

Queues
21: Sheridan St & 56 Street

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	89	1955	76	975	127	357	151	175	77
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
Queue Length 50th (ft)	33	265	30	106	19	35	23	70	0
Queue Length 95th (ft)	73	#383	#82	143	38	#77	44	#172	34
Internal Link Dist (ft)		2556		3235		3715		999	
Turn Bay Length (ft)					361				
Base Capacity (vph)	239	2219	149	2040	462	547	432	220	255
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	0.37	0.88	0.51	0.48	0.27	0.65	0.35	0.80	0.30

Intersection Summary

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

2015 Background AM Peak
8/14/2013

									
Lane Group	WBL	WBR	NBL	NBR	SEL	SER	SWL2	SWL	SWR
Lane Configurations			 						
Volume (vph)	3	16	0	3	82	0	4	0	621
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1611	3072	0	0	3278	0	1613	0
Flt Permitted	0.950				0.950				
Satd. Flow (perm)	0	1611	3072	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	
Peak Hour Factor	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)	3	17	3	0	89	0	0	679	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

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)	328	1254	56	48	1258	190	313	238	74	149	81	136
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			0.173			0.501			0.392		
Satd. Flow (perm)	1770	5055	0	322	5085	1583	933	1798	0	730	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10				207		16				146
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	
Peak Hour Factor	0.91	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93
Shared Lane Traffic (%)												
Lane Group Flow (vph)	360	1440	0	52	1367	207	340	339	0	160	87	146
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)	26.0	45.0	0.0	11.0	30.0	30.0	18.0	24.0	0.0	10.0	16.0	16.0
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)	21.4	44.8		26.6	26.0	24.0	30.6	20.6		18.6	12.6	12.6
Actuated g/C Ratio	0.24	0.50		0.30	0.29	0.27	0.34	0.23		0.21	0.14	0.14
v/c Ratio	0.86	0.57		0.25	0.93	0.36	0.76	0.80		0.73	0.33	0.42
Control Delay	47.6	17.2		32.3	43.4	5.8	37.7	47.3		45.8	39.4	10.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	47.6	17.2		32.3	43.4	5.8	37.7	47.3		45.8	39.4	10.5
LOS	D	B		C	D	A	D	D		D	D	B
Approach Delay		23.3			38.2			42.5			31.2	
Approach LOS		C			D			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 78 (87%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 32.3

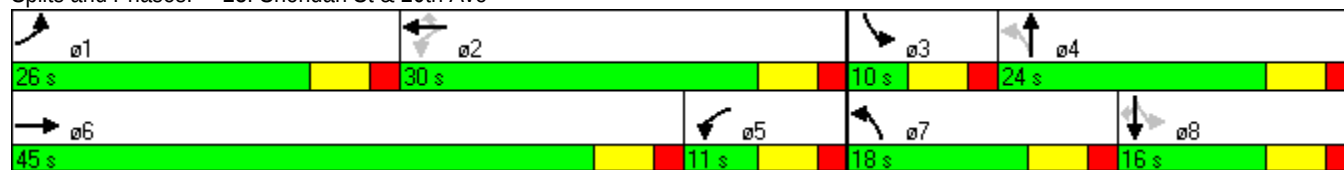
Intersection LOS: C

Intersection Capacity Utilization 81.1%

ICU Level of Service D

Analysis Period (min) 15

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



Queues
23: Sheridan St & 26th Ave

2015 Background AM Peak

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Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	360	1440	52	1367	207	340	339	160	87	146
v/c Ratio	0.86	0.57	0.25	0.93	0.36	0.76	0.80	0.73	0.33	0.42
Control Delay	47.6	17.2	32.3	43.4	5.8	37.7	47.3	45.8	39.4	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	17.2	32.3	43.4	5.8	37.7	47.3	45.8	39.4	10.5
Queue Length 50th (ft)	176	217	21	273	3	158	176	66	46	0
Queue Length 95th (ft)	m#289	m247	m48	#371	49	#276	#319	#125	91	53
Internal Link Dist (ft)		1272		3039			3745		616	
Turn Bay Length (ft)	600		228			150		295		295
Base Capacity (vph)	433	2519	208	1469	574	448	425	220	261	348
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	0.83	0.57	0.25	0.93	0.36	0.76	0.80	0.73	0.33	0.42

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

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)	222	882	240	76	126	131	0	0	0	22	115	75
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	0.555			0.950							0.995	
Satd. Flow (perm)	1034	3539	1583	1770	3270	0	0	0	0	0	3335	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			261		142						82	
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	
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)	241	959	261	83	279	0	0	0	0	0	231	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)	18.0	41.0	41.0	14.0	23.0	0.0	0.0	0.0	0.0	12.0	12.0	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)	31.0	36.0	36.0	8.2	30.0						8.0	
Actuated g/C Ratio	0.34	0.40	0.40	0.09	0.33						0.09	
v/c Ratio	0.53	0.68	0.33	0.52	0.24						0.62	
Control Delay	9.7	8.3	0.9	39.5	7.0						33.3	
Queue Delay	0.0	0.0	0.0	0.0	0.9						0.0	
Total Delay	9.7	8.3	0.9	39.5	7.9						33.3	
LOS	A	A	A	D	A						C	
Approach Delay		7.2			15.2						33.3	
Approach LOS		A			B						C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

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

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.77

Intersection Signal Delay: 11.6

Intersection LOS: B

Intersection Capacity Utilization 46.5%

ICU Level of Service A

Analysis Period (min) 15

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

2015 Background AM Peak

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

#26 ø1 18 s	#26 #48 ø2 23 s	#26 #48 ø5 14 s	#48 ø8 23 s	
#26 #48 ø6 41 s				#26 ø7 12 s

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)	
Peak Hour Factor	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	8
Permitted Phases	
Total Split (s)	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
26: Sheridan St & Dixie Hwy SB

2015 Background AM Peak
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Lane Group	EBL	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	241	959	261	83	279	231
v/c Ratio	0.53	0.68	0.33	0.52	0.24	0.62
Control Delay	9.7	8.3	0.9	39.5	7.0	33.3
Queue Delay	0.0	0.0	0.0	0.0	0.9	0.0
Total Delay	9.7	8.3	0.9	39.5	7.9	33.3
Queue Length 50th (ft)	26	53	0	48	10	43
Queue Length 95th (ft)	m38	64	m0	m65	m22	81
Internal Link Dist (ft)		3039			140	844
Turn Bay Length (ft)	225					
Base Capacity (vph)	473	1416	790	177	1185	371
Starvation Cap Reductn	0	0	0	0	649	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.68	0.33	0.47	0.52	0.62

Intersection Summary

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

Lanes, Volumes, Timings
27: Taft Street & 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)	71	291	41	24	189	33	28	277	15	64	264	16
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	1827	0	1770	1822	0	1770	3511	0	0	3483	0
Flt Permitted	0.609			0.411			0.530				0.829	
Satd. Flow (perm)	1134	1827	0	766	1822	0	987	3511	0	0	2913	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		17			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	
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)	77	361	0	26	241	0	30	317	0	0	374	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	0.18	0.51		0.05	0.30		0.11	0.30			0.42	
Control Delay	10.3	12.4		4.9	7.0		13.1	11.3			12.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	10.3	12.4		4.9	7.0		13.1	11.3			12.7	
LOS	B	B		A	A		B	B			B	
Approach Delay		12.0			6.8			11.5			12.7	
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: 0.51

Intersection Signal Delay: 11.1

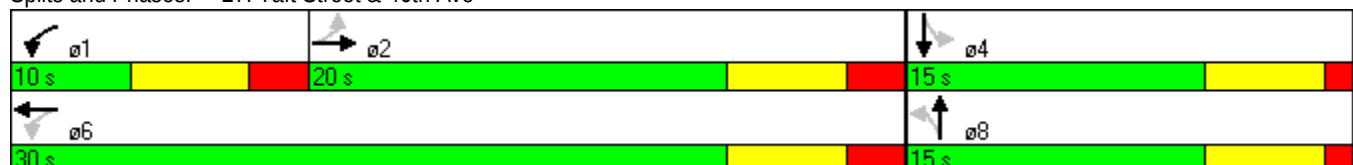
Intersection LOS: B

Intersection Capacity Utilization 54.8%

ICU Level of Service A

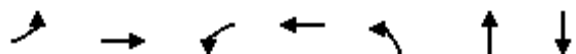
Analysis Period (min) 15

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



Queues
27: Taft Street & 46th Ave

2015 Background AM Peak
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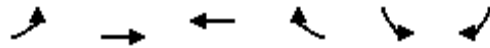
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	77	361	26	241	30	317	374
v/c Ratio	0.18	0.51	0.05	0.30	0.11	0.30	0.42
Control Delay	10.3	12.4	4.9	7.0	13.1	11.3	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.3	12.4	4.9	7.0	13.1	11.3	12.7
Queue Length 50th (ft)	9	44	2	25	4	22	27
Queue Length 95th (ft)	39	141	9	52	22	61	74
Internal Link Dist (ft)		3298		1898		2582	3730
Turn Bay Length (ft)	96		85		210		
Base Capacity (vph)	434	709	533	1204	269	1062	882
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	0.18	0.51	0.05	0.20	0.11	0.30	0.42
Intersection Summary							

						
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	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
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

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	35	283	322	15	12	126
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	0.376				0.950	
Satd. Flow (perm)	700	1863	1852	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			7			137
Link Speed (mph)		30	30		30	
Link Distance (ft)		1537	578		2152	
Travel Time (s)		34.9	13.1		48.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	38	308	366	0	13	137
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	0.49		0.02	0.26
Control Delay	3.9	6.2	11.0		10.2	4.9
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	3.9	6.2	11.0		10.2	4.9
LOS	A	A	B		B	A
Approach Delay		6.0	11.0		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: 0.49

Intersection Signal Delay: 8.0

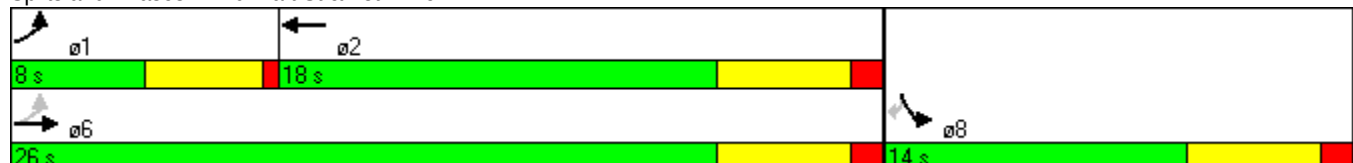
Intersection LOS: A

Intersection Capacity Utilization 36.2%

ICU Level of Service A

Analysis Period (min) 15

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

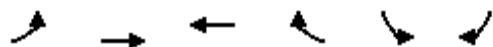


Queues
29: Taft St & 28th Ave

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	38	308	366	13	137
v/c Ratio	0.07	0.34	0.49	0.02	0.26
Control Delay	3.9	6.2	11.0	10.2	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.9	6.2	11.0	10.2	4.9
Queue Length 50th (ft)	3	28	34	1	0
Queue Length 95th (ft)	9	56	115	10	29
Internal Link Dist (ft)		1457	498	2072	
Turn Bay Length (ft)	91				
Base Capacity (vph)	520	1309	852	595	535
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	0.24	0.43	0.02	0.26
Intersection Summary					



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	3	275	427	0	4	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			50	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25			25	25	25
Satd. Flow (prot)	1770	1863	1863	1863	1770	1583
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	1770	1863	1863	1863	1770	1583
Link Speed (mph)		30	30		30	
Link Distance (ft)		2557	1537		1232	
Travel Time (s)		58.1	34.9		28.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	3	299	464	0	4	4
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 32.5% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
31: Taft 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)	95	190	55	94	144	129	42	412	135	130	355	157
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	0.633			0.511			0.377			0.455		
Satd. Flow (perm)	1179	1863	1583	952	1863	1583	702	3539	1583	848	3376	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			60			140			147		115	
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	
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)	103	207	60	102	157	140	46	448	147	141	557	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)	16.9	13.9	13.9	16.9	13.6	13.6	23.7	21.4	21.4	24.5	23.2	
Actuated g/C Ratio	0.33	0.27	0.27	0.33	0.27	0.27	0.47	0.42	0.42	0.48	0.46	
v/c Ratio	0.22	0.41	0.13	0.24	0.31	0.27	0.10	0.30	0.20	0.26	0.35	
Control Delay	11.9	21.2	6.4	12.2	20.1	5.5	11.1	17.1	4.7	13.3	13.3	
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	11.9	21.2	6.4	12.2	20.1	5.5	11.1	17.1	4.7	13.3	13.3	
LOS	B	C	A	B	C	A	B	B	A	B	B	
Approach Delay		16.2			13.0			13.8			13.3	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 50.9

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.41

Intersection Signal Delay: 13.9

Intersection LOS: B

Intersection Capacity Utilization 47.1%

ICU Level of Service A

Analysis Period (min) 15

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

			
20 s	10 s	10 s	20 s
			
20 s	10 s	10 s	20 s

Queues
31: Taft St & N Park Rd

2015 Background AM Peak
8/14/2013

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	103	207	60	102	157	140	46	448	147	141	557
v/c Ratio	0.22	0.41	0.13	0.24	0.31	0.27	0.10	0.30	0.20	0.26	0.35
Control Delay	11.9	21.2	6.4	12.2	20.1	5.5	11.1	17.1	4.7	13.3	13.3
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	11.9	21.2	6.4	12.2	20.1	5.5	11.1	17.1	4.7	13.3	13.3
Queue Length 50th (ft)	21	62	0	21	45	0	8	66	0	27	65
Queue Length 95th (ft)	46	114	23	46	89	35	25	110	36	60	115
Internal Link Dist (ft)	1277			2477			2588			2028	
Turn Bay Length (ft)	168		168	250		151	192		110	160	
Base Capacity (vph)	473	685	620	429	685	671	474	1488	751	535	1603
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	0.22	0.30	0.10	0.24	0.23	0.21	0.10	0.30	0.20	0.26	0.35
Intersection Summary											

Lanes, Volumes, Timings
35: Taft St & N 35th Ave

2015 Background AM Peak

8/14/2013

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↗		↖	↗	↖	↗
Volume (vph)	250	223	182	148	61	80
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			0.439		0.950	
Satd. Flow (perm)	1744	0	818	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	188					87
Link Speed (mph)	30			30	30	
Link Distance (ft)	1556			1357	713	
Travel Time (s)	35.4			30.8	16.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	514	0	198	161	66	87
Turn Type			Perm			Perm
Protected Phases	2			6	4	
Permitted Phases			6			4
Total Split (s)	26.0	0.0	26.0	26.0	14.0	14.0
Total Lost Time (s)	3.0	4.0	3.0	3.0	3.0	3.0
Act Effect Green (s)	30.0		30.0	30.0	9.5	9.5
Actuated g/C Ratio	0.76		0.76	0.76	0.24	0.24
v/c Ratio	0.38		0.32	0.11	0.16	0.20
Control Delay	3.4		5.8	3.5	12.4	4.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	3.4		5.8	3.5	12.4	4.9
LOS	A		A	A	B	A
Approach Delay	3.4			4.8	8.1	
Approach LOS	A			A	A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 39.7

