

Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	105	1161	1829	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	5085	5085	0	1863	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	5085	0	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	1352		331	
Travel Time (s)		7.5	30.7		7.5	
Lane Group Flow (vph)	114	1262	1988	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 47.8% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
21: Sheridan St & 56 Street

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	81	1690	91	69	800	87	115	159	165	137	159	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	361		361	0		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5045	0	1770	5009	0	1770	3270	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.648			0.459		
Satd. Flow (perm)	1770	5045	0	1770	5009	0	1207	3270	0	855	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			32			179				76
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2636			3315			3795			1079	
Travel Time (s)		59.9			75.3			86.3			24.5	
Lane Group Flow (vph)	88	1936	0	75	965	0	125	352	0	149	173	76
Turn Type	Prot			Prot			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases							4			8		8
Total Split (s)	14.0	31.0	0.0	11.0	28.0	0.0	10.0	13.0	0.0	10.0	13.0	13.0
Total Lost Time (s)	6.0	5.0	4.0	6.0	5.0	4.0	6.0	6.0	4.0	6.0	6.0	6.0
Act Effect Green (s)	7.3	28.4		5.0	26.2		10.8	6.8		12.0	8.8	8.8
Actuated g/C Ratio	0.11	0.44		0.08	0.40		0.17	0.10		0.18	0.14	0.14
v/c Ratio	0.44	0.87		0.55	0.47		0.53	0.70		0.70	0.68	0.27
Control Delay	38.4	15.5		33.9	7.5		29.6	22.2		41.8	46.5	10.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	38.4	15.5		33.9	7.5		29.6	22.2		41.8	46.5	10.6
LOS	D	B		C	A		C	C		D	D	B
Approach Delay		16.5			9.5			24.1			37.9	
Approach LOS		B			A			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 8 (12%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 17.7

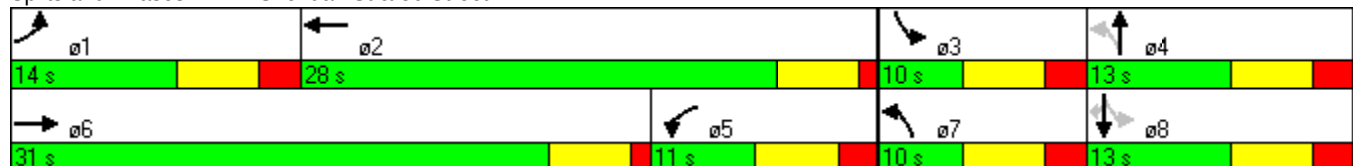
Intersection LOS: B

Intersection Capacity Utilization 75.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 21: Sheridan St & 56 Street



Queues

21: Sheridan St & 56 Street

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	88	1936	75	965	125	352	149	173	76
v/c Ratio	0.44	0.87	0.55	0.47	0.53	0.70	0.70	0.68	0.27
Control Delay	38.4	15.5	33.9	7.5	29.6	22.2	41.8	46.5	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	15.5	33.9	7.5	29.6	22.2	41.8	46.5	10.6
Queue Length 50th (ft)	51	290	20	39	39	34	48	69	0
Queue Length 95th (ft)	m56	m315	m42	64	79	#76	#101	#170	34
Internal Link Dist (ft)		2556		3235		3715		999	
Turn Bay Length (ft)					361				
Base Capacity (vph)	218	2213	136	2035	235	512	214	253	280
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.87	0.55	0.47	0.53	0.69	0.70	0.68	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
22: Coolidge Street & N Park Rd

7/29/2013

									
Lane Group	WBL	WBR	NBL	NBR	SEL	SER	SWL2	SWL	SWR
Lane Configurations			  			 			
Volume (vph)	2	15	0	2	81	0	10	3	614
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	3072	0	0	3278	0	1615	0
Flt Permitted	0.950				0.950			0.999	
Satd. Flow (perm)	0	1611	3072	0	0	3278	0	1615	0
Link Speed (mph)	30		30		30			30	
Link Distance (ft)	794		2108		1376			1073	
Travel Time (s)	18.0		47.9		31.3			24.4	
Lane Group Flow (vph)	2	16	2	0	88	0	0	681	0
Sign Control	Stop		Free		Free			Stop	
Intersection Summary									
Area Type:	Other								
Control Type:	Unsignalized								
Intersection Capacity Utilization Err%	ICU Level of Service H								
Analysis Period (min)	15								

Lanes, Volumes, Timings
23: Sheridan St & 26th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  			 			 	
Volume (vph)	324	1241	55	47	1245	188	309	235	73	147	80	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		0	228		0	150		0	295		295
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5055	0	1770	5085	1583	1770	1798	0	1770	1863	1583
Flt Permitted	0.950			0.105			0.552			0.348		
Satd. Flow (perm)	1770	5055	0	196	5085	1583	1028	1798	0	648	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				173		11				144
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1352			3119			3825			696	
Travel Time (s)		30.7			70.9			86.9			15.8	
Lane Group Flow (vph)	356	1424	0	51	1353	204	336	334	0	158	86	144
Turn Type	Prot			pm+pt		Perm	pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases				2		2	4			8		8
Total Split (s)	37.0	68.0	0.0	11.0	42.0	42.0	27.0	35.0	0.0	16.0	24.0	24.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	31.3	64.5		45.0	38.0	36.0	48.7	32.9		34.5	22.7	22.7
Actuated g/C Ratio	0.24	0.50		0.35	0.29	0.28	0.37	0.25		0.27	0.17	0.17
v/c Ratio	0.84	0.57		0.33	0.91	0.36	0.66	0.72		0.58	0.26	0.36
Control Delay	66.0	25.7		29.6	53.2	9.8	39.3	53.6		39.3	50.8	10.3
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	66.0	25.7		29.6	53.2	9.8	39.3	53.6		39.3	50.8	10.3
LOS	E	C		C	D	A	D	D		D	D	B
Approach Delay		33.7			47.0			46.4			31.1	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 24 (18%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 40.2

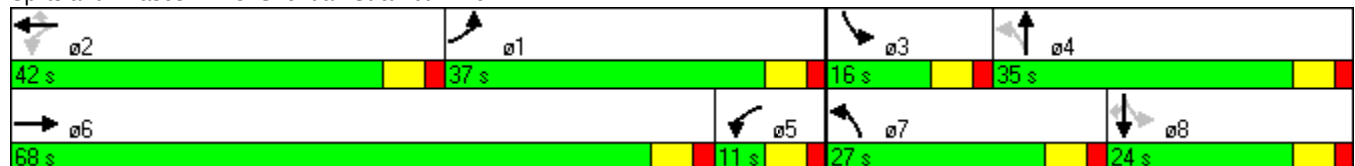
Intersection LOS: D

Intersection Capacity Utilization 80.3%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 23: Sheridan St & 26th Ave



Queues

23: Sheridan St & 26th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	356	1424	51	1353	204	336	334	158	86	144
v/c Ratio	0.84	0.57	0.33	0.91	0.36	0.66	0.72	0.58	0.26	0.36
Control Delay	66.0	25.7	29.6	53.2	9.8	39.3	53.6	39.3	50.8	10.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.0	25.7	29.6	53.2	9.8	39.3	53.6	39.3	50.8	10.3
Queue Length 50th (ft)	283	353	18	393	19	222	256	93	65	0
Queue Length 95th (ft)	m375	m391	m37	#471	82	319	#377	149	117	60
Internal Link Dist (ft)		1272		3039			3745		616	
Turn Bay Length (ft)	600		228			150		295		295
Base Capacity (vph)	449	2513	153	1486	563	516	463	277	326	395
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.57	0.33	0.91	0.36	0.65	0.72	0.57	0.26	0.36

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
26: Sheridan St & Dixie Hwy SB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	219	873	237	75	124	129	0	0	0	21	113	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	0		0	0		0	224		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3539	1583	1770	3270	0	0	0	0	0	3335	0
Flt Permitted	0.544			0.950							0.995	
Satd. Flow (perm)	1013	3539	1583	1770	3270	0	0	0	0	0	3335	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			258		140						64	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3119			220			1044			924	
Travel Time (s)		70.9			5.0			23.7			21.0	
Lane Group Flow (vph)	238	949	258	82	275	0	0	0	0	0	226	0
Turn Type	D.P+P		Perm	Prot							Split	
Protected Phases	1	6		5	2						7	7
Permitted Phases	2	2	6		5							
Total Split (s)	23.0	61.0	61.0	19.0	38.0	0.0	0.0	0.0	0.0	18.0	18.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	51.0	56.0	56.0	11.0	51.2						14.0	
Actuated g/C Ratio	0.39	0.43	0.43	0.08	0.39						0.11	
v/c Ratio	0.49	0.62	0.31	0.55	0.20						0.54	
Control Delay	15.3	14.0	0.9	57.2	7.3						44.4	
Queue Delay	0.0	0.0	0.0	0.9	0.8						0.0	
Total Delay	15.3	14.0	0.9	58.1	8.0						44.4	
LOS	B	B	A	E	A						D	
Approach Delay		11.9			19.5						44.4	
Approach LOS		B			B						D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 124 (95%), Referenced to phase 2:EBWB, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 16.8

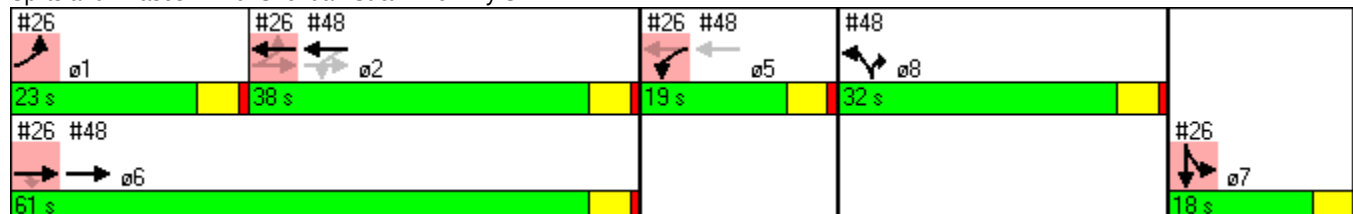
Intersection LOS: B

Intersection Capacity Utilization 46.1%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 26: Sheridan St & Dixie Hwy SB



Lane Group	ø8
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Total Split (s)	32.0
Total Lost Time (s)	
Act Effect Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Intersection Summary	

Queues

26: Sheridan St & Dixie Hwy SB

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	238	949	258	82	275	226
v/c Ratio	0.49	0.62	0.31	0.55	0.20	0.54
Control Delay	15.3	14.0	0.9	57.2	7.3	44.4
Queue Delay	0.0	0.0	0.0	0.9	0.8	0.0
Total Delay	15.3	14.0	0.9	58.1	8.0	44.4
Queue Length 50th (ft)	54	121	0	70	17	68
Queue Length 95th (ft)	m72	133	2	m117	30	112
Internal Link Dist (ft)		3039			140	844
Turn Bay Length (ft)	225					
Base Capacity (vph)	517	1524	829	191	1372	416
Starvation Cap Reductn	0	0	0	22	798	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.46	0.62	0.31	0.49	0.48	0.54

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
27: Taft Street & 46th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	288	40	23	187	32	27	274	14	63	261	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	96		0	85		0	210		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1829	0	1770	1822	0	1770	3514	0	0	3483	0
Flt Permitted	0.611			0.416			0.533				0.832	
Satd. Flow (perm)	1138	1829	0	775	1822	0	993	3514	0	0	2924	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		16			30			11			10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3378			1978			2662			3810	
Travel Time (s)		76.8			45.0			60.5			86.6	
Lane Group Flow (vph)	76	356	0	25	238	0	29	313	0	0	368	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	20.0	20.0	0.0	10.0	30.0	0.0	15.0	15.0	0.0	15.0	15.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	4.0	6.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	14.1	14.1		17.8	15.8		10.1	11.1			11.1	
Actuated g/C Ratio	0.38	0.38		0.48	0.43		0.27	0.30			0.30	
v/c Ratio	0.17	0.50		0.05	0.30		0.11	0.29			0.42	
Control Delay	10.2	12.3		4.9	6.9		13.0	11.3			12.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	10.2	12.3		4.9	6.9		13.0	11.3			12.6	
LOS	B	B		A	A		B	B			B	
Approach Delay		12.0			6.7			11.5			12.6	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 37

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 11.0

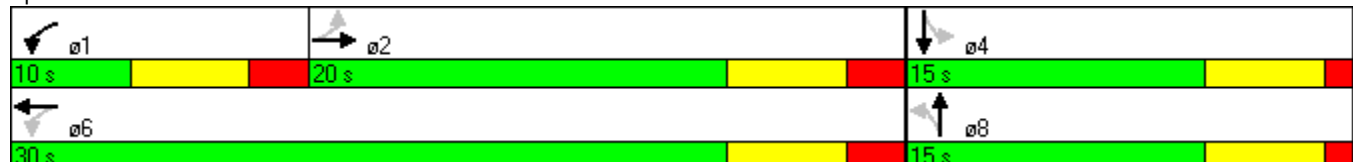
Intersection LOS: B

Intersection Capacity Utilization 54.3%

ICU Level of Service A

Analysis Period (min) 15

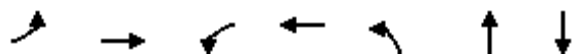
Splits and Phases: 27: Taft Street & 46th Ave



Queues

27: Taft Street & 46th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	76	356	25	238	29	313	368
v/c Ratio	0.17	0.50	0.05	0.30	0.11	0.29	0.42
Control Delay	10.2	12.3	4.9	6.9	13.0	11.3	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.2	12.3	4.9	6.9	13.0	11.3	12.6
Queue Length 50th (ft)	9	44	2	25	4	21	26
Queue Length 95th (ft)	38	139	9	52	22	60	73
Internal Link Dist (ft)		3298		1898		2582	3730
Turn Bay Length (ft)	96		85		210		
Base Capacity (vph)	435	709	536	1204	271	1063	885
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.50	0.05	0.20	0.11	0.29	0.42
Intersection Summary							

Lanes, Volumes, Timings
28: Taft St & N 29th Ave

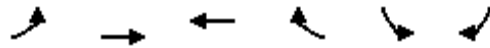
7/29/2013

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	578			788	755	
Travel Time (s)	13.1			17.9	17.2	
Lane Group Flow (vph)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	0.0%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings

29: Taft St & 28th Ave

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	34	280	318	14	11	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	91			145	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1852	0	1770	1583
Flt Permitted	0.381				0.950	
Satd. Flow (perm)	710	1863	1852	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			6			135
Link Speed (mph)		30	30		30	
Link Distance (ft)		1537	578		2152	
Travel Time (s)		34.9	13.1		48.9	
Lane Group Flow (vph)	37	304	361	0	12	135
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Total Split (s)	8.0	26.0	18.0	0.0	14.0	14.0
Total Lost Time (s)	2.0	3.0	3.0	2.0	3.0	5.0
Act Effect Green (s)	15.5	16.1	13.4		11.3	9.2
Actuated g/C Ratio	0.46	0.48	0.40		0.34	0.27
v/c Ratio	0.07	0.34	0.48		0.02	0.25
Control Delay	3.8	6.2	10.9		10.2	5.0
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	3.8	6.2	10.9		10.2	5.0
LOS	A	A	B		B	A
Approach Delay		5.9	10.9		5.4	
Approach LOS		A	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 33.5

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.48

Intersection Signal Delay: 8.0

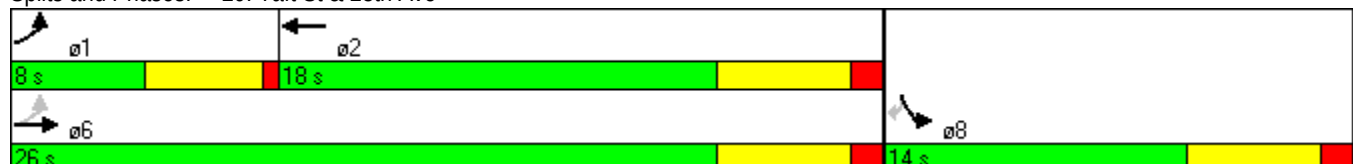
Intersection LOS: A

Intersection Capacity Utilization 35.9%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 29: Taft St & 28th Ave



Queues

29: Taft St & 28th Ave

7/29/2013



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	37	304	361	12	135
v/c Ratio	0.07	0.34	0.48	0.02	0.25
Control Delay	3.8	6.2	10.9	10.2	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.8	6.2	10.9	10.2	5.0
Queue Length 50th (ft)	3	28	34	1	0
Queue Length 95th (ft)	9	55	114	10	29
Internal Link Dist (ft)		1457	498	2072	
Turn Bay Length (ft)	91				
Base Capacity (vph)	523	1309	852	595	533
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.07	0.23	0.42	0.02	0.25
Intersection Summary					

Lanes, Volumes, Timings
30: Taft St & Okomo St W

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	2	272	422	0	3	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1863	1863	0	1694	0
Flt Permitted					0.976	
Satd. Flow (perm)	0	1863	1863	0	1694	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		2557	1537		1232	
Travel Time (s)		58.1	34.9		28.0	
Lane Group Flow (vph)	0	298	459	0	6	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.2% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

31: Taft St & N Park Rd

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	94	188	54	93	142	127	41	407	133	128	351	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	168		168	250		151	192		110	160		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3376	0
Flt Permitted	0.622			0.515			0.379			0.454		
Satd. Flow (perm)	1159	1863	1583	959	1863	1583	706	3539	1583	846	3376	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			59			138			145		111	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1357			2557			2668			2108	
Travel Time (s)		30.8			58.1			60.6			47.9	
Lane Group Flow (vph)	102	204	59	101	154	138	45	442	145	139	550	0
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Total Split (s)	10.0	21.0	21.0	10.0	21.0	21.0	10.0	24.0	24.0	10.0	24.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	18.7	13.9	13.9	18.7	13.9	13.9	33.1	27.1	27.1	33.9	29.1	
Actuated g/C Ratio	0.29	0.21	0.21	0.29	0.21	0.21	0.51	0.42	0.42	0.52	0.45	
v/c Ratio	0.26	0.51	0.15	0.28	0.39	0.31	0.10	0.30	0.19	0.26	0.35	
Control Delay	13.6	24.7	5.4	15.2	24.1	6.2	4.1	9.6	1.5	12.2	12.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	13.6	24.7	5.4	15.2	24.1	6.2	4.1	9.6	1.5	12.2	12.5	
LOS	B	C	A	B	C	A	A	A	A	B	B	
Approach Delay		18.4			15.5			7.4			12.4	
Approach LOS		B			B			A			B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 64 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 12.5

Intersection LOS: B

Intersection Capacity Utilization 46.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 31: Taft St & N Park Rd

