency/Co.: Wells & Associates, LLC
 Date Performed: 1/24/2006
 Analysis Time Period: PM Peak Period
 Intersection: Florida/9th/V Streets
 Jurisdiction: Washington DC
 Units: U. S. Customary
 Analysis Year: 2007 TF Conditions
 Project ID: 2799 Atlantic South (Addendum)
 East/West Street: 9th Street/V Street
 North/South Street: Florida/9th Street

Worksheet 2 - Volume Adjustments and Site Characteristics

	Eastbound			Westbound			Northbound			Southbound		
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	30	106	260	102	169	27	354	41	32	32	28	24
% Thrus Left Lane	55						45					

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LT	TR	LTR		LT	TR	LTR	
PHF	0.90	0.90	0.90		0.90	0.90	0.90	
Flow Rate	97	341	330		413	60	92	
% Heavy Veh	2	2	2		2	2	2	
No. Lanes		2		1		2		1
Opposing-Lanes		1		2		1		2
Conflicting-lanes		2		2		2		2
Geometry group		5		4b		5		4b
Duration, T	0.25 hrs.							

Worksheet 5 - Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Flow Rate	97	341	330		413	60	92	
Service Time	5.5	4.7	5.4		5.5	4.6	6.3	
Utilization, x	0.21	0.66	0.70		0.90	0.12	0.22	
Dep. headway, hd	7.76	6.98	7.66		7.84	6.94	8.59	
Capacity	347	496	454		454	310	342	
Delay	12.51	22.29	26.47		48.71	10.55	13.69	
LOS	B	C	D		E	B	B	
Approach:								
Delay		20.13		26.47		43.87		13.69
LOS		C		D		E		B
Intersection Delay	29.68		Intersection LOS D					

2007 Total Future Condition
6: V Street & 8th Street

AM Peak Period
1/24/2006

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↕											
Sign Control	Free											
Grade	0%											
Volume (veh/h)	24	93	43	14	150	29	24	32	27	15	11	17
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)	26	101	47	15	163	32	26	35	29	16	12	18
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None											
Median storage (veh)												
Upstream signal (ft)	311											
pX, platoon unblocked												
vC, conflicting volume	195			148			410	402	124	433	409	179
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	195			148			410	402	124	433	409	179
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			95	93	97	97	98	98
cM capacity (veh/h)	1379			1434			519	521	926	479	516	864
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	174	210	90	47								
Volume Left	26	15	26	16								
Volume Right	47	32	29	18								
cSH	1379	1434	607	595								
Volume to Capacity	0.02	0.01	0.15	0.08								
Queue Length 95th (ft)	1	1	13	6								
Control Delay (s)	1.3	0.6	12.0	11.6								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.3	0.6	12.0	11.6								
Approach LOS			B	B								
Intersection Summary												
Average Delay			3.8									
Intersection Capacity Utilization			27.3%	ICU Level of Service				A				
Analysis Period (min)			15									

2007 Total Future Condition
6: V Street & 8th Street

PM Peak Period
1/24/2006

												
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)	9	114	44	18	222	73	76	26	44	33	16	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	124	48	20	241	79	83	28	48	36	17	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (ft)	310											
pX, platoon unblocked												
vC, conflicting volume	321			172			531	527	148	549	511	281
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	321			172			531	527	148	549	511	281
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			80	94	95	91	96	95
cM capacity (veh/h)	1239			1405			418	446	899	395	456	758
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	182	340	159	88								
Volume Left	10	20	83	36								
Volume Right	48	79	48	35								
cSH	1239	1405	505	504								
Volume to Capacity	0.01	0.01	0.31	0.17								
Queue Length 95th (ft)	1	1	33	16								
Control Delay (s)	0.5	0.6	15.4	13.7								
Lane LOS	A	A	C	B								
Approach Delay (s)	0.5	0.6	15.4	13.7								
Approach LOS			C	B								
Intersection Summary												
Average Delay			5.1									
Intersection Capacity Utilization			40.6%	ICU Level of Service					A			
Analysis Period (min)			15									