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.38

Intersection Signal Delay: 4.6

Intersection LOS: A

Intersection Capacity Utilization 55.1%

ICU Level of Service B

Analysis Period (min) 15

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

→ ø2	↖ ø4
26 s	14 s
← ø6	
26 s	

Queues
35: Taft St & N 35th Ave

2015 Background AM Peak
8/14/2013

	→	↙	←	↖	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	514	198	161	66	87
v/c Ratio	0.38	0.32	0.11	0.16	0.20
Control Delay	3.4	5.8	3.5	12.4	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.4	5.8	3.5	12.4	4.9
Queue Length 50th (ft)	25	16	11	11	0
Queue Length 95th (ft)	68	53	30	31	21
Internal Link Dist (ft)	1476		1277	633	
Turn Bay Length (ft)		85			
Base Capacity (vph)	1364	618	1408	491	502
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	0.38	0.32	0.11	0.13	0.17
Intersection Summary					

Lanes, Volumes, Timings
37: Taft St & 26 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)	54	172	42	9	212	39	67	208	7	8	112	42
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	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Satd. Flow (prot)	1770	1807	0	1770	1820	0	1770	1853	0	1770	1786	0
Flt Permitted	0.592			0.613			0.651			0.613		
Satd. Flow (perm)	1103	1807	0	1142	1820	0	1213	1853	0	1142	1786	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		34			25			5			46	
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	
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)	59	233	0	10	272	0	73	234	0	9	168	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		9.9	9.9		17.4	17.4		17.4	17.4	
Actuated g/C Ratio	0.28	0.28		0.29	0.29		0.50	0.50		0.50	0.50	
v/c Ratio	0.19	0.44		0.03	0.51		0.12	0.25		0.02	0.18	
Control Delay	11.2	11.6		9.2	13.3		9.0	9.2		8.2	7.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.2	11.6		9.2	13.3		9.0	9.2		8.2	7.1	
LOS	B	B		A	B		A	A		A	A	
Approach Delay		11.6			13.1			9.2			7.2	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 34.6

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.51

Intersection Signal Delay: 10.5

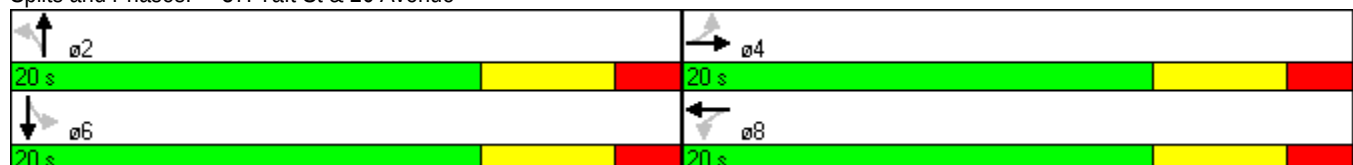
Intersection LOS: B

Intersection Capacity Utilization 51.6%

ICU Level of Service A

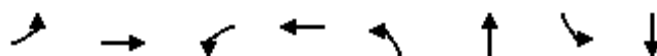
Analysis Period (min) 15

Splits and Phases: 37: Taft St & 26 Avenue



Queues
37: Taft St & 26 Avenue

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	59	233	10	272	73	234	9	168
v/c Ratio	0.19	0.44	0.03	0.51	0.12	0.25	0.02	0.18
Control Delay	11.2	11.6	9.2	13.3	9.0	9.2	8.2	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	11.2	11.6	9.2	13.3	9.0	9.2	8.2	7.1
Queue Length 50th (ft)	9	31	1	40	9	29	1	15
Queue Length 95th (ft)	26	69	8	84	30	76	7	48
Internal Link Dist (ft)		708		3038		622		3745
Turn Bay Length (ft)	110		110					
Base Capacity (vph)	460	773	476	773	611	935	575	922
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	0.13	0.30	0.02	0.35	0.12	0.25	0.02	0.18
Intersection Summary								

Lanes, Volumes, Timings
43: Taft 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)	234	305	246	60	210	33	106	1106	49	40	925	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	220		50	399		50	100		50	0		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	0.343			0.399			0.131			0.135		
Satd. Flow (perm)	639	1863	1583	743	1863	1583	244	3539	1583	251	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			146			27			19			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	
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)	254	332	267	65	228	36	115	1202	53	43	1146	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)	13.0	21.0	21.0	10.0	18.0	18.0	10.0	34.0	34.0	10.0	34.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	4.0
Act Effect Green (s)	22.9	17.1	17.1	16.3	11.7	11.7	33.2	30.6	30.6	32.2	28.7	
Actuated g/C Ratio	0.32	0.24	0.24	0.23	0.16	0.16	0.46	0.42	0.42	0.45	0.40	
v/c Ratio	0.79	0.75	0.55	0.28	0.75	0.13	0.55	0.80	0.08	0.21	0.82	
Control Delay	40.9	41.2	17.4	20.9	47.0	14.8	21.6	25.0	11.0	11.8	26.4	
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	40.9	41.2	17.4	20.9	47.0	14.8	21.6	25.0	11.0	11.8	26.4	
LOS	D	D	B	C	D	B	C	C	B	B	C	
Approach Delay		33.7			38.3			24.2			25.8	
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 72.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.82

Intersection Signal Delay: 28.1

Intersection LOS: C

Intersection Capacity Utilization 77.9%

ICU Level of Service D

Analysis Period (min) 15

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

			
10 s	34 s	10 s	21 s
			
10 s	34 s	13 s	18 s

Queues
43: Taft 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)	254	332	267	65	228	36	115	1202	53	43	1146
v/c Ratio	0.79	0.75	0.55	0.28	0.75	0.13	0.55	0.80	0.08	0.21	0.82
Control Delay	40.9	41.2	17.4	20.9	47.0	14.8	21.6	25.0	11.0	11.8	26.4
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	40.9	41.2	17.4	20.9	47.0	14.8	21.6	25.0	11.0	11.8	26.4
Queue Length 50th (ft)	90	150	49	20	102	4	26	269	10	9	246
Queue Length 95th (ft)	#166	#290	123	46	#202	28	#63	#396	31	24	#365
Internal Link Dist (ft)		1915			2514			905			3733
Turn Bay Length (ft)	220		50	399		50	100		50		
Base Capacity (vph)	320	441	486	231	325	298	208	1499	681	207	1394
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	0.79	0.75	0.55	0.28	0.70	0.12	0.55	0.80	0.08	0.21	0.82

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

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)	42	306	26	26	203	24	28	289	36	22	198	31
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	1840	0	1770	1833	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.606			0.488			0.624			0.570		
Satd. Flow (perm)	1129	1840	0	909	1833	0	1162	1863	1583	1062	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			17				39			34
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	
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)	46	361	0	28	247	0	30	314	39	24	215	34
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	0.59		0.09	0.40		0.06	0.42	0.06	0.06	0.29	0.05
Control Delay	9.4	14.4		9.2	11.1		8.3	10.8	3.9	8.4	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	9.4	14.4		9.2	11.1		8.3	10.8	3.9	8.4	9.5	4.1
LOS	A	B		A	B		A	B	A	A	A	A
Approach Delay		13.8			10.9			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: 0.59

Intersection Signal Delay: 11.1

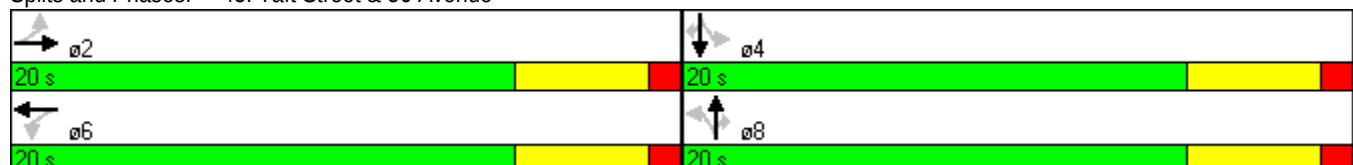
Intersection LOS: B

Intersection Capacity Utilization 61.2%

ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 45: Taft Street & 56 Avenue



Queues
45: Taft Street & 56 Avenue

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	46	361	28	247	30	314	39	24	215	34
v/c Ratio	0.12	0.59	0.09	0.40	0.06	0.42	0.06	0.06	0.29	0.05
Control Delay	9.4	14.4	9.2	11.1	8.3	10.8	3.9	8.4	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	9.4	14.4	9.2	11.1	8.3	10.8	3.9	8.4	9.5	4.1
Queue Length 50th (ft)	6	57	4	35	3	42	0	3	27	0
Queue Length 95th (ft)	21	112	15	73	15	99	12	13	67	11
Internal Link Dist (ft)	2514		3298		1168		3715			
Turn Bay Length (ft)	95									
Base Capacity (vph)	455	748	366	748	468	750	661	428	750	658
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	0.48	0.08	0.33	0.06	0.42	0.06	0.06	0.29	0.05
Intersection Summary										

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

2015 Background AM Peak

8/14/2013

	→	↘	↙	←	↖	↗			
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø5	ø7
Lane Configurations	↑↑			↑↑↑	↖↗	↗			
Volume (vph)	908	0	4	1025	406	231			
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)						251			
Link Speed (mph)	30			30	30				
Link Distance (ft)	220			165	3812				
Travel Time (s)	5.0			3.8	86.6				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92			
Shared Lane Traffic (%)									
Lane Group Flow (vph)	987	0	0	1118	441	251			
Turn Type			Perm		Prot				
Protected Phases	6			2	8	8	1	5	7
Permitted Phases	2		2	5					
Total Split (s)	41.0	0.0	23.0	23.0	23.0	23.0	18.0	14.0	12.0
Total Lost Time (s)	5.0	4.0	5.0	5.0	5.0	5.0			
Act Effect Green (s)	36.0			26.0	21.0	21.0			
Actuated g/C Ratio	0.40			0.29	0.23	0.23			
v/c Ratio	0.70			0.77	0.55	0.45			
Control Delay	3.6			18.4	34.6	7.1			
Queue Delay	0.0			0.0	0.0	0.0			
Total Delay	3.6			18.4	34.6	7.1			
LOS	A			B	C	A			
Approach Delay	3.6			18.4	24.6				
Approach LOS	A			B	C				

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 2 (2%), Referenced to phase 2:EBWB, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 14.7
Intersection Capacity Utilization 47.7%
Analysis Period (min) 15

Intersection LOS: B

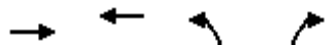
ICU Level of Service A

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

#26 ↖ ø1 18 s	#26 #48 ← ø2 23 s	#26 #48 ↖ ø5 14 s	#48 ↗ ø8 23 s	
#26 #48 → ø6 41 s				#26 ↖ ø7 12 s

Queues
48: Sheridan Street & Dixie Hwy NB

2015 Background AM Peak
8/14/2013



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	987	1118	441	251
v/c Ratio	0.70	0.77	0.55	0.45
Control Delay	3.6	18.4	34.6	7.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	3.6	18.4	34.6	7.1
Queue Length 50th (ft)	12	76	119	0
Queue Length 95th (ft)	12	m97	169	61
Internal Link Dist (ft)	140	85	3732	
Turn Bay Length (ft)				
Base Capacity (vph)	1416	1445	801	561
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.70	0.77	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

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)	344	470	111	117	515	197	241	944	67	165	524	99
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	3437	0	1770	3539	1583	1770	3504	0	1770	3454	0
Flt Permitted	0.211			0.412			0.232			0.141		
Satd. Flow (perm)	393	3437	0	767	3539	1583	432	3504	0	263	3454	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31				187		9			25	
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	
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)	374	632	0	127	560	214	262	1099	0	179	678	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)	20.0	30.0	0.0	11.0	21.0	21.0	15.0	39.0	0.0	10.0	34.0	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)	37.0	24.1		23.9	15.0	15.0	44.9	33.0		36.3	28.3	
Actuated g/C Ratio	0.41	0.27		0.27	0.17	0.17	0.50	0.37		0.40	0.31	
v/c Ratio	0.92	0.67		0.45	0.95	0.51	0.70	0.85		0.86	0.61	
Control Delay	43.5	11.4		23.7	65.0	12.3	24.6	33.9		54.5	28.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	43.5	11.4		23.7	65.0	12.3	24.6	33.9		54.5	28.1	
LOS	D	B		C	E	B	C	C		D	C	
Approach Delay		23.3			46.6			32.1			33.6	
Approach LOS		C			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 86 (96%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 33.5

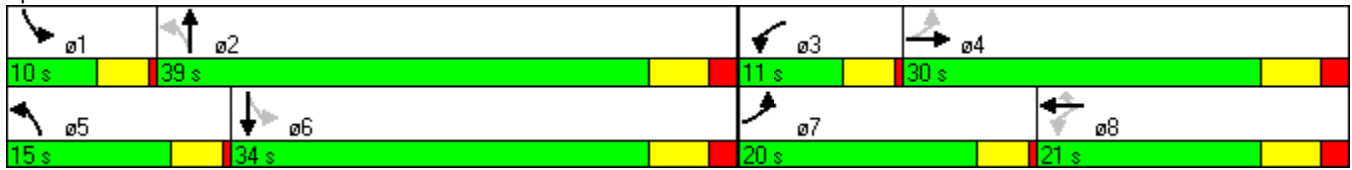
Intersection LOS: C

Intersection Capacity Utilization 87.3%

ICU Level of Service E

Analysis Period (min) 15

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



Queues
49: Sheridan Street & US-1

2015 Background AM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	374	632	127	560	214	262	1099	179	678
v/c Ratio	0.92	0.67	0.45	0.95	0.51	0.70	0.85	0.86	0.61
Control Delay	43.5	11.4	23.7	65.0	12.3	24.6	33.9	54.5	28.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.5	11.4	23.7	65.0	12.3	24.6	33.9	54.5	28.1
Queue Length 50th (ft)	78	87	45	167	13	83	295	54	165
Queue Length 95th (ft)	#303	127	82	#270	76	#139	#387	#166	224
Internal Link Dist (ft)		1729		676			3735		706
Turn Bay Length (ft)	195		280		280	224		238	
Base Capacity (vph)	406	942	283	590	420	380	1291	207	1105
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	0.67	0.45	0.95	0.51	0.69	0.85	0.86	0.61

