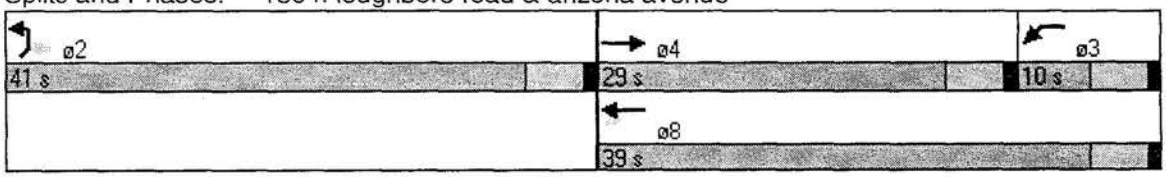
Lane Group	EBT	WBL	WBT	NEL	NER
Lane Configurations					
Volume (vph)	434	438	190	89	563
Turn Type		pm+pt			Perm
Protected Phases	4	3	8	2	
Permitted Phases		8			2
Detector Phases	4	3	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	9.0	21.0	21.0	21.0
Total Split (s)	29.0	10.0	39.0	41.0	41.0
Total Split (%)	36%	13%	49%	51%	51%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lead	Lag			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)	26.0		36.0	38.0	38.0
Actuated g/C Ratio	0.33		0.45	0.48	0.48
v/c Ratio	0.43		1.08dl	0.11	0.60
Uniform Delay, d1	20.3		17.7	11.6	5.2
Delay	19.3		9.6	3.8	0.0
LOS	B		A	A	A
Approach Delay	19.3		9.6	0.5	
Approach LOS	B		A	A	

Intersection Summary

Cycle Length: 80
Offset: 16 (20%), Referenced to phase 3:WBL and 8:WBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 8.9 Intersection LOS: A
Intersection Capacity Utilization 55.4% ICU Level of Service A
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1804: loughboro road & arizona avenue



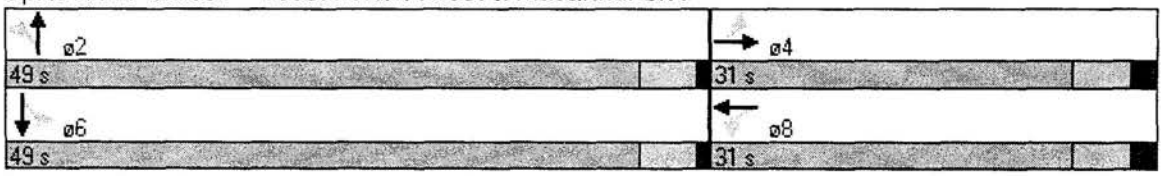
Board of Zoning Adjustment
District of Columbia
CASE NO.16852
EXHIBIT NO.346A5

Lane Group	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations							
Volume (vph)	3	462	12	3	447	238	682
Turn Type		Perm		Perm		Perm	
Protected Phases	4		8		2		6
Permitted Phases		8		2		6	
Detector Phases	4	8	8	2	2	6	6
Minimum Initial (s)	6.0	6.0	6.0	10.0	10.0	10.0	10.0
Minimum Split (s)	30.0	30.0	30.0	25.0	25.0	25.0	25.0
Total Split (s)	31.0	31.0	31.0	49.0	49.0	49.0	49.0
Total Split (%)	39%	39%	39%	61%	61%	61%	61%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	1.0	1.0	1.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	28.0	28.0	28.0		46.0		46.0
Actuated g/C Ratio	0.35	0.35	0.35		0.58		0.58
v/c Ratio	0.01	0.62	0.67		0.45		0.88dl
Uniform Delay, d1	10.2	21.5	17.8		4.3		13.5
Delay	14.6	22.2	18.5		1.1		15.7
LOS	B	C	B		A		B
Approach Delay	14.6		20.1		1.1		15.7
Approach LOS	B		C		A		B

Intersection Summary

Cycle Length: 80
Offset: 7 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 70
Control Type: Pretimed
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 11.5 Intersection LOS: B
Intersection Capacity Utilization 88.1% ICU Level of Service D
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1806: norton street & macarthur blvd

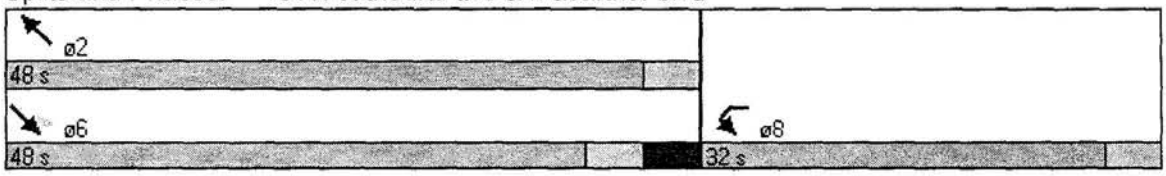


Lane Group	WBL	SEL	SET	NWT
Lane Configurations				
Volume (vph)	30	30	1137	945
Turn Type		Perm		
Protected Phases	8		6	2
Permitted Phases		6		
Detector Phases	8	6	6	2
Minimum Initial (s)	6.0	10.0	10.0	10.0
Minimum Split (s)	24.0	20.0	20.0	20.0
Total Split (s)	32.0	48.0	48.0	48.0
Total Split (%)	40%	60%	60%	60%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	4.0	4.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	29.0		45.0	45.0
Actuated g/C Ratio	0.36		0.56	0.56
v/c Ratio	0.09		0.65	0.49
Uniform Delay, d1	8.3		12.0	10.5
Delay	10.4		11.4	0.7
LOS	B		B	A
Approach Delay	10.4		11.4	0.7
Approach LOS	B		B	A

Intersection Summary

Cycle Length: 80
Offset: 50 (63%), Referenced to phase 2:NWT and 6:SETL, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 6.6 Intersection LOS: A
Intersection Capacity Utilization 53.6% ICU Level of Service A

Splits and Phases: 1810: cathedral ave & macarthur blvd

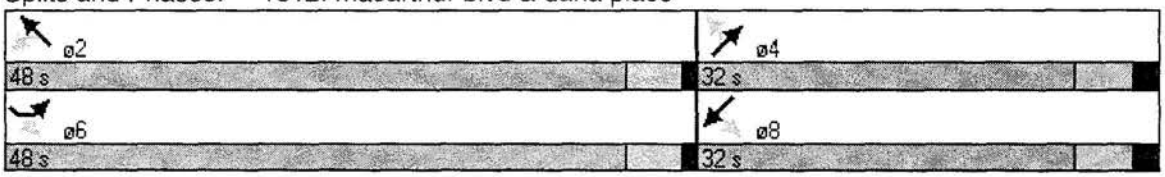


Lane Group	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations							
Volume (vph)	1253	15	712	40	30	40	15
Turn Type		Perm		Perm		Perm	
Protected Phases			2!		4		8
Permitted Phases	6	2		4		8	
Detector Phases	6	2	2	4	4	8	8
Minimum Initial (s)	10.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	19.0	19.0	19.0	28.0	28.0	28.0	28.0
Total Split (s)	48.0	48.0	48.0	32.0	32.0	32.0	32.0
Total Split (%)	60%	60%	60%	40%	40%	40%	40%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	2.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	45.0		45.0		29.0		29.0
Actuated g/C Ratio	0.56		0.56		0.36		0.36
v/c Ratio	0.73		0.41		0.18		0.16
Uniform Delay, d1	13.0		9.9		10.8		9.8
Delay	11.8		8.6		11.8		11.2
LOS	B		A		B		B
Approach Delay	11.8		8.6		11.8		11.2
Approach LOS	B		A		B		B

Intersection Summary

Cycle Length: 80
Offset: 41 (51%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 10.7 Intersection LOS: B
Intersection Capacity Utilization 78.1% ICU Level of Service C
! Phase conflict between lane groups.

Splits and Phases: 1812: macarthur blvd & dana place

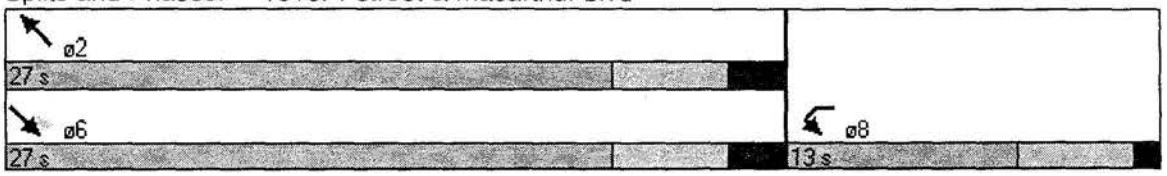


Lane Group	WBL	SEL	SET	NWT
Lane Configurations				
Volume (vph)	51	40	1206	679
Turn Type		Perm		
Protected Phases	8		6	2
Permitted Phases		6		
Detector Phases	8	6	6	2
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	12.0	25.0	25.0	25.0
Total Split (s)	13.0	27.0	27.0	27.0
Total Split (%)	33%	68%	68%	68%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Coord	Coord	Coord
Act Effct Green (s)	9.3		30.7	30.7
Actuated g/C Ratio	0.23		0.77	0.77
v/c Ratio	0.19		0.50	0.29
Uniform Delay, d1	9.1		3.2	2.2
Delay	8.9		4.4	6.1
LOS	A		A	A
Approach Delay	8.9		4.4	6.1
Approach LOS	A		A	A

Intersection Summary

Cycle Length: 40
Actuated Cycle Length: 40
Offset: 0 (0%), Referenced to phase 2:NWT and 6:SETL, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 5.2 Intersection LOS: A
Intersection Capacity Utilization 62.5% ICU Level of Service B