											
24 s	10 s	10 s	21 s	10 s	10 s	21 s	10 s	10 s	21 s	10 s	10 s
											
24 s	10 s	10 s	21 s	10 s	10 s	21 s	10 s	10 s	21 s	10 s	10 s

Queues

31: Taft St & N Park Rd

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	102	204	59	101	154	138	45	442	145	139	550
v/c Ratio	0.26	0.51	0.15	0.28	0.39	0.31	0.10	0.30	0.19	0.26	0.35
Control Delay	13.6	24.7	5.4	15.2	24.1	6.2	4.1	9.6	1.5	12.2	12.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	24.7	5.4	15.2	24.1	6.2	4.1	9.6	1.5	12.2	12.5
Queue Length 50th (ft)	22	66	0	26	52	0	2	22	0	28	66
Queue Length 95th (ft)	43	116	15	51	94	37	6	44	7	60	114
Internal Link Dist (ft)	1277			2477			2588			2028	
Turn Bay Length (ft)	168		168	250		151	192		110	160	
Base Capacity (vph)	393	487	458	355	487	516	458	1475	744	527	1573
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.42	0.13	0.28	0.32	0.27	0.10	0.30	0.19	0.26	0.35

Intersection Summary

Lanes, Volumes, Timings

35: Taft St & N 35th Ave

7/29/2013

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖	↗	↖	↗
Volume (vph)	247	220	180	146	60	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	85		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)		25	25		25	25
Satd. Flow (prot)	1744	0	1770	1863	1770	1583
Flt Permitted			0.420		0.950	
Satd. Flow (perm)	1744	0	782	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	153					86
Link Speed (mph)	30			30	30	
Link Distance (ft)	1556			1357	713	
Travel Time (s)	35.4			30.8	16.2	
Lane Group Flow (vph)	507	0	196	159	65	86
Turn Type			Perm			Perm
Protected Phases	2			6	4	
Permitted Phases			6			4
Total Split (s)	47.0	0.0	47.0	47.0	18.0	18.0
Total Lost Time (s)	3.0	4.0	3.0	3.0	3.0	3.0
Act Effect Green (s)	44.0		44.0	44.0	15.0	15.0
Actuated g/C Ratio	0.68		0.68	0.68	0.23	0.23
v/c Ratio	0.41		0.37	0.13	0.16	0.20
Control Delay	4.3		3.6	1.2	21.2	6.8
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	4.3		3.6	1.2	21.2	6.8
LOS	A		A	A	C	A
Approach Delay	4.3			2.5	13.0	
Approach LOS	A			A	B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 54 (83%), Referenced to phase 4:NBL and 8; Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 5.0

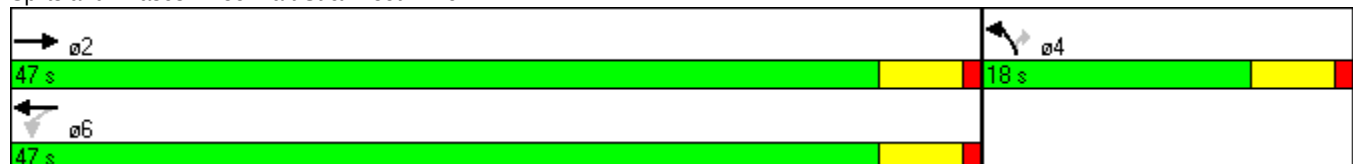
Intersection LOS: A

Intersection Capacity Utilization 54.8%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 35: Taft St & N 35th Ave



Queues

35: Taft St & N 35th Ave

7/29/2013



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	507	196	159	65	86
v/c Ratio	0.41	0.37	0.13	0.16	0.20
Control Delay	4.3	3.6	1.2	21.2	6.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.3	3.6	1.2	21.2	6.8
Queue Length 50th (ft)	46	3	2	21	0
Queue Length 95th (ft)	86	5	4	49	31
Internal Link Dist (ft)	1476		1277	633	
Turn Bay Length (ft)		85			
Base Capacity (vph)	1230	529	1261	408	431
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.41	0.37	0.13	0.16	0.20
Intersection Summary					

Lanes, Volumes, Timings

37: Taft St & 26 Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	53	170	41	8	209	38	66	205	6	7	110	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		0	110		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1809	0	1770	1820	0	0	1835	0	0	1794	0
Flt Permitted	0.594			0.615				0.881			0.979	
Satd. Flow (perm)	1106	1809	0	1146	1820	0	0	1636	0	0	1760	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			25			3			45	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		788			3118			702			3825	
Travel Time (s)		17.9			70.9			16.0			86.9	
Lane Group Flow (vph)	58	230	0	9	268	0	0	302	0	0	173	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0
Act Effect Green (s)	9.7	9.7		9.8	9.8			17.5			17.5	
Actuated g/C Ratio	0.28	0.28		0.28	0.28			0.50			0.50	
v/c Ratio	0.19	0.43		0.03	0.50			0.37			0.19	
Control Delay	11.2	11.6		9.1	13.2			10.5			7.2	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	11.2	11.6		9.1	13.2			10.5			7.2	
LOS	B	B		A	B			B			A	
Approach Delay		11.5			13.1			10.5			7.2	
Approach LOS		B			B			B			A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 34.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.50

Intersection Signal Delay: 10.9

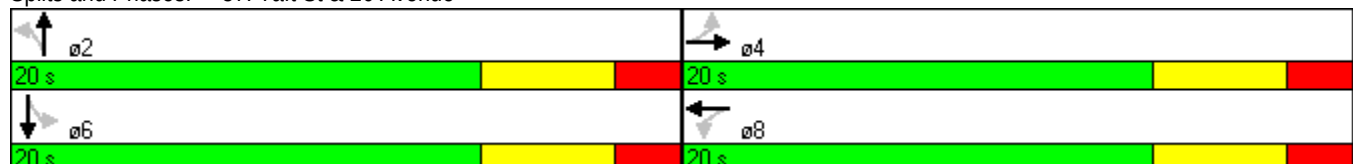
Intersection LOS: B

Intersection Capacity Utilization 60.1%

ICU Level of Service B

Analysis Period (min) 15

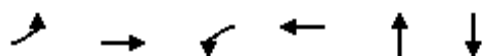
Splits and Phases: 37: Taft St & 26 Avenue



Queues

37: Taft St & 26 Avenue

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	58	230	9	268	302	173
v/c Ratio	0.19	0.43	0.03	0.50	0.37	0.19
Control Delay	11.2	11.6	9.1	13.2	10.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	11.6	9.1	13.2	10.5	7.2
Queue Length 50th (ft)	9	31	1	39	41	15
Queue Length 95th (ft)	26	68	7	82	104	49
Internal Link Dist (ft)		708		3038	622	3745
Turn Bay Length (ft)	110		110			
Base Capacity (vph)	458	769	475	769	826	909
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.30	0.02	0.35	0.37	0.19
Intersection Summary						

Lanes, Volumes, Timings
43: Taft Street & SR-7/441

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	231	301	243	59	207	32	104	1095	48	39	915	128
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		0	399		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1825	0	1770	3539	1583	1770	3476	0
Flt Permitted	0.269			0.399			0.127			0.131		
Satd. Flow (perm)	501	1863	1583	743	1825	0	237	3539	1583	244	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			221		9				52		24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1995			2594			985			3813	
Travel Time (s)		45.3			59.0			22.4			86.7	
Lane Group Flow (vph)	251	327	264	64	260	0	113	1190	52	42	1134	0
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	13.0	20.0	20.0	10.0	17.0	0.0	10.0	35.0	35.0	10.0	35.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	4.0	5.5	5.5	5.5	5.5	5.5	4.0
Act Effect Green (s)	22.6	16.8	16.8	16.1	11.5		34.2	31.5	31.5	33.1	29.6	
Actuated g/C Ratio	0.31	0.23	0.23	0.22	0.16		0.47	0.43	0.43	0.45	0.41	
v/c Ratio	0.88	0.76	0.49	0.28	0.88		0.55	0.78	0.07	0.20	0.80	
Control Delay	54.3	43.3	10.2	21.6	61.8		20.8	23.4	4.9	11.3	24.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	54.3	43.3	10.2	21.6	61.8		20.8	23.4	4.9	11.3	24.5	
LOS	D	D	B	C	E		C	C	A	B	C	
Approach Delay		36.2			53.9			22.5			24.1	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 73

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 28.9

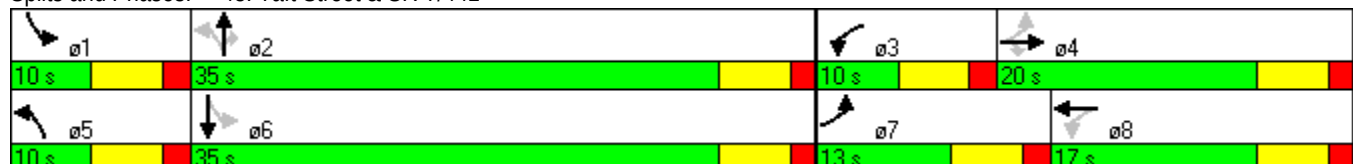
Intersection LOS: C

Intersection Capacity Utilization 79.1%

ICU Level of Service D

Analysis Period (min) 15

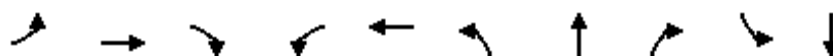
Splits and Phases: 43: Taft Street & SR-7/441



Queues

43: Taft Street & SR-7/441

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	251	327	264	64	260	113	1190	52	42	1134
v/c Ratio	0.88	0.76	0.49	0.28	0.88	0.55	0.78	0.07	0.20	0.80
Control Delay	54.3	43.3	10.2	21.6	61.8	20.8	23.4	4.9	11.3	24.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.3	43.3	10.2	21.6	61.8	20.8	23.4	4.9	11.3	24.5
Queue Length 50th (ft)	91	150	17	21	116	25	258	0	9	236
Queue Length 95th (ft)	#198	#296	81	47	#252	#61	#358	20	23	318
Internal Link Dist (ft)		1915			2514		905			3733
Turn Bay Length (ft)	220			399						
Base Capacity (vph)	286	428	534	227	296	206	1529	713	205	1424
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.88	0.76	0.49	0.28	0.88	0.55	0.78	0.07	0.20	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
45: Taft Street & 56 Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	41	302	25	25	200	23	27	286	35	21	196	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1842	0	1770	1835	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.608			0.497			0.625			0.571		
Satd. Flow (perm)	1133	1842	0	926	1835	0	1164	1863	1583	1064	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			17				38			33
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2594			3378			1248			3795	
Travel Time (s)		59.0			76.8			28.4			86.3	
Lane Group Flow (vph)	45	355	0	27	242	0	29	311	38	23	213	33
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		4
Total Split (s)	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	20.0	20.0	20.0	20.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Act Effect Green (s)	12.3	12.3		12.3	12.3		15.1	15.1	15.1	15.1	15.1	15.1
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.40	0.40	0.40	0.40	0.40	0.40
v/c Ratio	0.12	0.58		0.09	0.39		0.06	0.41	0.06	0.05	0.28	0.05
Control Delay	9.3	14.2		9.1	10.9		8.3	10.8	4.0	8.3	9.5	4.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.3	14.2		9.1	10.9		8.3	10.8	4.0	8.3	9.5	4.1
LOS	A	B		A	B		A	B	A	A	A	A
Approach Delay		13.7			10.8			9.9			8.7	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 37.4

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 11.0

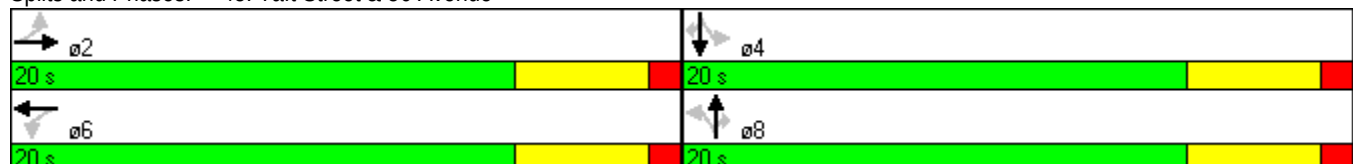
Intersection LOS: B

Intersection Capacity Utilization 60.7%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 45: Taft Street & 56 Avenue



Queues

45: Taft Street & 56 Avenue

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	45	355	27	242	29	311	38	23	213	33
v/c Ratio	0.12	0.58	0.09	0.39	0.06	0.41	0.06	0.05	0.28	0.05
Control Delay	9.3	14.2	9.1	10.9	8.3	10.8	4.0	8.3	9.5	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.3	14.2	9.1	10.9	8.3	10.8	4.0	8.3	9.5	4.1
Queue Length 50th (ft)	6	56	4	34	3	41	0	3	26	0
Queue Length 95th (ft)	20	110	14	72	15	97	12	13	67	11
Internal Link Dist (ft)	2514		3298		1168		3715			
Turn Bay Length (ft)	95									
Base Capacity (vph)	457	749	373	750	469	751	660	429	751	657
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.47	0.07	0.32	0.06	0.41	0.06	0.05	0.28	0.05

Intersection Summary

Lanes, Volumes, Timings
48: Sheridan Street & Dixie Hwy NB

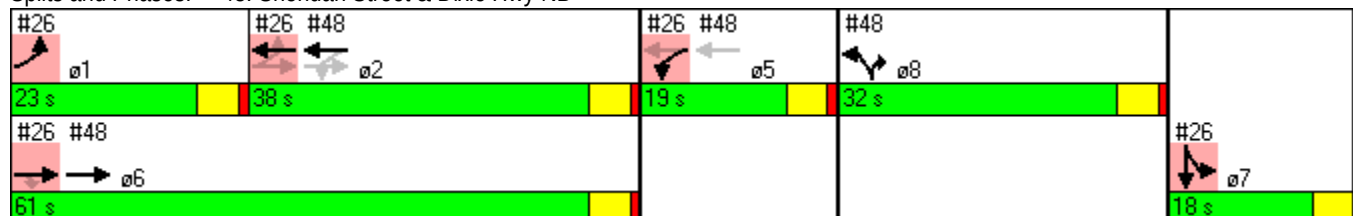
7/29/2013

							ø1	ø5	ø7
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø5	ø7
Lane Configurations	↑↑			↑↑↑	↵↵	↵			
Volume (vph)	898	0	3	1014	401	228			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	3539	0	0	5085	3433	1583			
Flt Permitted				0.940	0.950				
Satd. Flow (perm)	3539	0	0	4780	3433	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)						248			
Link Speed (mph)	30			30	30				
Link Distance (ft)	220			165	3812				
Travel Time (s)	5.0			3.8	86.6				
Lane Group Flow (vph)	976	0	0	1105	436	248			
Turn Type			Perm			Prot			
Protected Phases	6			2	8	8	1	5	7
Permitted Phases	2		2	5					
Total Split (s)	61.0	0.0	38.0	38.0	32.0	32.0	23.0	19.0	18.0
Total Lost Time (s)	5.0	4.0	5.0	5.0	5.0	5.0			
Act Effect Green (s)	56.0			46.2	30.0	30.0			
Actuated g/C Ratio	0.43			0.36	0.23	0.23			
v/c Ratio	0.64			0.62	0.55	0.45			
Control Delay	4.4			21.3	13.7	4.6			
Queue Delay	0.0			0.0	0.0	0.0			
Total Delay	4.4			21.3	13.7	4.6			
LOS	A			C	B	A			
Approach Delay	4.4			21.3	10.4				
Approach LOS	A			C	B				

Intersection Summary

Area Type: Other
 Cycle Length: 130
 Actuated Cycle Length: 130
 Offset: 124 (95%), Referenced to phase 2:EBWB, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.64
 Intersection Signal Delay: 12.7
 Intersection LOS: B
 Intersection Capacity Utilization 47.3%
 ICU Level of Service A
 Analysis Period (min) 15

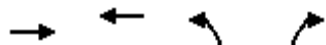
Splits and Phases: 48: Sheridan Street & Dixie Hwy NB



Queues

48: Sheridan Street & Dixie Hwy NB

7/29/2013



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	976	1105	436	248
v/c Ratio	0.64	0.62	0.55	0.45
Control Delay	4.4	21.3	13.7	4.6
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	4.4	21.3	13.7	4.6
Queue Length 50th (ft)	21	264	33	6
Queue Length 95th (ft)	45	322	m42	m72
Internal Link Dist (ft)	140	85	3732	
Turn Bay Length (ft)				
Base Capacity (vph)	1524	1780	793	556
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	19	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.64	0.63	0.55	0.45

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
49: Sheridan Street & US-1

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	340	465	109	115	509	195	238	934	66	163	518	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		0	280		280	224		0	238		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3440	0	1770	3539	1583	1770	3504	0	1770	3454	0
Flt Permitted	0.952			0.645			0.246			0.106		
Satd. Flow (perm)	1773	3440	0	1201	3539	1583	458	3504	0	197	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				212		6			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1809			756			3815			786	
Travel Time (s)		41.1			17.2			86.7			17.9	
Lane Group Flow (vph)	370	623	0	125	553	212	259	1087	0	177	670	0
Turn Type	pm+pt			pm+pt		Perm	pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	29.0	43.0	0.0	16.0	30.0	30.0	26.0	54.0	0.0	17.0	45.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Act Effect Green (s)	31.4	29.2		25.6	23.4	23.4	66.7	49.7		59.1	45.2	
Actuated g/C Ratio	0.24	0.22		0.20	0.18	0.18	0.51	0.38		0.45	0.35	
v/c Ratio	0.86	0.79		0.39	0.87	0.46	0.65	0.81		0.76	0.55	
Control Delay	37.7	27.7		50.7	66.7	9.3	25.8	41.9		46.7	36.3	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	37.7	27.7		50.7	66.7	9.3	25.8	41.9		46.7	36.3	
LOS	D	C		D	E	A	C	D		D	D	
Approach Delay		31.4			50.8			38.8			38.5	
Approach LOS		C			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 120 (92%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 39.6

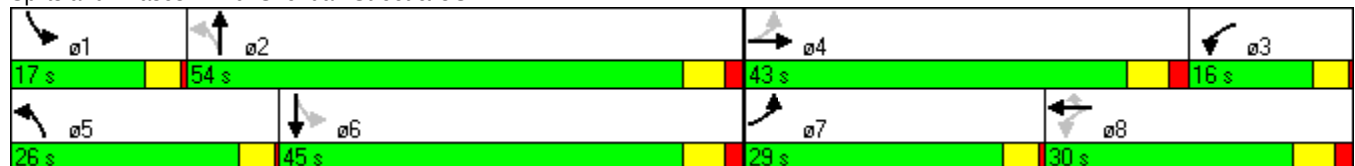
Intersection LOS: D

Intersection Capacity Utilization 86.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 49: Sheridan Street & US-1



Queues

49: Sheridan Street & US-1

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	370	623	125	553	212	259	1087	177	670
v/c Ratio	0.86	0.79	0.39	0.87	0.46	0.65	0.81	0.76	0.55
Control Delay	37.7	27.7	50.7	66.7	9.3	25.8	41.9	46.7	36.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.7	27.7	50.7	66.7	9.3	25.8	41.9	46.7	36.3
Queue Length 50th (ft)	214	172	92	239	0	120	435	80	234
Queue Length 95th (ft)	323	205	153	#326	68	178	526	#196	318
Internal Link Dist (ft)		1729		676			3735		706
Turn Bay Length (ft)	195		280		280	224		238	
Base Capacity (vph)	429	995	321	653	465	460	1343	248	1212
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.63	0.39	0.85	0.46	0.56	0.81	0.71	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