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

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)	28	16	57	22	19	25	59	833	14	26	767	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3532	0	1770	1853	0
Flt Permitted							0.269			0.310		
Satd. Flow (perm)	1863	1863	1583	1863	1863	1583	501	3532	0	577	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			62			27		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	
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)	30	17	62	24	21	27	64	920	0	28	861	0
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Total Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	34.0	34.0	0.0	34.0	34.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Act Effect Green (s)	6.0	6.0	6.0	6.0	6.0	6.0	36.7	36.7		36.7	36.7	
Actuated g/C Ratio	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79		0.79	0.79	
v/c Ratio	0.12	0.07	0.24	0.10	0.09	0.12	0.16	0.33		0.06	0.59	
Control Delay	18.7	17.9	8.8	18.3	18.2	9.7	4.4	3.2		3.4	6.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	18.7	17.9	8.8	18.3	18.2	9.7	4.4	3.2		3.4	6.4	
LOS	B	B	A	B	B	A	A	A		A	A	
Approach Delay		12.9			15.0			3.3			6.3	
Approach LOS		B			B			A			A	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 46.6

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.59

Intersection Signal Delay: 5.5

Intersection LOS: A

Intersection Capacity Utilization 65.6%

ICU Level of Service C

Analysis Period (min) 15

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



Queues
53: Taft Street & US-1

2015 Background AM Peak

8/14/2013

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	17	62	24	21	27	64	920	28	861
v/c Ratio	0.12	0.07	0.24	0.10	0.09	0.12	0.16	0.33	0.06	0.59
Control Delay	18.7	17.9	8.8	18.3	18.2	9.7	4.4	3.2	3.4	6.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.7	17.9	8.8	18.3	18.2	9.7	4.4	3.2	3.4	6.4
Queue Length 50th (ft)	7	4	0	6	5	0	5	45	2	111
Queue Length 95th (ft)	24	17	24	21	19	16	17	68	8	217
Internal Link Dist (ft)	1932			578			662			3735
Turn Bay Length (ft)										
Base Capacity (vph)	240	240	258	240	240	228	394	2780	454	1459
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	0.13	0.07	0.24	0.10	0.09	0.12	0.16	0.33	0.06	0.59
Intersection Summary										

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Volume (vph)	1975	11	0	1328	0	38
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	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	2159	0	0	1443	0	41
Sign Control	Free			Free	Stop	
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization	48.4%			ICU Level of Service A		
Analysis Period (min)	15					

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

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	120	57	36	159	0	0	0	0	45	373	13
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				0.563						0.950		
Satd. Flow (perm)	0	3369	0	1049	1863	0	0	0	0	1770	5060	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		62									5	
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	
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	192	0	39	173	0	0	0	0	49	419	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)		9.6		16.3	18.6					5.1	12.0	
Actuated g/C Ratio		0.16		0.28	0.32					0.09	0.21	
v/c Ratio		0.32		0.10	0.29					0.32	0.40	
Control Delay		17.0		7.1	9.1					34.0	14.1	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		17.0		7.1	9.1					34.0	14.1	
LOS		B		A	A					C	B	
Approach Delay		17.0			8.8						16.2	
Approach LOS		B			A						B	

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 58.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 14.6

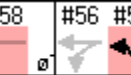
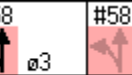
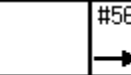
Intersection LOS: B

Intersection Capacity Utilization 32.1%

ICU Level of Service A

Analysis Period (min) 15

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

#56 #58 	#56 #58 	#56 #58 	#58 	#56 #58 	#56 
14 s	9 s	12 s	20 s	20 s	20 s

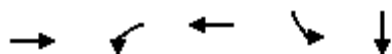
Lane Group	ø3	ø4
Lane Configurations		
Volume (vph)		
Ideal Flow (vphpl)		
Satd. Flow (prot)		
Flt Permitted		
Satd. Flow (perm)		
Right Turn on Red		
Satd. Flow (RTOR)		
Link Speed (mph)		
Link Distance (ft)		
Travel Time (s)		
Peak Hour Factor		
Shared Lane Traffic (%)		
Lane Group Flow (vph)		
Turn Type		
Protected Phases	3	4
Permitted Phases		
Total Split (s)	12.0	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

2015 Background AM Peak

56: Taft Street & Dixie Hwy SB

8/14/2013



Lane Group	EBT	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	192	39	173	49	419
v/c Ratio	0.32	0.10	0.29	0.32	0.40
Control Delay	17.0	7.1	9.1	34.0	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	17.0	7.1	9.1	34.0	14.1
Queue Length 50th (ft)	22	3	12	17	26
Queue Length 95th (ft)	49	m7	m43	50	47
Internal Link Dist (ft)	3038		138		2690
Turn Bay Length (ft)					
Base Capacity (vph)	985	406	595	154	1653
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	0.19	0.10	0.29	0.32	0.25

Intersection Summary

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

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

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)	53	112	0	0	152	15	37	522	20	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	0.638							0.997				
Satd. Flow (perm)	1188	1863	0	0	3493	0	0	5045	0	0	0	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					9			6				
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	
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)	58	122	0	0	181	0	0	629	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)	9.6	9.6			14.1			7.1				
Actuated g/C Ratio	0.16	0.16			0.24			0.12				
v/c Ratio	0.30	0.40			0.21			1.01				
Control Delay	14.2	14.4			17.7			70.4				
Queue Delay	0.0	0.0			0.0			0.0				
Total Delay	14.2	14.4			17.7			70.4				
LOS	B	B			B			E				
Approach Delay		14.4			17.7			70.4				
Approach LOS		B			B			E				

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 58.3

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 50.6

Intersection LOS: D

Intersection Capacity Utilization 32.1%

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)			
Peak Hour Factor			
Shared Lane Traffic (%)			
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			



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	58	122	181	629
v/c Ratio	0.30	0.40	0.21	1.01
Control Delay	14.2	14.4	17.7	70.4
Queue Delay	0.0	0.0	0.0	0.0
Total Delay	14.2	14.4	17.7	70.4
Queue Length 50th (ft)	12	26	24	~95
Queue Length 95th (ft)	27	46	52	#187
Internal Link Dist (ft)		138	1932	1320
Turn Bay Length (ft)				
Base Capacity (vph)	331	520	850	621
Starvation Cap Reductn	0	18	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.18	0.24	0.21	1.01

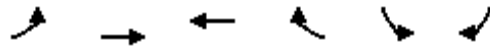
Intersection Summary

- ~ 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
65: Johnson Street & 37th Avenue

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	210	458	297	116	30	98
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	0.565				0.988	
Satd. Flow (perm)	1052	1863	1863	1583	1651	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				126	107	
Link Speed (mph)		30	30		30	
Link Distance (ft)		927	1696		545	
Travel Time (s)		21.1	38.5		12.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	228	498	323	126	140	0
Turn Type	Perm			Perm		
Protected Phases		4	8		6	
Permitted Phases	4			8		
Total Split (s)	20.0	20.0	20.0	20.0	20.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0
Act Effect Green (s)	13.2	13.2	13.2	13.2	14.0	
Actuated g/C Ratio	0.34	0.34	0.34	0.34	0.36	
v/c Ratio	0.65	0.80	0.52	0.20	0.21	
Control Delay	22.3	24.3	13.9	3.5	4.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	22.3	24.3	13.9	3.5	4.7	
LOS	C	C	B	A	A	
Approach Delay		23.7	11.0		4.7	
Approach LOS		C	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 39.2

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 17.3

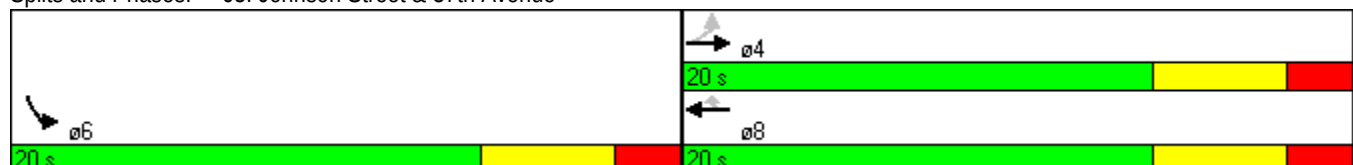
Intersection LOS: B

Intersection Capacity Utilization 50.0%

ICU Level of Service A

Analysis Period (min) 15

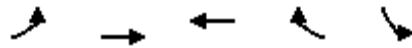
Splits and Phases: 65: Johnson Street & 37th Avenue



Queues
65: Johnson Street & 37th Avenue

2015 Background AM Peak

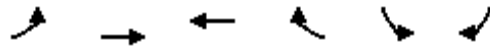
8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	228	498	323	126	140
v/c Ratio	0.65	0.80	0.52	0.20	0.21
Control Delay	22.3	24.3	13.9	3.5	4.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	22.3	24.3	13.9	3.5	4.7
Queue Length 50th (ft)	40	94	54	0	5
Queue Length 95th (ft)	#117	#218	107	22	29
Internal Link Dist (ft)		847	1616		465
Turn Bay Length (ft)	200			190	
Base Capacity (vph)	376	666	666	647	659
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	0.61	0.75	0.48	0.19	0.21

Intersection Summary

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



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	15	588	393	18	54	24
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	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	639	447	0	59	26
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 40.9% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
71: Johnson Street & 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)	29	368	36	72	284	54	21	225	87	112	231	23
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	0.408			0.396			0.596			0.401		
Satd. Flow (perm)	760	1839	0	738	1818	0	1110	3391	0	747	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			19			78				25
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	
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)	32	439	0	78	368	0	23	340	0	122	251	25
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		12.8	7.8		15.6	14.8	14.8
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		0.19	0.50		0.08	0.67		0.46	0.29	0.06
Control Delay	6.8	15.1		7.8	15.6		16.5	26.2		25.4	20.6	10.4
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	6.8	15.1		7.8	15.6		16.5	26.2		25.4	20.6	10.4
LOS	A	B		A	B		B	C		C	C	B
Approach Delay		14.5			14.2			25.5			21.5	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 59.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.67

Intersection Signal Delay: 18.5

Intersection LOS: B

Intersection Capacity Utilization 57.4%

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

2015 Background AM Peak

8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	32	439	78	368	23	340	122	251	25
v/c Ratio	0.07	0.51	0.19	0.50	0.08	0.67	0.46	0.29	0.06
Control Delay	6.8	15.1	7.8	15.6	16.5	26.2	25.4	20.6	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	15.1	7.8	15.6	16.5	26.2	25.4	20.6	10.4
Queue Length 50th (ft)	5	117	12	90	6	47	34	36	0
Queue Length 95th (ft)	15	198	28	158	20	85	#83	79	19
Internal Link Dist (ft)		849		2138		631		2582	
Turn Bay Length (ft)									
Base Capacity (vph)	449	856	415	742	293	522	263	875	410
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	0.19	0.50	0.08	0.65	0.46	0.29	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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	134	1304	126	137	1926	118	261	320	107	229	302	189
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
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	0.95	0.97	0.95	1.00
Frt		0.987			0.991			0.962				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5019	0	1770	5040	0	3433	3405	0	3433	3539	1583
Flt Permitted	0.129			0.118			0.395			0.308		
Satd. Flow (perm)	240	5019	0	220	5040	0	1427	3405	0	1113	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26			16			53				127
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)	141	1506	0	146	2175	0	311	508	0	276	364	228
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	35.0	0.0	13.0	38.0	0.0	10.0	17.0	0.0	10.0	17.0	17.0
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)	37.0	31.0		43.0	34.0		19.0	13.0		19.0	13.0	13.0
Actuated g/C Ratio	0.49	0.41		0.57	0.45		0.25	0.17		0.25	0.17	0.17
v/c Ratio	0.59	0.72		0.47	0.95		0.60	0.80		0.59	0.59	0.60
Control Delay	29.1	20.5		23.8	30.6		25.7	37.9		25.7	33.1	20.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	29.1	20.5		23.8	30.6		25.7	37.9		25.7	33.1	20.6
LOS	C	C		C	C		C	D		C	C	C
Approach Delay		21.2			30.1			33.2			27.5	
Approach LOS		C			C			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 75

Actuated Cycle Length: 75

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

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 27.6

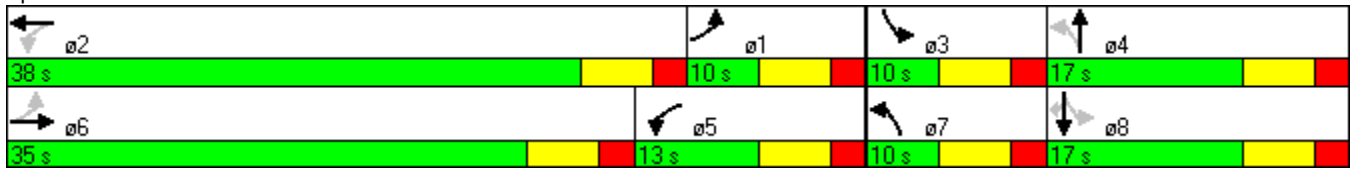
Intersection LOS: C

Intersection Capacity Utilization 79.4%

ICU Level of Service D

Analysis Period (min) 15

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



Queues
1: Sheridan St & 46th Ave

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	141	1506	146	2175	311	508	276	364	228
v/c Ratio	0.59	0.72	0.47	0.95	0.60	0.80	0.59	0.59	0.60
Control Delay	29.1	20.5	23.8	30.6	25.7	37.9	25.7	33.1	20.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	29.1	20.5	23.8	30.6	25.7	37.9	25.7	33.1	20.6
Queue Length 50th (ft)	27	204	28	337	56	108	49	83	42
Queue Length 95th (ft)	#75	256	64	#465	80	#150	71	114	94
Internal Link Dist (ft)		3235		1916		3730		694	
Turn Bay Length (ft)	275		330		165		234		234
Base Capacity (vph)	241	2090	312	2294	522	634	468	613	379
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	0.59	0.72	0.47	0.95	0.60	0.80	0.59	0.59	0.60

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 PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	147	1499	48	113	2110	73	70	23	79	41	12	61
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
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.995			0.995			0.884			0.869	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5060	0	1770	5060	0	1770	1647	0	1770	1619	0
Flt Permitted	0.077			0.092			0.690			0.685		
Satd. Flow (perm)	143	5060	0	171	5060	0	1285	1647	0	1276	1619	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			10			86			90	
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)	160	1681	0	123	2538	0	76	111	0	60	103	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)	14.0	55.0	0.0	15.0	56.0	0.0	20.0	20.0	0.0	20.0	20.0	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)	61.7	52.2		57.8	52.2		14.3	14.3		16.3	14.3	
Actuated g/C Ratio	0.69	0.58		0.64	0.58		0.16	0.16		0.18	0.16	
v/c Ratio	0.59	0.57		0.50	0.86		0.37	0.33		0.26	0.31	
Control Delay	23.9	12.9		16.0	19.9		40.2	14.6		35.4	12.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	23.9	12.9		16.0	19.9		40.2	14.6		35.4	12.6	
LOS	C	B		B	B		D	B		D	B	
Approach Delay		13.9			19.7			25.0			21.0	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 2 (2%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 17.7