2007 Total Future Condition
11: U Street & Florida Avenue

AM Peak Period
1/24/2006

												
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		4.0	4.0	
Lane Util. Factor		0.95			0.95	1.00		0.95		1.00	0.95	
Frt		0.98			1.00	0.85		1.00		1.00	1.00	
Flt Protected		1.00			1.00	1.00		0.99		0.95	1.00	
Satd. Flow (prot)		3459			3539	1583		3502		1770	3524	
Flt Permitted		1.00			1.00	1.00		0.63		0.36	1.00	
Satd. Flow (perm)		3459			3539	1583		2218		666	3524	
Volume (vph)	0	556	99	0	862	154	68	359	8	272	1112	32
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	604	108	0	937	167	74	390	9	296	1209	35
RTOR Reduction (vph)	0	15	0	0	0	99	0	1	0	0	2	0
Lane Group Flow (vph)	0	697	0	0	937	68	0	472	0	296	1242	0
Turn Type					Perm	Perm				pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases						8	2			6		
Actuated Green, G (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Effective Green, g (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Actuated g/C Ratio		0.41			0.41	0.41		0.36		0.51	0.51	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Grp Cap (vph)		1418			1451	649		798		461	1797	
v/s Ratio Prot		0.20			c0.26					0.07	c0.35	
v/s Ratio Perm						0.04		0.21		0.26		
v/c Ratio		0.49			0.65	0.11		0.59		0.64	0.69	
Uniform Delay, d1		21.8			23.7	18.2		26.0		15.2	18.5	
Progression Factor		1.00			1.00	1.00		1.00		0.59	0.64	
Incremental Delay, d2		1.2			2.2	0.3		3.2		3.5	1.1	
Delay (s)		23.0			25.9	18.5		29.2		12.6	12.9	
Level of Service		C			C	B		C		B	B	
Approach Delay (s)		23.0			24.8			29.2			12.9	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM Average Control Delay		20.2			HCM Level of Service					C		
HCM Volume to Capacity ratio		0.67										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		77.7%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

2007 Total Future Condition
11: U Street & Florida Avenue

PM Peak Period
1/24/2006

												
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		4.0	4.0	
Lane Util. Factor		0.95			0.95	1.00		0.95		1.00	0.95	
Frt		0.98			1.00	0.85		1.00		1.00	0.99	
Flt Protected		1.00			1.00	1.00		1.00		0.95	1.00	
Satd. Flow (prot)		3472			3539	1583		3526		1770	3510	
Flt Permitted		1.00			1.00	1.00		0.88		0.10	1.00	
Satd. Flow (perm)		3472			3539	1583		3096		186	3510	
Volume (vph)	0	785	114	0	717	201	49	935	9	268	603	35
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	853	124	0	779	218	53	1016	10	291	655	38
RTOR Reduction (vph)	0	11	0	0	0	129	0	1	0	0	4	0
Lane Group Flow (vph)	0	966	0	0	779	89	0	1078	0	291	689	0
Turn Type					Perm	Perm				pm+pt		
Protected Phases		4			8			2		1	6	
Permitted Phases						8	2			6		
Actuated Green, G (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Effective Green, g (s)		41.0			41.0	41.0		36.0		51.0	51.0	
Actuated g/C Ratio		0.41			0.41	0.41		0.36		0.51	0.51	
Clearance Time (s)		4.0			4.0	4.0		4.0		4.0	4.0	
Lane Grp Cap (vph)		1424			1451	649		1115		269	1790	
v/s Ratio Prot		c0.28			0.22					c0.12	0.20	
v/s Ratio Perm						0.06		0.35		c0.43		
v/c Ratio		0.68			0.54	0.14		0.97		1.08	0.38	
Uniform Delay, d1		24.1			22.3	18.4		31.4		27.9	14.9	
Progression Factor		1.00			1.00	1.00		1.00		0.93	1.01	
Incremental Delay, d2		2.6			1.4	0.4		20.1		77.2	0.6	
Delay (s)		26.7			23.7	18.9		51.5		103.2	15.7	
Level of Service		C			C	B		D		F	B	
Approach Delay (s)		26.7			22.7			51.5			41.6	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM Average Control Delay		36.0			HCM Level of Service					D		
HCM Volume to Capacity ratio		0.89										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		80.7%			ICU Level of Service					D		
Analysis Period (min)		15										
c Critical Lane Group												

2007 Total Future Condition
8: Florida Avenue & 8th Street

AM Peak Period
1/24/2006

														
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)	39	767	32	17	983	42	9	3	3	23	18	27		
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)	42	834	35	18	1068	46	10	3	3	25	20	29		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None						None							
Median storage (veh)														
Upstream signal (ft)	301													
pX, platoon unblocked				0.86			0.86			0.86	0.86	0.86	0.86	
vC, conflicting volume	1114				868				1368	2087	434	1635	2082	379
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	1114				691				1269	2101	189	1578	2094	379
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 %	93				98				84	92	100	55	52	95
cM capacity (veh/h)	623				778				60	40	710	55	41	619
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1							
Volume Total	459	452	286	534	313	16	74							
Volume Left	42	0	18	0	0	10	25							
Volume Right	0	35	0	0	46	3	29							
cSH	623	1700	778	1700	1700	66	75							
Volume to Capacity	0.07	0.27	0.02	0.31	0.18	0.25	0.98							
Queue Length 95th (ft)	5	0	2	0	0	22	129							
Control Delay (s)	2.0	0.0	0.9	0.0	0.0	77.2	193.5							
Lane LOS	A		A			F	F							
Approach Delay (s)	1.0		0.2			77.2	193.5							
Approach LOS						F	F							
Intersection Summary														
Average Delay	7.8													
Intersection Capacity Utilization	57.7%			ICU Level of Service			B							
Analysis Period (min)	15													