Splits and Phases: 1818: v street & macarthur blvd

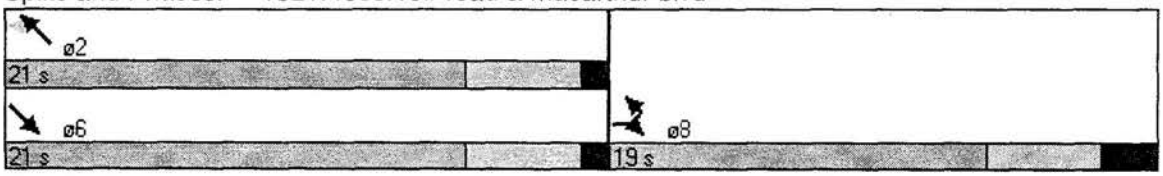


Lane Group	EBL	EBR	SET	NWL	NWT
Lane Configurations					
Volume (vph)	36	344	1238	3	890
Turn Type	Split				custom
Protected Phases	8	8	6		2
Permitted Phases				2	
Detector Phases	8	8	6	2	2
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	19.0	19.0	16.0	12.0	12.0
Total Split (s)	19.0	19.0	21.0	21.0	21.0
Total Split (%)	48%	48%	53%	53%	53%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	1.0	1.0	1.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Coord	Coord	Coord
Act Effct Green (s)	12.6	12.6	24.6	24.6	24.6
Actuated g/C Ratio	0.32	0.32	0.62	0.62	0.62
v/c Ratio	0.39	0.36	0.57	0.01	0.41
Uniform Delay, d1	10.2	9.8	5.7	3.7	4.9
Delay	8.8	8.6	3.6	4.0	2.9
LOS	A	A	A	A	A
Approach Delay	8.7		3.6		2.9
Approach LOS	A		A		A

Intersection Summary

Cycle Length: 40
Actuated Cycle Length: 40
Offset: 30 (75%), Referenced to phase 2:NWTL and 6:SET, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.57
Intersection Signal Delay: 4.1 Intersection LOS: A
Intersection Capacity Utilization 55.2% ICU Level of Service A

Splits and Phases: 1821: reservoir road & macarthur blvd

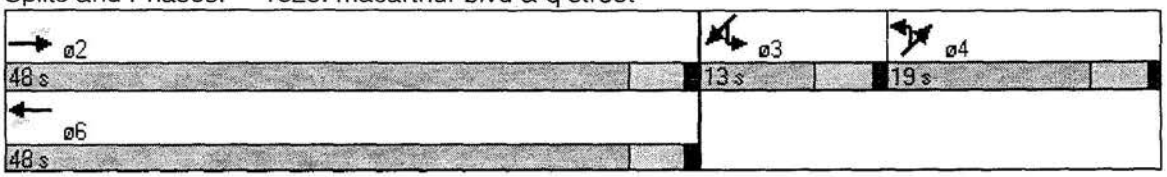


Lane Group	EBL	EBT	WBL	WBT	NET	SWT
Lane Configurations		↕		↕	↕	↕
Volume (vph)	101	619	60	518	30	80
Turn Type	Perm		Perm			
Protected Phases		2		6	4	3
Permitted Phases	2		6			
Detector Phases	2	2	6	6	4	3
Minimum Initial (s)	11.0	11.0	11.0	11.0	7.0	7.0
Minimum Split (s)	16.0	16.0	16.0	16.0	19.0	12.0
Total Split (s)	48.0	48.0	48.0	48.0	19.0	13.0
Total Split (%)	60%	60%	60%	60%	24%	16%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag					Lag	Lead
Lead-Lag Optimize?					Yes	Yes
Recall Mode	Coord	Coord	Min	Min	Min	Min
Act Effct Green (s)		48.8		48.8	12.6	9.6
Actuated g/C Ratio		0.61		0.61	0.16	0.12
v/c Ratio		0.49		0.62	0.57	0.52
Uniform Delay, d1		8.2		9.7	18.0	28.2
Delay		10.1		4.8	17.9	18.6
LOS		B		A	B	B
Approach Delay		10.1		4.8	17.9	18.6
Approach LOS		B		A	B	B

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 80
Offset: 19 (24%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 9.7 Intersection LOS: A
Intersection Capacity Utilization 84.0% ICU Level of Service D

Splits and Phases: 1825: macarthur blvd & q street

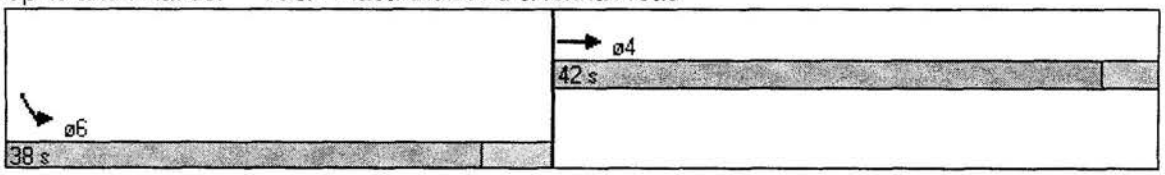


Lane Group	EBT	WBT	WBR	SBL
Lane Configurations				
Volume (vph)	590	0	1567	680
Turn Type			Free	
Protected Phases	4			6
Permitted Phases			Free	
Detector Phases	4			6
Minimum Initial (s)	10.0			10.0
Minimum Split (s)	29.0			22.0
Total Split (s)	42.0	0.0	0.0	38.0
Total Split (%)	53%	0%	0%	48%
Yellow Time (s)	4.0			5.0
All-Red Time (s)	0.0			0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max			Max
Act Effct Green (s)	39.0		80.0	35.0
Actuated g/C Ratio	0.49		1.00	0.44
v/c Ratio	0.34		0.56	0.45
Uniform Delay, d1	12.6		0.0	15.8
Delay	6.9		1.5	6.5
LOS	A		A	A
Approach Delay	6.9	1.5		6.5
Approach LOS	A	A		A

Intersection Summary

Cycle Length: 80
Offset: 28 (35%), Referenced to phase 6:SBL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 3.8 Intersection LOS: A
Intersection Capacity Utilization 42.4% ICU Level of Service A

Splits and Phases: 1827: macarthur blvd & foxhall road

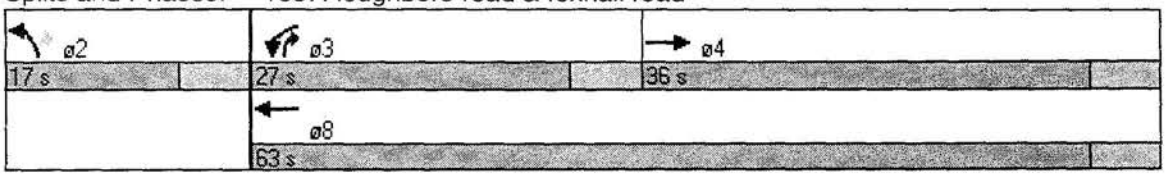


Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Volume (vph)	834	454	174	559
Turn Type				pm+ov
Protected Phases	4	8	2	3
Permitted Phases				2
Detector Phases	4	8	2	3
Minimum Initial (s)	9.0	10.0	5.0	10.0
Minimum Split (s)	21.0	36.0	17.0	15.0
Total Split (s)	36.0	63.0	17.0	27.0
Total Split (%)	45%	79%	21%	34%
Yellow Time (s)	5.0	5.0	5.0	5.0
All-Red Time (s)	0.0	0.0	0.0	0.0
Lead/Lag	Lag			Lead
Lead-Lag Optimize?	Yes			Yes
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	33.0	60.0	14.0	41.0
Actuated g/C Ratio	0.41	0.75	0.18	0.51
v/c Ratio	0.80	1.19dl	0.56	0.66
Uniform Delay, d1	18.9	3.7	30.2	12.1
Delay	23.6	12.2	30.9	12.9
LOS	C	B	C	B
Approach Delay	23.6	12.2	17.1	
Approach LOS	C	B	B	

Intersection Summary

Cycle Length: 80
Offset: 44 (55%), Referenced to phase 3:WBL and 8:WBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 17.9 Intersection LOS: B
Intersection Capacity Utilization 88.4% ICU Level of Service D
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1837: loughboro road & foxhall road

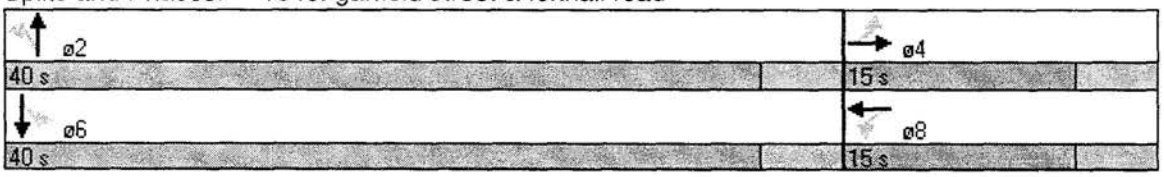


Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT
Lane Configurations		↕		↕	↕		↕
Volume (vph)	34	83	111	34	681	40	865
Turn Type	Perm		Perm			Perm	
Protected Phases		4		8	2		6
Permitted Phases	4		8			6	
Detector Phases	4	4	8	8	2	6	6
Minimum Initial (s)	7.0	7.0	7.0	7.0	27.0	27.0	27.0
Minimum Split (s)	15.0	15.0	15.0	15.0	36.0	36.0	36.0
Total Split (s)	15.0	15.0	15.0	15.0	40.0	40.0	40.0
Total Split (%)	27%	27%	27%	27%	73%	73%	73%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		12.0		12.0	37.0		37.0
Actuated g/C Ratio		0.22		0.22	0.67		0.67
v/c Ratio		0.33		0.53	0.61		0.77
Uniform Delay, d1		17.5		17.7	4.8		6.1
Delay		18.1		18.6	5.2		7.8
LOS		B		B	A		A
Approach Delay		18.1		18.6	5.2		7.8
Approach LOS		B		B	A		A

Intersection Summary

Cycle Length: 55
Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 8.4 Intersection LOS: A
Intersection Capacity Utilization 115.3% ICU Level of Service G

Splits and Phases: 1840: garfield street & foxhall road

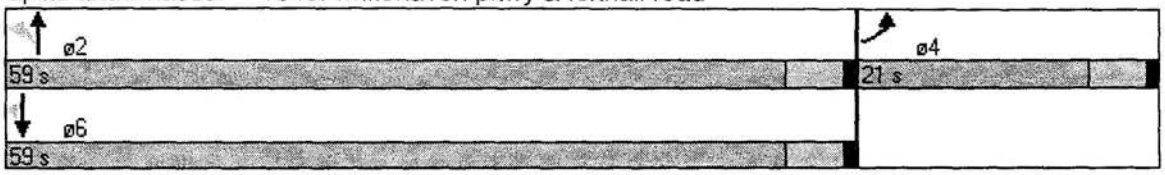


Lane Group	EBL	NBL	NBT	SBT	SBR
Lane Configurations					
Volume (vph)	66	169	727	776	295
Turn Type		Perm			Perm
Protected Phases	4		2	6	
Permitted Phases		2			6
Detector Phases	4	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0
Total Split (s)	21.0	59.0	59.0	59.0	59.0
Total Split (%)	26%	74%	74%	74%	74%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	Coord	Coord	Coord	Coord
Act Effct Green (s)	11.8	62.2	62.2	62.2	62.2
Actuated g/C Ratio	0.15	0.78	0.78	0.78	0.78
v/c Ratio	0.62	0.43	0.50	0.54	0.23
Uniform Delay, d1	11.6	3.0	3.2	3.4	0.1
Delay	9.2	2.2	1.6	4.3	0.6
LOS	A	A	A	A	A
Approach Delay	9.2		1.7	3.3	
Approach LOS	A		A	A	