Intersection LOS: B

Intersection Capacity Utilization 72.7%

ICU Level of Service C

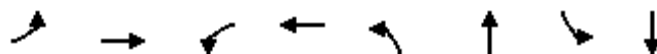
Analysis Period (min) 15

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



Queues
2: Sheridan St & 40th Ave

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	160	1681	123	2538	76	111	60	103
v/c Ratio	0.59	0.57	0.50	0.86	0.37	0.33	0.26	0.31
Control Delay	23.9	12.9	16.0	19.9	40.2	14.6	35.4	12.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.9	12.9	16.0	19.9	40.2	14.6	35.4	12.6
Queue Length 50th (ft)	33	200	18	412	39	12	30	6
Queue Length 95th (ft)	99	253	59	445	83	59	49	51
Internal Link Dist (ft)		1916		1383		3875		672
Turn Bay Length (ft)	220		250		100		250	
Base Capacity (vph)	279	2936	273	2941	204	333	231	332
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	0.57	0.57	0.45	0.86	0.37	0.33	0.26	0.31
Intersection Summary								

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	9	226	20	12	462	44	16	36	27	19	54	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.989			0.988			0.954			0.960	
Flt Protected		0.998			0.999			0.990			0.991	
Satd. Flow (prot)	0	1839	0	0	1839	0	0	1759	0	0	1772	0
Flt Permitted		0.998			0.999			0.990			0.991	
Satd. Flow (perm)	0	1839	0	0	1839	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	278	0	0	563	0	0	85	0	0	114	0
Sign Control		Yield			Yield			Yield			Yield	

Intersection Summary

Area Type: Other

Control Type: Roundabout

Intersection Capacity Utilization 46.0% ICU Level of Service A

Analysis Period (min) 15

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	214	839	192	230	1541	274	322	984	208	262	906	135
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
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	0.97	0.95	1.00	0.97	0.95	0.95
Frt			0.850			0.850			0.850		0.981	
Flt Protected	0.950			0.950			0.950			0.950		
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)			185			148			175		12	
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)	233	912	209	250	1675	298	350	1070	226	285	1132	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)	23.0	41.0	41.0	30.0	48.0	48.0	19.0	51.0	51.0	18.0	50.0	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)	17.0	36.5	36.5	22.5	42.0	42.0	13.0	44.0	44.0	12.0	43.0	
Actuated g/C Ratio	0.12	0.26	0.26	0.16	0.30	0.30	0.09	0.31	0.31	0.09	0.31	
v/c Ratio	1.08	0.69	0.38	0.88	1.10	0.51	1.10	0.96	0.37	0.97	1.05	
Control Delay	141.5	50.1	10.2	87.0	100.0	23.2	136.1	66.4	11.2	108.3	88.4	
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	141.5	50.1	10.2	87.0	100.0	23.2	136.1	66.4	11.2	108.3	88.4	
LOS	F	D	B	F	F	C	F	E	B	F	F	
Approach Delay		59.7			88.3			73.7			92.4	
Approach LOS		E			F			E			F	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 1.10

Intersection Signal Delay: 79.7

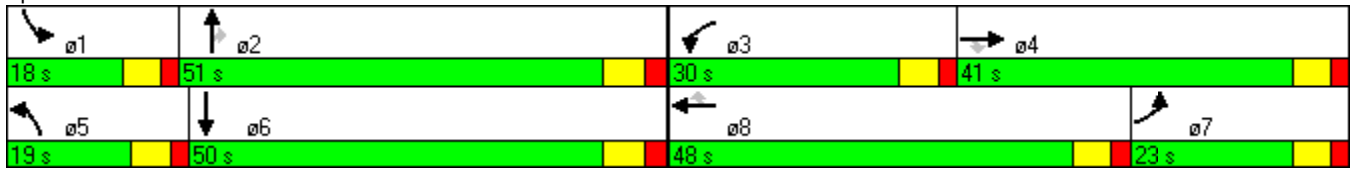
Intersection LOS: E

Intersection Capacity Utilization 101.0%

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

2015 Background PM Peak

8/14/2013

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	233	912	209	250	1675	298	350	1070	226	285	1132
v/c Ratio	1.08	0.69	0.38	0.88	1.10	0.51	1.10	0.96	0.37	0.97	1.05
Control Delay	141.5	50.1	10.2	87.0	100.0	23.2	136.1	66.4	11.2	108.3	88.4
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	141.5	50.1	10.2	87.0	100.0	23.2	136.1	66.4	11.2	108.3	88.4
Queue Length 50th (ft)	~237	279	17	222	~631	110	~185	504	33	135	~587
Queue Length 95th (ft)	#409	332	85	#363	#727	205	#288	#649	101	#229	#729
Internal Link Dist (ft)		1040			2556			3733			1519
Turn Bay Length (ft)	500		190	562		182	330		266	425	
Base Capacity (vph)	215	1326	550	303	1526	579	319	1112	618	294	1075
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	0.69	0.38	0.83	1.10	0.51	1.10	0.96	0.37	0.97	1.05

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 PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Volume (vph)	97	1347	156	209	1881	189	173	305	386	216	288	190
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	1		0	1		1	1		1
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.985			0.986				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5009	0	1770	5014	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.272			0.214		
Satd. Flow (perm)	1770	5009	0	1770	5014	0	507	1863	1583	399	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			25				319			148
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)	110	1701	0	227	2435	0	188	332	420	254	313	224
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	38.0	0.0	18.0	45.0	0.0	11.0	22.0	22.0	12.0	23.0	23.0
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	34.5		12.5	41.5		21.0	16.0	16.0	27.0	17.0	19.0
Actuated g/C Ratio	0.08	0.38		0.14	0.46		0.23	0.18	0.18	0.30	0.19	0.21
v/c Ratio	0.74	0.88		0.92	1.05		1.00	1.00	0.77	1.05	0.89	0.50
Control Delay	70.5	32.0		81.0	57.5		97.8	89.4	20.3	100.2	64.1	15.7
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	32.0		81.0	57.5		97.8	89.4	20.3	100.2	64.1	15.7
LOS	E	C		F	E		F	F	C	F	E	B
Approach Delay		34.4			59.5			60.2			62.0	
Approach LOS		C			E			E			E	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.05

Intersection Signal Delay: 52.6

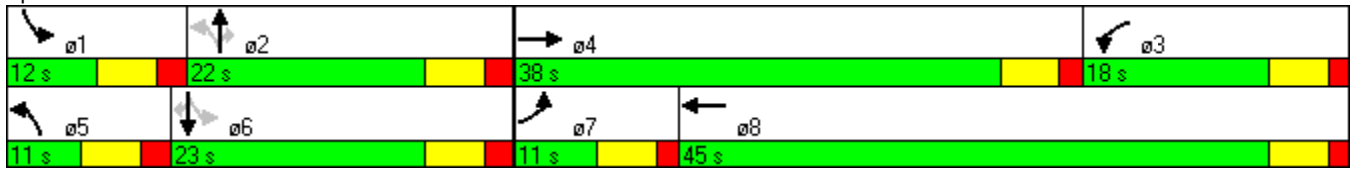
Intersection LOS: D

Intersection Capacity Utilization 88.9%

ICU Level of Service E

Analysis Period (min) 15

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



Queues
8: Sheridan St & N Park Rd

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	110	1701	227	2435	188	332	420	254	313	224
v/c Ratio	0.74	0.88	0.92	1.05	1.00	1.00	0.77	1.05	0.89	0.50
Control Delay	70.5	32.0	81.0	57.5	97.8	89.4	20.3	100.2	64.1	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	70.5	32.0	81.0	57.5	97.8	89.4	20.3	100.2	64.1	15.7
Queue Length 50th (ft)	62	319	129	~554	82	~192	51	~119	175	36
Queue Length 95th (ft)	#143	371	#267	#586	#187	#364	#193	#229	#324	92
Internal Link Dist (ft)		1322		3033		550			795	
Turn Bay Length (ft)	260		500		212		212	160		160
Base Capacity (vph)	148	1935	246	2325	188	331	544	242	352	451
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	0.74	0.88	0.92	1.05	1.00	1.00	0.77	1.05	0.89	0.50

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
10: Johnson Street & N Park Rd

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	99	347	169	143	343	164	146	532	245	139	471	88
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.217			0.430			0.264			0.434		
Satd. Flow (perm)	404	1863	1583	801	1863	1583	492	3539	1583	808	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			184			178			266			96
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)	108	377	184	155	373	178	159	578	266	151	512	96
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)	10.0	33.0	33.0	15.0	38.0	38.0	15.0	29.0	29.0	13.0	27.0	27.0
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)	24.2	23.2	23.2	26.9	25.9	25.9	34.1	33.1	33.1	32.7	31.7	31.7
Actuated g/C Ratio	0.27	0.26	0.26	0.30	0.29	0.29	0.38	0.37	0.37	0.36	0.35	0.35
v/c Ratio	0.54	0.79	0.34	0.50	0.69	0.31	0.48	0.44	0.35	0.39	0.41	0.15
Control Delay	25.8	33.1	2.9	33.1	35.6	4.9	26.5	24.4	4.8	16.6	14.3	1.6
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	25.8	33.1	2.9	33.1	35.6	4.9	26.5	24.4	4.8	16.6	14.3	1.6
LOS	C	C	A	C	D	A	C	C	A	B	B	A
Approach Delay		23.6			27.3			19.5			13.1	
Approach LOS		C			C			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 64 (71%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 20.6

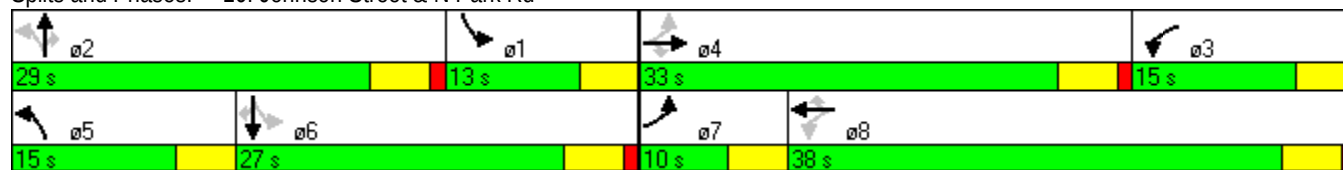
Intersection LOS: C

Intersection Capacity Utilization 63.6%

ICU Level of Service B

Analysis Period (min) 15

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



Queues

2015 Background PM Peak

10: Johnson Street & N Park Rd

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	108	377	184	155	373	178	159	578	266	151	512	96
v/c Ratio	0.54	0.79	0.34	0.50	0.69	0.31	0.48	0.44	0.35	0.39	0.41	0.15
Control Delay	25.8	33.1	2.9	33.1	35.6	4.9	26.5	24.4	4.8	16.6	14.3	1.6
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	25.8	33.1	2.9	33.1	35.6	4.9	26.5	24.4	4.8	16.6	14.3	1.6
Queue Length 50th (ft)	29	198	2	70	194	0	61	128	0	31	60	0
Queue Length 95th (ft)	60	286	7	105	256	41	124	205	57	60	88	4
Internal Link Dist (ft)	1616			1426			1044			2588		
Turn Bay Length (ft)				200		200	163		163	189		189
Base Capacity (vph)	200	580	619	396	683	693	350	1300	750	390	1246	620
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	0.54	0.65	0.30	0.39	0.55	0.26	0.45	0.44	0.35	0.39	0.41	0.15
Intersection Summary												

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		   			  			 		 	 	
Volume (vph)	112	1581	52	39	2140	146	70	12	45	554	102	691
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
Lane Util. Factor	1.00	0.81	1.00	1.00	0.91	1.00	1.00	0.95	0.95	0.97	1.00	1.00
Frt			0.850			0.850		0.881				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	7544	1583	1770	5085	1583	1770	3118	0	3433	1863	1583
Flt Permitted	0.950			0.095			0.627			0.950		
Satd. Flow (perm)	1770	7544	1583	177	5085	1583	1168	3118	0	3433	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			57			87		14				329
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)	122	1718	57	42	2326	159	76	62	0	602	111	751
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)	8.0	47.0	47.0	39.0	39.0	39.0	20.0	20.0	0.0	23.0	23.0	23.0
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	53.3	51.3	42.8	42.8	41.3	19.1	6.9		21.7	19.0	19.0
Actuated g/C Ratio	0.04	0.59	0.57	0.48	0.48	0.46	0.21	0.08		0.24	0.21	0.21
v/c Ratio	1.54	0.38	0.06	0.50	0.96	0.21	0.23	0.25		0.73	0.28	1.26
Control Delay	330.6	10.9	3.7	30.9	22.7	3.3	20.1	34.0		36.7	32.1	152.1
Queue Delay	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	330.6	10.9	3.7	30.9	25.0	3.3	20.1	34.0		36.7	32.1	152.1
LOS	F	B	A	C	C	A	C	C		D	C	F
Approach Delay		31.3			23.8			26.4			95.5	
Approach LOS		C			C			C			F	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 42 (47%), Referenced to phase 2:WBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.54

Intersection Signal Delay: 43.6

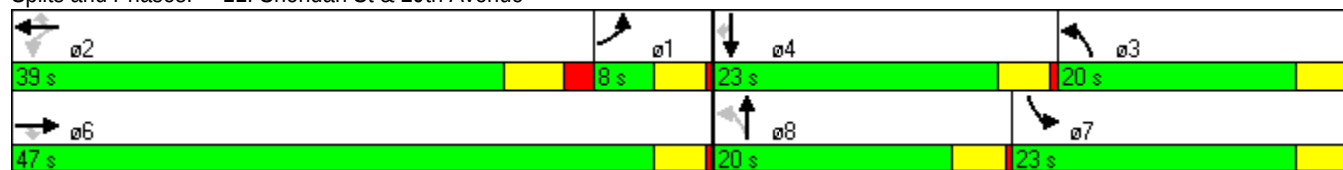
Intersection LOS: D

Intersection Capacity Utilization 98.4%

ICU Level of Service F

Analysis Period (min) 15

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



Queues
11: Sheridan St & 29th Avenue

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	122	1718	57	42	2326	159	76	62	602	111	751
v/c Ratio	1.54	0.38	0.06	0.50	0.96	0.21	0.23	0.25	0.73	0.28	1.26
Control Delay	330.6	10.9	3.7	30.9	22.7	3.3	20.1	34.0	36.7	32.1	152.1
Queue Delay	0.0	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	330.6	10.9	3.7	30.9	25.0	3.3	20.1	34.0	36.7	32.1	152.1
Queue Length 50th (ft)	~99	121	0	9	193	14	28	13	164	53	~385
Queue Length 95th (ft)	#208	174	19	m#45	#674	m31	49	33	205	101	#606
Internal Link Dist (ft)		3033			324			1024		559	
Turn Bay Length (ft)	337		347	180		160					
Base Capacity (vph)	79	4464	926	84	2416	773	450	566	829	393	594
Starvation Cap Reductn	0	0	0	0	49	0	0	0	0	0	0
Spillback Cap Reductn	0	9	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	1.54	0.39	0.06	0.50	0.98	0.21	0.17	0.11	0.73	0.28	1.26