2007 Total Future Condition
8: Florida Avenue & 8th Street

PM Peak Period
1/24/2006

												
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)	78	960	23	24	874	50	8	19	4	31	11	33
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)	85	1043	25	26	950	54	9	21	4	34	12	36
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)	301											
pX, platoon unblocked				0.78			0.78			0.78		
vC, conflicting volume	1004				1068				1636	2282	534	1735
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1004				807				1534	2361	123	1661
tC, single (s)	4.1				4.1				7.5	6.5	6.9	7.5
tC, 2 stage (s)												
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5
p0 queue free %	88				96				72	10	99	0
cM capacity (veh/h)	685				635				31	23	706	10
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	607	547	264	475	292	34	82					
Volume Left	85	0	26	0	0	9	34					
Volume Right	0	25	0	0	54	4	36					
cSH	685	1700	635	1700	1700	28	20					
Volume to Capacity	0.12	0.32	0.04	0.28	0.17	1.19	3.99					
Queue Length 95th (ft)	11	0	3	0	0	98	Err					
Control Delay (s)	3.2	0.0	1.5	0.0	0.0	437.3	Err					
Lane LOS	A		A			F	F					
Approach Delay (s)	1.7		0.4			437.3	Err					
Approach LOS						F	F					
Intersection Summary												
Average Delay				362.0								
Intersection Capacity Utilization				65.1%			ICU Level of Service			C		
Analysis Period (min)				15								

2007 Total Future Condition
17: V Street & Parcel A and D

AM Peak Period
1/24/2006

												
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)	8	118	3	4	177	11	3	0	5	40	0	27
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)	9	128	3	4	192	12	3	0	5	43	0	29
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage veh												
Upstream signal (ft)	431											
pX, platoon unblocked												
vC, conflicting volume	204			132			384	360	130	360	356	198
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	204			132			384	360	130	360	356	198
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			100			99	100	99	93	100	97
cM capacity (veh/h)	1367			1454			551	561	920	588	564	843
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	140	209	9	73								
Volume Left	9	4	3	43								
Volume Right	3	12	5	29								
cSH	1367	1454	735	670								
Volume to Capacity	0.01	0.00	0.01	0.11								
Queue Length 95th (ft)	0	0	1	9								
Control Delay (s)	0.5	0.2	10.0	11.0								
Lane LOS	A	A	A	B								
Approach Delay (s)	0.5	0.2	10.0	11.0								
Approach LOS			A	B								
Intersection Summary												
Average Delay				2.3								
Intersection Capacity Utilization				24.1%	ICU Level of Service				A			
Analysis Period (min)				15								

2007 Total Future Condition
17: V Street & Parcel A and D

PM Peak Period
1/24/2006

												
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)	33	126	11	16	268	46	9	0	12	29	0	22
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)	36	137	12	17	291	50	10	0	13	32	0	24
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None						None					
Median storage (veh)												
Upstream signal (ft)	430											
pX, platoon unblocked												
vC, conflicting volume	341			149			590	591	143	579	572	316
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	341			149			590	591	143	579	572	316
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	97			99			98	100	99	92	100	97
cM capacity (veh/h)	1218			1433			393	402	905	407	413	724
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	185	359	23	55								
Volume Left	36	17	10	32								
Volume Right	12	50	13	24								
cSH	1218	1433	580	502								
Volume to Capacity	0.03	0.01	0.04	0.11								
Queue Length 95th (ft)	2	1	3	9								
Control Delay (s)	1.8	0.5	11.5	13.1								
Lane LOS	A	A	B	B								
Approach Delay (s)	1.8	0.5	11.5	13.1								
Approach LOS			B	B								
Intersection Summary												
Average Delay				2.4								
Intersection Capacity Utilization				31.2%	ICU Level of Service				A			
Analysis Period (min)				15								