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 80
Offset: 41 (51%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 3.2 Intersection LOS: A
Intersection Capacity Utilization 73.7% ICU Level of Service C

Splits and Phases: 1843: whitehaven pkwy & foxhall road

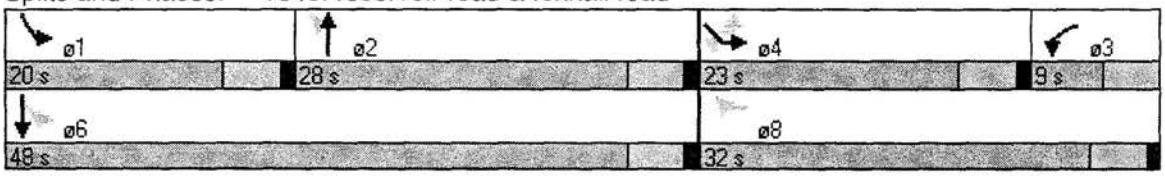


Lane Group	WBL	WBR	NBL	NBT	SBL	SBT	SEL2	SEL	SER
Lane Configurations									
Volume (vph)	112	165	79	736	418	469	27	566	73
Turn Type	Prot		Perm		pm+pt		Perm		Perm
Protected Phases	3			2	1	6		4	
Permitted Phases		8	2		6		4		4
Detector Phases	3	8	2	2	1	6	4	4	4
Minimum Initial (s)	5.0	5.0	9.0	9.0	5.0	5.0	4.0	4.0	4.0
Minimum Split (s)	9.0	27.0	24.0	24.0	20.0	21.0	18.0	18.0	18.0
Total Split (s)	9.0	32.0	28.0	28.0	20.0	48.0	23.0	23.0	23.0
Total Split (%)	11%	40%	35%	35%	25%	60%	29%	29%	29%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag		Lag	Lag	Lead		Lead	Lead	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	6.0	29.0		25.0	45.0	45.0	20.0	20.0	20.0
Actuated g/C Ratio	0.08	0.36		0.31	0.56	0.56	0.25	0.25	0.25
v/c Ratio	0.84	0.50		1.16	0.89	0.50	0.16	1.28	0.16
Uniform Delay, d1	36.5	15.5		25.4	17.8	10.4	23.4	30.0	0.0
Delay	70.2	16.2		95.6	32.8	8.1	8.3	135.0	4.2
LOS	E	B		F	C	A	A	F	A
Approach Delay	30.6			95.6		19.1		115.5	
Approach LOS	C			F		B		F	

Intersection Summary

Cycle Length: 80
Offset: 72 (90%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 100
Control Type: Pretimed
Maximum v/c Ratio: 1.28
Intersection Signal Delay: 68.4 Intersection LOS: E
Intersection Capacity Utilization 124.3% ICU Level of Service H

Splits and Phases: 1846: reservoir road & foxhall road

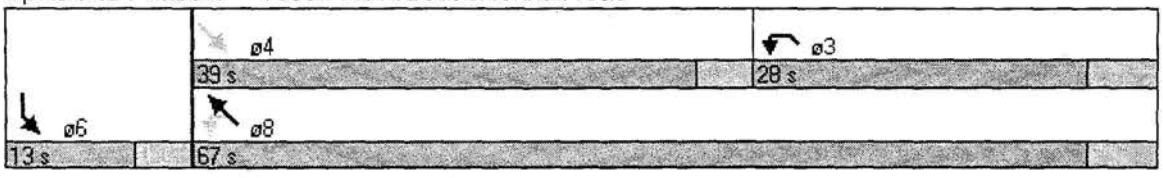


Lane Group	NBT	SBT	SET	NWL	NWT	ø6
Lane Configurations						
Volume (vph)	0	0	625	514	1053	
Turn Type				pm+pt		
Protected Phases				3	8	6
Permitted Phases			4	8	8	
Detector Phases			4	3	8	
Minimum Initial (s)			10.0	5.0	10.0	5.0
Minimum Split (s)			17.0	22.0	39.0	12.0
Total Split (s)	0.0	0.0	39.0	28.0	67.0	13.0
Total Split (%)	0%	0%	49%	35%	84%	16%
Yellow Time (s)			4.0	5.0	5.0	4.0
All-Red Time (s)			0.0	0.0	0.0	0.0
Lead/Lag			Lead	Lag		
Lead-Lag Optimize?			Yes	Yes		
Recall Mode			Max	Max	Max	Max
Act Effct Green (s)		10.0	36.0	64.0	64.0	
Actuated g/C Ratio		0.13	0.45	0.80	0.80	
v/c Ratio		0.26	0.41	0.60	0.71	
Uniform Delay, d1		29.4	14.7	7.7	3.7	
Delay		30.5	8.5	9.4	5.6	
LOS		C	A	A	A	
Approach Delay		30.5	8.5		6.9	
Approach LOS		C	A		A	

Intersection Summary

Cycle Length: 80
Offset: 40 (50%), Referenced to phase 4:SET and 8:NWTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 7.9 Intersection LOS: A
Intersection Capacity Utilization 65.4% ICU Level of Service B

Splits and Phases: 1863: 44th street & foxhall road

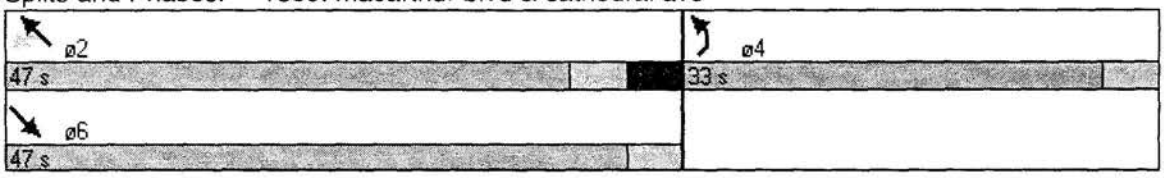


Lane Group	SET	NWL	NWT	NEL
Lane Configurations				
Volume (vph)	1167	30	915	30
Turn Type		Perm		
Protected Phases	6		2	4
Permitted Phases		2		
Detector Phases	6	2	2	4
Minimum Initial (s)	10.0	10.0	10.0	6.0
Minimum Split (s)	20.0	20.0	20.0	24.0
Total Split (s)	47.0	47.0	47.0	33.0
Total Split (%)	59%	59%	59%	41%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	4.0	4.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	44.0		44.0	30.0
Actuated g/C Ratio	0.55		0.55	0.38
v/c Ratio	0.62		0.55	0.09
Uniform Delay, d1	12.2		11.6	8.0
Delay	3.3		11.0	9.9
LOS	A		B	A
Approach Delay	3.3		11.0	9.9
Approach LOS	A		B	A

Intersection Summary

Cycle Length: 80
Offset: 47 (59%), Referenced to phase 2:NWTL and 6:SET, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.62
Intersection Signal Delay: 6.8 — Intersection LOS: A
Intersection Capacity Utilization 45.4% — ICU Level of Service A

Splits and Phases: 1869: macarthur blvd & cathedral ave

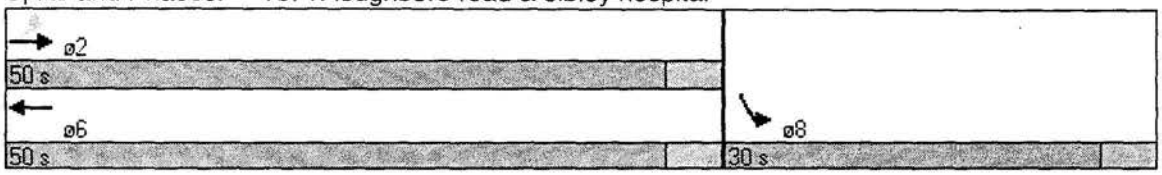


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Volume (vph)	28	667	603	64
Turn Type	Perm			
Protected Phases		2	6	8
Permitted Phases	2			
Detector Phases	2	2	6	8
Minimum Initial (s)	33.0	33.0	33.0	4.0
Minimum Split (s)	40.0	40.0	40.0	18.0
Total Split (s)	50.0	50.0	50.0	30.0
Total Split (%)	63%	63%	63%	38%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Coord	Coord	Coord	None
Act Effct Green (s)		67.2	67.2	9.3
Actuated g/C Ratio		0.84	0.84	0.12
v/c Ratio		0.25	0.21	0.44
Uniform Delay, d1		1.6	1.5	20.6
Delay		0.8	2.0	21.0
LOS		A	A	C
Approach Delay		0.8	2.0	21.0
Approach LOS		A	A	C

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 80
Offset: 44 (55%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.44
Intersection Signal Delay: 2.8 Intersection LOS: A
Intersection Capacity Utilization 40.2% ICU Level of Service A

Splits and Phases: 1871: loughboro road & sibley hospital

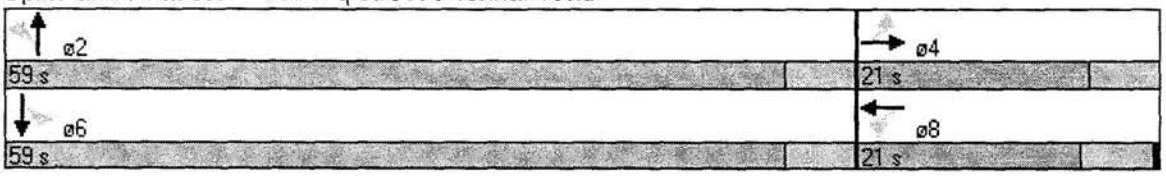


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕		↕		↕
Volume (vph)	74	30	15	60	30	1057	20	600
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phases	4	4	8	8	2	2	6	6
Minimum Initial (s)	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.0	21.0	21.0	21.0	15.0	15.0	15.0	15.0
Total Split (s)	21.0	21.0	21.0	21.0	59.0	59.0	59.0	59.0
Total Split (%)	26%	26%	26%	26%	74%	74%	74%	74%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		18.0		18.0		56.0		56.0
Actuated g/C Ratio		0.23		0.23		0.70		0.70
v/c Ratio		0.43		0.23		0.86		0.52
Uniform Delay, d1		21.5		21.6		9.1		5.6
Delay		14.6		22.3		10.5		2.8
LOS		B		C		B		A
Approach Delay		14.6		22.3		10.5		2.8
Approach LOS		B		C		B		A