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 PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑↑	↗	↘↘	↑↑↑					↘↘		↗↗↗
Volume (vph)	0	1499	594	498	1459	0	0	0	0	654	0	822
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.81	1.00	0.97	0.91	1.00	1.00	1.00	1.00	0.97	1.00	0.76
Frt			0.850									0.850
Flt Protected				0.950						0.950		
Satd. Flow (prot)	0	7544	1583	3433	5085	0	0	0	0	3433	0	3610
Flt Permitted				0.950						0.950		
Satd. Flow (perm)	0	7544	1583	3433	5085	0	0	0	0	3433	0	3610
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			646									80
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	1629	646	541	1586	0	0	0	0	711	0	893
Turn Type			Perm	Prot						Prot		custom
Protected Phases		6		5	2					3		8
Permitted Phases			6									
Total Split (s)	0.0	37.0	37.0	23.0	60.0	0.0	0.0	0.0	0.0	30.0	0.0	30.0
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)		33.0	33.0	19.7	56.7					25.3		25.3
Actuated g/C Ratio		0.37	0.37	0.22	0.63					0.28		0.28
v/c Ratio		0.59	0.65	0.72	0.50					0.74		0.83
Control Delay		21.7	8.0	31.1	9.3					34.5		35.3
Queue Delay		0.0	0.6	2.2	0.7					0.1		0.1
Total Delay		21.7	8.6	33.2	10.0					34.6		35.4
LOS		C	A	C	A					C		D
Approach Delay		18.0			15.9							
Approach LOS		B			B							

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 36 (40%), Referenced to phase 2:WBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 21.8

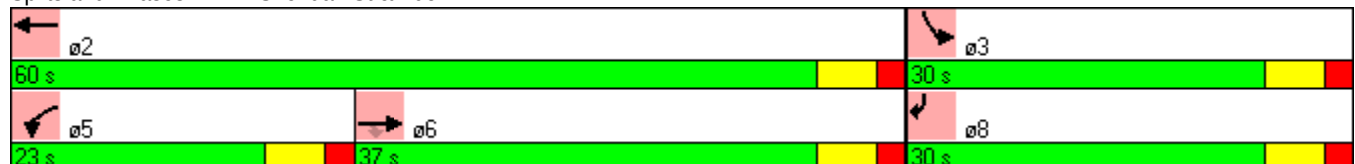
Intersection LOS: C

Intersection Capacity Utilization 149.0%

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 PM Peak
8/14/2013

	→	↘	↙	←	↘	↙
Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	1629	646	541	1586	711	893
v/c Ratio	0.59	0.65	0.72	0.50	0.74	0.83
Control Delay	21.7	8.0	31.1	9.3	34.5	35.3
Queue Delay	0.0	0.6	2.2	0.7	0.1	0.1
Total Delay	21.7	8.6	33.2	10.0	34.6	35.4
Queue Length 50th (ft)	203	128	95	108	186	189
Queue Length 95th (ft)	237	253	143	125	248	251
Internal Link Dist (ft)	324			172		
Turn Bay Length (ft)						
Base Capacity (vph)	2766	990	750	3201	992	1100
Starvation Cap Reductn	0	102	102	1116	0	0
Spillback Cap Reductn	2	0	0	444	19	7
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.73	0.83	0.76	0.73	0.82
Intersection Summary						

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	638	1486	0	0	1355	777	590	0	664	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	0.91	1.00	1.00	0.81	1.00	0.94	1.00	1.00	1.00	1.00	1.00
Frt						0.850			0.850			
Flt Protected	0.950						0.950					
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)						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)	693	1615	0	0	1473	845	641	0	722	0	0	0
Turn Type	Prot					Perm	custom		custom			
Protected Phases	5	2			6							
Permitted Phases						6	8		8			
Total Split (s)	20.0	52.0	0.0	0.0	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	4.0	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	1.14	0.60			0.62	0.83	0.34		1.19			
Control Delay	103.2	10.4			13.0	11.2	20.6		127.1			
Queue Delay	37.1	1.2			0.1	0.0	0.0		0.0			
Total Delay	140.3	11.6			13.1	11.2	20.6		127.1			
LOS	F	B			B	B	C		F			
Approach Delay		50.2			12.4							
Approach LOS		D			B							

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 38 (42%), Referenced to phase 2:EBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.19

Intersection Signal Delay: 41.7

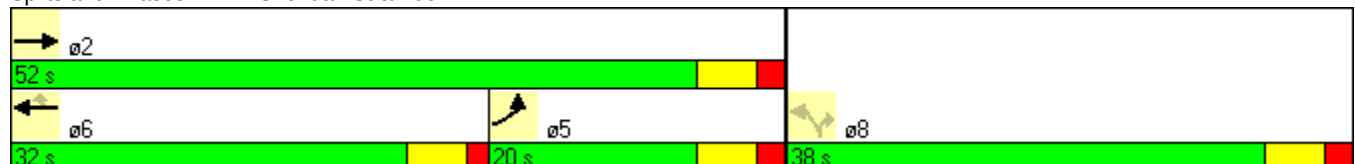
Intersection LOS: D

Intersection Capacity Utilization 149.0%

ICU Level of Service H

Analysis Period (min) 15

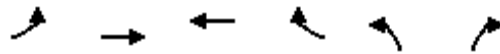
Splits and Phases: 17: Sheridan St & I-95 E



Queues
17: Sheridan St & I-95 E

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	NBL	NBR
Lane Group Flow (vph)	693	1615	1473	845	641	722
v/c Ratio	1.14	0.60	0.62	0.83	0.34	1.19
Control Delay	103.2	10.4	13.0	11.2	20.6	127.1
Queue Delay	37.1	1.2	0.1	0.0	0.0	0.0
Total Delay	140.3	11.6	13.1	11.2	20.6	127.1
Queue Length 50th (ft)	~244	136	100	349	90	~495
Queue Length 95th (ft)	#332	154	m120	m382	119	#715
Internal Link Dist (ft)		172	248			
Turn Bay Length (ft)						
Base Capacity (vph)	610	2712	2389	1021	1885	609
Starvation Cap Reductn	43	791	0	0	0	0
Spillback Cap Reductn	0	0	87	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	1.22	0.84	0.64	0.83	0.34	1.19

Intersection Summary

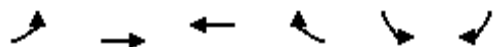
~ Volume exceeds capacity, queue is theoretically infinite.

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)	119	1698	1832	5	3	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.91	0.91	0.91	1.00	1.00
Frt					0.916	
Flt Protected	0.950				0.982	
Satd. Flow (prot)	1770	5085	5085	0	1676	0
Flt Permitted	0.950				0.982	
Satd. Flow (perm)	1770	5085	5085	0	1676	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)	129	1846	1996	0	8	0
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 55.4% ICU Level of Service B

Analysis Period (min) 15

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	135	1069	87	176	1630	156	161	285	103	174	382	135
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
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	0.91	0.97	0.95	0.95	0.97	1.00	1.00
Frt		0.989			0.987			0.960				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	5029	0	1770	5019	0	3433	3398	0	3433	1863	1583
Flt Permitted	0.950			0.950			0.233			0.327		
Satd. Flow (perm)	1770	5029	0	1770	5019	0	842	3398	0	1182	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		15			20			50				147
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)	147	1257	0	191	1942	0	175	422	0	189	415	147
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	23.0	0.0	14.0	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	29.6		12.4	34.0		22.2	17.2		27.8	20.0	20.0
Actuated g/C Ratio	0.09	0.33		0.14	0.38		0.25	0.19		0.31	0.22	0.22
v/c Ratio	0.94	0.75		0.78	1.02		0.50	0.61		0.34	1.00	0.32
Control Delay	100.3	30.3		60.4	53.6		26.3	33.6		22.4	81.9	7.2
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	100.3	30.3		60.4	53.6		26.3	33.6		22.4	81.9	7.2
LOS	F	C		E	D		C	C		C	F	A
Approach Delay		37.6			54.2			31.5			52.3	
Approach LOS		D			D			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 12 (13%), Referenced to phase 2:WBT and 6:EBT, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.02

Intersection Signal Delay: 46.4

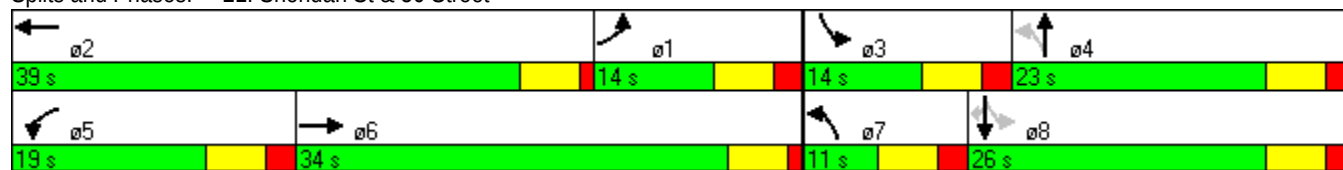
Intersection LOS: D

Intersection Capacity Utilization 86.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 21: Sheridan St & 56 Street



Queues
21: Sheridan St & 56 Street

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	147	1257	191	1942	175	422	189	415	147
v/c Ratio	0.94	0.75	0.78	1.02	0.50	0.61	0.34	1.00	0.32
Control Delay	100.3	30.3	60.4	53.6	26.3	33.6	22.4	81.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	100.3	30.3	60.4	53.6	26.3	33.6	22.4	81.9	7.2
Queue Length 50th (ft)	85	231	106	~410	35	103	38	~238	0
Queue Length 95th (ft)	#200	285	#208	#527	58	152	62	#427	47
Internal Link Dist (ft)		2556		3235		3715		999	
Turn Bay Length (ft)					361				
Base Capacity (vph)	157	1665	256	1909	352	691	568	414	466
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	0.94	0.75	0.75	1.02	0.50	0.61	0.33	1.00	0.32

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

2015 Background PM Peak
8/14/2013

									
Lane Group	WBL	WBR	NBL	NBR	SEL	SER	SWL2	SWL	SWR
Lane Configurations			  			 		 	
Volume (vph)	3	25	6	7	135	0	4	0	679
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.97	0.95	1.00	0.88	1.00	1.00	1.00
Frt		0.865	0.920					0.866	
Flt Protected	0.950		0.977		0.950				
Satd. Flow (prot)	0	1611	3248	0	0	3278	0	1613	0
Flt Permitted	0.950		0.977		0.950				
Satd. Flow (perm)	0	1611	3248	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)	3	27	15	0	147	0	0	742	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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Volume (vph)	348	1370	189	65	1326	170	209	170	66	270	188	376
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
Lane Util. Factor	1.00	0.91	0.91	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.982				0.850		0.958				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	4994	0	1770	5085	1583	1770	1785	0	1770	1863	1583
Flt Permitted	0.950			0.200			0.588			0.213		
Satd. Flow (perm)	1770	4994	0	373	5085	1583	1095	1785	0	397	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		36				185		19				404
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)	382	1713	0	71	1441	185	227	257	0	290	202	404
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)	25.0	44.0	0.0	11.0	30.0	30.0	11.0	20.0	0.0	15.0	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)	21.0	42.2		26.0	26.0	24.0	23.0	16.0		31.0	20.0	20.0
Actuated g/C Ratio	0.23	0.47		0.29	0.29	0.27	0.26	0.18		0.34	0.22	0.22
v/c Ratio	0.92	0.73		0.33	0.98	0.33	0.68	0.77		0.95	0.49	0.61
Control Delay	56.8	19.1		10.7	30.6	2.8	36.8	49.8		67.8	35.2	7.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	56.8	19.1		10.7	30.6	2.8	36.8	49.8		67.8	35.2	7.6
LOS	E	B		B	C	A	D	D		E	D	A
Approach Delay		26.0			26.7			43.7			33.3	
Approach LOS		C			C			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 66 (73%), Referenced to phase 4:NBTL and 8:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 29.2

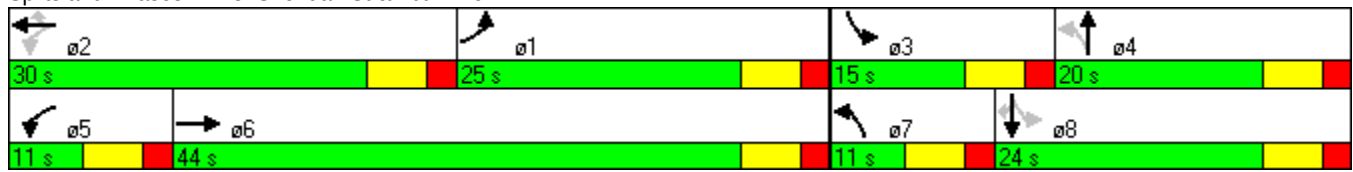
Intersection LOS: C

Intersection Capacity Utilization 86.2%

ICU Level of Service E

Analysis Period (min) 15

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



Queues
23: Sheridan St & 26th Ave

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	382	1713	71	1441	185	227	257	290	202	404
v/c Ratio	0.92	0.73	0.33	0.98	0.33	0.68	0.77	0.95	0.49	0.61
Control Delay	56.8	19.1	10.7	30.6	2.8	36.8	49.8	67.8	35.2	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	56.8	19.1	10.7	30.6	2.8	36.8	49.8	67.8	35.2	7.6
Queue Length 50th (ft)	219	287	16	261	15	96	130	128	101	0
Queue Length 95th (ft)	m#321	m289	m20	#390	m16	#168	#249	#268	169	76
Internal Link Dist (ft)		1272		3039			3745		616	
Turn Bay Length (ft)	600		228			150		295		295
Base Capacity (vph)	413	2361	216	1469	558	332	333	305	414	666
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	0.92	0.73	0.33	0.98	0.33	0.68	0.77	0.95	0.49	0.61

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 						 	
Volume (vph)	99	923	272	80	1331	45	0	0	0	21	123	109
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
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	0.95	0.95	0.95
Frt			0.850		0.995						0.936	
Flt Protected	0.950			0.950							0.996	
Satd. Flow (prot)	1770	3539	1583	1770	3522	0	0	0	0	0	3299	0
Flt Permitted	0.124			0.950							0.996	
Satd. Flow (perm)	231	3539	1583	1770	3522	0	0	0	0	0	3299	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			296		5						118	
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)	108	1003	296	87	1496	0	0	0	0	0	275	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)	11.0	48.0	48.0	12.0	37.0	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)	39.0	43.0	43.0	6.9	43.8						6.0	
Actuated g/C Ratio	0.43	0.48	0.48	0.08	0.49						0.07	
v/c Ratio	0.53	0.59	0.32	0.64	0.87						0.83	
Control Delay	23.1	10.8	0.8	54.1	20.5						46.0	
Queue Delay	0.0	0.0	0.0	0.0	7.2						0.0	
Total Delay	23.1	10.8	0.8	54.1	27.7						46.0	
LOS	C	B	A	D	C						D	
Approach Delay		9.6			29.1						46.0	
Approach LOS		A			C						D	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