53: Taft Street & US-1

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	27	15	56	21	18	24	58	824	13	25	759	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1641	0	1770	1704	0	1770	3532	0	1770	1853	0
Flt Permitted							0.288			0.313		
Satd. Flow (perm)	1863	1641	0	1863	1704	0	536	3532	0	583	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		61			26			7			7	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2012			658			742			3815	
Travel Time (s)		45.7			15.0			16.9			86.7	
Lane Group Flow (vph)	29	77	0	23	46	0	63	910	0	27	851	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	11.0	11.0	0.0	11.0	11.0	0.0	44.0	44.0	0.0	44.0	44.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Act Effect Green (s)	6.1	6.1		6.1	6.1		44.2	44.2		44.2	44.2	
Actuated g/C Ratio	0.11	0.11		0.11	0.11		0.82	0.82		0.82	0.82	
v/c Ratio	0.14	0.32		0.11	0.21		0.14	0.31		0.06	0.56	
Control Delay	23.9	13.8		23.5	16.6		3.4	2.6		2.8	5.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.9	13.8		23.5	16.6		3.4	2.6		2.8	5.1	
LOS	C	B		C	B		A	A		A	A	
Approach Delay		16.6			18.9			2.6			5.0	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 55

Actuated Cycle Length: 53.6

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.56

Intersection Signal Delay: 5.0

Intersection LOS: A

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

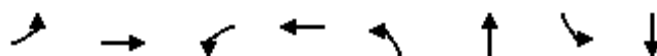
Splits and Phases: 53: Taft Street & US-1

	ø2			ø4
44 s			11 s	
	ø6			ø8
44 s			11 s	

Queues

53: Taft Street & US-1

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	29	77	23	46	63	910	27	851
v/c Ratio	0.14	0.32	0.11	0.21	0.14	0.31	0.06	0.56
Control Delay	23.9	13.8	23.5	16.6	3.4	2.6	2.8	5.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	13.8	23.5	16.6	3.4	2.6	2.8	5.1
Queue Length 50th (ft)	9	5	7	6	5	44	2	108
Queue Length 95th (ft)	29	37	24	30	15	64	7	193
Internal Link Dist (ft)		1932		578		662		3735
Turn Bay Length (ft)								
Base Capacity (vph)	210	239	210	216	442	2917	481	1531
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.32	0.11	0.21	0.14	0.31	0.06	0.56
Intersection Summary								

Lanes, Volumes, Timings
55: Sheridan St & 35th Street

7/29/2013

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Volume (vph)	1955	10	0	1314	0	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	5080	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5080	0	0	5085	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	1463			1402	1234	
Travel Time (s)	33.3			31.9	28.0	
Lane Group Flow (vph)	2136	0	0	1428	0	40
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	48.0%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings
56: Taft Street & Dixie Hwy SB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑					↖	↑↑↑	
Volume (vph)	0	118	56	35	157	0	0	0	0	44	369	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3369	0	1770	1863	0	0	0	0	1770	5060	0
Flt Permitted				0.199						0.950		
Satd. Flow (perm)	0	3369	0	371	1863	0	0	0	0	1770	5060	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		53									3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3118			218			1569			2770	
Travel Time (s)		70.9			5.0			35.7			63.0	
Lane Group Flow (vph)	0	189	0	38	171	0	0	0	0	48	414	0
Turn Type			custom							custom		
Protected Phases		5		2	2						6	
Permitted Phases				3	3					1	1	
Total Split (s)	0.0	25.0	0.0	26.0	26.0	0.0	0.0	0.0	0.0	16.0	23.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)		13.8		77.9	78.9					8.8	17.1	
Actuated g/C Ratio		0.11		0.60	0.61					0.07	0.13	
v/c Ratio		0.47		0.04	0.15					0.40	0.62	
Control Delay		41.9		3.6	3.5					67.2	29.0	
Queue Delay		0.0		0.0	0.4					0.0	0.0	
Total Delay		41.9		3.6	3.9					67.2	29.0	
LOS		D		A	A					E	C	
Approach Delay		41.9			3.9						33.0	
Approach LOS		D			A						C	

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 60 (46%), Referenced to phase 2:WBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 27.9

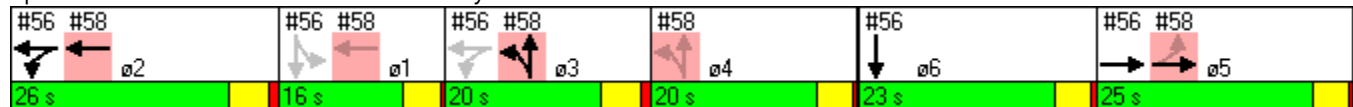
Intersection LOS: C

Intersection Capacity Utilization 32.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 56: Taft Street & Dixie Hwy SB

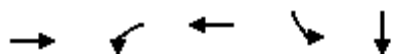


Lane Group	ø3	ø4
Lane Configurations		
Volume (vph)		
Ideal Flow (vphpl)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	4
Permitted Phases		
Total Split (s)	20.0	20.0
Total Lost Time (s)		
Act Effct Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Intersection Summary		

Queues

56: Taft Street & Dixie Hwy SB

7/29/2013



Lane Group	EBT	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	189	38	171	48	414
v/c Ratio	0.47	0.04	0.15	0.40	0.62
Control Delay	41.9	3.6	3.5	67.2	29.0
Queue Delay	0.0	0.0	0.4	0.0	0.0
Total Delay	41.9	3.6	3.9	67.2	29.0
Queue Length 50th (ft)	57	3	13	36	63
Queue Length 95th (ft)	92	m7	m24	m73	84
Internal Link Dist (ft)	3038		138		2690
Turn Bay Length (ft)					
Base Capacity (vph)	589	845	1131	163	1043
Starvation Cap Reductn	0	0	587	0	0
Spillback Cap Reductn	1	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.32	0.04	0.31	0.29	0.40

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
58: Taft Street & Dixie Hwy NB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	110	0	0	150	14	36	516	19	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1863	0	0	3493	0	0	5045	0	0	0	0
Flt Permitted	0.640							0.997				
Satd. Flow (perm)	1192	1863	0	0	3493	0	0	5045	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7			4				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		218			2012			1400			3812	
Travel Time (s)		5.0			45.7			31.8			86.6	
Lane Group Flow (vph)	57	120	0	0	178	0	0	621	0	0	0	0
Turn Type	Perm						custom					
Protected Phases		5			2		3	3				
Permitted Phases	5				1		4	4				
Total Split (s)	25.0	25.0	0.0	0.0	26.0	0.0	20.0	20.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	13.8	13.8			68.8			20.1				
Actuated g/C Ratio	0.11	0.11			0.53			0.15				
v/c Ratio	0.45	0.61			0.10			0.79				
Control Delay	34.3	37.9			14.4			61.6				
Queue Delay	0.0	0.3			0.0			0.0				
Total Delay	34.3	38.3			14.4			61.6				
LOS	C	D			B			E				
Approach Delay		37.0			14.4			61.6				
Approach LOS		D			B			E				

Intersection Summary

Area Type: Other

Cycle Length: 130

Actuated Cycle Length: 130

Offset: 60 (46%), Referenced to phase 2:WBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 48.5

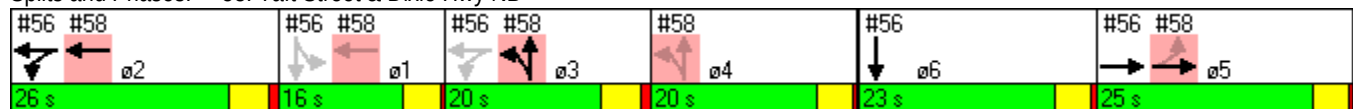
Intersection LOS: D

Intersection Capacity Utilization 32.0%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 58: Taft Street & Dixie Hwy NB



Lane Group	ø1	ø4	ø6
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	1	4	6
Permitted Phases			
Total Split (s)	16.0	20.0	23.0
Total Lost Time (s)			
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Intersection Summary			

Queues

58: Taft Street & Dixie Hwy NB

7/29/2013



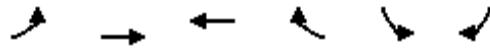
Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	57	120	178	621
v/c Ratio	0.45	0.61	0.10	0.79
Control Delay	34.3	37.9	14.4	61.6
Queue Delay	0.0	0.3	0.0	0.0
Total Delay	34.3	38.3	14.4	61.6
Queue Length 50th (ft)	24	52	33	189
Queue Length 95th (ft)	42	73	56	#295
Internal Link Dist (ft)		138	1932	1320
Turn Bay Length (ft)				
Base Capacity (vph)	193	301	1851	782
Starvation Cap Reductn	0	26	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.44	0.10	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
65: Johnson Street & 37th Avenue

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	207	453	294	114	29	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			190	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1863	1583	1651	0
Flt Permitted	0.503				0.988	
Satd. Flow (perm)	937	1863	1863	1583	1651	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				124	105	
Link Speed (mph)		30	30		30	
Link Distance (ft)		927	1696		545	
Travel Time (s)		21.1	38.5		12.4	
Lane Group Flow (vph)	225	492	320	124	137	0
Turn Type	Perm			Perm		
Protected Phases		4	8		6	
Permitted Phases	4			8		
Total Split (s)	41.0	41.0	41.0	41.0	24.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0
Act Effect Green (s)	24.5	24.5	24.5	24.5	28.5	
Actuated g/C Ratio	0.38	0.38	0.38	0.38	0.44	
v/c Ratio	0.64	0.70	0.46	0.18	0.18	
Control Delay	23.8	21.9	19.2	5.1	6.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	23.8	21.9	19.2	5.1	6.1	
LOS	C	C	B	A	A	
Approach Delay		22.5	15.2		6.1	
Approach LOS		C	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65

Offset: 24 (37%), Referenced to phase 2: and 6:SBL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 18.3

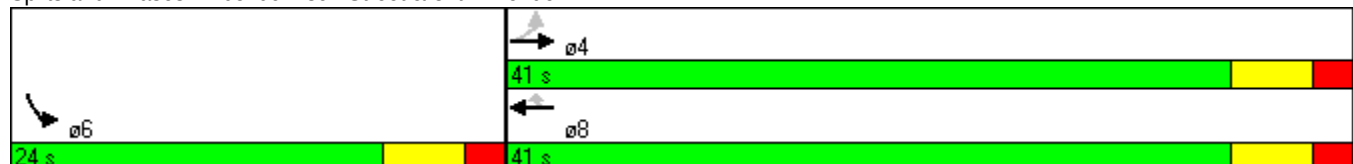
Intersection LOS: B

Intersection Capacity Utilization 49.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 65: Johnson Street & 37th Avenue



Queues

65: Johnson Street & 37th Avenue

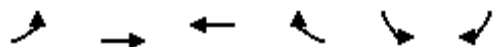
7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	225	492	320	124	137
v/c Ratio	0.64	0.70	0.46	0.18	0.18
Control Delay	23.8	21.9	19.2	5.1	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	23.8	21.9	19.2	5.1	6.1
Queue Length 50th (ft)	70	159	103	0	7
Queue Length 95th (ft)	109	196	118	6	44
Internal Link Dist (ft)		847	1616		465
Turn Bay Length (ft)	200			190	
Base Capacity (vph)	505	1003	1003	910	782
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.45	0.49	0.32	0.14	0.18
Intersection Summary					

Lanes, Volumes, Timings
69: Johnson Street & 40th Avenue

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	14	582	389	17	53	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1852	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1852	0	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2218	927		830	
Travel Time (s)		50.4	21.1		18.9	
Lane Group Flow (vph)	15	633	441	0	58	25
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.6% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
71: Johnson Street & 46th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	28	364	35	71	281	53	20	222	86	110	228	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1839	0	1770	1818	0	1770	3391	0	1770	3539	1583
Flt Permitted	0.414			0.402			0.598			0.406		
Satd. Flow (perm)	771	1839	0	749	1818	0	1114	3391	0	756	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			19			78				24
Link Speed (mph)		30			30			30				30
Link Distance (ft)		929			2218			711			2662	
Travel Time (s)		21.1			50.4			16.2			60.5	
Lane Group Flow (vph)	30	434	0	77	363	0	22	334	0	120	248	24
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Total Split (s)	9.0	29.0	0.0	9.0	29.0	0.0	10.0	13.0	0.0	9.0	12.0	12.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0
Act Effect Green (s)	30.0	27.6		28.0	24.0		12.7	7.7		15.5	14.7	14.7
Actuated g/C Ratio	0.50	0.46		0.47	0.40		0.21	0.13		0.26	0.25	0.25
v/c Ratio	0.07	0.51		0.18	0.49		0.08	0.66		0.45	0.28	0.06
Control Delay	6.8	15.0		7.7	15.4		16.5	25.7		24.9	20.6	10.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	6.8	15.0		7.7	15.4		16.5	25.7		24.9	20.6	10.6
LOS	A	B		A	B		B	C		C	C	B
Approach Delay		14.5			14.1			25.1			21.3	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 59.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.66

Intersection Signal Delay: 18.3

Intersection LOS: B

Intersection Capacity Utilization 56.9%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 71: Johnson Street & 46th Ave

			
ø1	ø2	ø3	ø4
9 s	29 s	9 s	13 s
			
ø5	ø6	ø7	ø8
9 s	29 s	10 s	12 s

Queues

71: Johnson Street & 46th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	30	434	77	363	22	334	120	248	24
v/c Ratio	0.07	0.51	0.18	0.49	0.08	0.66	0.45	0.28	0.06
Control Delay	6.8	15.0	7.7	15.4	16.5	25.7	24.9	20.6	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	15.0	7.7	15.4	16.5	25.7	24.9	20.6	10.6
Queue Length 50th (ft)	4	115	12	89	6	46	33	36	0
Queue Length 95th (ft)	14	196	27	156	20	83	#81	78	18
Internal Link Dist (ft)		849		2138		631		2582	
Turn Bay Length (ft)									
Base Capacity (vph)	454	856	420	742	292	522	265	874	409
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.51	0.18	0.49	0.08	0.64	0.45	0.28	0.06

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
1: Sheridan St & 46th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	1291	124	135	1906	116	258	316	105	226	299	187
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	190		0	160		0	165		0	234		234
Storage Lanes	1		0	1		0	1		0	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5019	0	1770	5040	0	1770	3408	0	1770	3539	1583
Flt Permitted	0.133			0.125			0.355			0.333		
Satd. Flow (perm)	248	5019	0	233	5040	0	661	3408	0	620	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			15			52				135
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3315			1996			3810			774	
Travel Time (s)		75.3			45.4			86.6			17.6	
Lane Group Flow (vph)	139	1490	0	144	2151	0	307	501	0	272	360	225
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Total Split (s)	10.0	34.0	0.0	12.0	36.0	0.0	13.0	17.0	0.0	12.0	16.0	16.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	36.0	30.0		40.0	32.0		22.0	13.0		20.0	12.0	12.0
Actuated g/C Ratio	0.48	0.40		0.53	0.43		0.29	0.17		0.27	0.16	0.16
v/c Ratio	0.58	0.74		0.50	1.00		0.94	0.79		0.94	0.64	0.61
Control Delay	20.2	21.5		15.5	41.2		61.8	37.2		66.2	35.2	20.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	20.2	21.5		15.5	41.2		61.8	37.2		66.2	35.2	20.5
LOS	C	C		B	D		E	D		E	D	C
Approach Delay		21.4			39.6			46.6			41.2	
Approach LOS		C			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 35.5

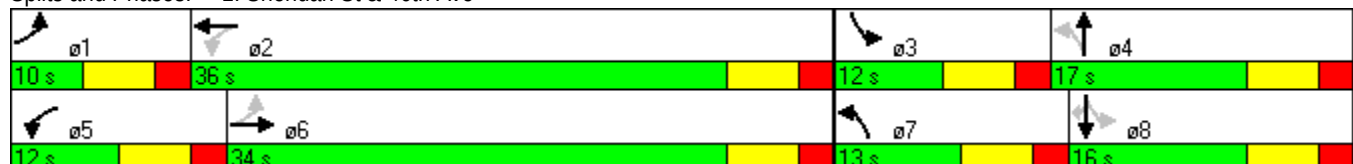
Intersection LOS: D

Intersection Capacity Utilization 84.7%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Sheridan St & 46th Ave



Queues

1: Sheridan St & 46th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	139	1490	144	2151	307	501	272	360	225
v/c Ratio	0.58	0.74	0.50	1.00	0.94	0.79	0.94	0.64	0.61
Control Delay	20.2	21.5	15.5	41.2	61.8	37.2	66.2	35.2	20.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	21.5	15.5	41.2	61.8	37.2	66.2	35.2	20.5
Queue Length 50th (ft)	28	206	30	350	114	106	98	83	38
Queue Length 95th (ft)	#66	259	65	#482	#199	#145	#183	115	90
Internal Link Dist (ft)		3235		1916		3730		694	
Turn Bay Length (ft)	190		160		165		234		234
Base Capacity (vph)	241	2023	288	2159	327	634	288	566	367
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.74	0.50	1.00	0.94	0.79	0.94	0.64	0.61

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

2: Sheridan St & 40th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	145	1484	47	111	2089	72	69	22	78	40	11	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		0	250		0	100		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5060	0	1770	5060	0	1770	1645	0	1770	1617	0
Flt Permitted	0.116			0.117			0.741			0.687		
Satd. Flow (perm)	216	5060	0	218	5060	0	1380	1645	0	1280	1617	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			13			85			88	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1996			1463			3955			752	
Travel Time (s)		45.4			33.3			89.9			17.1	
Lane Group Flow (vph)	158	1664	0	121	2513	0	75	109	0	59	100	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Total Split (s)	10.0	35.0	0.0	12.0	37.0	0.0	13.0	13.0	0.0	13.0	13.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	6.0	4.0	4.0	6.0	6.0	4.0	4.0	6.0	4.0
Act Effect Green (s)	40.0	35.6		38.8	37.1		6.8	6.8		8.8	6.8	
Actuated g/C Ratio	0.69	0.61		0.67	0.64		0.12	0.12		0.15	0.12	
v/c Ratio	0.51	0.54		0.40	0.77		0.46	0.41		0.30	0.37	
Control Delay	18.3	9.9		15.0	13.2		34.8	14.6		27.4	12.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.3	9.9		15.0	13.2		34.8	14.6		27.4	12.7	
LOS	B	A		B	B		C	B		C	B	
Approach Delay		10.6			13.3			22.8			18.2	
Approach LOS		B			B			C			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 58

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 12.8

Intersection LOS: B

Intersection Capacity Utilization 72.2%

ICU Level of Service C

Analysis Period (min) 15

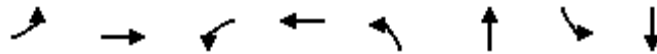
Splits and Phases: 2: Sheridan St & 40th Ave