Intersection Summary

Cycle Length: 80
Offset: 68 (85%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 8.8 Intersection LOS: A
Intersection Capacity Utilization 117.8% ICU Level of Service G

Splits and Phases: 1874: q street & foxhall road

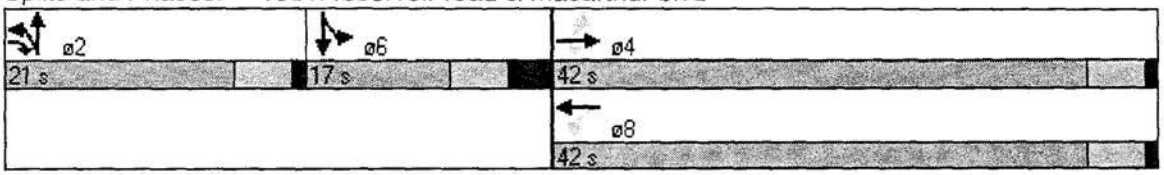


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations		↕	↱		↕	↰	↕	↕
Volume (vph)	30	651	820	10	302	529	12	10
Turn Type	Perm		pm+ov	Perm		Split		
Protected Phases		4	2		8	2	2	6
Permitted Phases	4		4	8				
Detector Phases	4	4	2	8	8	2	2	6
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	17.0	18.0	18.0	17.0	17.0	17.0
Total Split (s)	42.0	42.0	21.0	42.0	42.0	21.0	21.0	17.0
Total Split (%)	53%	53%	26%	53%	53%	26%	26%	21%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Coord	Coord	Min	Coord	Coord	Min	Min	Min
Act Effct Green (s)		42.2	62.7		42.2	17.5	17.5	11.3
Actuated g/C Ratio		0.53	0.78		0.53	0.22	0.22	0.14
v/c Ratio		0.75	0.60		0.34	0.74	0.74	0.12
Uniform Delay, d1		14.7	0.0		10.8	29.1	29.0	19.9
Delay		14.8	2.5		15.2	30.4	30.2	22.8
LOS		B	A		B	C	C	C
Approach Delay		8.1			15.2		30.3	22.8
Approach LOS		A			B		C	C

Intersection Summary

Cycle Length: 80
Actuated Cycle Length: 80
Offset: 2 (3%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 14.3 Intersection LOS: B
Intersection Capacity Utilization 101.4% ICU Level of Service F

Splits and Phases: 1881: reservoir road & macarthur blvd



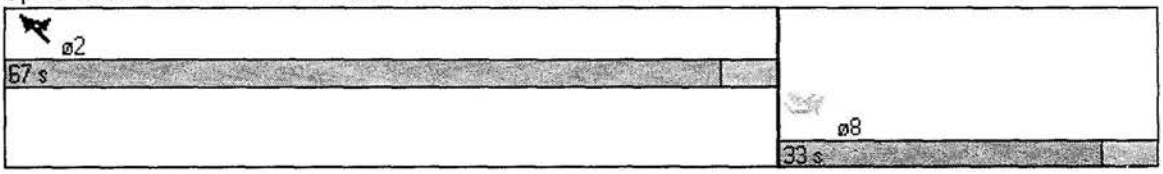
APPENDIX K
PM PEAK OPTIMIZED TIMINGS

Lane Group	SEL	SET	NWT	NWR	SWL	SWR
Lane Configurations						
Volume (vph)	634	0	1911	80	0	1278
Turn Type	custom			Prot		custom
Protected Phases			2	2		
Permitted Phases	8					8
Detector Phases	8		2	2		8
Minimum Initial (s)	6.0		6.0	6.0		6.0
Minimum Split (s)	11.0		22.0	22.0		11.0
Total Split (s)	33.0	0.0	67.0	67.0	0.0	33.0
Total Split (%)	33%	0%	67%	67%	0%	33%
Yellow Time (s)	5.0		5.0	5.0		5.0
All-Red Time (s)	0.0		0.0	0.0		0.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	Max		Max	Max		Max
Act Effct Green (s)	30.0		64.0	64.0		30.0
Actuated g/C Ratio	0.30		0.64	0.64		0.30
v/c Ratio	8.57		0.84	0.08		1.49
Uniform Delay, d1	34.9		14.1	3.3		33.6
Delay	440.5		14.6	3.9		187.4
LOS	F		B	A		F
Approach Delay		440.5	14.2		187.4	
Approach LOS		F	B		F	

Intersection Summary

Cycle Length: 100
Offset: 39 (39%), Referenced to phase 8:SEL, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 8.57
Intersection Signal Delay: 140.2 Intersection LOS: F
Intersection Capacity Utilization 104.2% ICU Level of Service F

Splits and Phases: 1781: canal road & arizona avenue

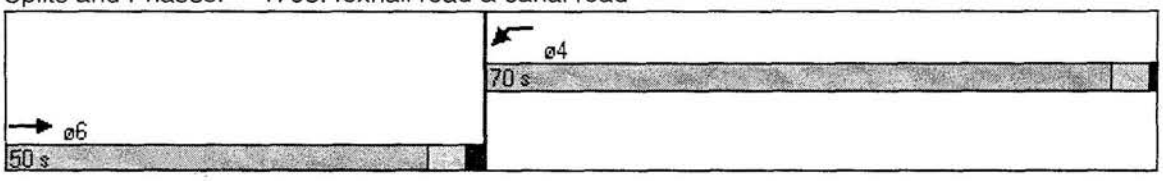


Lane Group	EBT	WBL	WBT	NEL
Lane Configurations				
Volume (vph)	1321	1673	961	0
Turn Type			Free	
Protected Phases	6	4		
Permitted Phases		4	Free	
Detector Phases	6	4		
Minimum Initial (s)	10.0	10.0		
Minimum Split (s)	16.0	15.0		
Total Split (s)	50.0	70.0	0.0	0.0
Total Split (%)	42%	58%	0%	0%
Yellow Time (s)	4.0	4.0		
All-Red Time (s)	2.0	1.0		
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max		
Act Effct Green (s)	47.0	67.0	120.0	
Actuated g/C Ratio	0.39	0.56	1.00	
v/c Ratio	0.97	0.93	0.54	
Uniform Delay, d1	35.7	24.4	0.0	
Delay	39.5	21.3	0.0	
LOS	D	C	A	
Approach Delay	39.5		6.8	
Approach LOS	D		A	

Intersection Summary

Cycle Length: 120
Offset: 60 (50%), Referenced to phase 4:WBL, Start of Green
Natural Cycle: 65
Control Type: Pretimed
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 17.8 Intersection LOS: B
Intersection Capacity Utilization 93.8% ICU Level of Service E

Splits and Phases: 1793: foxhall road & canal road

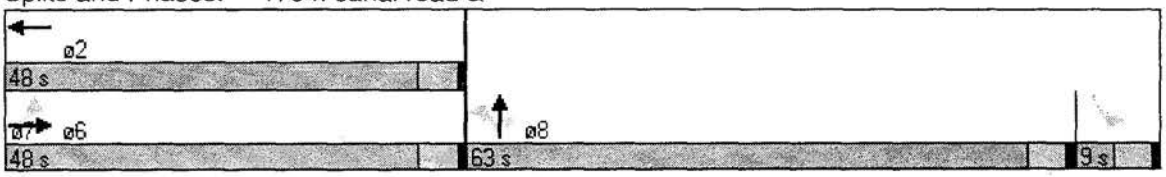


Lane Group	EBL	EBT	EBR	WBT	NBL	NBT	NBR	SBL	SBT
Lane Configurations									
Volume (vph)	2	624	669	1029	1595	28	611	40	0
Turn Type	Perm		Free		Perm		Perm	custom	
Protected Phases		6		2		8			
Permitted Phases	6		Free		8		8	7	
Detector Phases	6	6		2	8	8	8	7	
Minimum Initial (s)	6.0	6.0		6.0	4.0	4.0	4.0	4.0	
Minimum Split (s)	13.0	13.0		13.0	18.0	18.0	18.0	9.0	
Total Split (s)	48.0	48.0	0.0	48.0	63.0	63.0	63.0	9.0	0.0
Total Split (%)	40%	40%	0%	40%	53%	53%	53%	8%	0%
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
All-Red Time (s)	1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lead/Lag					Lead	Lead	Lead	Lag	
Lead-Lag Optimize?					Yes	Yes	Yes	Yes	
Recall Mode	Coord	Coord		Coord	None	None	None	None	
Act Effct Green (s)		54.0	120.0	54.0	60.0	60.0	60.0		0.0
Actuated g/C Ratio		0.45	1.00	0.45	0.50	0.50	0.50		0.00
v/c Ratio		0.79	0.44	0.66	0.95	0.98	0.68		9.40
Uniform Delay, d1		28.1	0.0	25.8	28.6	29.3	14.2		0.0
Delay		1.2	5.4	9.5	41.9	48.0	15.0		484.9
LOS		A	A	A	D	D	B		F
Approach Delay		3.4		9.5		36.8			484.9
Approach LOS		A		A		D			F

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 108 (90%), Referenced to phase 2:WBT and 6:EBTL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 9.40
Intersection Signal Delay: 25.8 Intersection LOS: C
Intersection Capacity Utilization 106.3% ICU Level of Service F