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

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 22.1

Intersection LOS: C

Intersection Capacity Utilization 62.9%

ICU Level of Service B

Analysis Period (min) 15

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

2015 Background PM Peak

8/14/2013

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

#26 ø1 11 s	#26 #48 ø2 37 s	#26 #48 ø5 12 s	#48 ø8 20 s	
#26 #48 ø6 48 s				#26 ø7 10 s

Lane Group	ø8
Lane Configurations	
Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (ft)	
Storage Lanes	
Taper Length (ft)	
Lane Util. Factor	
Frt	
Flt Protected	
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 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

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	EBR	WBL	WBT	SBT
Lane Group Flow (vph)	108	1003	296	87	1496	275
v/c Ratio	0.53	0.59	0.32	0.64	0.87	0.83
Control Delay	23.1	10.8	0.8	54.1	20.5	46.0
Queue Delay	0.0	0.0	0.0	0.0	7.2	0.0
Total Delay	23.1	10.8	0.8	54.1	27.7	46.0
Queue Length 50th (ft)	13	72	0	53	291	46
Queue Length 95th (ft)	m24	m105	m2	m#104	558	#114
Internal Link Dist (ft)		3039			140	844
Turn Bay Length (ft)	225					
Base Capacity (vph)	203	1691	911	138	1716	330
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	0.53	0.59	0.32	0.63	0.98	0.83

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	199	34	38	369	61	48	325	36	22	389	44
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95
Frt		0.978			0.979			0.985			0.985	
Flt Protected	0.950			0.950			0.950				0.998	
Satd. Flow (prot)	1770	1822	0	1770	1824	0	1770	3486	0	0	3479	0
Flt Permitted	0.495			0.465			0.440				0.919	
Satd. Flow (perm)	922	1822	0	866	1824	0	820	3486	0	0	3204	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21			30			28			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)	41	253	0	41	467	0	52	392	0	0	495	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	0.14	0.41		0.07	0.59		0.25	0.39			0.53	
Control Delay	12.3	12.6		4.7	10.4		15.6	11.6			13.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0			0.0	
Total Delay	12.3	12.6		4.7	10.4		15.6	11.6			13.3	
LOS	B	B		A	B		B	B			B	
Approach Delay		12.6			9.9			12.1			13.3	
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: 0.59

Intersection Signal Delay: 11.9

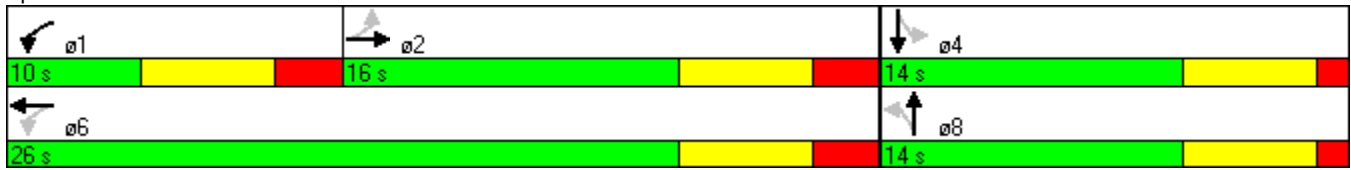
Intersection LOS: B

Intersection Capacity Utilization 66.2%

ICU Level of Service C

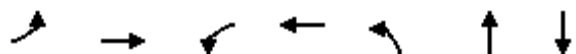
Analysis Period (min) 15

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



Queues
27: Taft Street & 46th Ave

2015 Background PM Peak
8/14/2013



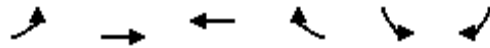
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBT
Lane Group Flow (vph)	41	253	41	467	52	392	495
v/c Ratio	0.14	0.41	0.07	0.59	0.25	0.39	0.53
Control Delay	12.3	12.6	4.7	10.4	15.6	11.6	13.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.3	12.6	4.7	10.4	15.6	11.6	13.3
Queue Length 50th (ft)	4	26	4	56	7	24	33
Queue Length 95th (ft)	25	94	11	110	32	64	83
Internal Link Dist (ft)		3298		1898		2582	3730
Turn Bay Length (ft)	96		85		210		
Base Capacity (vph)	302	611	575	1057	212	1018	936
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	0.14	0.41	0.07	0.44	0.25	0.39	0.53
Intersection Summary							

	→	↘	↙	←	↖	↗
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						
Flt Protected						
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

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	99	383	407	24	29	91
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.993			0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1770	1863	1850	0	1770	1583
Flt Permitted	0.271				0.950	
Satd. Flow (perm)	505	1863	1850	0	1770	1583
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)			8			99
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)	108	416	468	0	32	99
Turn Type	pm+pt					Perm
Protected Phases	1	6	2		8	
Permitted Phases	6					8
Total Split (s)	8.0	31.0	23.0	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)	23.1	22.1	17.3		16.9	14.9
Actuated g/C Ratio	0.51	0.49	0.38		0.38	0.33
v/c Ratio	0.25	0.46	0.65		0.05	0.17
Control Delay	3.9	6.0	15.5		13.1	5.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	3.9	6.0	15.5		13.1	5.5
LOS	A	A	B		B	A
Approach Delay		5.6	15.5		7.3	
Approach LOS		A	B		A	

Intersection Summary

Area Type: Other

Cycle Length: 45

Actuated Cycle Length: 45

Offset: 4 (9%), Referenced to phase 4: and 8:SBL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 9.9

Intersection LOS: A

Intersection Capacity Utilization 43.4%

ICU Level of Service A

Analysis Period (min) 15

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

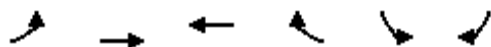


Queues
29: Taft St & 28th Ave

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Group Flow (vph)	108	416	468	32	99
v/c Ratio	0.25	0.46	0.65	0.05	0.17
Control Delay	3.9	6.0	15.5	13.1	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	3.9	6.0	15.5	13.1	5.5
Queue Length 50th (ft)	7	54	89	6	0
Queue Length 95th (ft)	9	35	149	21	28
Internal Link Dist (ft)		1457	498	2072	
Turn Bay Length (ft)	91				
Base Capacity (vph)	428	1159	827	666	591
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	0.25	0.36	0.57	0.05	0.17
Intersection Summary					



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	7	497	502	0	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	200			50	0	0
Storage Lanes	1			1	1	1
Taper Length (ft)	25			25	25	25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt						0.850
Flt Protected	0.950					
Satd. Flow (prot)	1770	1863	1863	1863	1863	1583
Flt Permitted	0.950					
Satd. Flow (perm)	1770	1863	1863	1863	1863	1583
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)	8	540	546	0	0	7
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 36.4% ICU Level of Service A

Analysis Period (min) 15

Lanes, Volumes, Timings
31: Taft St & N Park Rd

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	187	179	42	149	239	222	68	540	151	139	502	69
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3476	0
Flt Permitted	0.313			0.585			0.312			0.330		
Satd. Flow (perm)	583	1863	1583	1090	1863	1583	581	3539	1583	615	3476	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			46			241			164		18	
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)	203	195	46	162	260	241	74	587	164	151	621	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)	17.0	31.0	31.0	14.0	28.0	28.0	10.0	31.0	31.0	14.0	35.0	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)	34.7	22.1	22.1	29.4	19.5	19.5	38.5	32.5	32.5	46.0	38.0	
Actuated g/C Ratio	0.39	0.25	0.25	0.33	0.22	0.22	0.43	0.36	0.36	0.51	0.42	
v/c Ratio	0.52	0.43	0.11	0.38	0.65	0.45	0.23	0.46	0.24	0.35	0.42	
Control Delay	21.1	28.9	7.3	15.9	32.6	8.5	8.8	13.9	1.9	19.6	20.5	
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	21.1	28.9	7.3	15.9	32.6	8.5	8.8	13.9	1.9	19.6	20.5	
LOS	C	C	A	B	C	A	A	B	A	B	C	
Approach Delay		23.1			19.8			11.1			20.3	
Approach LOS		C			B			B			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 8 (9%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 17.8

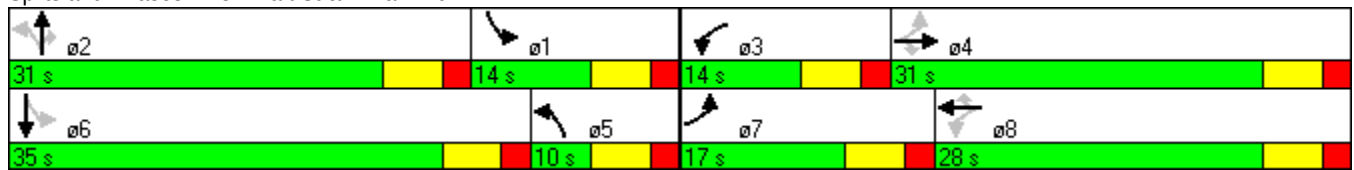
Intersection LOS: B

Intersection Capacity Utilization 58.9%

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

2015 Background PM Peak

8/14/2013

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	203	195	46	162	260	241	74	587	164	151	621
v/c Ratio	0.52	0.43	0.11	0.38	0.65	0.45	0.23	0.46	0.24	0.35	0.42
Control Delay	21.1	28.9	7.3	15.9	32.6	8.5	8.8	13.9	1.9	19.6	20.5
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	21.1	28.9	7.3	15.9	32.6	8.5	8.8	13.9	1.9	19.6	20.5
Queue Length 50th (ft)	76	88	3	55	101	29	10	62	0	44	130
Queue Length 95th (ft)	111	139	20	90	160	54	m23	104	12	87	193
Internal Link Dist (ft)	1277			2477			2588			2028	
Turn Bay Length (ft)	168		168	250		151	192		110	160	
Base Capacity (vph)	399	559	507	432	497	599	327	1276	676	446	1476
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	0.51	0.35	0.09	0.38	0.52	0.40	0.23	0.46	0.24	0.34	0.42

Intersection Summary

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

Lanes, Volumes, Timings
35: Taft St & N 35th Ave

2015 Background PM Peak

8/14/2013

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↰		↱	↰	↱	↱
Volume (vph)	206	58	68	287	235	217
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.970					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	1807	0	1770	1863	1770	1583
Flt Permitted			0.541		0.950	
Satd. Flow (perm)	1807	0	1008	1863	1770	1583
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	42					236
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)	287	0	74	312	255	236
Turn Type			Perm			Perm
Protected Phases	2			6	4	
Permitted Phases			6			4
Total Split (s)	24.0	0.0	24.0	24.0	21.0	21.0
Total Lost Time (s)	3.0	4.0	3.0	3.0	3.0	3.0
Act Effect Green (s)	21.0		21.0	21.0	18.0	18.0
Actuated g/C Ratio	0.47		0.47	0.47	0.40	0.40
v/c Ratio	0.33		0.16	0.36	0.36	0.30
Control Delay	7.7		4.3	5.1	11.3	2.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	7.7		4.3	5.1	11.3	2.9
LOS	A		A	A	B	A
Approach Delay	7.7			4.9	7.3	
Approach LOS	A			A	A	

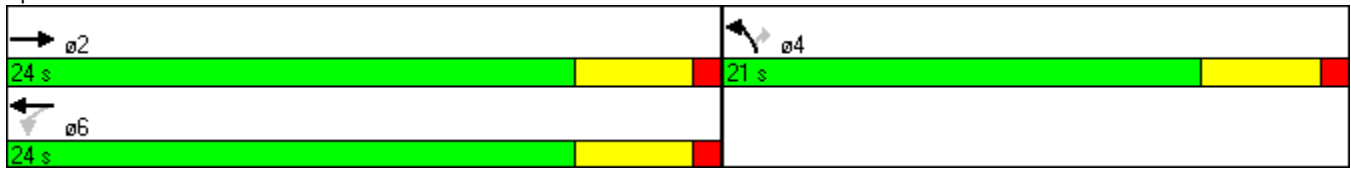
Intersection Summary

Area Type: Other
 Cycle Length: 45
 Actuated Cycle Length: 45
 Offset: 32 (71%), Referenced to phase 4:NBL and 8:, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.36
 Intersection Signal Delay: 6.6
 Intersection Capacity Utilization 49.9%
 Analysis Period (min) 15

Intersection LOS: A

ICU Level of Service A

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



Queues
35: Taft St & N 35th Ave

2015 Background PM Peak
8/14/2013

					
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	287	74	312	255	236
v/c Ratio	0.33	0.16	0.36	0.36	0.30
Control Delay	7.7	4.3	5.1	11.3	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	7.7	4.3	5.1	11.3	2.9
Queue Length 50th (ft)	35	12	55	43	0
Queue Length 95th (ft)	73	m18	64	86	30
Internal Link Dist (ft)	1476		1277	633	
Turn Bay Length (ft)		85			
Base Capacity (vph)	866	470	869	708	775
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	0.33	0.16	0.36	0.36	0.30

Intersection Summary

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

Lanes, Volumes, Timings
37: Taft St & 26 Avenue

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	229	74	22	283	30	76	211	16	26	221	62
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	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.964			0.985			0.990			0.967	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1796	0	1770	1835	0	1770	1844	0	1770	1801	0
Flt Permitted	0.525			0.545			0.573			0.606		
Satd. Flow (perm)	978	1796	0	1015	1835	0	1067	1844	0	1129	1801	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		44			15			10			39	
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)	84	329	0	24	341	0	83	246	0	28	307	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)	11.6	11.6		11.6	11.6		16.4	16.4		16.4	16.4	
Actuated g/C Ratio	0.29	0.29		0.29	0.29		0.41	0.41		0.41	0.41	
v/c Ratio	0.30	0.60		0.08	0.63		0.19	0.32		0.06	0.40	
Control Delay	13.0	14.8		9.7	16.8		10.3	10.2		9.0	10.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	13.0	14.8		9.7	16.8		10.3	10.2		9.0	10.2	
LOS	B	B		A	B		B	B		A	B	
Approach Delay		14.4			16.4			10.2			10.1	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 40