Queues

2: Sheridan St & 40th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	158	1664	121	2513	75	109	59	100
v/c Ratio	0.51	0.54	0.40	0.77	0.46	0.41	0.30	0.37
Control Delay	18.3	9.9	15.0	13.2	34.8	14.6	27.4	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	9.9	15.0	13.2	34.8	14.6	27.4	12.7
Queue Length 50th (ft)	13	144	12	265	26	8	19	4
Queue Length 95th (ft)	58	186	36	310	#65	47	37	41
Internal Link Dist (ft)		1916		1383		3875		672
Turn Bay Length (ft)	220		250		100		250	
Base Capacity (vph)	311	3108	308	3243	167	274	200	273
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.54	0.39	0.77	0.45	0.40	0.29	0.37

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
6: Taft St & 40th Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	8	223	19	11	457	43	15	35	26	18	53	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1840	0	0	1840	0	0	1759	0	0	1772	0
Flt Permitted		0.998			0.999			0.990			0.991	
Satd. Flow (perm)	0	1840	0	0	1840	0	0	1759	0	0	1772	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1978			1556			736			3955	
Travel Time (s)		45.0			35.4			16.7			89.9	
Lane Group Flow (vph)	0	272	0	0	556	0	0	82	0	0	111	0
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 45.2%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
7: Sheridan Street & SR-7/441

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 		 	 	
Volume (vph)	211	830	190	227	1525	271	318	974	205	259	897	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		190	562		182	330		266	425		0
Storage Lanes	1		1	1		1	2		1	2		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	3433	3472	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	3539	1583	3433	3472	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			170			139			166		11	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1120			2636			3813			1599	
Travel Time (s)		25.5			59.9			86.7			36.3	
Lane Group Flow (vph)	229	902	207	247	1658	295	346	1059	223	282	1120	0
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Total Split (s)	24.0	42.0	42.0	34.0	52.0	52.0	20.0	56.0	56.0	18.0	54.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	7.0	4.0
Act Effect Green (s)	18.0	39.3	39.3	24.7	46.0	46.0	14.0	49.0	49.0	12.0	47.0	
Actuated g/C Ratio	0.12	0.26	0.26	0.16	0.31	0.31	0.09	0.33	0.33	0.08	0.31	
v/c Ratio	1.08	0.68	0.38	0.85	1.06	0.51	1.08	0.92	0.35	1.03	1.02	
Control Delay	144.5	53.3	12.7	85.3	90.9	25.2	135.2	61.4	12.2	126.8	82.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	144.5	53.3	12.7	85.3	90.9	25.2	135.2	61.4	12.2	126.8	82.7	
LOS	F	D	B	F	F	C	F	E	B	F	F	
Approach Delay		62.6			81.5			70.3			91.6	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.08

Intersection Signal Delay: 77.0

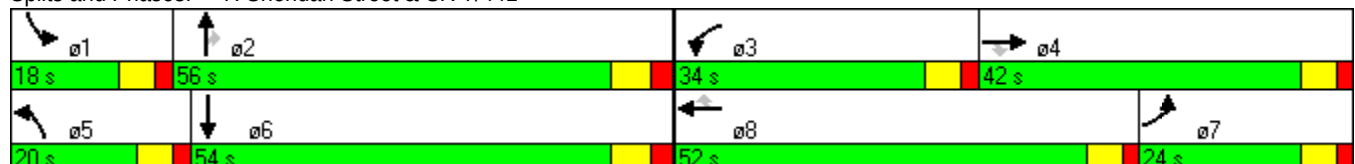
Intersection LOS: E

Intersection Capacity Utilization 100.1%

ICU Level of Service G

Analysis Period (min) 15

Splits and Phases: 7: Sheridan Street & SR-7/441



Queues

7: Sheridan Street & SR-7/441

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	229	902	207	247	1658	295	346	1059	223	282	1120
v/c Ratio	1.08	0.68	0.38	0.85	1.06	0.51	1.08	0.92	0.35	1.03	1.02
Control Delay	144.5	53.3	12.7	85.3	90.9	25.2	135.2	61.4	12.2	126.8	82.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	144.5	53.3	12.7	85.3	90.9	25.2	135.2	61.4	12.2	126.8	82.7
Queue Length 50th (ft)	~249	296	28	234	~652	123	~194	525	39	~151	~607
Queue Length 95th (ft)	#426	354	103	#349	#748	219	#298	#652	109	#248	#748
Internal Link Dist (ft)		1040			2556			3733			1519
Turn Bay Length (ft)	500		190	562		182	330		266	425	
Base Capacity (vph)	212	1331	540	330	1559	582	320	1156	629	275	1095
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.08	0.68	0.38	0.75	1.06	0.51	1.08	0.92	0.35	1.03	1.02

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

8: Sheridan St & N Park Rd

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Volume (vph)	96	1333	154	206	1862	187	171	301	382	213	285	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	500		0	212		212	160		160
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5009	0	0	4999	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950				0.636		0.167			0.154		
Satd. Flow (perm)	1770	5009	0	0	3192	0	311	1863	1583	287	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22			18				96			77
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1402			3113			630			875	
Travel Time (s)		31.9			70.8			14.3			19.9	
Lane Group Flow (vph)	109	1682	0	0	2635	0	186	327	415	251	310	221
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		6
Total Split (s)	11.0	93.0	0.0	11.0	93.0	0.0	16.0	30.0	30.0	16.0	30.0	30.0
Total Lost Time (s)	3.5	3.5	4.0	5.5	3.5	4.0	6.0	6.0	6.0	4.0	6.0	4.0
Act Effect Green (s)	7.5	100.5			89.5		34.0	24.0	24.0	38.0	24.0	26.0
Actuated g/C Ratio	0.05	0.67			0.60		0.23	0.16	0.16	0.25	0.16	0.17
v/c Ratio	1.22	0.50			12.44dl		1.11	1.10	1.24	1.31	1.04	0.65
Control Delay	223.1	12.7			200.0		144.9	137.2	170.2	210.6	122.5	47.2
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	223.1	12.7			200.0		144.9	137.2	170.2	210.6	122.5	47.2
LOS	F	B			F		F	F	F	F	F	D
Approach Delay		25.5			200.0			153.5			129.5	
Approach LOS		C			F			F			F	

Intersection Summary

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.38

Intersection Signal Delay: 133.1

Intersection LOS: F

Intersection Capacity Utilization 116.1%

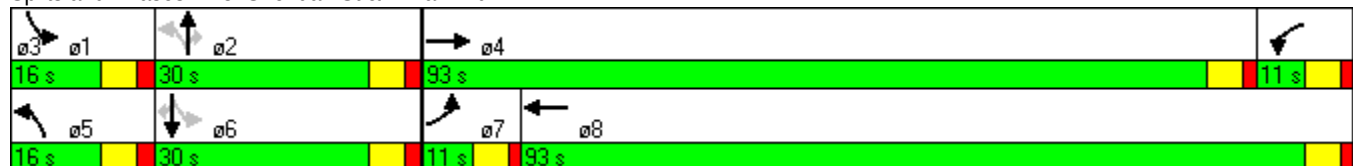
ICU Level of Service H

Analysis Period (min) 15

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

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Splits and Phases: 8: Sheridan St & N Park Rd



Queues

8: Sheridan St & N Park Rd

7/29/2013



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	109	1682	2635	186	327	415	251	310	221
v/c Ratio	1.22	0.50	12.44dl	1.11	1.10	1.24	1.31	1.04	0.65
Control Delay	223.1	12.7	200.0	144.9	137.2	170.2	210.6	122.5	47.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	223.1	12.7	200.0	144.9	137.2	170.2	210.6	122.5	47.2
Queue Length 50th (ft)	~131	275	~1250	~156	~361	~421	~263	~327	133
Queue Length 95th (ft)	#255	299	#1218	#317	#562	#639	#411	#523	210
Internal Link Dist (ft)		1322	3033		550			795	
Turn Bay Length (ft)	260			212		212	160		160
Base Capacity (vph)	89	3363	1916	168	298	334	191	298	338
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.50	1.38	1.11	1.10	1.24	1.31	1.04	0.65

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

Lanes, Volumes, Timings
10: Johnson Street & N Park Rd

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	98	343	167	141	339	162	144	526	242	137	466	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		200	163		163	189		189
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.542			0.339			0.308			0.437		
Satd. Flow (perm)	1010	1863	1583	631	1863	1583	574	3539	1583	814	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			176			263			95
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1696			1506			1124			2668	
Travel Time (s)		38.5			34.2			25.5			60.6	
Lane Group Flow (vph)	107	373	182	153	368	176	157	572	263	149	507	95
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	8.0	22.0	22.0	9.0	23.0	23.0	9.0	21.0	21.0	8.0	20.0	20.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0
Act Effect Green (s)	17.3	15.1	15.1	16.5	15.5	15.5	17.7	16.7	16.7	18.2	15.9	15.9
Actuated g/C Ratio	0.32	0.28	0.28	0.30	0.28	0.28	0.32	0.31	0.31	0.33	0.29	0.29
v/c Ratio	0.28	0.73	0.32	0.51	0.70	0.31	0.52	0.53	0.40	0.43	0.49	0.18
Control Delay	19.3	29.0	5.1	22.7	26.5	4.9	25.0	20.1	4.9	25.0	20.3	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	29.0	5.1	22.7	26.5	4.9	25.0	20.1	4.9	25.0	20.3	5.9
LOS	B	C	A	C	C	A	C	C	A	C	C	A
Approach Delay		20.8			20.2			16.8			19.4	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 54.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 19.1

Intersection LOS: B

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Johnson Street & N Park Rd

Queues

10: Johnson Street & N Park Rd

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	107	373	182	153	368	176	157	572	263	149	507	95
v/c Ratio	0.28	0.73	0.32	0.51	0.70	0.31	0.52	0.53	0.40	0.43	0.49	0.18
Control Delay	19.3	29.0	5.1	22.7	26.5	4.9	25.0	20.1	4.9	25.0	20.3	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.3	29.0	5.1	22.7	26.5	4.9	25.0	20.1	4.9	25.0	20.3	5.9
Queue Length 50th (ft)	29	120	0	41	116	0	44	94	0	43	84	0
Queue Length 95th (ft)	61	#228	39	81	196	37	#97	141	47	86	127	30
Internal Link Dist (ft)		1616			1426			1044			2588	
Turn Bay Length (ft)				200		200	163		163	189		189
Base Capacity (vph)	383	603	636	299	639	658	300	1079	665	344	1031	528
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.62	0.29	0.51	0.58	0.27	0.52	0.53	0.40	0.43	0.49	0.18

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
11: Sheridan St & 29th Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	110	1565	51	38	2118	144	69	11	44	548	100	684
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	337		347	180		160	0		0	0		0
Storage Lanes	1		0	1		1	1		0	2		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	6376	0	1770	5085	1583	1770	3115	0	3433	1863	1583
Flt Permitted	0.950			0.096			0.646			0.950		
Satd. Flow (perm)	1770	6376	0	179	5085	1583	1203	3115	0	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				84		17				343
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3113			404			1104			639	
Travel Time (s)		70.8			9.2			25.1			14.5	
Lane Group Flow (vph)	120	1756	0	41	2302	157	75	60	0	596	109	743
Turn Type	Prot			Perm		Perm	pm+pt			Prot		Perm
Protected Phases	1	6			2		3	8		7	4	
Permitted Phases				2		2	8					4
Total Split (s)	8.0	45.0	0.0	37.0	37.0	37.0	20.0	20.0	0.0	25.0	25.0	25.0
Total Lost Time (s)	4.0	2.0	4.0	4.5	4.5	6.0	2.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	4.0	53.0		42.5	42.5	41.0	17.2	6.7		22.2	21.0	21.0
Actuated g/C Ratio	0.04	0.59		0.47	0.47	0.46	0.19	0.07		0.25	0.23	0.23
v/c Ratio	1.52	0.47		0.49	0.96	0.20	0.26	0.24		0.70	0.25	1.18
Control Delay	320.7	11.7		30.0	24.2	3.8	21.1	32.3		35.7	30.0	114.4
Queue Delay	0.0	0.0		0.0	2.6	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	320.7	11.7		30.0	26.8	3.8	21.1	32.3		35.7	30.0	114.4
LOS	F	B		C	C	A	C	C		D	C	F
Approach Delay		31.5			25.4			26.1			75.7	
Approach LOS		C			C			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 10 (11%), Referenced to phase 2:WBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.52

Intersection Signal Delay: 39.6

Intersection LOS: D

Intersection Capacity Utilization 97.5%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 11: Sheridan St & 29th Avenue

Queues

11: Sheridan St & 29th Avenue

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	120	1756	41	2302	157	75	60	596	109	743
v/c Ratio	1.52	0.47	0.49	0.96	0.20	0.26	0.24	0.70	0.25	1.18
Control Delay	320.7	11.7	30.0	24.2	3.8	21.1	32.3	35.7	30.0	114.4
Queue Delay	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	320.7	11.7	30.0	26.8	3.8	21.1	32.3	35.7	30.0	114.4
Queue Length 50th (ft)	~96	151	9	260	13	28	12	163	51	~349
Queue Length 95th (ft)	#205	219	m24	#661	m29	49	31	204	96	#570
Internal Link Dist (ft)		3033		324			1024		559	
Turn Bay Length (ft)	337		180		160					
Base Capacity (vph)	79	3756	84	2399	766	450	568	851	435	632
Starvation Cap Reductn	0	0	0	57	0	0	0	0	0	0
Spillback Cap Reductn	0	5	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.52	0.47	0.49	0.98	0.20	0.17	0.11	0.70	0.25	1.18

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings

14: Sheridan St & I-95 W

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↘↘	↑↑↑					↘↘		↗↗
Volume (vph)	0	1484	588	493	1444	0	0	0	0	647	0	813
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	7544	1583	3433	5085	0	0	0	0	3433	0	2787
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	7544	1583	3433	5085	0	0	0	0	3433	0	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			639									38
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		404			252			911			801	
Travel Time (s)		9.2			5.7			20.7			18.2	
Lane Group Flow (vph)	0	1613	639	536	1570	0	0	0	0	703	0	884
Turn Type			Perm	Prot						Prot		custom
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Total Split (s)	0.0	32.0	32.0	21.0	53.0	0.0	0.0	0.0	0.0	37.0	0.0	37.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)		28.0	28.0	18.0	50.0					32.0		32.0
Actuated g/C Ratio		0.31	0.31	0.20	0.56					0.36		0.36
v/c Ratio		0.69	0.68	0.78	0.56					0.58		0.87
Control Delay		23.8	7.2	40.4	8.5					25.6		36.6
Queue Delay		0.0	0.8	3.1	0.5					0.0		0.1
Total Delay		23.8	8.0	43.5	9.0					25.6		36.6
LOS		C	A	D	A					C		D
Approach Delay		19.4			17.8							
Approach LOS		B			B							

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 22.1

Intersection LOS: C

Intersection Capacity Utilization 63.0%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 14: Sheridan St & I-95 W

Queues

14: Sheridan St & I-95 W

7/29/2013



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1613	639	536	1570	703	884
v/c Ratio	0.69	0.68	0.78	0.56	0.58	0.87
Control Delay	23.8	7.2	40.4	8.5	25.6	36.6
Queue Delay	0.0	0.8	3.1	0.5	0.0	0.1
Total Delay	23.8	8.0	43.5	9.0	25.6	36.6
Queue Length 50th (ft)	213	121	112	107	161	248
Queue Length 95th (ft)	209	29	#213	124	216	#365
Internal Link Dist (ft)	324			172		
Turn Bay Length (ft)						
Base Capacity (vph)	2347	933	687	2826	1259	1046
Starvation Cap Reductn	0	100	77	722	0	0
Spillback Cap Reductn	24	0	0	498	0	3
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.69	0.77	0.88	0.75	0.56	0.85

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

17: Sheridan St & I-95 E

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	631	1471	0	2	1341	769	584	0	657	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	3433	5085	0	0	7544	1583	3433	0	1583	0	0	0
Flt Permitted	0.950				0.925		0.950					
Satd. Flow (perm)	3433	5085	0	0	6978	1583	3433	0	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						760			18			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		252			328			940			778	
Travel Time (s)		5.7			7.5			21.4			17.7	
Lane Group Flow (vph)	686	1599	0	0	1460	836	635	0	714	0	0	0
Turn Type	Prot			Perm		Perm	custom		custom			
Protected Phases	5	2			6							
Permitted Phases				6		6	8		8			
Total Split (s)	20.0	52.0	0.0	32.0	32.0	32.0	38.0	0.0	38.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	5.5	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	16.0	48.0			28.5	28.5	34.0		34.0			
Actuated g/C Ratio	0.18	0.53			0.32	0.32	0.38		0.38			
v/c Ratio	1.12	0.59			0.66	0.82	0.49		1.17			
Control Delay	98.6	10.3			28.3	11.4	23.0		121.9			
Queue Delay	36.5	0.7			0.1	0.0	0.1		0.0			
Total Delay	135.1	11.0			28.4	11.4	23.1		121.9			
LOS	F	B			C	B	C		F			
Approach Delay		48.3			22.2							
Approach LOS		D			C							

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 2 (2%), Referenced to phase 2:EBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.17

Intersection Signal Delay: 44.4

Intersection LOS: D

Intersection Capacity Utilization 82.7%

ICU Level of Service E

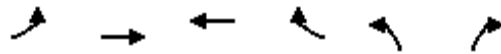
Analysis Period (min) 15

Splits and Phases: 17: Sheridan St & I-95 E

Queues

17: Sheridan St & I-95 E

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	686	1599	1460	836	635	714
v/c Ratio	1.12	0.59	0.66	0.82	0.49	1.17
Control Delay	98.6	10.3	28.3	11.4	23.0	121.9
Queue Delay	36.5	0.7	0.1	0.0	0.1	0.0
Total Delay	135.1	11.0	28.4	11.4	23.1	121.9
Queue Length 50th (ft)	~240	120	175	31	139	~485
Queue Length 95th (ft)	#334	136	209	#202	189	#704
Internal Link Dist (ft)		172	248			
Turn Bay Length (ft)						
Base Capacity (vph)	610	2712	2210	1021	1297	609
Starvation Cap Reductn	43	678	0	0	0	0
Spillback Cap Reductn	0	0	63	0	79	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.21	0.79	0.68	0.82	0.52	1.17

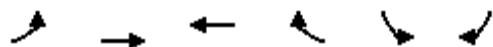
Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

20: Sheridan St &

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	117	1681	1813	4	2	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	5085	5085	0	1668	0
Flt Permitted	0.950				0.984	
Satd. Flow (perm)	1770	5085	5085	0	1668	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	1352		331	
Travel Time (s)		7.5	30.7		7.5	
Lane Group Flow (vph)	127	1827	1975	0	6	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 54.9%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
21: Sheridan St & 56 Street