Splits and Phases: 1794: canal road &

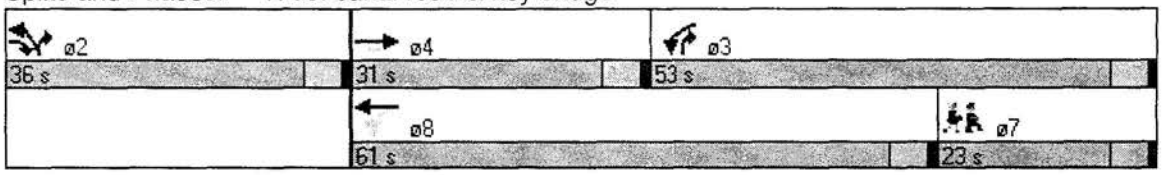


Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø7
Lane Configurations							
Volume (vph)	192	662	1246	125	542	689	
Turn Type		pm+ov	pm+pt			pt+ov	
Protected Phases	4	2	3	8	2	2 3	7
Permitted Phases		4	8				
Detector Phases	4	2	3	8	2	2 3	
Minimum Initial (s)	5.0	6.0	5.0	5.0	6.0		5.0
Minimum Split (s)	10.0	11.0	29.0	20.0	11.0		19.0
Total Split (s)	31.0	36.0	53.0	61.0	36.0	89.0	23.0
Total Split (%)	26%	30%	44%	51%	30%	74%	19%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0
Lead/Lag	Lead		Lag	Lead			Lag
Lead-Lag Optimize?	Yes		Yes	Yes			Yes
Recall Mode	Max	Max	Max	Max	Max		Max
Act Effct Green (s)	28.0	64.0	81.0	58.0	33.0	86.0	
Actuated g/C Ratio	0.23	0.53	0.68	0.48	0.28	0.72	
v/c Ratio	0.60	0.55	0.72	0.07	0.57	0.32	
Uniform Delay, d1	40.9	18.5	20.8	16.6	37.4	0.2	
Delay	35.7	15.2	12.7	23.1	37.8	0.5	
LOS	D	B	B	C	D	A	
Approach Delay	25.6			13.6	16.9		
Approach LOS	C			B	B		

Intersection Summary

Cycle Length: 120
Offset: 89 (74%), Referenced to phase 4:EBT and 8:WBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.72
Intersection Signal Delay: 17.8 — Intersection LOS: B
Intersection Capacity Utilization 73.4% — ICU Level of Service C

Splits and Phases: 1795: canal road & key bridge

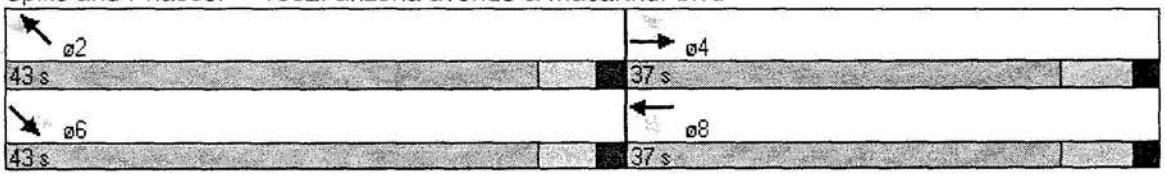


Lane Group	EBL	EBT	WBL	WBT	SEL	SET	NWL	NWT
Lane Configurations								
Volume (vph)	162	448	55	681	16	720	152	594
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		6		2
Permitted Phases	4		8		6		2	
Detector Phases	4	4	8	8	6	6	2	2
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	10.0	10.0
Minimum Split (s)	31.0	31.0	31.0	31.0	27.0	27.0	27.0	27.0
Total Split (s)	37.0	37.0	37.0	37.0	43.0	43.0	43.0	43.0
Total Split (%)	46%	46%	46%	46%	54%	54%	54%	54%
Yellow Time (s)	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	34.0	34.0	34.0	34.0		40.0		40.0
Actuated g/C Ratio	0.43	0.43	0.43	0.43		0.50		0.50
v/c Ratio	1.72	0.67	0.28	0.89		0.72		1.16dl
Uniform Delay, d1	23.1	17.9	15.0	21.2		13.6		17.0
Delay	246.1	18.7	16.3	30.1		16.6		16.4
LOS	F	B	B	C		B		B
Approach Delay		72.4		29.1		16.6		16.4
Approach LOS		E		C		B		B

Intersection Summary

Cycle Length: 80
Offset: 57 (71%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 1.72
Intersection Signal Delay: 30.5 Intersection LOS: C
Intersection Capacity Utilization 116.6% ICU Level of Service G
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

Splits and Phases: 1802: arizona avenue & macarthur blvd

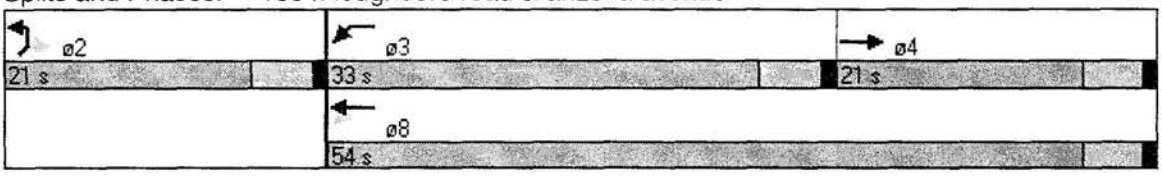


Lane Group	EBT	WBL	WBT	NEL	NER
Lane Configurations					
Volume (vph)	238	809	162	135	424
Turn Type		pm+pt			Perm
Protected Phases	4	3	8	2	
Permitted Phases		8			2
Detector Phases	4	3	8	2	2
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	9.0	21.0	21.0	21.0
Total Split (s)	21.0	33.0	54.0	21.0	21.0
Total Split (%)	28%	44%	72%	28%	28%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lead/Lag	Lag	Lead			
Lead-Lag Optimize?	Yes	Yes			
Recall Mode	Max	Max	Max	Max	Max
Act Effct Green (s)	18.0	51.0	51.0	18.0	18.0
Actuated g/C Ratio	0.24	0.68	0.68	0.24	0.24
v/c Ratio	0.35	0.87	0.13	0.32	0.60
Uniform Delay, d1	20.5	7.4	4.2	23.4	0.0
Delay	20.8	14.3	4.3	24.0	3.0
LOS	C	B	A	C	A
Approach Delay	20.8		12.6	8.1	
Approach LOS	C		B	A	

Intersection Summary

Cycle Length: 75
Offset: 0 (0%), Referenced to phase 3:WBL and 8:WBTL, Start of Green
Natural Cycle: 75
Control Type: Pretimed
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 12.6 Intersection LOS: B
Intersection Capacity Utilization 70.7% ICU Level of Service C

Splits and Phases: 1804: loughboro road & arizona avenue

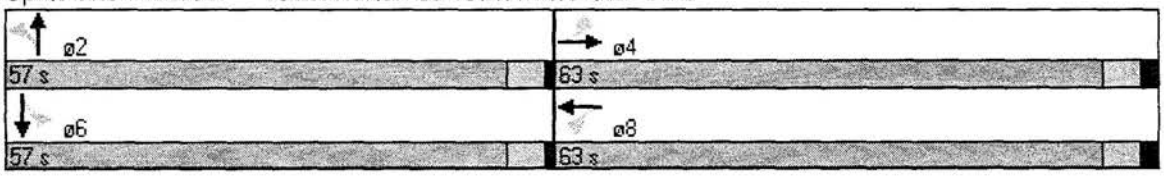


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↔	↰	↔		↔		↔
Volume (vph)	7	11	590	22	1	387	127	541
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phases	4	4	8	8	2	2	6	6
Minimum Initial (s)	6.0	6.0	6.0	6.0	10.0	10.0	10.0	10.0
Minimum Split (s)	30.0	30.0	30.0	30.0	25.0	25.0	25.0	25.0
Total Split (s)	63.0	63.0	63.0	63.0	57.0	57.0	57.0	57.0
Total Split (%)	53%	53%	53%	53%	48%	48%	48%	48%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		60.0	60.0	60.0		54.0		54.0
Actuated g/C Ratio		0.50	0.50	0.50		0.45		0.45
v/c Ratio		0.02	0.55	0.61		0.44		0.67
Uniform Delay, d1		15.2	20.6	19.1		15.0		25.9
Delay		15.3	19.2	17.8		15.3		26.5
LOS		B	B	B		B		C
Approach Delay		15.3		18.4		15.3		26.5
Approach LOS		B		B		B		C

Intersection Summary

Cycle Length: 120
Offset: 54 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 19.9 Intersection LOS: B
Intersection Capacity Utilization 78.0% ICU Level of Service C

Splits and Phases: 1806: norton street & macarthur blvd

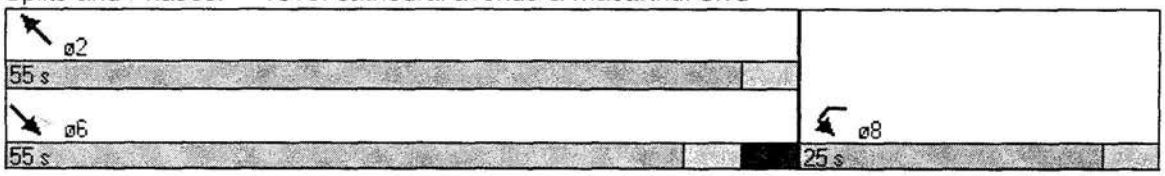


Lane Group	WBL	SEL	SET	NWT
Lane Configurations				
Volume (vph)	60	30	1114	675
Turn Type		Perm		
Protected Phases	8		6	2
Permitted Phases		6	6	
Detector Phases	8	6	6	2
Minimum Initial (s)	6.0	10.0	10.0	10.0
Minimum Split (s)	24.0	20.0	20.0	20.0
Total Split (s)	25.0	55.0	55.0	55.0
Total Split (%)	31%	69%	69%	69%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	4.0	4.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	22.0		52.0	52.0
Actuated g/C Ratio	0.28		0.65	0.65
v/c Ratio	0.18		0.50	0.35
Uniform Delay, d1	14.5		7.2	5.9
Delay	16.0		7.4	0.8
LOS	B		A	A
Approach Delay	16.0		7.4	0.8
Approach LOS	B		A	A

Intersection Summary

Cycle Length: 80
Offset: 6 (8%), Referenced to phase 2:NWT and 6:SETL, Start of Green
Natural Cycle: 45
Control Type: Pretimed
Maximum v/c Ratio: 0.50
Intersection Signal Delay: 5.2 Intersection LOS: A
Intersection Capacity Utilization 52.9% ICU Level of Service A