Actuated Cycle Length: 40

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 12.9

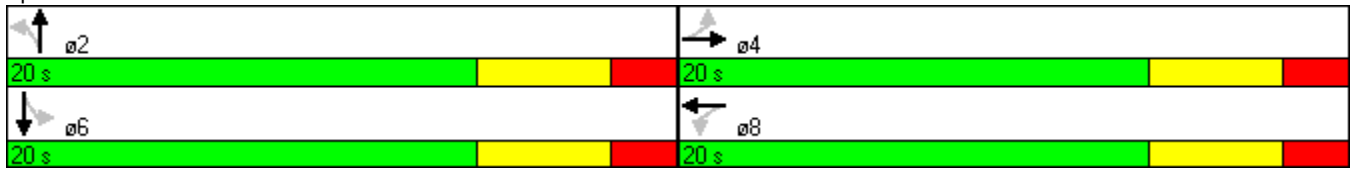
Intersection LOS: B

Intersection Capacity Utilization 60.6%

ICU Level of Service B

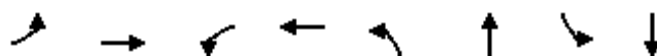
Analysis Period (min) 15

Splits and Phases: 37: Taft St & 26 Avenue



Queues
37: Taft St & 26 Avenue

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	84	329	24	341	83	246	28	307
v/c Ratio	0.30	0.60	0.08	0.63	0.19	0.32	0.06	0.40
Control Delay	13.0	14.8	9.7	16.8	10.3	10.2	9.0	10.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.0	14.8	9.7	16.8	10.3	10.2	9.0	10.2
Queue Length 50th (ft)	14	51	4	60	11	34	4	40
Queue Length 95th (ft)	36	99	14	110	35	79	15	93
Internal Link Dist (ft)		708		3038		622		3745
Turn Bay Length (ft)	110		110					
Base Capacity (vph)	342	657	355	652	437	762	463	762
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	0.25	0.50	0.07	0.52	0.19	0.32	0.06	0.40
Intersection Summary								

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	132	227	206	90	328	36	253	1202	64	27	1045	212
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		1	1		1	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	0.95
Frt			0.850			0.850			0.850		0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3451	0
Flt Permitted	0.195			0.446			0.095			0.114		
Satd. Flow (perm)	363	1863	1583	831	1863	1583	177	3539	1583	212	3451	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			186			39			70		31	
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)	143	247	224	98	357	39	275	1307	70	29	1366	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	24.0	24.0	10.0	24.0	24.0	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	5.5	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	18.5	50.5	44.5	44.5	39.0	34.5	
Actuated g/C Ratio	0.27	0.23	0.23	0.26	0.21	0.21	0.56	0.49	0.49	0.43	0.38	
v/c Ratio	0.86	0.58	0.44	0.38	0.93	0.11	0.96	0.75	0.09	0.17	1.02	
Control Delay	69.1	38.4	10.7	27.9	69.0	10.8	69.0	22.6	4.1	12.1	57.2	
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	69.1	38.4	10.7	27.9	69.0	10.8	69.0	22.6	4.1	12.1	57.2	
LOS	E	D	B	C	E	B	E	C	A	B	E	
Approach Delay		35.5			56.3			29.5			56.3	
Approach LOS		D			E			C			E	

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: 42.6

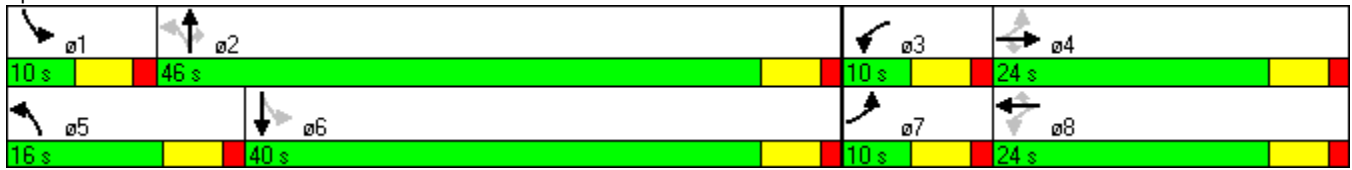
Intersection LOS: D

Intersection Capacity Utilization 92.6%

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

2015 Background PM Peak

8/14/2013

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	143	247	224	98	357	39	275	1307	70	29	1366
v/c Ratio	0.86	0.58	0.44	0.38	0.93	0.11	0.96	0.75	0.09	0.17	1.02
Control Delay	69.1	38.4	10.7	27.9	69.0	10.8	69.0	22.6	4.1	12.1	57.2
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	69.1	38.4	10.7	27.9	69.0	10.8	69.0	22.6	4.1	12.1	57.2
Queue Length 50th (ft)	60	130	18	40	201	0	108	329	0	7	~412
Queue Length 95th (ft)	#142	210	81	78	#368	26	#265	421	23	19	#566
Internal Link Dist (ft)	1915			2514			905			3733	
Turn Bay Length (ft)	220			399							
Base Capacity (vph)	167	424	504	259	383	356	285	1751	819	170	1343
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	0.86	0.58	0.44	0.38	0.93	0.11	0.96	0.75	0.09	0.17	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
45: Taft Street & 56 Avenue

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	40	226	41	35	357	61	29	370	33	28	460	53
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.977			0.978				0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1820	0	1770	1822	0	1770	1863	1583	1770	1863	1583
Flt Permitted	0.353			0.581			0.367			0.474		
Satd. Flow (perm)	658	1820	0	1082	1822	0	684	1863	1583	883	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		25			24				36			58
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)	43	291	0	38	454	0	32	402	36	30	500	58
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	0.20	0.47		0.11	0.74		0.11	0.52	0.05	0.08	0.65	0.08
Control Delay	11.9	12.3		9.8	20.2		8.9	12.0	3.7	8.2	14.9	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	11.9	12.3		9.8	20.2		8.9	12.0	3.7	8.2	14.9	3.3
LOS	B	B		A	C		A	B	A	A	B	A
Approach Delay		12.2			19.4			11.1			13.4	
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: 0.74

Intersection Signal Delay: 14.2

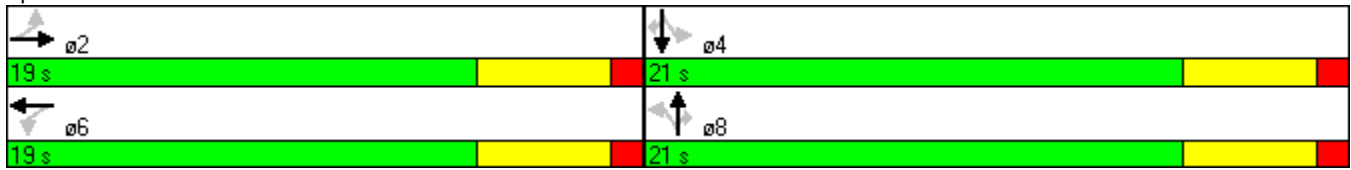
Intersection LOS: B

Intersection Capacity Utilization 65.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 45: Taft Street & 56 Avenue



Queues
45: Taft Street & 56 Avenue

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	43	291	38	454	32	402	36	30	500	58
v/c Ratio	0.20	0.47	0.11	0.74	0.11	0.52	0.05	0.08	0.65	0.08
Control Delay	11.9	12.3	9.8	20.2	8.9	12.0	3.7	8.2	14.9	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	11.9	12.3	9.8	20.2	8.9	12.0	3.7	8.2	14.9	3.3
Queue Length 50th (ft)	6	43	6	78	4	64	0	4	86	0
Queue Length 95th (ft)	23	90	19	#188	16	123	11	15	#169	14
Internal Link Dist (ft)		2514		3298		1168			3715	
Turn Bay Length (ft)	95									
Base Capacity (vph)	238	673	391	673	283	769	675	364	769	688
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	0.18	0.43	0.10	0.67	0.11	0.52	0.05	0.08	0.65	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

2015 Background PM Peak

8/14/2013

	→	↘	↙	←	↖	↗			
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR	ø1	ø5	ø7
Lane Configurations	↑↑			↑↑↑	↖↗	↗			
Volume (vph)	970	0	3	1010	425	108			
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Util. Factor	0.95	1.00	0.91	0.91	0.97	1.00			
Frt						0.850			
Flt Protected					0.950				
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)						117			
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)	1054	0	0	1101	462	117			
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	37.0	37.0	20.0	20.0	11.0	12.0	10.0
Total Lost Time (s)	5.0	4.0	5.0	5.0	5.0	5.0			
Act Effect Green (s)	43.0			39.8	17.4	17.4			
Actuated g/C Ratio	0.48			0.44	0.19	0.19			
v/c Ratio	0.62			0.49	0.70	0.29			
Control Delay	2.4			9.5	41.6	8.8			
Queue Delay	0.0			0.1	2.6	0.0			
Total Delay	2.4			9.6	44.2	8.8			
LOS	A			A	D	A			
Approach Delay	2.4			9.6	37.0				
Approach LOS	A			A	D				

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

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

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.87

Intersection Signal Delay: 12.6

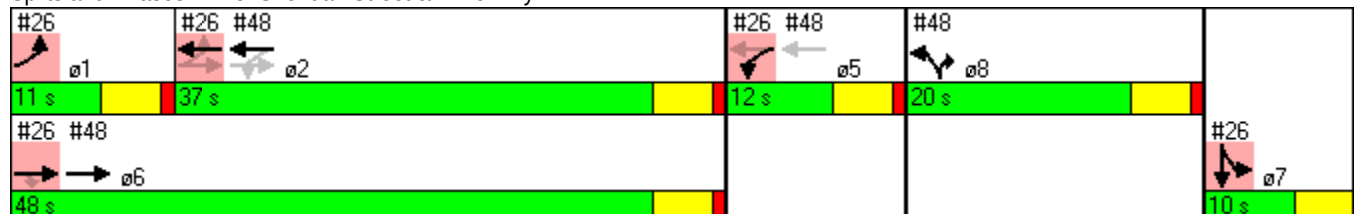
Intersection LOS: B

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

2015 Background PM Peak

8/14/2013



Lane Group	EBT	WBT	NBL	NBR
Lane Group Flow (vph)	1054	1101	462	117
v/c Ratio	0.62	0.49	0.70	0.29
Control Delay	2.4	9.5	41.6	8.8
Queue Delay	0.0	0.1	2.6	0.0
Total Delay	2.4	9.6	44.2	8.8
Queue Length 50th (ft)	8	90	131	0
Queue Length 95th (ft)	10	m97	#204	46
Internal Link Dist (ft)	140	85	3732	
Turn Bay Length (ft)				
Base Capacity (vph)	1691	2230	664	400
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	196	106	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.62	0.54	0.83	0.29

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
49: Sheridan Street & US-1

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	570	176	152	548	166	236	642	105	236	965	109
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
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.965				0.850		0.979			0.985	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3415	0	1770	3539	1583	1770	3465	0	1770	3486	0
Flt Permitted	0.231			0.250			0.123			0.209		
Satd. Flow (perm)	430	3415	0	466	3539	1583	229	3465	0	389	3486	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		42				180		22			15	
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)	261	811	0	165	596	180	257	812	0	257	1167	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)	14.0	27.0	0.0	9.0	22.0	22.0	14.0	37.0	0.0	17.0	40.0	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)	32.0	21.0		23.0	16.0	16.0	44.5	32.5		47.5	34.0	
Actuated g/C Ratio	0.36	0.23		0.26	0.18	0.18	0.49	0.36		0.53	0.38	
v/c Ratio	0.86	0.98		0.86	0.95	0.42	0.90	0.64		0.67	0.88	
Control Delay	54.2	44.9		70.0	63.0	8.6	55.7	26.4		20.1	35.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	54.2	44.9		70.0	63.0	8.6	55.7	26.4		20.1	35.1	
LOS	D	D		E	E	A	E	C		C	D	
Approach Delay		47.2			53.8			33.4			32.4	
Approach LOS		D			D			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 24 (27%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.98

Intersection Signal Delay: 40.6

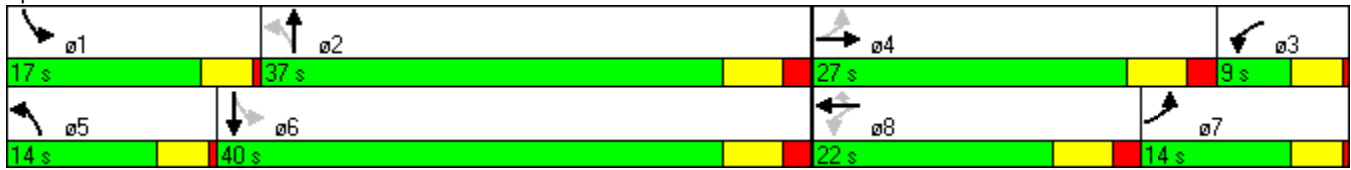
Intersection LOS: D

Intersection Capacity Utilization 89.7%

ICU Level of Service E

Analysis Period (min) 15

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



Queues
49: Sheridan Street & US-1

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	261	811	165	596	180	257	812	257	1167
v/c Ratio	0.86	0.98	0.86	0.95	0.42	0.90	0.64	0.67	0.88
Control Delay	54.2	44.9	70.0	63.0	8.6	55.7	26.4	20.1	35.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.2	44.9	70.0	63.0	8.6	55.7	26.4	20.1	35.1
Queue Length 50th (ft)	139	251	66	177	0	92	196	71	316
Queue Length 95th (ft)	#259	#371	#166	#283	55	#239	264	116	#442
Internal Link Dist (ft)		1729		676			3735		706
Turn Bay Length (ft)	195		280		280	224		238	
Base Capacity (vph)	302	829	192	629	429	285	1266	411	1326
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	0.98	0.86	0.95	0.42	0.90	0.64	0.63	0.88

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	62	43	66	21	26	23	67	988	24	30	1130	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt			0.850			0.850		0.996			0.995	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3525	0	1770	1853	0
Flt Permitted	0.816			0.816			0.095			0.249		
Satd. Flow (perm)	1520	1863	1583	1520	1863	1583	177	3525	0	464	1853	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			72			25		11			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)	67	47	72	23	28	25	73	1100	0	33	1270	0
Turn Type	Perm		Perm	Perm		Perm	Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8		8	2			6		
Total Split (s)	11.0	11.0	11.0	11.0	11.0	11.0	54.0	54.0	0.0	54.0	54.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Act Effect Green (s)	6.0	6.0	6.0	6.0	6.0	6.0	52.8	52.8		52.8	52.8	
Actuated g/C Ratio	0.09	0.09	0.09	0.09	0.09	0.09	0.80	0.80		0.80	0.80	
v/c Ratio	0.49	0.28	0.34	0.17	0.16	0.15	0.51	0.39		0.09	0.85	
Control Delay	40.8	32.0	13.1	30.3	29.7	14.5	21.4	2.9		2.8	14.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	40.8	32.0	13.1	30.3	29.7	14.5	21.4	2.9		2.8	14.1	
LOS	D	C	B	C	C	B	C	A		A	B	
Approach Delay		27.8			24.9			4.1			13.8	
Approach LOS		C			C			A			B	

Intersection Summary

Area Type: Other

Cycle Length: 65

Actuated Cycle Length: 65.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 10.9