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	133	1058	86	174	1613	154	159	282	101	172	378	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	361		361	0		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5029	0	1770	5019	0	1770	3398	0	1770	1863	1583
Flt Permitted	0.950			0.950			0.222			0.356		
Satd. Flow (perm)	1770	5029	0	1770	5019	0	414	3398	0	663	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			20			50				145
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2636			3315			3795			1079	
Travel Time (s)		59.9			75.3			86.3			24.5	
Lane Group Flow (vph)	145	1243	0	189	1920	0	173	417	0	187	411	145
Turn Type	Prot			Prot			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases							4			8		8
Total Split (s)	14.0	34.0	0.0	19.0	39.0	0.0	11.0	24.0	0.0	13.0	26.0	26.0
Total Lost Time (s)	6.0	5.0	4.0	6.0	5.0	4.0	6.0	6.0	4.0	6.0	6.0	6.0
Act Effect Green (s)	8.0	29.0		13.0	34.0		23.0	18.0		27.0	20.0	20.0
Actuated g/C Ratio	0.09	0.32		0.14	0.38		0.26	0.20		0.30	0.22	0.22
v/c Ratio	0.92	0.76		0.74	1.01		0.96	0.58		0.66	0.99	0.31
Control Delay	97.5	30.7		55.6	50.7		85.9	32.2		35.2	79.5	7.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	97.5	30.7		55.6	50.7		85.9	32.2		35.2	79.5	7.2
LOS	F	C		E	D		F	C		D	E	A
Approach Delay		37.7			51.1			47.9			54.2	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 47.3

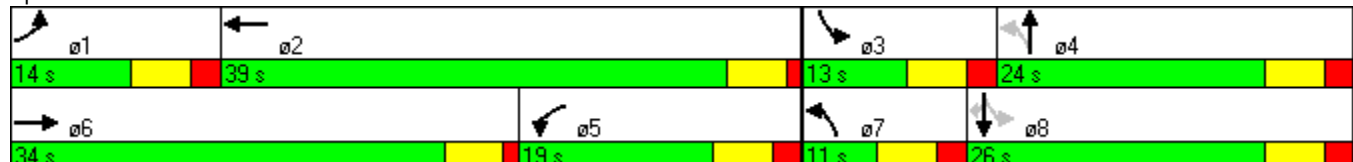
Intersection LOS: D

Intersection Capacity Utilization 89.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 21: Sheridan St & 56 Street



Queues

21: Sheridan St & 56 Street

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	145	1243	189	1920	173	417	187	411	145
v/c Ratio	0.92	0.76	0.74	1.01	0.96	0.58	0.66	0.99	0.31
Control Delay	97.5	30.7	55.6	50.7	85.9	32.2	35.2	79.5	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	97.5	30.7	55.6	50.7	85.9	32.2	35.2	79.5	7.2
Queue Length 50th (ft)	83	228	104	~395	71	99	77	234	0
Queue Length 95th (ft)	#196	281	#205	#517	#172	147	#138	#422	46
Internal Link Dist (ft)		2556		3235		3715		999	
Turn Bay Length (ft)					361				
Base Capacity (vph)	157	1631	256	1909	181	720	285	414	465
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.76	0.74	1.01	0.96	0.58	0.66	0.99	0.31

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
22: Coolidge Street & N Park Rd

7/29/2013

									
Lane Group	WBL	WBR	NBL	NBR	SEL	SER	SWL2	SWL	SWR
Lane Configurations			 			 			
Volume (vph)	2	24	5	6	133	0	4	3	672
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	3230	0	0	3278	0	1613	0
Flt Permitted	0.950		0.980		0.950				
Satd. Flow (perm)	0	1611	3230	0	0	3278	0	1613	0
Link Speed (mph)	30		30		30			30	
Link Distance (ft)	794		2108		1376			1073	
Travel Time (s)	18.0		47.9		31.3			24.4	
Lane Group Flow (vph)	2	26	12	0	145	0	0	737	0
Sign Control	Stop		Free		Free			Stop	
Intersection Summary									
Area Type:	Other								
Control Type:	Unsignalized								
Intersection Capacity Utilization Err%	ICU Level of Service H								
Analysis Period (min)	15								

Lanes, Volumes, Timings
23: Sheridan St & 26th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	344	1356	187	64	1312	168	206	168	65	267	186	372
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	600		0	228		0	150		0	295		295
Storage Lanes	1		0	1		1	1		0	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	4994	0	1770	5085	1583	1770	1785	0	1770	1863	1583
Flt Permitted	0.950			0.182			0.588			0.286		
Satd. Flow (perm)	1770	4994	0	339	5085	1583	1095	1785	0	533	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		41				183		22				322
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1352			3119			3825			696	
Travel Time (s)		30.7			70.9			86.9			15.8	
Lane Group Flow (vph)	378	1695	0	70	1426	183	224	254	0	287	200	400
Turn Type	Prot			pm+pt		Perm	pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases				2		2	4			8		8
Total Split (s)	21.0	36.0	0.0	11.0	26.0	26.0	10.0	15.0	0.0	13.0	18.0	18.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	17.0	34.2		29.0	22.0	20.0	17.0	11.0		23.0	14.0	14.0
Actuated g/C Ratio	0.23	0.46		0.39	0.29	0.27	0.23	0.15		0.31	0.19	0.19
v/c Ratio	0.94	0.74		0.26	0.96	0.33	0.74	0.90		0.92	0.57	0.72
Control Delay	64.0	19.4		14.1	42.2	5.6	39.4	65.7		59.5	35.2	15.2
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	64.0	19.4		14.1	42.2	5.6	39.4	65.7		59.5	35.2	15.2
LOS	E	B		B	D	A	D	E		E	D	B
Approach Delay		27.5			37.1			53.4			34.0	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 34.2

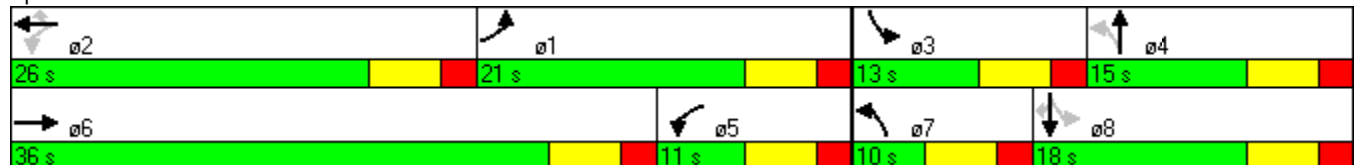
Intersection LOS: C

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 23: Sheridan St & 26th Ave



Queues

23: Sheridan St & 26th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	378	1695	70	1426	183	224	254	287	200	400
v/c Ratio	0.94	0.74	0.26	0.96	0.33	0.74	0.90	0.92	0.57	0.72
Control Delay	64.0	19.4	14.1	42.2	5.6	39.4	65.7	59.5	35.2	15.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	64.0	19.4	14.1	42.2	5.6	39.4	65.7	59.5	35.2	15.2
Queue Length 50th (ft)	174	235	13	236	0	80	108	107	86	31
Queue Length 95th (ft)	#335	293	29	#334	44	#170	#242	#220	150	#130
Internal Link Dist (ft)		1272		3039			3745		616	
Turn Bay Length (ft)	600		228			150		295		295
Base Capacity (vph)	401	2299	265	1492	556	302	281	312	348	557
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.94	0.74	0.26	0.96	0.33	0.74	0.90	0.92	0.57	0.72

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
26: Sheridan St & Dixie Hwy SB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Volume (vph)	98	913	269	79	1317	44	0	0	0	20	121	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	225		0	0		0	0		0	224		0
Storage Lanes	1		1	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	0	0	0	0	3299	0
Flt Permitted	0.120			0.950							0.996	
Satd. Flow (perm)	224	3539	1583	1770	3522	0	0	0	0	0	3299	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			292		5						116	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3119			220			1044			924	
Travel Time (s)		70.9			5.0			23.7			21.0	
Lane Group Flow (vph)	107	992	292	86	1480	0	0	0	0	0	270	0
Turn Type	D.P+P		Perm	Prot							Split	
Protected Phases	1	6		5	2						7	7
Permitted Phases	2	2	6		5							
Total Split (s)	10.0	48.0	48.0	12.0	38.0	0.0	0.0	0.0	0.0	10.0	10.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	37.2	41.0	41.0	6.9	42.5						6.1	
Actuated g/C Ratio	0.43	0.48	0.48	0.08	0.50						0.07	
v/c Ratio	0.57	0.58	0.32	0.60	0.84						0.79	
Control Delay	26.8	18.2	2.8	54.8	22.1						41.3	
Queue Delay	0.0	0.0	0.0	0.0	3.6						0.0	
Total Delay	26.8	18.2	2.8	54.8	25.7						41.3	
LOS	C	B	A	D	C						D	
Approach Delay		15.6			27.3						41.3	
Approach LOS		B			C						D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 85.6

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 23.4

Intersection LOS: C

Intersection Capacity Utilization 62.3%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 26: Sheridan St & Dixie Hwy SB

Lane Group	ø8
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (mph)	
Link Distance (ft)	
Travel Time (s)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Total Split (s)	20.0
Total Lost Time (s)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	
Intersection Summary	

Queues

26: Sheridan St & Dixie Hwy SB

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	107	992	292	86	1480	270
v/c Ratio	0.57	0.58	0.32	0.60	0.84	0.79
Control Delay	26.8	18.2	2.8	54.8	22.1	41.3
Queue Delay	0.0	0.0	0.0	0.0	3.6	0.0
Total Delay	26.8	18.2	2.8	54.8	25.7	41.3
Queue Length 50th (ft)	32	206	0	50	414	46
Queue Length 95th (ft)	#72	267	41	m#95	510	#112
Internal Link Dist (ft)		3039			140	844
Turn Bay Length (ft)	225					
Base Capacity (vph)	188	1800	949	147	1754	342
Starvation Cap Reductn	0	0	0	0	194	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.57	0.55	0.31	0.59	0.95	0.79

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
27: Taft Street & 46th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	37	197	33	37	365	60	47	321	35	21	385	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	96		0	85		0	210		0	0		0
Storage Lanes	1		0	1		0	1		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1822	0	1770	1824	0	1770	3486	0	0	3483	0
Flt Permitted	0.497			0.467			0.440				0.921	
Satd. Flow (perm)	926	1822	0	870	1824	0	820	3486	0	0	3214	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			29			27			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3378			1978			2662			3810	
Travel Time (s)		76.8			45.0			60.5			86.6	
Lane Group Flow (vph)	40	250	0	40	462	0	51	387	0	0	488	0
Turn Type	Perm			pm+pt			Perm			Perm		
Protected Phases		2		1	6			8			4	
Permitted Phases	2			6			8			4		
Total Split (s)	16.0	16.0	0.0	10.0	26.0	0.0	14.0	14.0	0.0	14.0	14.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	4.0	6.0	4.0	5.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	11.6	11.6		17.1	15.1		9.1	10.1			10.1	
Actuated g/C Ratio	0.33	0.33		0.48	0.43		0.26	0.29			0.29	
v/c Ratio	0.13	0.41		0.07	0.58		0.24	0.38			0.52	
Control Delay	12.2	12.6		4.7	10.3		15.6	11.6			13.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	12.2	12.6		4.7	10.3		15.6	11.6			13.2	
LOS	B	B		A	B		B	B			B	
Approach Delay		12.6			9.8			12.0			13.2	
Approach LOS		B			A			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 35.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.58

Intersection Signal Delay: 11.8

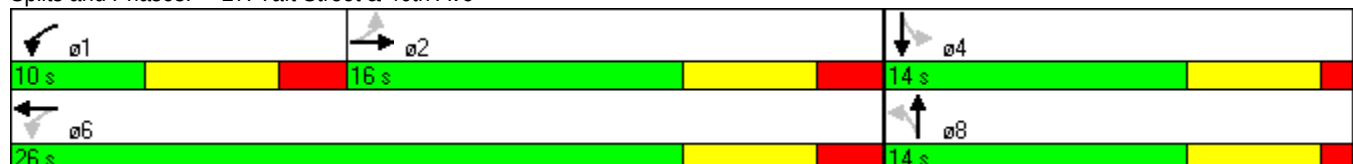
Intersection LOS: B

Intersection Capacity Utilization 65.0%

ICU Level of Service C

Analysis Period (min) 15

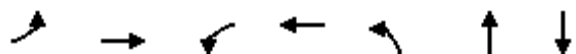
Splits and Phases: 27: Taft Street & 46th Ave



Queues

27: Taft Street & 46th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	40	250	40	462	51	387	488
v/c Ratio	0.13	0.41	0.07	0.58	0.24	0.38	0.52
Control Delay	12.2	12.6	4.7	10.3	15.6	11.6	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	12.6	4.7	10.3	15.6	11.6	13.2
Queue Length 50th (ft)	4	26	3	55	7	24	33
Queue Length 95th (ft)	24	94	11	109	31	63	82
Internal Link Dist (ft)		3298		1898		2582	3730
Turn Bay Length (ft)	96		85		210		
Base Capacity (vph)	304	611	576	1057	212	1017	939
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.41	0.07	0.44	0.24	0.38	0.52
Intersection Summary							

Lanes, Volumes, Timings
28: Taft St & N 29th Ave

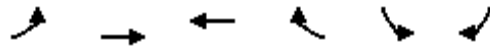
7/29/2013

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1863	0	0	1863	1863	0
Flt Permitted						
Satd. Flow (perm)	1863	0	0	1863	1863	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	578			788	755	
Travel Time (s)	13.1			17.9	17.2	
Lane Group Flow (vph)	0	0	0	0	0	0
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	0.0%			ICU Level of Service A		
Analysis Period (min)	15					

Lanes, Volumes, Timings

29: Taft St & 28th Ave

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	98	379	402	23	28	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	91			145	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1850	0	1770	1583
Flt Permitted	0.295				0.950	
Satd. Flow (perm)	550	1863	1850	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			9			98
Link Speed (mph)		30	30		30	
Link Distance (ft)		1537	578		2152	
Travel Time (s)		34.9	13.1		48.9	
Lane Group Flow (vph)	107	412	462	0	30	98
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Total Split (s)	8.0	27.0	19.0	0.0	13.0	13.0
Total Lost Time (s)	2.0	3.0	3.0	2.0	3.0	5.0
Act Effect Green (s)	19.8	18.7	14.5		10.3	8.2
Actuated g/C Ratio	0.56	0.53	0.41		0.29	0.23
v/c Ratio	0.20	0.42	0.60		0.06	0.22
Control Delay	4.1	6.0	12.7		11.9	5.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	4.1	6.0	12.7		11.9	5.7
LOS	A	A	B		B	A
Approach Delay		5.6	12.7		7.1	
Approach LOS		A	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 35.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 8.8

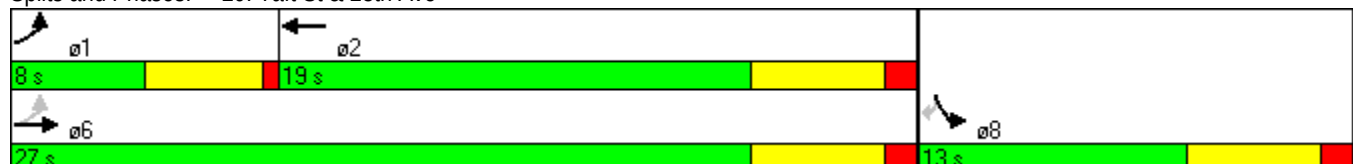
Intersection LOS: A

Intersection Capacity Utilization 43.0%

ICU Level of Service A

Analysis Period (min) 15

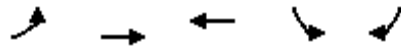
Splits and Phases: 29: Taft St & 28th Ave



Queues

29: Taft St & 28th Ave

7/29/2013



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	107	412	462	30	98
v/c Ratio	0.20	0.42	0.60	0.06	0.22
Control Delay	4.1	6.0	12.7	11.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	4.1	6.0	12.7	11.9	5.7
Queue Length 50th (ft)	7	37	75	5	0
Queue Length 95th (ft)	17	70	144	18	25
Internal Link Dist (ft)		1457	498	2072	
Turn Bay Length (ft)	91				
Base Capacity (vph)	523	1307	870	518	445
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	0.32	0.53	0.06	0.22
Intersection Summary					

Lanes, Volumes, Timings
30: Taft St & Okomo St W

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	6	492	497	0	0	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1861	1863	0	1611	0
Flt Permitted		0.999				
Satd. Flow (perm)	0	1861	1863	0	1611	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		2557	1537		1232	
Travel Time (s)		58.1	34.9		28.0	
Lane Group Flow (vph)	0	542	540	0	5	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.7% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings

31: Taft St & N Park Rd

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	185	177	41	147	236	219	67	534	149	137	497	68
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	168		168	250		151	192		110	160		0
Storage Lanes	1		1	1		1	1		1	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3476	0
Flt Permitted	0.460			0.581			0.305			0.332		
Satd. Flow (perm)	857	1863	1583	1082	1863	1583	568	3539	1583	618	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			45			238			162		24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1357			2557			2668			2108	
Travel Time (s)		30.8			58.1			60.6			47.9	
Lane Group Flow (vph)	201	192	45	160	257	238	73	580	162	149	614	0
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		
Total Split (s)	10.0	20.0	20.0	10.0	20.0	20.0	10.0	20.0	20.0	10.0	20.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	18.5	14.1	14.1	18.5	14.1	14.1	23.2	16.9	16.9	23.9	18.7	
Actuated g/C Ratio	0.34	0.26	0.26	0.34	0.26	0.26	0.43	0.31	0.31	0.44	0.35	
v/c Ratio	0.50	0.40	0.10	0.35	0.53	0.40	0.19	0.53	0.27	0.36	0.50	
Control Delay	16.4	21.0	6.9	13.5	23.3	5.4	13.2	19.8	5.1	17.0	17.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	16.4	21.0	6.9	13.5	23.3	5.4	13.2	19.8	5.1	17.0	17.8	
LOS	B	C	A	B	C	A	B	B	A	B	B	
Approach Delay		17.4			14.4			16.3			17.6	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 54

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.53

Intersection Signal Delay: 16.4

Intersection LOS: B

Intersection Capacity Utilization 58.4%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 31: Taft St & N Park Rd

Queues

31: Taft St & N Park Rd

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	201	192	45	160	257	238	73	580	162	149	614
v/c Ratio	0.50	0.40	0.10	0.35	0.53	0.40	0.19	0.53	0.27	0.36	0.50
Control Delay	16.4	21.0	6.9	13.5	23.3	5.4	13.2	19.8	5.1	17.0	17.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	21.0	6.9	13.5	23.3	5.4	13.2	19.8	5.1	17.0	17.8
Queue Length 50th (ft)	44	57	0	34	79	0	14	94	0	31	96
Queue Length 95th (ft)	83	107	20	67	141	45	35	143	37	63	147
Internal Link Dist (ft)	1277			2477			2588			2028	
Turn Bay Length (ft)	168		168	250		151	192		110	160	
Base Capacity (vph)	400	582	525	451	582	658	384	1104	606	409	1223
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.50	0.33	0.09	0.35	0.44	0.36	0.19	0.53	0.27	0.36	0.50