Splits and Phases: 1810: cathedral avenue & macarthur blvd

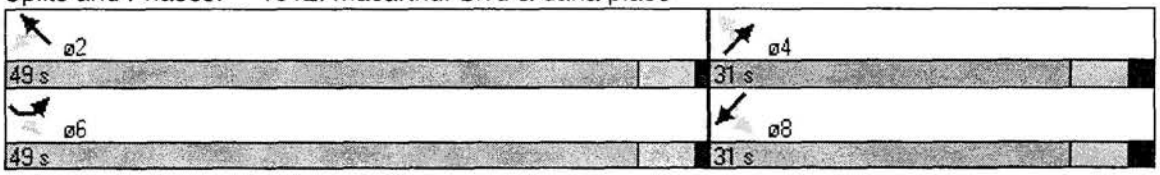


Lane Group	SET	NWL	NWT	NEL	NET	SWL	SWT
Lane Configurations							
Volume (vph)	790	20	748	35	20	15	20
Turn Type		Perm		Perm		Perm	
Protected Phases			2!		4		8
Permitted Phases	6	2		4		8	
Detector Phases	6	2	2	4	4	8	8
Minimum Initial (s)	10.0	10.0	10.0	6.0	6.0	6.0	6.0
Minimum Split (s)	19.0	19.0	19.0	28.0	28.0	28.0	28.0
Total Split (s)	49.0	49.0	49.0	31.0	31.0	31.0	31.0
Total Split (%)	61%	61%	61%	39%	39%	39%	39%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	2.0	2.0	2.0	2.0
Lead/Lag							
Lead-Lag Optimize?							
Recall Mode	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	46.0		46.0		28.0		28.0
Actuated g/C Ratio	0.58		0.58		0.35		0.35
v/c Ratio	0.47		0.44		0.13		0.12
Uniform Delay, d1	9.8		9.4		13.8		8.6
Delay	13.0		9.6		14.9		10.7
LOS	B		A		B		B
Approach Delay	13.0		9.6		14.9		10.7
Approach LOS	B		A		B		B

Intersection Summary

Cycle Length: 80
Offset: 22 (28%), Referenced to phase 2:NWTL and 6:SETL, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.47
Intersection Signal Delay: 11.4 Intersection LOS: B
Intersection Capacity Utilization 45.4% ICU Level of Service A
! Phase conflict between lane groups.

Splits and Phases: 1812: macarthur blvd & dana place

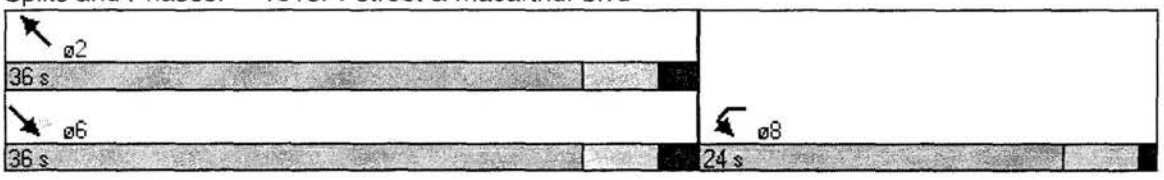


Lane Group	WBL	SEL	SET	NWT
Lane Configurations				
Volume (vph)	20	50	775	688
Turn Type		Perm		
Protected Phases	8		6	2
Permitted Phases		6		
Detector Phases	8	6	6	2
Minimum Initial (s)	7.0	7.0	7.0	7.0
Minimum Split (s)	12.0	25.0	25.0	25.0
Total Split (s)	24.0	36.0	36.0	36.0
Total Split (%)	40%	60%	60%	60%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	None	Coord	Coord	Coord
Act Effct Green (s)	9.5		50.5	50.5
Actuated g/C Ratio	0.16		0.84	0.84
v/c Ratio	0.28		0.32	0.24
Uniform Delay, d1	5.3		1.8	1.7
Delay	9.2		2.2	1.7
LOS	A		A	A
Approach Delay	9.2		2.2	1.7
Approach LOS	A		A	A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NWT and 6:SETL, Start of Yellow
Natural Cycle: 40
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.32
Intersection Signal Delay: 2.3 Intersection LOS: A
Intersection Capacity Utilization 49.2% ICU Level of Service A

Splits and Phases: 1818: v street & macarthur blvd

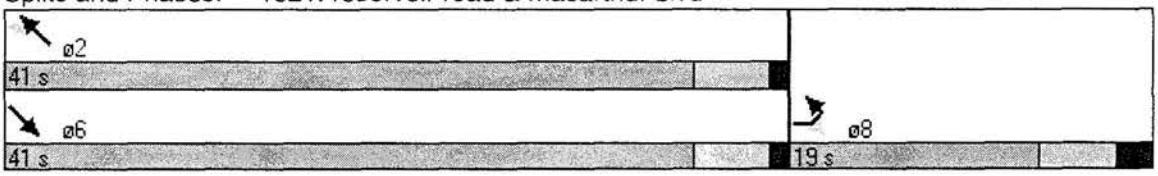


Lane Group	EBL	EBR	SET	NWL	NWT
Lane Configurations					
Volume (vph)	5	16	785	279	777
Turn Type	Prot				custom
Protected Phases	8		6		2
Permitted Phases		8		2	
Detector Phases	8	8	6	2	2
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	19.0	19.0	16.0	12.0	12.0
Total Split (s)	19.0	19.0	41.0	41.0	41.0
Total Split (%)	32%	32%	68%	68%	68%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	1.0	1.0	1.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	Coord	Coord	Coord
Act Effct Green (s)	10.0	10.0	56.8	56.8	56.8
Actuated g/C Ratio	0.17	0.17	0.95	0.95	0.95
v/c Ratio	0.02	0.06	0.23	0.49	0.23
Uniform Delay, d1	25.8	0.0	1.2	1.7	1.2
Delay	21.0	11.4	1.5	2.9	1.2
LOS	C	B	A	A	A
Approach Delay	13.7		1.5		1.7
Approach LOS	B		A		A

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 10 (17%), Referenced to phase 2:NWTL and 6:SET, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 1.7 Intersection LOS: A
Intersection Capacity Utilization 53.1% ICU Level of Service A

Splits and Phases: 1821: reservoir road & macarthur blvd

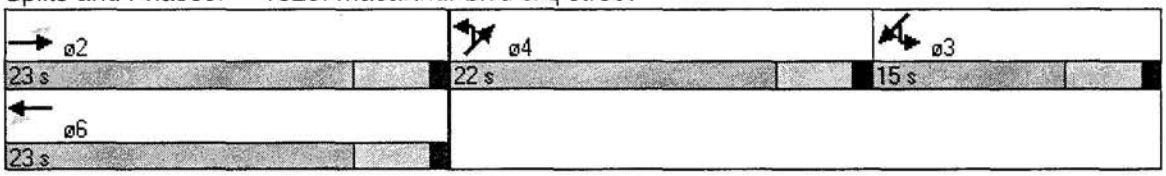


Lane Group	EBL	EBT	WBL	WBT	NET	SWT
Lane Configurations						
Volume (vph)	10	469	10	305	50	10
Turn Type	Perm		Perm			
Protected Phases		2		6	4	3
Permitted Phases	2		6			
Detector Phases	2	2	6	6	4	3
Minimum Initial (s)	11.0	11.0	11.0	11.0	7.0	7.0
Minimum Split (s)	16.0	16.0	16.0	16.0	19.0	12.0
Total Split (s)	23.0	23.0	23.0	23.0	22.0	15.0
Total Split (%)	38%	38%	38%	38%	37%	25%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lead/Lag					Lead	Lag
Lead-Lag Optimize?					Yes	Yes
Recall Mode	Coord	Coord	Min	Min	Min	Min
Act Effct Green (s)		29.8		29.8	11.2	9.9
Actuated g/C Ratio		0.50		0.50	0.19	0.17
v/c Ratio		0.29		0.38	0.41	0.30
Uniform Delay, d1		8.8		9.0	14.9	8.6
Delay		7.4		9.9	15.0	10.7
LOS		A		A	B	B
Approach Delay		7.4		9.9	15.0	10.7
Approach LOS		A		A	B	B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 1 (2%), Referenced to phase 2:EBTL, Start of Green
Natural Cycle: 50
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.41
Intersection Signal Delay: 9.6 Intersection LOS: A
Intersection Capacity Utilization 43.2% ICU Level of Service A

Splits and Phases: 1825: macarthur blvd & q street

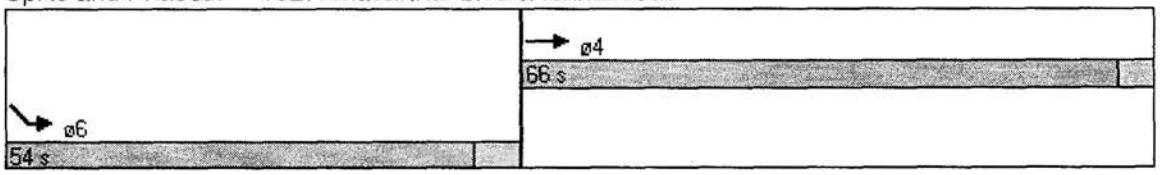


Lane Group	EBT	WBT	WBR	SEL
Lane Configurations	↑↑		↱↱	↰↰
Volume (vph)	550	0	977	814
Turn Type				
Protected Phases	4			6
Permitted Phases			Free	
Detector Phases	4			6
Minimum Initial (s)	10.0			10.0
Minimum Split (s)	29.0			22.0
Total Split (s)	66.0	0.0	0.0	54.0
Total Split (%)	55%	0%	0%	45%
Yellow Time (s)	4.0			5.0
All-Red Time (s)	0.0			0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max			Max
Act Effct Green (s)	63.0		120.0	51.0
Actuated g/C Ratio	0.53		1.00	0.43
v/c Ratio	0.30		0.35	0.56
Uniform Delay, d1	16.0		0.0	26.0
Delay	12.7		0.0	0.4
LOS	B		A	A
Approach Delay	12.7	0.0		0.4
Approach LOS	B	A		A

Intersection Summary

Cycle Length: 120
Offset: 4 (3%), Referenced to phase 6:SEL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.56
Intersection Signal Delay: 3.1 Intersection LOS: A
Intersection Capacity Utilization 45.1% ICU Level of Service A