2007 Total Future Condition
5: V Street & Georgia Avenue

AM Peak Period
1/24/2006



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			0.95			0.95	
Frt		0.97			0.97			0.99			0.99	
Flt Protected		0.98			0.99			1.00			1.00	
Satd. Flow (prot)		1770			1781			3503			3488	
Flt Permitted		0.86			0.90			0.78			0.93	
Satd. Flow (perm)		1555			1617			2736			3240	
Volume (vph)	48	54	33	28	49	22	40	399	18	33	1033	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)	52	59	36	30	53	24	43	434	20	36	1123	111
RTOR Reduction (vph)	0	11	0	0	11	0	0	3	0	0	7	0
Lane Group Flow (vph)	0	136	0	0	96	0	0	494	0	0	1263	0
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		18.0			18.0			74.0			74.0	
Effective Green, g (s)		18.0			18.0			74.0			74.0	
Actuated g/C Ratio		0.18			0.18			0.74			0.74	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		280			291			2025			2398	
v/s Ratio Prot												
v/s Ratio Perm		c0.09			0.06			0.18			c0.39	
v/c Ratio		0.48			0.33			0.24			0.53	
Uniform Delay, d1		36.8			35.8			4.1			5.5	
Progression Factor		1.05			1.00			1.00			0.26	
Incremental Delay, d2		5.6			3.0			0.3			0.6	
Delay (s)		44.3			38.8			4.4			2.1	
Level of Service		D			D			A			A	
Approach Delay (s)		44.3			38.8			4.4			2.1	
Approach LOS		D			D			A			A	

Intersection Summary

HCM Average Control Delay	7.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

2007 Total Future Condition
5: V Street & Georgia Avenue

PM Peak Period
1/24/2006

												
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			0.95			0.95	
Frst		0.96			0.97			1.00			0.98	
Flt Protected		0.99			0.99			0.99			1.00	
Satd. Flow (prot)		1765			1789			3511			3467	
Flt Permitted		0.75			0.73			0.71			0.93	
Satd. Flow (perm)		1338			1327			2515			3235	
Volume (vph)	53	81	55	62	105	39	97	665	8	17	727	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)	58	88	60	67	114	42	105	723	9	18	790	121
RTOR Reduction (vph)	0	15	0	0	8	0	0	1	0	0	12	0
Lane Group Flow (vph)	0	191	0	0	215	0	0	836	0	0	917	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		18.0			18.0			74.0			74.0	
Effective Green, g (s)		18.0			18.0			74.0			74.0	
Actuated g/C Ratio		0.18			0.18			0.74			0.74	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Lane Grp Cap (vph)		241			239			1861			2394	
v/s Ratio Prot												
v/s Ratio Perm		0.14			0.16			0.33			0.28	
v/c Ratio		0.79			0.90			0.45			0.38	
Uniform Delay, d1		39.2			40.1			5.1			4.7	
Progression Factor		0.94			1.00			1.00			0.37	
Incremental Delay, d2		22.9			36.9			0.8			0.4	
Delay (s)		59.9			77.0			5.9			2.1	
Level of Service		E			E			A			A	
Approach Delay (s)		59.9			77.0			5.9			2.1	
Approach LOS		E			E			A			A	
Intersection Summary												
HCM Average Control Delay		16.6					HCM Level of Service				B	
HCM Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		100.0					Sum of lost time (s)			8.0		
Intersection Capacity Utilization		71.0%					ICU Level of Service			C		
Analysis Period (min)		15										
c Critical Lane Group												

2007 Total Future Condition
31: University Dorms & Sherman Street

AM Peak Period
1/24/2006



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗	↑↑			
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Volume (veh/h)	0	0	373	6	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	405	7	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)						299
pX, platoon unblocked						
vC, conflicting volume	409	206			412	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	409	206			412	
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	100			100	
cM capacity (veh/h)	571	800			1143	
Direction, Lane #	WB 1	NB 1	NB 2			
Volume Total	0	270	142			
Volume Left	0	0	0			
Volume Right	0	0	7			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.16	0.08			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	0.0	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		13.8%		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)	0	1	1004	3	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	1	1091	3	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)					299	
pX, platoon unblocked						
vC, conflicting volume	1093	547			1095	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1093	547			1095	
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	100			100	
cM capacity (veh/h)	209	481			633	
Direction, Lane #	WB 1	NB 1	NB 2			
Volume Total	1	728	367			
Volume Left	0	0	0			
Volume Right	1	0	3			
cSH	481	1700	1700			
Volume to Capacity	0.00	0.43	0.22			
Queue Length 95th (ft)	0	0	0			
Control Delay (s)	12.5	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	12.5	0.0				
Approach LOS	B					
Intersection Summary						
Average Delay		0.0				
Intersection Capacity Utilization		37.8%		ICU Level of Service	A	
Analysis Period (min)		15				

Appendix C

Updated Feasibility Analysis (Traffic Circle Analysis)