Intersection Summary

Lanes, Volumes, Timings

35: Taft St & N 35th Ave

7/29/2013

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰		↱	↰	↱	↱
Volume (vph)	203	57	67	284	232	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)		0	85		0	0
Storage Lanes		0	1		1	1
Taper Length (ft)		25	25		25	25
Satd. Flow (prot)	1807	0	1770	1863	1770	1583
Flt Permitted			0.572		0.950	
Satd. Flow (perm)	1807	0	1065	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	46					233
Link Speed (mph)	30			30	30	
Link Distance (ft)	1556			1357	713	
Travel Time (s)	35.4			30.8	16.2	
Lane Group Flow (vph)	283	0	73	309	252	233
Turn Type			Perm			Perm
Protected Phases	2			6	4	
Permitted Phases			6			4
Total Split (s)	21.0	0.0	21.0	21.0	19.0	19.0
Total Lost Time (s)	3.0	4.0	3.0	3.0	3.0	3.0
Act Effect Green (s)	18.3		18.3	18.3	12.4	12.4
Actuated g/C Ratio	0.50		0.50	0.50	0.34	0.34
v/c Ratio	0.31		0.14	0.33	0.42	0.34
Control Delay	6.4		6.8	7.6	11.5	3.2
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	6.4		6.8	7.6	11.5	3.2
LOS	A		A	A	B	A
Approach Delay	6.4			7.4	7.5	
Approach LOS	A			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 36.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.42

Intersection Signal Delay: 7.2

Intersection LOS: A

Intersection Capacity Utilization 49.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 35: Taft St & N 35th Ave

Queues

35: Taft St & N 35th Ave

7/29/2013



Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	283	73	309	252	233
v/c Ratio	0.31	0.14	0.33	0.42	0.34
Control Delay	6.4	6.8	7.6	11.5	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	6.4	6.8	7.6	11.5	3.2
Queue Length 50th (ft)	23	7	31	37	0
Queue Length 95th (ft)	66	25	81	76	27
Internal Link Dist (ft)	1476		1277	633	
Turn Bay Length (ft)		85			
Base Capacity (vph)	924	531	929	773	822
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.31	0.14	0.33	0.33	0.28
Intersection Summary					

Lanes, Volumes, Timings

37: Taft St & 26 Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	76	226	73	21	280	29	75	208	15	25	218	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	110		0	110		0	0		0	0		0
Storage Lanes	1		0	1		0	0		0	0		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1796	0	1770	1837	0	0	1828	0	0	1805	0
Flt Permitted	0.558			0.564				0.839			0.947	
Satd. Flow (perm)	1039	1796	0	1051	1837	0	0	1552	0	0	1716	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			15			7			35	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		788			3118			702			3825	
Travel Time (s)		17.9			70.9			16.0			86.9	
Lane Group Flow (vph)	83	325	0	23	336	0	0	324	0	0	330	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0	20.0	20.0	0.0
Total Lost Time (s)	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0
Act Effect Green (s)	11.1	11.1		11.1	11.1			14.1			14.1	
Actuated g/C Ratio	0.30	0.30		0.30	0.30			0.38			0.38	
v/c Ratio	0.27	0.57		0.07	0.60			0.55			0.49	
Control Delay	12.1	13.7		9.5	15.5			14.0			11.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0			0.0	
Total Delay	12.1	13.7		9.5	15.5			14.0			11.7	
LOS	B	B		A	B			B			B	
Approach Delay		13.4			15.1			14.0			11.7	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 37.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.60

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 69.9%

ICU Level of Service C

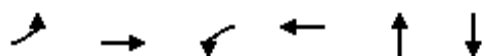
Analysis Period (min) 15

Splits and Phases: 37: Taft St & 26 Avenue

Queues

37: Taft St & 26 Avenue

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	83	325	23	336	324	330
v/c Ratio	0.27	0.57	0.07	0.60	0.55	0.49
Control Delay	12.1	13.7	9.5	15.5	14.0	11.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	13.7	9.5	15.5	14.0	11.7
Queue Length 50th (ft)	13	46	3	54	49	44
Queue Length 95th (ft)	35	98	13	108	115	104
Internal Link Dist (ft)		708		3038	622	3745
Turn Bay Length (ft)	110		110			
Base Capacity (vph)	393	706	397	703	591	670
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.46	0.06	0.48	0.55	0.49
Intersection Summary						

Lanes, Volumes, Timings
43: Taft Street & SR-7/441

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	130	224	203	89	324	35	250	1190	63	26	1034	209
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		0	399		0	0		0	0		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1835	0	1770	3539	1583	1770	3451	0
Flt Permitted	0.195			0.449			0.092			0.129		
Satd. Flow (perm)	363	1863	1583	836	1835	0	171	3539	1583	240	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			188		5				68		30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1995			2594			985			3813	
Travel Time (s)		45.3			59.0			22.4			86.7	
Lane Group Flow (vph)	141	243	221	97	390	0	272	1293	68	28	1351	0
Turn Type	pm+pt		Perm	pm+pt			pm+pt		Perm	pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8			2		2	6		
Total Split (s)	10.0	24.0	24.0	10.0	24.0	0.0	16.0	46.0	46.0	10.0	40.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	4.0	5.5	5.5	5.5	5.5	5.5	4.0
Act Effect Green (s)	24.1	20.5	20.5	23.0	18.5		50.5	46.5	46.5	39.0	34.5	
Actuated g/C Ratio	0.27	0.23	0.23	0.26	0.21		0.56	0.52	0.52	0.43	0.38	
v/c Ratio	0.84	0.57	0.44	0.37	1.02		0.96	0.71	0.08	0.15	1.01	
Control Delay	67.1	38.1	10.3	27.8	89.2		68.9	20.3	4.1	11.7	54.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	67.1	38.1	10.3	27.8	89.2		68.9	20.3	4.1	11.7	54.7	
LOS	E	D	B	C	F		E	C	A	B	D	
Approach Delay		34.7			77.0			27.7			53.8	
Approach LOS		C			E			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 43.4

Intersection LOS: D

Intersection Capacity Utilization 93.8%

ICU Level of Service F

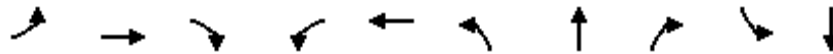
Analysis Period (min) 15

Splits and Phases: 43: Taft Street & SR-7/441

Queues

43: Taft Street & SR-7/441

7/29/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	141	243	221	97	390	272	1293	68	28	1351
v/c Ratio	0.84	0.57	0.44	0.37	1.02	0.96	0.71	0.08	0.15	1.01
Control Delay	67.1	38.1	10.3	27.8	89.2	68.9	20.3	4.1	11.7	54.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.1	38.1	10.3	27.8	89.2	68.9	20.3	4.1	11.7	54.7
Queue Length 50th (ft)	59	127	15	40	~229	108	250	0	7	~397
Queue Length 95th (ft)	#141	207	77	77	#415	#265	414	22	18	#556
Internal Link Dist (ft)		1915			2514		905			3733
Turn Bay Length (ft)	220			399						
Base Capacity (vph)	167	424	506	260	381	283	1829	851	181	1341
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.84	0.57	0.44	0.37	1.02	0.96	0.71	0.08	0.15	1.01

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
45: Taft Street & 56 Avenue

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	39	223	40	34	353	60	28	366	32	27	455	52
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	95		0	0		0	0		0	0		0
Storage Lanes	1		0	1		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1820	0	1770	1822	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.360			0.585			0.372			0.479		
Satd. Flow (perm)	671	1820	0	1090	1822	0	693	1863	1583	892	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			23				35			57
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2594			3378			1248			3795	
Travel Time (s)		59.0			76.8			28.4			86.3	
Lane Group Flow (vph)	42	285	0	37	449	0	30	398	35	29	495	57
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8		8	4		4
Total Split (s)	19.0	19.0	0.0	19.0	19.0	0.0	21.0	21.0	21.0	21.0	21.0	21.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0
Act Effect Green (s)	12.8	12.8		12.8	12.8		16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.33	0.33		0.33	0.33		0.41	0.41	0.41	0.41	0.41	0.41
v/c Ratio	0.19	0.46		0.10	0.73		0.10	0.52	0.05	0.08	0.64	0.08
Control Delay	11.7	12.1		9.7	19.8		8.8	11.9	3.7	8.2	14.6	3.3
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.7	12.1		9.7	19.8		8.8	11.9	3.7	8.2	14.6	3.3
LOS	B	B		A	B		A	B	A	A	B	A
Approach Delay		12.1			19.1			11.1			13.2	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 38.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 14.0

Intersection LOS: B

Intersection Capacity Utilization 64.7%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 45: Taft Street & 56 Avenue

Queues

45: Taft Street & 56 Avenue

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	42	285	37	449	30	398	35	29	495	57
v/c Ratio	0.19	0.46	0.10	0.73	0.10	0.52	0.05	0.08	0.64	0.08
Control Delay	11.7	12.1	9.7	19.8	8.8	11.9	3.7	8.2	14.6	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.7	12.1	9.7	19.8	8.8	11.9	3.7	8.2	14.6	3.3
Queue Length 50th (ft)	6	42	5	77	4	63	0	4	84	0
Queue Length 95th (ft)	22	88	19	#185	15	121	10	14	#165	14
Internal Link Dist (ft)		2514		3298		1168			3715	
Turn Bay Length (ft)	95									
Base Capacity (vph)	243	674	394	674	286	769	674	369	769	687
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.42	0.09	0.67	0.10	0.52	0.05	0.08	0.64	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
48: Sheridan Street & Dixie Hwy NB

7/29/2013

	→	↘	↙	←	↖	↗			
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø5	ø7
Lane Configurations	↑↑			↑↑↑	↖↗	↗			
Volume (vph)	960	0	2	999	420	106			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Satd. Flow (prot)	3539	0	0	5085	3433	1583			
Flt Permitted				0.940	0.950				
Satd. Flow (perm)	3539	0	0	4780	3433	1583			
Right Turn on Red		Yes				Yes			
Satd. Flow (RTOR)						115			
Link Speed (mph)	30			30	30				
Link Distance (ft)	220			165	3812				
Travel Time (s)	5.0			3.8	86.6				
Lane Group Flow (vph)	1043	0	0	1088	457	115			
Turn Type			Perm			Prot			
Protected Phases	6			2	8	8	1	5	7
Permitted Phases	2		2	5					
Total Split (s)	48.0	0.0	38.0	38.0	20.0	20.0	10.0	12.0	10.0
Total Lost Time (s)	5.0	4.0	5.0	5.0	5.0	5.0			
Act Effect Green (s)	41.0			38.7	15.2	15.2			
Actuated g/C Ratio	0.48			0.45	0.18	0.18			
v/c Ratio	0.61			0.48	0.75	0.31			
Control Delay	4.4			14.9	43.8	9.3			
Queue Delay	0.0			0.1	17.4	0.0			
Total Delay	4.4			15.0	61.2	9.3			
LOS	A			B	E	A			
Approach Delay	4.4			15.0	50.8				
Approach LOS	A			B	D				

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 85.6

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 18.5

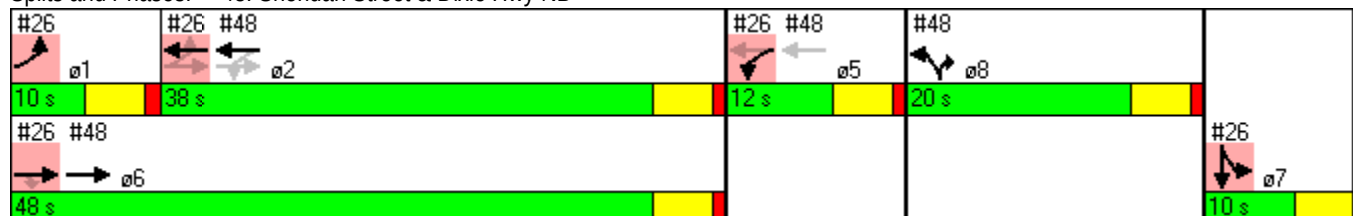
Intersection LOS: B

Intersection Capacity Utilization 46.9%

ICU Level of Service A

Analysis Period (min) 15

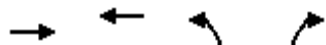
Splits and Phases: 48: Sheridan Street & Dixie Hwy NB



Queues

48: Sheridan Street & Dixie Hwy NB

7/29/2013



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1043	1088	457	115
v/c Ratio	0.61	0.48	0.75	0.31
Control Delay	4.4	14.9	43.8	9.3
Queue Delay	0.0	0.1	17.4	0.0
Total Delay	4.4	15.0	61.2	9.3
Queue Length 50th (ft)	25	137	130	0
Queue Length 95th (ft)	29	171	#200	45
Internal Link Dist (ft)	140	85	3732	
Turn Bay Length (ft)				
Base Capacity (vph)	1800	2282	609	376
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	196	146	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.58	0.52	0.99	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
49: Sheridan Street & US-1

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	237	564	174	150	542	164	233	635	103	233	955	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	195		0	280		280	224		0	238		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	3415	0	1770	3539	1583	1770	3465	0	1770	3486	0
Flt Permitted	0.211			0.267			0.197			0.219		
Satd. Flow (perm)	393	3415	0	497	3539	1583	367	3465	0	408	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		48				178		24			17	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1809			756			3815			786	
Travel Time (s)		41.1			17.2			86.7			17.9	
Lane Group Flow (vph)	258	802	0	163	589	178	253	802	0	253	1154	0
Turn Type	pm+pt			pm+pt		Perm	pm+pt			pm+pt		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4			8		8	2			6		
Total Split (s)	12.0	25.0	0.0	8.0	21.0	21.0	12.0	32.0	0.0	15.0	35.0	0.0
Total Lost Time (s)	4.0	6.0	4.0	4.0	6.0	6.0	4.0	6.0	4.0	4.0	6.0	4.0
Act Effect Green (s)	29.0	19.0		21.0	15.0	15.0	28.3	26.3		31.0	29.0	
Actuated g/C Ratio	0.36	0.24		0.26	0.19	0.19	0.35	0.33		0.39	0.36	
v/c Ratio	0.92	0.95		0.84	0.89	0.40	0.94	0.69		0.74	0.91	
Control Delay	61.1	50.0		59.0	49.2	7.9	74.1	26.5		33.2	35.6	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	61.1	50.0		59.0	49.2	7.9	74.1	26.5		33.2	35.6	
LOS	E	D		E	D	A	E	C		C	D	
Approach Delay		52.7			43.0			37.9			35.2	
Approach LOS		D			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 80

Actuated Cycle Length: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 41.6

Intersection LOS: D

Intersection Capacity Utilization 88.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 49: Sheridan Street & US-1

Queues

49: Sheridan Street & US-1

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	258	802	163	589	178	253	802	253	1154
v/c Ratio	0.92	0.95	0.84	0.89	0.40	0.94	0.69	0.74	0.91
Control Delay	61.1	50.0	59.0	49.2	7.9	74.1	26.5	33.2	35.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	50.0	59.0	49.2	7.9	74.1	26.5	33.2	35.6
Queue Length 50th (ft)	95	196	56	152	0	94	176	88	279
Queue Length 95th (ft)	#208	#314	#148	#244	51	#218	241	#169	#408
Internal Link Dist (ft)		1729		676			3735		706
Turn Bay Length (ft)	195		280		280	224		238	
Base Capacity (vph)	280	848	194	664	441	270	1156	345	1275
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.92	0.95	0.84	0.89	0.40	0.94	0.69	0.73	0.91

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings

53: Taft Street & US-1

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	61	42	65	20	25	22	66	978	23	29	1118	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1693	0	1770	1730	0	1770	3529	0	1770	1853	0
Flt Permitted	0.816			0.816			0.088			0.252		
Satd. Flow (perm)	1520	1693	0	1520	1730	0	164	3529	0	469	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		71			24			10			8	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2012			658			742			3815	
Travel Time (s)		45.7			15.0			16.9			86.7	
Lane Group Flow (vph)	66	117	0	22	51	0	72	1088	0	32	1256	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Total Split (s)	11.0	11.0	0.0	11.0	11.0	0.0	49.0	49.0	0.0	49.0	49.0	0.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0
Act Effect Green (s)	6.0	6.0		6.0	6.0		47.8	47.8		47.8	47.8	
Actuated g/C Ratio	0.10	0.10		0.10	0.10		0.79	0.79		0.79	0.79	
v/c Ratio	0.44	0.51		0.15	0.26		0.56	0.39		0.09	0.86	
Control Delay	35.2	20.7		27.1	20.0		27.5	3.2		2.9	15.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	35.2	20.7		27.1	20.0		27.5	3.2		2.9	15.3	
LOS	D	C		C	C		C	A		A	B	
Approach Delay		25.9			22.2			4.7			15.0	
Approach LOS		C			C			A			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 11.5

Intersection LOS: B

Intersection Capacity Utilization 79.5%

ICU Level of Service D

Analysis Period (min) 15

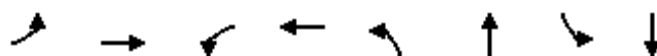
Splits and Phases: 53: Taft Street & US-1

	ø2												ø4
49 s												11 s	
	ø6												ø8
49 s												11 s	

Queues

53: Taft Street & US-1

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	117	22	51	72	1088	32	1256
v/c Ratio	0.44	0.51	0.15	0.26	0.56	0.39	0.09	0.86
Control Delay	35.2	20.7	27.1	20.0	27.5	3.2	2.9	15.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.2	20.7	27.1	20.0	27.5	3.2	2.9	15.3
Queue Length 50th (ft)	23	16	7	9	9	56	2	270
Queue Length 95th (ft)	#57	58	26	37	#79	80	8	#671
Internal Link Dist (ft)		1932		578		662		3735
Turn Bay Length (ft)								
Base Capacity (vph)	150	231	150	193	129	2779	369	1459
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.51	0.15	0.26	0.56	0.39	0.09	0.86

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
55: Sheridan St & 35th Street