Splits and Phases: 1827: macarthur blvd & foxhall road

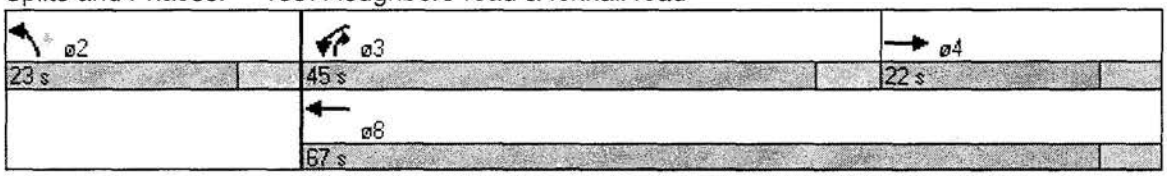


Lane Group	EBT	WBT	NBL	NBR
Lane Configurations				
Volume (vph)	573	802	269	590
Turn Type				pm+ov
Protected Phases	4	8	2	3
Permitted Phases				2
Detector Phases	4	8	2	3
Minimum Initial (s)	9.0	10.0	5.0	4.0
Minimum Split (s)	21.0	36.0	17.0	9.5
Total Split (s)	22.0	67.0	23.0	45.0
Total Split (%)	24%	74%	26%	50%
Yellow Time (s)	5.0	5.0	5.0	5.0
All-Red Time (s)	0.0	0.0	0.0	0.0
Lead/Lag	Lag			Lead
Lead-Lag Optimize?	Yes			Yes
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	19.0	64.0	20.0	65.0
Actuated g/C Ratio	0.21	0.71	0.22	0.72
v/c Ratio	0.95	0.65	0.68	0.51
Uniform Delay, d1	33.5	6.0	32.1	5.2
Delay	49.9	2.8	33.8	5.4
LOS	D	A	C	A
Approach Delay	49.9	2.8	14.3	
Approach LOS	D	A	B	

Intersection Summary

Cycle Length: 90
Offset: 80 (89%), Referenced to phase 4:EBT and 8:WBT, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.95
Intersection Signal Delay: 17.8 Intersection LOS: B
Intersection Capacity Utilization 82.1% ICU Level of Service D

Splits and Phases: 1837: loughboro road & foxhall road

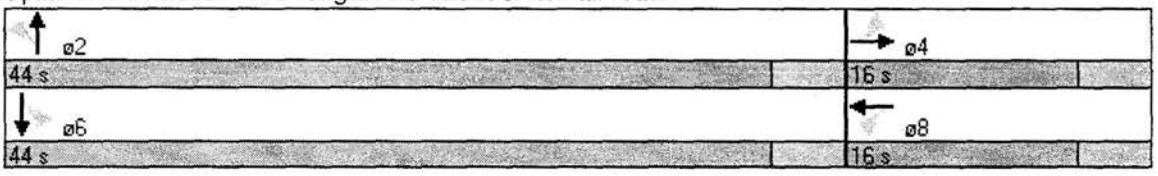


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕		↕		↕
Volume (vph)	28	30	85	36	3	806	13	626
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phases	4	4	8	8	2	2	6	6
Minimum Initial (s)	7.0	7.0	7.0	7.0	27.0	27.0	27.0	27.0
Minimum Split (s)	15.0	15.0	15.0	15.0	36.0	36.0	36.0	36.0
Total Split (s)	16.0	16.0	16.0	16.0	44.0	44.0	44.0	44.0
Total Split (%)	27%	27%	27%	27%	73%	73%	73%	73%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		13.0		13.0		41.0		41.0
Actuated g/C Ratio		0.22		0.22		0.68		0.68
v/c Ratio		0.18		0.42		0.69		0.52
Uniform Delay, d1		18.1		18.8		5.6		4.6
Delay		18.9		19.6		4.5		4.9
LOS		B		B		A		A
Approach Delay		18.9		19.6		4.5		4.9
Approach LOS		B		B		A		A

Intersection Summary

Cycle Length: 60
Offset: 28 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 6.3 Intersection LOS: A
Intersection Capacity Utilization 69.6% ICU Level of Service B

Splits and Phases: 1840: garfield street & foxhall road

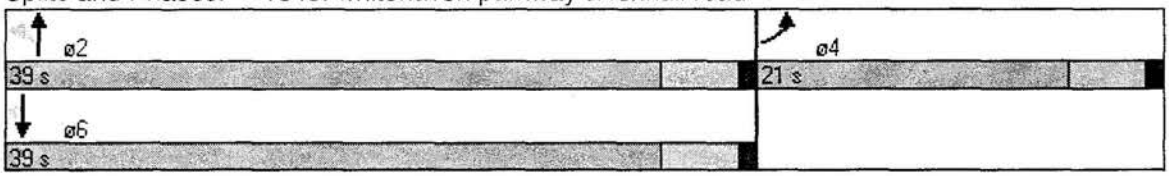


Lane Group	EBL	NBL	NBT	SBT	SBR
Lane Configurations					
Volume (vph)	84	65	739	723	67
Turn Type		Perm			Perm
Protected Phases	4		2	6	
Permitted Phases		2			6
Detector Phases	4	2	2	6	6
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0
Minimum Split (s)	21.0	21.0	21.0	21.0	21.0
Total Split (s)	21.0	39.0	39.0	39.0	39.0
Total Split (%)	35%	65%	65%	65%	65%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	Coord	Coord	Coord	Coord
Act Effct Green (s)	10.5	46.2	46.2	46.2	46.2
Actuated g/C Ratio	0.18	0.77	0.77	0.77	0.77
v/c Ratio	0.49	0.18	0.51	0.50	0.05
Uniform Delay, d1	10.3	2.3	3.3	3.2	0.0
Delay	10.0	4.1	4.7	3.3	0.4
LOS	A	A	A	A	A
Approach Delay	10.0		4.6	3.0	
Approach LOS	A		A	A	

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 7 (12%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 4.5 Intersection LOS: A
Intersection Capacity Utilization 62.4% ICU Level of Service B

Splits and Phases: 1843: whitehaven parkway & foxhall road

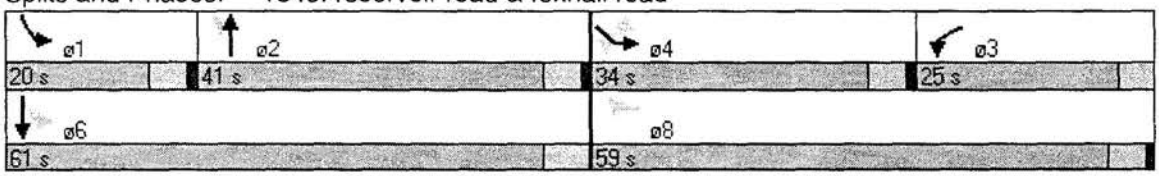


Lane Group	WBL	WBR	NBL	NBT	SBL	SBT	SEL2	SEL	SER
Lane Configurations									
Volume (vph)	261	451	66	535	151	600	26	319	56
Turn Type	Prot		Perm		pm+pt		Perm		Perm
Protected Phases	3			2	1	6		4	
Permitted Phases		8	2		6		4		4
Detector Phases	3	8	2	2	1	6	4	4	4
Minimum Initial (s)	5.0	5.0	9.0	9.0	5.0	5.0	4.0	4.0	4.0
Minimum Split (s)	10.0	27.0	24.0	24.0	20.0	20.0	18.0	18.0	18.0
Total Split (s)	25.0	59.0	41.0	41.0	20.0	61.0	34.0	34.0	34.0
Total Split (%)	21%	49%	34%	34%	17%	51%	28%	28%	28%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	0.0	1.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0
Lead/Lag	Lag		Lag	Lag	Lead		Lead	Lead	Lead
Lead-Lag Optimize?	Yes		Yes	Yes	Yes		Yes	Yes	Yes
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)	22.0	56.0		38.0	58.0	58.0	31.0	31.0	31.0
Actuated g/C Ratio	0.18	0.47		0.32	0.48	0.48	0.26	0.26	0.26
v/c Ratio	0.80	0.91		0.90	0.44	0.69	0.42	0.70	0.12
Uniform Delay, d1	46.9	28.3		37.3	17.5	24.0	37.0	40.2	0.0
Delay	54.3	37.1		35.8	19.4	20.8	30.5	31.3	10.5
LOS	D	D		D	B	C	C	C	B
Approach Delay	41.8			35.8		20.6		28.4	
Approach LOS	D			D		C		C	

Intersection Summary

Cycle Length: 120
Offset: 78 (65%), Referenced to phase 6:SBTL, Start of Green
Natural Cycle: 90
Control Type: Pretimed
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 32.7 Intersection LOS: C
Intersection Capacity Utilization 128.9% ICU Level of Service H

Splits and Phases: 1846: reservoir road & foxhall road

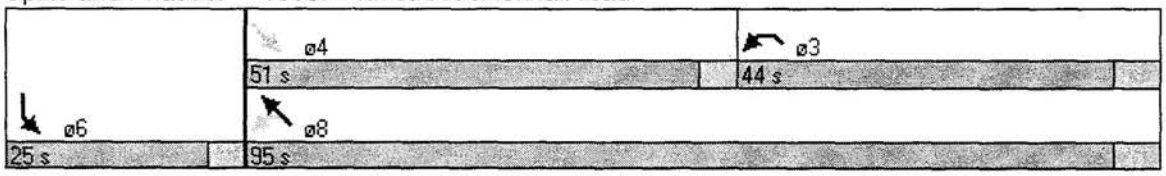


Lane Group	SBL	SET	NWL	NWT	NEL
Lane Configurations					
Volume (vph)	11	803	340	637	0
Turn Type	Prot		pm+pt		
Protected Phases	6		3	8	
Permitted Phases		4	8	8	
Detector Phases	6	4	3	8	
Minimum Initial (s)	5.0	10.0	5.0	10.0	
Minimum Split (s)	12.0	17.0	22.0	39.0	
Total Split (s)	25.0	51.0	44.0	95.0	0.0
Total Split (%)	21%	43%	37%	79%	0%
Yellow Time (s)	4.0	4.0	5.0	5.0	
All-Red Time (s)	0.0	0.0	0.0	0.0	
Lead/Lag		Lead	Lag		
Lead-Lag Optimize?		Yes	Yes		
Recall Mode	Max	Max	Max	Max	
Act Effct Green (s)	22.0	48.0	92.0	92.0	
Actuated g/C Ratio	0.18	0.40	0.77	0.77	
v/c Ratio	0.08	0.59	0.44	0.45	
Uniform Delay, d1	26.9	28.1	14.3	5.0	
Delay	30.8	14.6	17.4	6.2	
LOS	C	B	B	A	
Approach Delay	30.8	14.6		10.1	
Approach LOS	C	B		B	