7/29/2013

						
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↑
Volume (vph)	1654	12	0	2494	0	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	5080	0	0	5085	0	1611
Flt Permitted						
Satd. Flow (perm)	5080	0	0	5085	0	1611
Link Speed (mph)	30			30	30	
Link Distance (ft)	1463			1402	1234	
Travel Time (s)	33.3			31.9	28.0	
Lane Group Flow (vph)	1811	0	0	2711	0	38
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.5% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
56: Taft Street & Dixie Hwy SB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 									  	
Volume (vph)	0	155	43	58	232	0	0	0	0	78	389	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	3422	0	1770	1863	0	0	0	0	1770	5040	0
Flt Permitted				0.571						0.950		
Satd. Flow (perm)	0	3422	0	1064	1863	0	0	0	0	1770	5040	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		32									10	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3118			218			1569			2770	
Travel Time (s)		70.9			5.0			35.7			63.0	
Lane Group Flow (vph)	0	215	0	63	252	0	0	0	0	85	450	0
Turn Type			custom							custom		
Protected Phases		5		2	2						6	
Permitted Phases				3	3					1	1	
Total Split (s)	0.0	20.0	0.0	14.0	14.0	0.0	0.0	0.0	0.0	9.0	20.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)		11.7		16.1	16.1					5.0	14.0	
Actuated g/C Ratio		0.18		0.25	0.25					0.08	0.22	
v/c Ratio		0.33		0.17	0.54					0.61	0.41	
Control Delay		20.6		10.9	15.6					51.7	12.7	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		20.6		10.9	15.6					51.7	12.7	
LOS		C		B	B					D	B	
Approach Delay		20.6			14.7						18.9	
Approach LOS		C			B						B	
Intersection Summary												
Area Type:	Other											
Cycle Length: 95												
Actuated Cycle Length: 63.8												
Control Type: Semi Act-Uncoord												
Maximum v/c Ratio: 0.91												
Intersection Signal Delay: 18.0					Intersection LOS: B							
Intersection Capacity Utilization 30.4%					ICU Level of Service A							
Analysis Period (min) 15												

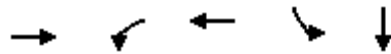
Splits and Phases: 56: Taft Street & Dixie Hwy SB

Lane Group	ø3	ø4
Lane Configurations		
Volume (vph)		
Ideal Flow (vphpl)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	4
Permitted Phases		
Total Split (s)	12.0	20.0
Total Lost Time (s)		
Act Effect Green (s)		
Actuated g/C Ratio		
v/c Ratio		
Control Delay		
Queue Delay		
Total Delay		
LOS		
Approach Delay		
Approach LOS		
Intersection Summary		

Queues

56: Taft Street & Dixie Hwy SB

7/29/2013



Lane Group	EBT	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	215	63	252	85	450
v/c Ratio	0.33	0.17	0.54	0.61	0.41
Control Delay	20.6	10.9	15.6	51.7	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	10.9	15.6	51.7	12.7
Queue Length 50th (ft)	32	6	25	32	31
Queue Length 95th (ft)	61	m14	m64	#103	54
Internal Link Dist (ft)	3038		138		2690
Turn Bay Length (ft)					
Base Capacity (vph)	886	368	470	139	1674
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.24	0.17	0.54	0.61	0.27

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
58: Taft Street & Dixie Hwy NB

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	43	168	0	0	195	10	91	333	52	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1863	0	0	3514	0	0	4954	0	0	0	0
Flt Permitted	0.612							0.991				
Satd. Flow (perm)	1140	1863	0	0	3514	0	0	4954	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					5			23				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		218			2012			1400			3812	
Travel Time (s)		5.0			45.7			31.8			86.6	
Lane Group Flow (vph)	47	183	0	0	223	0	0	518	0	0	0	0
Turn Type	Perm						custom					
Protected Phases		5			2		3	3				
Permitted Phases	5				1		4	4				
Total Split (s)	20.0	20.0	0.0	0.0	14.0	0.0	12.0	12.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	5.0	4.0	5.0	5.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	11.7	11.7			18.1			7.0				
Actuated g/C Ratio	0.18	0.18			0.28			0.11				
v/c Ratio	0.23	0.54			0.22			0.91				
Control Delay	11.5	15.6			18.9			52.2				
Queue Delay	0.0	0.2			0.0			0.0				
Total Delay	11.5	15.8			18.9			52.2				
LOS	B	B			B			D				
Approach Delay		14.9			18.9			52.2				
Approach LOS		B			B			D				

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 63.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 35.7

Intersection LOS: D

Intersection Capacity Utilization 30.4%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 58: Taft Street & Dixie Hwy NB

Lane Group	ø1	ø4	ø6
Lane Configurations			
Volume (vph)			
Ideal Flow (vphpl)			
Satd. Flow (prot)			
Flt Permitted			
Satd. Flow (perm)			
Right Turn on Red			
Satd. Flow (RTOR)			
Link Speed (mph)			
Link Distance (ft)			
Travel Time (s)			
Lane Group Flow (vph)			
Turn Type			
Protected Phases	1	4	6
Permitted Phases			
Total Split (s)	9.0	20.0	20.0
Total Lost Time (s)			
Act Effect Green (s)			
Actuated g/C Ratio			
v/c Ratio			
Control Delay			
Queue Delay			
Total Delay			
LOS			
Approach Delay			
Approach LOS			
Intersection Summary			

Queues

58: Taft Street & Dixie Hwy NB

7/29/2013



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	47	183	223	518
v/c Ratio	0.23	0.54	0.22	0.91
Control Delay	11.5	15.6	18.9	52.2
Queue Delay	0.0	0.2	0.0	0.0
Total Delay	11.5	15.8	18.9	52.2
Queue Length 50th (ft)	10	37	33	69
Queue Length 95th (ft)	m21	m64	66	#150
Internal Link Dist (ft)		138	1932	1320
Turn Bay Length (ft)				
Base Capacity (vph)	287	470	1000	567
Starvation Cap Reductn	0	33	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.42	0.22	0.91

Intersection Summary

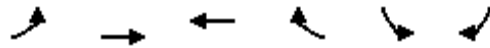
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
65: Johnson Street & 37th Avenue

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	73	384	600	79	67	181
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			190	0	0
Storage Lanes	1			1	1	0
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1863	1583	1658	0
Flt Permitted	0.236				0.987	
Satd. Flow (perm)	440	1863	1863	1583	1658	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				86	184	
Link Speed (mph)		30	30		30	
Link Distance (ft)		927	1696		545	
Travel Time (s)		21.1	38.5		12.4	
Lane Group Flow (vph)	79	417	652	86	270	0
Turn Type	Perm			Perm		
Protected Phases		4	8		6	
Permitted Phases	4			8		
Total Split (s)	30.0	30.0	30.0	30.0	20.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0
Act Effect Green (s)	20.3	20.3	20.3	20.3	14.1	
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.30	
v/c Ratio	0.41	0.51	0.80	0.12	0.43	
Control Delay	16.3	11.8	20.3	2.6	7.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	16.3	11.8	20.3	2.6	7.9	
LOS	B	B	C	A	A	
Approach Delay		12.5	18.3		7.9	
Approach LOS		B	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 46.5

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 14.5

Intersection LOS: B

Intersection Capacity Utilization 65.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 65: Johnson Street & 37th Avenue

Queues

65: Johnson Street & 37th Avenue

7/29/2013



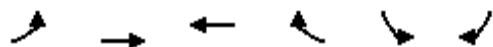
Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	79	417	652	86	270
v/c Ratio	0.41	0.51	0.80	0.12	0.43
Control Delay	16.3	11.8	20.3	2.6	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	11.8	20.3	2.6	7.9
Queue Length 50th (ft)	13	75	139	0	18
Queue Length 95th (ft)	44	133	#253	16	66
Internal Link Dist (ft)		847	1616		465
Turn Bay Length (ft)	200			190	
Base Capacity (vph)	229	971	971	866	632
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.34	0.43	0.67	0.10	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
69: Johnson Street & 40th Avenue

7/29/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	19	417	708	59	39	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	150			0	0	0
Storage Lanes	1			0	1	1
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1844	0	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1844	0	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2218	927		830	
Travel Time (s)		50.4	21.1		18.9	
Lane Group Flow (vph)	21	453	834	0	42	41
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 50.8% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
71: Johnson Street & 46th Ave

7/29/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	35	299	38	112	500	57	56	296	49	66	305	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1831	0	1770	1835	0	1770	3465	0	1770	3539	1583
Flt Permitted	0.188			0.441			0.551			0.407		
Satd. Flow (perm)	350	1831	0	821	1835	0	1026	3465	0	758	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			11			25				30
Link Speed (mph)		30			30			30				30
Link Distance (ft)		929			2218			711			2662	
Travel Time (s)		21.1			50.4			16.2			60.5	
Lane Group Flow (vph)	38	366	0	122	605	0	61	375	0	72	332	30
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Total Split (s)	9.0	28.0	0.0	10.0	29.0	0.0	10.0	13.0	0.0	9.0	12.0	12.0
Total Lost Time (s)	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	5.0
Act Effect Green (s)	28.2	25.0		29.0	24.0		13.0	8.0		13.4	11.0	11.0
Actuated g/C Ratio	0.47	0.42		0.48	0.40		0.22	0.13		0.22	0.18	0.18
v/c Ratio	0.15	0.48		0.26	0.82		0.21	0.77		0.31	0.51	0.10
Control Delay	7.9	15.8		8.2	27.3		18.2	36.6		20.2	28.7	11.1
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	7.9	15.8		8.2	27.3		18.2	36.6		20.2	28.7	11.1
LOS	A	B		A	C		B	D		C	C	B
Approach Delay		15.1			24.1			34.0			26.1	
Approach LOS		B			C			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 24.9

Intersection LOS: C

Intersection Capacity Utilization 63.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 71: Johnson Street & 46th Ave

Queues

71: Johnson Street & 46th Ave

7/29/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	38	366	122	605	61	375	72	332	30
v/c Ratio	0.15	0.48	0.26	0.82	0.21	0.77	0.31	0.51	0.10
Control Delay	7.9	15.8	8.2	27.3	18.2	36.6	20.2	28.7	11.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	7.9	15.8	8.2	27.3	18.2	36.6	20.2	28.7	11.1
Queue Length 50th (ft)	6	95	19	184	16	65	19	63	0
Queue Length 95th (ft)	16	165	40	#354	41	#126	46	#123	20
Internal Link Dist (ft)		849		2138		631		2582	
Turn Bay Length (ft)									
Base Capacity (vph)	259	770	476	741	284	484	236	649	315
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.48	0.26	0.82	0.21	0.77	0.31	0.51	0.10

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

APPENDIX – F

Synchro Output – Future Background Traffic (2015)



Lanes, Volumes, Timings
1: Sheridan St & 46th Ave

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	1522	167	127	980	128	136	199	154	204	222	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	330		0	165		0	234		234
Storage Lanes	1		0	1		0	2		0	2		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5009	0	1770	4999	0	3433	3309	0	3433	3539	1583
Flt Permitted	0.173			0.179			0.571			0.444		
Satd. Flow (perm)	322	5009	0	333	4999	0	2063	3309	0	1604	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36			44			181				145
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3315			1996			3810			774	
Travel Time (s)		75.3			45.4			86.6			17.6	
Peak Hour Factor	0.95	0.95	0.95	0.94	0.94	0.94	0.84	0.84	0.84	0.83	0.83	0.83
Shared Lane Traffic (%)												
Lane Group Flow (vph)	152	1778	0	135	1179	0	162	420	0	246	267	145
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Total Split (s)	11.0	27.0	0.0	10.0	26.0	0.0	10.0	13.0	0.0	10.0	13.0	13.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	30.2	23.1		28.4	22.3		15.1	9.0		15.1	9.0	9.0
Actuated g/C Ratio	0.52	0.40		0.49	0.38		0.26	0.16		0.26	0.16	0.16
v/c Ratio	0.44	0.88		0.43	0.60		0.24	0.63		0.41	0.48	0.39
Control Delay	18.3	23.5		17.9	15.9		15.8	18.1		17.2	26.5	8.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	18.3	23.5		17.9	15.9		15.8	18.1		17.2	26.5	8.6
LOS	B	C		B	B		B	B		B	C	A
Approach Delay		23.1			16.1			17.4			19.1	
Approach LOS		C			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 58

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 19.7

Intersection LOS: B

Intersection Capacity Utilization 69.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Sheridan St & 46th Ave

	ø2		ø1		ø3		ø4
26 s		11 s		10 s		13 s	
	ø6		ø5		ø7		ø8
27 s		10 s		10 s		13 s	

Queues
1: Sheridan St & 46th Ave

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	152	1778	135	1179	162	420	246	267	145
v/c Ratio	0.44	0.88	0.43	0.60	0.24	0.63	0.41	0.48	0.39
Control Delay	18.3	23.5	17.9	15.9	15.8	18.1	17.2	26.5	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.3	23.5	17.9	15.9	15.8	18.1	17.2	26.5	8.6
Queue Length 50th (ft)	24	212	21	120	21	42	32	47	0
Queue Length 95th (ft)	48	#315	43	161	37	73	52	73	34
Internal Link Dist (ft)		3235		1916		3730		694	
Turn Bay Length (ft)	275		330		165		234		234
Base Capacity (vph)	343	2018	312	1953	679	669	607	552	370
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.88	0.43	0.60	0.24	0.63	0.41	0.48	0.39

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
2: Sheridan St & 40th Ave

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	46	1798	99	105	1081	18	31	12	88	89	27	97
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		0	250		0	100		0	250		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5045	0	1770	5075	0	1770	1617	0	1770	1630	0
Flt Permitted	0.205			0.147			0.649			0.687		
Satd. Flow (perm)	382	5045	0	274	5075	0	1209	1617	0	1280	1630	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			5			96			143	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1996			1463			3955			752	
Travel Time (s)		45.4			33.3			89.9			17.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.86	0.86	0.92	0.92	0.92	0.68	0.92	0.68
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	2062	0	114	1278	0	34	109	0	131	172	0
Turn Type	pm+pt			pm+pt			Perm			Perm		
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Total Split (s)	10.0	33.0	0.0	10.0	33.0	0.0	17.0	17.0	0.0	17.0	17.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	6.0	4.0	4.0	6.0	6.0	4.0	4.0	6.0	4.0
Act Effect Green (s)	32.6	32.6		30.3	33.5		9.5	9.5		11.6	9.5	
Actuated g/C Ratio	0.59	0.59		0.55	0.61		0.17	0.17		0.21	0.17	
v/c Ratio	0.12	0.69		0.44	0.42		0.16	0.30		0.49	0.43	
Control Delay	11.0	13.3		15.6	9.7		22.9	9.5		27.8	10.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.0	13.3		15.6	9.7		22.9	9.5		27.8	10.5	
LOS	B	B		B	A		C	A		C	B	
Approach Delay		13.3			10.2			12.7			18.0	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 55.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 12.5

Intersection LOS: B

Intersection Capacity Utilization 73.5%

ICU Level of Service D

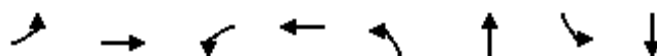
Analysis Period (min) 15

Splits and Phases: 2: Sheridan St & 40th Ave



Queues
2: Sheridan St & 40th Ave

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	50	2062	114	1278	34	109	131	172
v/c Ratio	0.12	0.69	0.44	0.42	0.16	0.30	0.49	0.43
Control Delay	11.0	13.3	15.6	9.7	22.9	9.5	27.8	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.0	13.3	15.6	9.7	22.9	9.5	27.8	10.5
Queue Length 50th (ft)	9	219	26	124	11	4	42	9
Queue Length 95th (ft)	24	283	#49	134	32	39	63	54
Internal Link Dist (ft)		1916		1383		3875		672
Turn Bay Length (ft)	220		250		100		250	
Base Capacity (vph)	406	2983	261	3170	248	408	310	448
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.69	0.44	0.40	0.14	0.27	0.42	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
6: Taft St & 40th Avenue

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	374	9	7	211	12	12	38	28	46	42	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1855	0	0	1846	0	0	1759	0	0	1785	0
Flt Permitted		0.999			0.998			0.992			0.978	
Satd. Flow (perm)	0	1855	0	0	1846	0	0	1759	0	0	1785	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1978			1556			736			3955	
Travel Time (s)		45.0			35.4			16.7			89.9	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	425	0	0	250	0	0	84	0	0	113	0
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 42.3%

ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
7: Sheridan Street & SR-7/441

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 		 	 	
Volume (vph)	232	1345	259	200	663	210	208	898	269	301	844	107
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	500		190	562		182	330		266	425		0
Storage Lanes	1		1	1		1	2		1	2		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	3433	3539	1583	3433	3479	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	3433	3539	1583	3433	3479	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200			216			292			14
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1120			2636			3813			1599	
Travel Time (s)		25.5			59.9			86.7			36.3	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	252	1462	282	217	721	228	226	976	292	327	1033	0
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			
Total Split (s)	24.0	33.0	33.0	18.0	27.0	27.0	13.0	34.0	34.0	15.0	36.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.0	7.0	6.0	7.0	4.0
Act Effect Green (s)	19.1	27.0	27.0	12.0	19.9	19.9	7.0	27.0	27.0	9.0	29.0	
Actuated g/C Ratio	0.19	0.27	0.27	0.12	0.20	0.20	0.07	0.27	0.27	0.09	0.29	
v/c Ratio	0.74	1.06	0.49	1.02	0.71	0.47	0.94	1.02	0.46	1.06	1.01	
Control Delay	53.6	79.6	12.7	113.1	41.6	9.1	92.5	71.5	6.0	112.2	67.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	53.6	79.6	12.7	113.1	41.6	9.1	92.5	71.5	6.0	112.2	67.3	
LOS	D	E	B	F	D	A	F	E	A	F	E	
Approach Delay		66.9			48.6			61.9			78.1	
Approach LOS		E			D			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.06

Intersection Signal Delay: 64.6

Intersection LOS: E

Intersection Capacity Utilization 91.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 7: Sheridan Street & SR-7/441

 ø1	 ø2	 ø4	 ø3
15 s	34 s	33 s	18 s
 ø5	 ø6	 ø8	 ø7
13 s	36 s	27 s	24 s

Queues
7: Sheridan Street & SR-7/441

2015 Background AM Peak

8/14/2013

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	252	1462	282	217	721	228	226	976	292	327	1033
v/c Ratio	0.74	1.06	0.49	1.02	0.71	0.47	0.94	1.02	0.46	1.06	1.01
Control Delay	53.6	79.6	12.7	113.1	41.6	9.1	92.5	71.5	6.0	112.2	67.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.6	79.6	12.7	113.1	41.6	9.1	92.5	71.5	6.0	112.2	67.3
Queue Length 50th (ft)	155	~379	40	~144	156	6	75	~350	0	~118	~351
Queue Length 95th (ft)	#278	#473	116	#293	199	68	#148	#476	62	#206	#494
Internal Link Dist (ft)		1040			2556			3733			1519
Turn Bay Length (ft)	500		190	562		182	330		266	425	
Base Capacity (vph)	339	1373	573	212	1068	503	240	956	641	309	1019
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.74	1.06	0.49	1.02	0.68	0.45	0.94	1.02	0.46	1.06	1.01

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
8: Sheridan St & N Park Rd

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			   						 	
Volume (vph)	74	1647	136	244	1131	88	134	196	287	205	254	91
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	260		0	500		0	212		212	160		160
Storage Lanes	1		0	0		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5029	0	0	4999	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950				0.678		0.377			0.539		
Satd. Flow (perm)	1770	5029	0	0	3417	0	702	1863	1583	1004	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20			19				183			61
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1402			3113			630			875	
Travel Time (s)		31.9			70.8			14.3			19.9	
Peak Hour Factor	0.88	0.88	0.92	0.92	0.85	0.85	0.92	0.92	0.92	0.85	0.92	0.85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	84	2020	0	0	1700	0	146	213	312	241	276	107
Turn Type	Prot			Prot			pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases							2		2	6		6
Total Split (s)	11.0	34.0	0.0	11.0	34.0	0.0	10.0	20.0	20.0	10.0	20.0	20.0
Total Lost Time (s)	3.5	3.5	4.0	5.5	3.5	4.0	6.0	6.0	6.0	4.0	6.0	4.0
Act Effect Green (s)	7.5	30.5			38.0		18.0	14.0	14.0	22.0	14.0	16.0
Actuated g/C Ratio	0.10	0.41			0.51		0.24	0.19	0.19	0.29	0.19	0.21
v/c Ratio	0.47	0.98			1.37dl		0.65	0.61	0.70	0.68	0.79	0.28
Control Delay	41.4	39.1			26.9		36.7	36.5	21.9	31.4	47.8	14.6
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	39.1			26.9		36.7	36.5	21.9	31.4	47.8	14.6
LOS	D	D			C		D	D	C	C	D	B
Approach Delay		39.2			26.9			29.8			35.8	
Approach LOS		D			C			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

Offset: 0 (0%), Referenced to phase 4:EBT and 8:WBT, Start of Green

Control Type: Pretimed

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 33.5

Intersection LOS: C

Intersection Capacity Utilization 101.1%

ICU Level of Service G

Analysis Period (min) 15

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

Splits and Phases: 8: Sheridan St & N Park Rd

 ø1	 ø2	 ø3	 ø4
10 s	20 s	11 s	34 s
 ø5	 ø6	 ø7	 ø8
10 s	20 s	11 s	34 s

Queues
8: Sheridan St & N Park Rd

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	84	2020	1700	146	213	312	241	276	107
v/c Ratio	0.47	0.98	1.37dl	0.65	0.61	0.70	0.68	0.79	0.28
Control Delay	41.4	39.1	26.9	36.7	36.5	21.9	31.4	47.8	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	41.4	39.1	26.9	36.7	36.5	21.9	31.4	47.8	14.6
Queue Length 50th (ft)	38	326	178	50	92	54	83	124	17
Queue Length 95th (ft)	78	#432	#212	#110	160	#160	133	#242	52
Internal Link Dist (ft)		1322	3033		550			795	
Turn Bay Length (ft)	260			212		212	160		160
Base Capacity (vph)	177	2057	1810	225	348	444	356	348	386
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.98	0.94	0.65	0.61	0.70	0.68	0.79	0.28

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Lanes, Volumes, Timings
10: Johnson Street & N Park Rd

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	92	288	122	134	274	109	160	409	133	100	332	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	200		200	163		163	189		189
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.396			0.570			0.536			0.471		
Satd. Flow (perm)	738	1863	1583	1062	1863	1583	998	3539	1583	877	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			133			118			145			98
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1696			1506			1124			2668	
Travel Time (s)		38.5			34.2			25.5			60.6	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	313	133	146	298	118	174	445	145	109	361	98
Turn Type	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm	pm+pt		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases	4		4	8		8	2		2	6		6
Total Split (s)	8.0	18.0	18.0	8.0	18.0	18.0	8.0	16.0	16.0	8.0	16.0	16.0
Total Lost Time (s)	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0	4.0	5.0	5.0
Act Effect Green (s)	13.3	12.3	12.3	16.0	13.8	13.8	15.4	11.4	11.4	15.4	11.4	11.4
Actuated g/C Ratio	0.29	0.27	0.27	0.35	0.30	0.30	0.34	0.25	0.25	0.34	0.25	0.25
v/c Ratio	0.33	0.63	0.26	0.34	0.53	0.21	0.43	0.51	0.29	0.29	0.41	0.21
Control Delay	17.1	23.2	5.1	17.5	19.4	5.0	14.5	18.9	5.7	12.1	17.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.1	23.2	5.1	17.5	19.4	5.0	14.5	18.9	5.7	12.1	17.9	5.9
LOS	B	C	A	B	B	A	B	B	A	B	B	A
Approach Delay		17.7			15.9			15.4			14.7	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 50

Actuated Cycle Length: 45.9

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 15.9

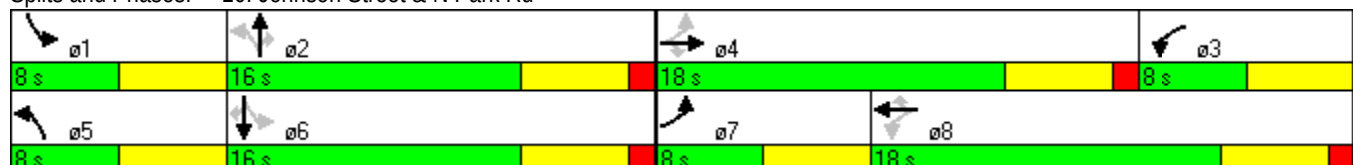
Intersection LOS: B

Intersection Capacity Utilization 55.6%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 10: Johnson Street & N Park Rd



Queues
10: Johnson Street & N Park Rd

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	100	313	133	146	298	118	174	445	145	109	361	98
v/c Ratio	0.33	0.63	0.26	0.34	0.53	0.21	0.43	0.51	0.29	0.29	0.41	0.21
Control Delay	17.1	23.2	5.1	17.5	19.4	5.0	14.5	18.9	5.7	12.1	17.9	5.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.1	23.2	5.1	17.5	19.4	5.0	14.5	18.9	5.7	12.1	17.9	5.9
Queue Length 50th (ft)	22	81	0	33	76	0	32	61	0	19	48	0
Queue Length 95th (ft)	51	#157	31	71	#142	29	66	98	34	44	81	28
Internal Link Dist (ft)	1616			1426			1044			2588		
Turn Bay Length (ft)				200		200	163		163	189		189
Base Capacity (vph)	307	547	559	434	595	586	405	880	502	375	880	467
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.57	0.24	0.34	0.50	0.20	0.43	0.51	0.29	0.29	0.41	0.21

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
11: Sheridan St & 29th Avenue

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		   			  			 		 		
Volume (vph)	262	2156	198	66	1585	477	19	15	29	139	8	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	337		347	180		160	0		0	0		0
Storage Lanes	1		1	1		1	1		0	2		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	7544	1583	1770	5085	1583	1770	3185	0	3433	1863	1583
Flt Permitted	0.950			0.086						0.950		
Satd. Flow (perm)	1770	7544	1583	160	5085	1583	1863	3185	0	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			215			342			21			82
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3113			404			1104			639	
Travel Time (s)		70.8			9.2			25.1			14.5	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	285	2343	215	72	1723	518	21	48	0	151	9	82
Turn Type	Prot		Perm	Perm		Perm	pm+pt			Prot		Perm
Protected Phases	1	6			2		3	8		7	4	
Permitted Phases			6	2		2	8					4
Total Split (s)	18.0	50.0	50.0	32.0	32.0	32.0	20.0	28.0	0.0	12.0	20.0	20.0
Total Lost Time (s)	4.0	2.0	4.0	4.5	4.5	6.0	2.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	14.0	69.6	67.6	49.1	49.1	47.6	9.4	6.5		7.7	9.7	9.7
Actuated g/C Ratio	0.16	0.77	0.75	0.55	0.55	0.53	0.10	0.07		0.09	0.11	0.11
v/c Ratio	1.04	0.40	0.17	0.83	0.62	0.52	0.11	0.19		0.51	0.04	0.34
Control Delay	103.5	4.2	1.0	78.4	11.2	5.6	37.5	27.2		45.7	36.4	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0		0.0	0.0	0.0
Total Delay	103.5	4.2	1.0	78.4	11.7	6.0	37.5	27.2		45.7	36.4	13.2
LOS	F	A	A	E	B	A	D	C		D	D	B
Approach Delay		13.9			12.5			30.3			34.4	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 84 (93%), Referenced to phase 2:WBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.04

Intersection Signal Delay: 14.4

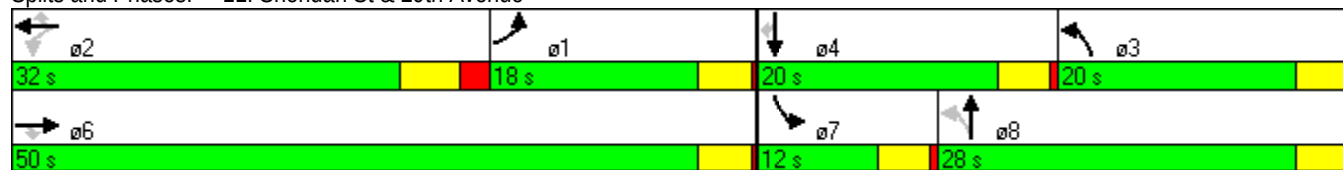
Intersection LOS: B

Intersection Capacity Utilization 66.2%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 11: Sheridan St & 29th Avenue



Queues
11: Sheridan St & 29th Avenue

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	285	2343	215	72	1723	518	21	48	151	9	82
v/c Ratio	1.04	0.40	0.17	0.83	0.62	0.52	0.11	0.19	0.51	0.04	0.34
Control Delay	103.5	4.2	1.0	78.4	11.2	5.6	37.5	27.2	45.7	36.4	13.2
Queue Delay	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0	0.0	0.0	0.0
Total Delay	103.5	4.2	1.0	78.4	11.7	6.0	37.5	27.2	45.7	36.4	13.2
Queue Length 50th (ft)	~176	106	0	25	143	0	11	7	42	4	0
Queue Length 95th (ft)	#331	136	20	m#102	234	m87	33	24	73	19	41
Internal Link Dist (ft)		3033			324			1024		559	
Turn Bay Length (ft)	337		347	180		160					
Base Capacity (vph)	275	5831	1242	87	2772	998	366	865	305	340	356
Starvation Cap Reductn	0	0	0	0	547	141	0	0	0	0	0
Spillback Cap Reductn	0	71	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	1.04	0.41	0.17	0.83	0.77	0.60	0.06	0.06	0.50	0.03	0.23

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Lanes, Volumes, Timings
14: Sheridan St & I-95 W

2015 Background AM Peak

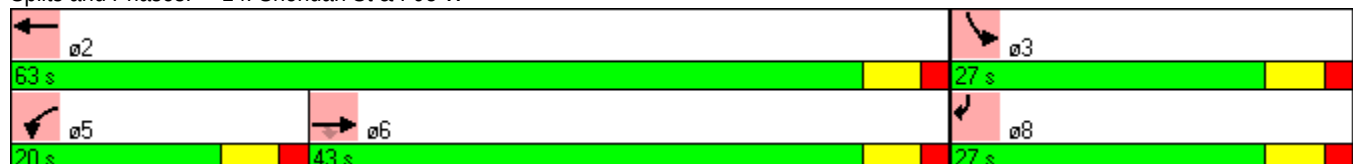
8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↖	↑↑↑					↖↖↖		↗↗
Volume (vph)	0	1368	699	475	1156	0	0	0	0	525	0	643
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	7544	1583	3433	5085	0	0	0	0	4990	0	2787
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	7544	1583	3433	5085	0	0	0	0	4990	0	2787
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			663									150
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		404			252			911			801	
Travel Time (s)		9.2			5.7			20.7			18.2	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	1487	760	516	1257	0	0	0	0	571	0	699
Turn Type			Perm	Prot						Prot		custom
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Total Split (s)	0.0	43.0	43.0	20.0	63.0	0.0	0.0	0.0	0.0	27.0	0.0	27.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)		39.0	39.0	16.7	59.7					22.3		22.3
Actuated g/C Ratio		0.43	0.43	0.19	0.66					0.25		0.25
v/c Ratio		0.45	0.72	0.81	0.37					0.46		0.87
Control Delay		19.3	14.6	33.9	12.1					30.0		38.4
Queue Delay		0.0	2.1	3.7	1.6					0.0		0.1
Total Delay		19.3	16.6	37.6	13.7					30.0		38.4
LOS		B	B	D	B					C		D
Approach Delay		18.4			20.6							
Approach LOS		B			C							

Intersection Summary

Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 0 (0%), Referenced to phase 2:WBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.87	
Intersection Signal Delay: 23.0	Intersection LOS: C
Intersection Capacity Utilization 149.7%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 14: Sheridan St & I-95 W



Queues
14: Sheridan St & I-95 W

2015 Background AM Peak

8/14/2013



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1487	760	516	1257	571	699
v/c Ratio	0.45	0.72	0.81	0.37	0.46	0.87
Control Delay	19.3	14.6	33.9	12.1	30.0	38.4
Queue Delay	0.0	2.1	3.7	1.6	0.0	0.1
Total Delay	19.3	16.6	37.6	13.7	30.0	38.4
Queue Length 50th (ft)	156	181	158	206	96	171
Queue Length 95th (ft)	186	386	#236	265	130	#276
Internal Link Dist (ft)	324			172		
Turn Bay Length (ft)						
Base Capacity (vph)	3269	1062	638	3375	1275	824
Starvation Cap Reductn	0	170	63	1865	0	0
Spillback Cap Reductn	78	0	0	0	0	2
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.47	0.85	0.90	0.83	0.45	0.85

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
17: Sheridan St & I-95 E

2015 Background AM Peak

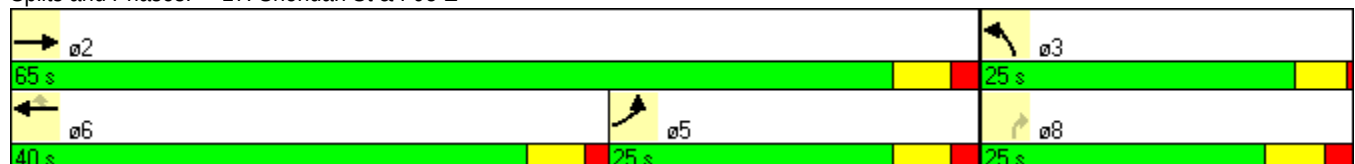
8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	 	  			   		  					
Volume (vph)	765	1101	0	0	1099	855	533	0	438	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	3433	5085	0	0	7544	1583	4990	0	1583	0	0	0
Flt Permitted	0.950						0.950					
Satd. Flow (perm)	3433	5085	0	0	7544	1583	4990	0	1583	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)						549			105			
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		252			328			940			778	
Travel Time (s)		5.7			7.5			21.4			17.7	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	832	1197	0	0	1195	929	579	0	476	0	0	0
Turn Type	Prot					Perm	Prot		custom			
Protected Phases	5	2			6		3					
Permitted Phases						6			8			
Total Split (s)	25.0	65.0	0.0	0.0	40.0	40.0	25.0	0.0	25.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	3.5	3.5	2.0	4.0	4.0	4.0	4.0	4.0
Act Effect Green (s)	21.0	61.0			36.5	36.5	23.0		21.0			
Actuated g/C Ratio	0.23	0.68			0.41	0.41	0.26		0.23			
v/c Ratio	1.04	0.35			0.39	0.96	0.45		1.06			
Control Delay	66.2	4.3			8.1	27.4	29.6		86.8			
Queue Delay	30.3	0.7			0.1	0.0	0.0		0.0			
Total Delay	96.4	5.0			8.2	27.4	29.6		86.8			
LOS	F	A			A	C	C		F			
Approach Delay		42.5			16.6							
Approach LOS		D			B							

Intersection Summary

Area Type:	Other
Cycle Length: 90	
Actuated Cycle Length: 90	
Offset: 72 (80%), Referenced to phase 2:EBT, Start of Green	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.06	
Intersection Signal Delay: 34.6	Intersection LOS: C
Intersection Capacity Utilization 149.7%	ICU Level of Service H
Analysis Period (min) 15	

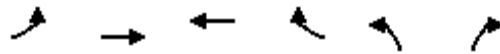
Splits and Phases: 17: Sheridan St & I-95 E



Queues
17: Sheridan St & I-95 E

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	832	1197	1195	929	579	476
v/c Ratio	1.04	0.35	0.39	0.96	0.45	1.06
Control Delay	66.2	4.3	8.1	27.4	29.6	86.8
Queue Delay	30.3	0.7	0.1	0.0	0.0	0.0
Total Delay	96.4	5.0	8.2	27.4	29.6	86.8
Queue Length 50th (ft)	~269	47	34	464	98	~250
Queue Length 95th (ft)	#355	57	m53	m#625	131	#442
Internal Link Dist (ft)		172	248			
Turn Bay Length (ft)						
Base Capacity (vph)	801	3447	3060	968	1275	450
Starvation Cap Reductn	56	1760	0	0	0	0
Spillback Cap Reductn	0	0	692	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.12	0.71	0.50	0.96	0.45	1.06

Intersection Summary

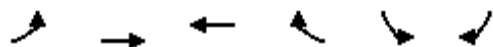
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	107	1173	1848	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	5085	5085	0	1863	0
Flt Permitted	0.950					
Satd. Flow (perm)	1770	5085	5085	0	1863	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		328	1352		331	
Travel Time (s)		7.5	30.7		7.5	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	116	1275	2009	0	0	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 48.3% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
21: Sheridan St & 56 Street

2015 Background AM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  		 	 		 		
Volume (vph)	82	1707	92	70	809	88	117	161	167	139	161	71
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	361		361	0		0
Storage Lanes	1		0	1		0	2		1	2		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	5045	0	1770	5009	0	3433	3270	0	3433	1863	1583
Flt Permitted	0.950			0.950			0.640			0.556		
Satd. Flow (perm)	1770	5045	0	1770	5009	0	2313	3270	0	2009	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			32			182				77
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2636			3315			3795			1079	
Travel Time (s)		59.9			75.3			86.3			24.5	
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
Shared Lane Traffic (%)												
Lane Group Flow (vph)	89	1955	0	76	975	0	127	357	0	151	175	77
Turn Type	Prot			Prot			pm+pt			pm+pt		Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases							4			8		8
Total Split (s)	14.0	31.0	0.0	11.0	28.0	0.0	10.0	13.0	0.0	10.0	13.0	13.0
Total Lost Time (s)	6.0	5.0	4.0	6.0	5.0	4.0	6.0	6.0	4.0	6.0	6.0	6.0
Act Effect Green (s)	7.4	26.6		5.1	24.5		10.2	7.2		10.2	7.2	7.2
Actuated g/C Ratio	0.12	0.44		0.08	0.40		0.17	0.12		0.17	0.12	0.12
v/c Ratio	0.41	0.88		0.51	0.48		0.27	0.65		0.35	0.80	0.30
Control Delay	32.9	24.2		43.2	15.7		20.4	20.6		21.3	58.0	11.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	32.9	24.2		43.2	15.7		20.4	20.6		21.3	58.0	11.2
LOS	C	C		D	B		C	C		C	E	B
Approach Delay		24.6			17.7			20.5			35.3	
Approach LOS		C			B			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 60.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 23.4

Intersection LOS: C

Intersection Capacity Utilization 72.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 21: Sheridan St & 56 Street

 ø1	 ø2	 ø3	 ø4
14 s	28 s	10 s	13 s
 ø6	 ø5	 ø7	 ø8
31 s	11 s	10 s	13 s