Intersection Summary

Cycle Length: 120
Offset: 2 (2%), Referenced to phase 4:SET and 8:NWTL, Start of Green
Natural Cycle: 55
Control Type: Pretimed
Maximum v/c Ratio: 0.59
Intersection Signal Delay: 12.4 — Intersection LOS: B
Intersection Capacity Utilization 56.1% — ICU Level of Service A

Splits and Phases: 1863: 44th street & foxhall road

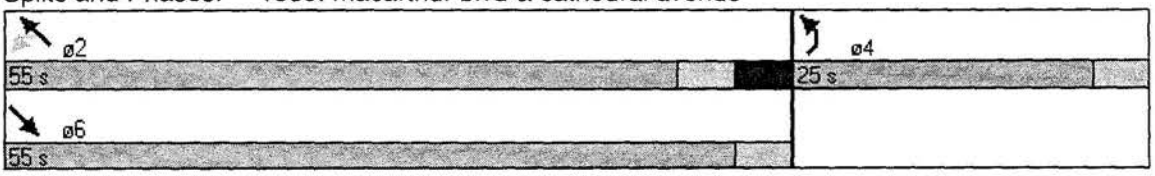


Lane Group	SET	NWL	NWT	NEL
Lane Configurations				
Volume (vph)	1144	30	755	30
Turn Type		Perm		
Protected Phases	6		2	4
Permitted Phases		2	2	
Detector Phases	6	2	2	4
Minimum Initial (s)	10.0	10.0	10.0	6.0
Minimum Split (s)	20.0	20.0	20.0	24.0
Total Split (s)	55.0	55.0	55.0	25.0
Total Split (%)	69%	69%	69%	31%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	4.0	4.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Max	Max	Max	Max
Act Effct Green (s)	52.0		52.0	22.0
Actuated g/C Ratio	0.65		0.65	0.28
v/c Ratio	0.51		0.34	0.12
Uniform Delay, d1	7.3		6.3	10.7
Delay	1.7		3.3	13.4
LOS	A		A	B
Approach Delay	1.7		3.3	13.4
Approach LOS	A		A	B

Intersection Summary

Cycle Length: 80
Offset: 6 (8%), Referenced to phase 2:NWTL and 6:SET, Start of Green
Natural Cycle: 50
Control Type: Pretimed
Maximum v/c Ratio: 0.51
Intersection Signal Delay: 2.7 Intersection LOS: A
Intersection Capacity Utilization 44.2% ICU Level of Service A

Splits and Phases: 1869: macarthur blvd & cathedral avenue

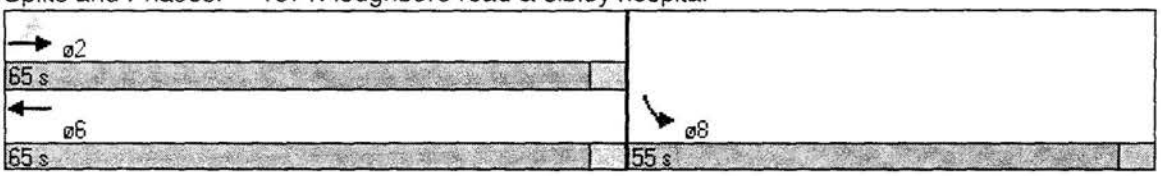


Lane Group	EBL	EBT	WBT	SBL
Lane Configurations				
Volume (vph)	27	402	600	53
Turn Type	Perm			
Protected Phases		2	6	8
Permitted Phases	2			
Detector Phases	2	2	6	8
Minimum Initial (s)	33.0	33.0	33.0	4.0
Minimum Split (s)	40.0	40.0	40.0	18.0
Total Split (s)	65.0	65.0	65.0	55.0
Total Split (%)	54%	54%	54%	46%
Yellow Time (s)	4.0	4.0	4.0	4.0
All-Red Time (s)	0.0	0.0	0.0	0.0
Lead/Lag				
Lead-Lag Optimize?				
Recall Mode	Coord	Coord	Coord	None
Act Effct Green (s)		103.2	103.2	10.8
Actuated g/C Ratio		0.86	0.86	0.09
v/c Ratio		0.16	0.20	0.76
Uniform Delay, d1		1.4	1.4	11.2
Delay		1.3	1.7	13.3
LOS		A	A	B
Approach Delay		1.3	1.7	13.3
Approach LOS		A	A	B

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 44 (37%), Referenced to phase 2:EBTL and 6:WBT, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 3.8 Intersection LOS: A
Intersection Capacity Utilization 48.9% ICU Level of Service A

Splits and Phases: 1871: loughboro road & sibley hospital

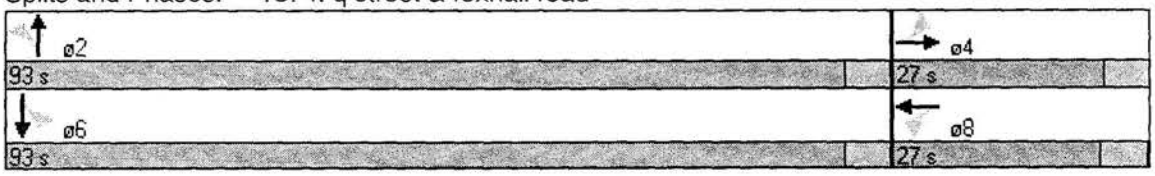


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations		↕		↕		↕		↕
Volume (vph)	50	40	15	30	15	582	81	802
Turn Type	Perm		Perm		Perm		Perm	
Protected Phases		4		8		2		6
Permitted Phases	4		8		2		6	
Detector Phases	4	4	8	8	2	2	6	6
Minimum Initial (s)	9.0	9.0	9.0	9.0	10.0	10.0	10.0	10.0
Minimum Split (s)	21.0	21.0	21.0	21.0	15.0	15.0	15.0	15.0
Total Split (s)	27.0	27.0	27.0	27.0	93.0	93.0	93.0	93.0
Total Split (%)	23%	23%	23%	23%	78%	78%	78%	78%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Max	Max	Max	Max	Max	Max	Max	Max
Act Effct Green (s)		24.0		24.0		90.0		90.0
Actuated g/C Ratio		0.20		0.20		0.75		0.75
v/c Ratio		0.38		0.37		0.47		0.74
Uniform Delay, d1		39.0		17.0		5.7		8.3
Delay		32.2		18.8		11.2		2.1
LOS		C		B		B		A
Approach Delay		32.2		18.8		11.2		2.1
Approach LOS		C		B		B		A

Intersection Summary

Cycle Length: 120
Offset: 58 (48%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Pretimed
Maximum v/c Ratio: 0.74
Intersection Signal Delay: 8.4 Intersection LOS: A
Intersection Capacity Utilization 110.7% ICU Level of Service G

Splits and Phases: 1874: q street & foxhall road

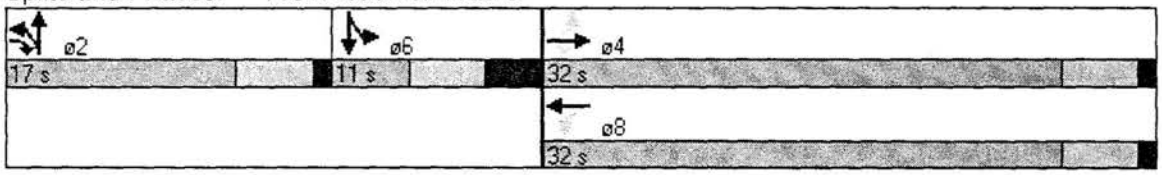


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBT
Lane Configurations		↔	↱		↔	↰	↔	↔
Volume (vph)	10	377	435	20	533	402	10	30
Turn Type	Perm		pm+ov	Perm		Split		
Protected Phases		4	2		8	2	2	6
Permitted Phases	4		4	8				
Detector Phases	4	4	2	8	8	2	2	6
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	12.0	12.0	17.0	18.0	18.0	17.0	17.0	17.0
Total Split (s)	32.0	32.0	17.0	32.0	32.0	17.0	17.0	11.0
Total Split (%)	53%	53%	28%	53%	53%	28%	28%	18%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	3.0
Lead/Lag								
Lead-Lag Optimize?								
Recall Mode	Coord	Coord	Min	Coord	Coord	Min	Min	Min
Act Effct Green (s)		30.0	46.0		30.0	13.0	13.0	8.0
Actuated g/C Ratio		0.50	0.77		0.50	0.22	0.22	0.13
v/c Ratio		0.44	0.35		0.64	0.59	0.57	0.36
Uniform Delay, d1		9.6	0.0		10.9	21.1	20.6	13.6
Delay		7.9	0.6		11.5	16.8	16.3	16.1
LOS		A	A		B	B	B	B
Approach Delay		4.1			11.5		16.5	16.1
Approach LOS		A			B		B	B

Intersection Summary

Cycle Length: 60
Actuated Cycle Length: 60
Offset: 56 (93%), Referenced to phase 4:EBTL and 8:WBTL, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 9.7 Intersection LOS: A
Intersection Capacity Utilization 69.8% ICU Level of Service B

Splits and Phases: 1881: reservoir road &



APPENDIX L
COMMUNITY PARTICIPANTS

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Cavanaugh, Debra
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Echols, Stan
Finney, John
Floto, M.
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Gates, Harry
Gavil, Erik
Gerstell, Glenn S.
Graves, Linda
Haggarty, Bill
Heller, Ann
Kain, Chris
Kentz, Ellen
Koczela, Jack
Latham, Sanndra
Lewis, Eleanor
McBride, James
McKinney, Anthony
Mitchell, Ronald
Mittleman, Ary
Moriarty, Peter
Morrison, DJ
Ormened, Doug
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Rich, Sherry
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Schwarz, Andy
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Shaughness, Patrick
Spector, Leonard
Van Sickel, Tina
Waters, Paul F.
Waters, Catherine G.
Woodwelc, D.

ANC 3D
Foxhall Community Citizens Association
Metropolitan Police Department