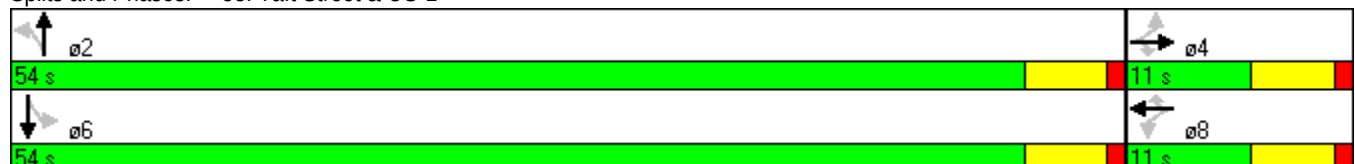
Intersection LOS: B

Intersection Capacity Utilization 84.3%

ICU Level of Service E

Analysis Period (min) 15

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



Queues
53: Taft Street & US-1

2015 Background PM Peak
8/14/2013

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	67	47	72	23	28	25	73	1100	33	1270
v/c Ratio	0.49	0.28	0.34	0.17	0.16	0.15	0.51	0.39	0.09	0.85
Control Delay	40.8	32.0	13.1	30.3	29.7	14.5	21.4	2.9	2.8	14.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.8	32.0	13.1	30.3	29.7	14.5	21.4	2.9	2.8	14.1
Queue Length 50th (ft)	26	18	0	9	11	0	9	57	3	279
Queue Length 95th (ft)	#68	46	34	29	32	20	#79	80	8	#711
Internal Link Dist (ft)	1932			578			662			3735
Turn Bay Length (ft)										
Base Capacity (vph)	138	170	209	138	170	167	142	2833	373	1490
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	0.49	0.28	0.34	0.17	0.16	0.15	0.51	0.39	0.09	0.85

Intersection Summary

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

	→	↘	↙	←	↖	↗
Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑			↑↑↑		↗
Volume (vph)	1671	13	0	2520	0	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.91	0.91	1.00	0.91	1.00	1.00
Frt	0.999					0.865
Flt Protected						
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)	1830	0	0	2739	0	39
Sign Control	Free			Free	Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 52.0% ICU Level of Service A

Analysis Period (min) 15

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↖	↑					↖	↑↑↑	
Volume (vph)	0	157	44	59	235	0	0	0	0	79	393	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.91	0.91
Frt		0.967									0.991	
Flt Protected				0.950						0.950		
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)		33									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	219	0	64	255	0	0	0	0	86	455	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		0.34		0.17	0.54					0.62	0.41	
Control Delay		20.6		10.9	15.9					52.2	12.7	
Queue Delay		0.0		0.0	0.0					0.0	0.0	
Total Delay		20.6		10.9	15.9					52.2	12.7	
LOS		C		B	B					D	B	
Approach Delay		20.6			14.9						19.0	
Approach LOS		C			B						B	

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 63.9

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 18.1

Intersection LOS: B

Intersection Capacity Utilization 30.6%

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)		
Lane Util. Factor		
Frt		
Flt Protected		
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 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

2015 Background PM Peak
8/14/2013

	→	↙	←	↘	↓
Lane Group	EBT	WBL	WBT	SBL	SBT
Lane Group Flow (vph)	219	64	255	86	455
v/c Ratio	0.34	0.17	0.54	0.62	0.41
Control Delay	20.6	10.9	15.9	52.2	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.6	10.9	15.9	52.2	12.7
Queue Length 50th (ft)	32	6	25	33	31
Queue Length 95th (ft)	62	m15	m65	#104	54
Internal Link Dist (ft)	3038		138		2690
Turn Bay Length (ft)					
Base Capacity (vph)	886	368	469	139	1671
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	1	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.25	0.17	0.54	0.62	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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	44	170	0	0	197	11	92	337	53	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	0.95	0.91	0.91	0.91	1.00	1.00	1.00
Frt					0.992			0.983				
Flt Protected	0.950							0.991				
Satd. Flow (prot)	1770	1863	0	0	3511	0	0	4954	0	0	0	0
Flt Permitted	0.611							0.991				
Satd. Flow (perm)	1138	1863	0	0	3511	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)	48	185	0	0	226	0	0	524	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			0.23			0.93				
Control Delay	11.5	15.7			19.0			54.1				
Queue Delay	0.0	0.2			0.0			0.0				
Total Delay	11.5	15.9			19.0			54.1				
LOS	B	B			B			D				
Approach Delay		15.0			19.0			54.1				
Approach LOS		B			B			D				

Intersection Summary

Area Type: Other

Cycle Length: 95

Actuated Cycle Length: 63.9

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 36.8

Intersection LOS: D

Intersection Capacity Utilization 30.6%

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)			
Lane Util. Factor			
Frt			
Flt Protected			
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 Effct 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

2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBT	NBT
Lane Group Flow (vph)	48	185	226	524
v/c Ratio	0.23	0.54	0.23	0.93
Control Delay	11.5	15.7	19.0	54.1
Queue Delay	0.0	0.2	0.0	0.0
Total Delay	11.5	15.9	19.0	54.1
Queue Length 50th (ft)	10	37	33	70
Queue Length 95th (ft)	m21	m63	67	#152
Internal Link Dist (ft)		138	1932	1320
Turn Bay Length (ft)				
Base Capacity (vph)	286	469	998	566
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	0.17	0.42	0.23	0.93

Intersection Summary

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

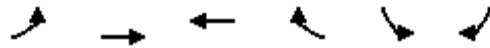
Queue shown is maximum after two cycles.

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

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

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	74	388	607	80	68	183
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt				0.850	0.902	
Flt Protected	0.950				0.987	
Satd. Flow (prot)	1770	1863	1863	1583	1658	0
Flt Permitted	0.189				0.987	
Satd. Flow (perm)	352	1863	1863	1583	1658	0
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				87	151	
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)	80	422	660	87	273	0
Turn Type	Perm			Perm		
Protected Phases		4	8		6	
Permitted Phases	4			8		
Total Split (s)	58.0	58.0	58.0	58.0	32.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0
Act Effect Green (s)	41.1	41.1	41.1	41.1	36.9	
Actuated g/C Ratio	0.46	0.46	0.46	0.46	0.41	
v/c Ratio	0.50	0.50	0.78	0.11	0.36	
Control Delay	26.4	18.2	16.7	0.4	11.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	
Total Delay	26.4	18.2	16.7	0.4	11.3	
LOS	C	B	B	A	B	
Approach Delay		19.5	14.8		11.3	
Approach LOS		B	B		B	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 14 (16%), Referenced to phase 2: and 6:SBL, Start of Green
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.78
Intersection Signal Delay: 15.7
Intersection Capacity Utilization 66.1%
Analysis Period (min) 15

Intersection LOS: B

ICU Level of Service C

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



Queues
65: Johnson Street & 37th Avenue

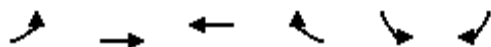
2015 Background PM Peak
8/14/2013



Lane Group	EBL	EBT	WBT	WBR	SBL
Lane Group Flow (vph)	80	422	660	87	273
v/c Ratio	0.50	0.50	0.78	0.11	0.36
Control Delay	26.4	18.2	16.7	0.4	11.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	18.2	16.7	0.4	11.3
Queue Length 50th (ft)	30	160	99	0	44
Queue Length 95th (ft)	64	188	113	m2	123
Internal Link Dist (ft)		847	1616		465
Turn Bay Length (ft)	200			190	
Base Capacity (vph)	203	1076	1076	951	768
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	0.39	0.39	0.61	0.09	0.36

Intersection Summary

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



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (vph)	20	422	716	60	40	39
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
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.990			0.850
Flt Protected	0.950				0.950	
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)	22	459	843	0	43	42
Sign Control		Free	Free		Stop	

Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 51.3% ICU Level of Service A

Analysis Period (min) 15

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

2015 Background PM Peak

8/14/2013

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	36	302	39	114	506	58	57	299	50	67	309	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.983			0.985			0.979				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1831	0	1770	1835	0	1770	3465	0	1770	3539	1583
Flt Permitted	0.172			0.404			0.549			0.417		
Satd. Flow (perm)	320	1831	0	753	1835	0	1023	3465	0	777	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12			11			26				32
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)	39	370	0	124	613	0	62	379	0	73	336	32
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	26.0	0.0	11.0	28.0	0.0	10.0	14.0	0.0	9.0	13.0	13.0
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)	26.4	23.2		28.9	23.0		13.8	8.8		14.2	11.8	11.8
Actuated g/C Ratio	0.44	0.39		0.48	0.38		0.23	0.15		0.24	0.20	0.20
v/c Ratio	0.16	0.52		0.27	0.86		0.21	0.71		0.29	0.48	0.09
Control Delay	8.8	17.9		8.7	31.9		17.3	31.2		19.0	26.4	10.5
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	8.8	17.9		8.7	31.9		17.3	31.2		19.0	26.4	10.5
LOS	A	B		A	C		B	C		B	C	B
Approach Delay		17.0			28.0			29.2			24.0	
Approach LOS		B			C			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 59.8

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 25.2

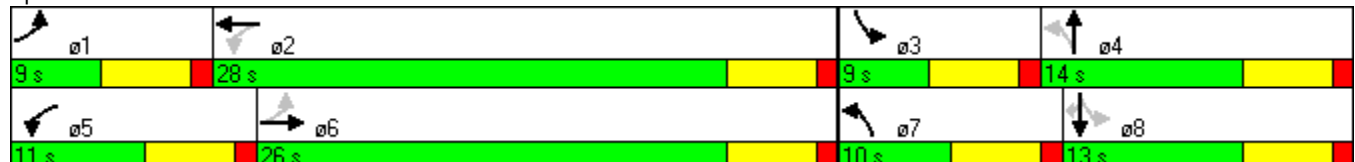
Intersection LOS: C

Intersection Capacity Utilization 63.7%

ICU Level of Service B

Analysis Period (min) 15

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



Queues
71: Johnson Street & 46th Ave

2015 Background PM Peak

8/14/2013



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	39	370	124	613	62	379	73	336	32
v/c Ratio	0.16	0.52	0.27	0.86	0.21	0.71	0.29	0.48	0.09
Control Delay	8.8	17.9	8.7	31.9	17.3	31.2	19.0	26.4	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	8.8	17.9	8.7	31.9	17.3	31.2	19.0	26.4	10.5
Queue Length 50th (ft)	6	102	20	194	16	64	19	62	0
Queue Length 95th (ft)	17	177	42	#374	40	#115	45	#113	21
Internal Link Dist (ft)		849		2138		631		2582	
Turn Bay Length (ft)									
Base Capacity (vph)	238	718	467	712	299	543	252	701	339
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	0.16	0.52	0.27	0.86	0.21	0.70	0.29	0.48	0.09

Intersection Summary

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

APPENDIX – G

Synchro Output -Future Total Traffic

(2015)



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

2015 Total AM Peak

3/3/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	144	1524	167	128	991	129	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		
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			43			181				273
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	1780	0	136	1191	0	162	420	0	246	267	145
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Detector Phase	1	6		5	2		7	4		3	8	8
Switch Phase												
Minimum Initial (s)	4.0	12.0		4.0	12.0		4.0	6.0		4.0	6.0	6.0
Minimum Split (s)	10.0	18.0		10.0	18.0		10.0	12.0		10.0	12.0	12.0
Total Split (s)	11.0	27.0		10.0	26.0		10.0	13.0		10.0	13.0	13.0
Total Split (%)	18.3%	45.0%		16.7%	43.3%		16.7%	21.7%		16.7%	21.7%	21.7%
Maximum Green (s)	5.0	21.0		4.0	20.0		4.0	7.0		4.0	7.0	7.0
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lag	Lead		Lag	Lead		Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Max		None	Max		Max	Max		None	Max	Max
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		0.44	0.61		0.24	0.63		0.41	0.48	0.30
Control Delay	18.4	23.6		18.0	16.0		15.8	18.1		17.2	26.5	1.6
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	18.4	23.6		18.0	16.0		15.8	18.1		17.2	26.5	1.6
LOS	B	C		B	B		B	B		B	C	A
Approach Delay		23.2			16.2			17.4			17.5	
Approach LOS		C			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 58

Lanes, Volumes, Timings

1: 46th Ave & Sheridan St

2015 Total AM Peak
3/3/2014

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 19.6

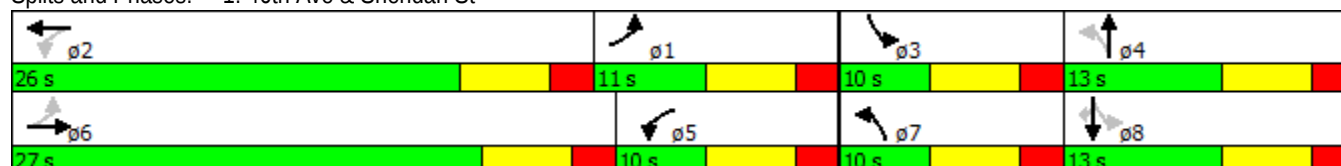
Intersection LOS: B

Intersection Capacity Utilization 69.8%

ICU Level of Service C

Analysis Period (min) 15

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



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

2015 Total AM Peak

3/3/2014

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  							
Volume (vph)	46	1801	99	106	1095	19	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		
Satd. Flow (prot)	1770	5045	0	1770	5070	0	1770	1617	0	1770	1630	0
Flt Permitted	0.201			0.146			0.649			0.687		
Satd. Flow (perm)	374	5045	0	272	5070	0	1209	1617	0	1280	1630	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		19			6			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	2066	0	115	1295	0	34	109	0	131	172	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	1	6		5	2			4			8	
Permitted Phases	6			2			4			8		
Detector Phase	1	6		5	2		4	4		8	8	
Switch Phase												
Minimum Initial (s)	4.0	12.0		4.0	12.0		6.0	6.0		6.0	6.0	
Minimum Split (s)	10.0	18.0		10.0	18.0		12.0	12.0		12.0	12.0	
Total Split (s)	10.0	33.0		10.0	33.0		17.0	17.0		17.0	17.0	
Total Split (%)	16.7%	55.0%		16.7%	55.0%		28.3%	28.3%		28.3%	28.3%	
Maximum Green (s)	4.0	27.0		4.0	27.0		11.0	11.0		11.0	11.0	
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0		0.0	-2.0		0.0	0.0		-2.0	0.0	
Total Lost Time (s)	4.0	4.0		6.0	4.0		6.0	6.0		4.0	6.0	
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?	Yes	Yes		Yes	Yes							
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	Max		None	None		None	None		None	None	
Act Effect Green (s)	32.6	32.6		30.5	33.7		9.6	9.6		11.6	9.6	
Actuated g/C Ratio	0.59	0.59		0.55	0.61		0.17	0.17		0.21	0.17	
v/c Ratio	0.13	0.69		0.44	0.42		0.16	0.30		0.49	0.43	
Control Delay	11.2	13.4		15.6	9.5		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	11.2	13.4		15.6	9.5		22.9	9.5		27.8	10.5	
LOS	B	B		B	A		C	A		C	B	
Approach Delay		13.3			10.0			12.7			18.0	
Approach LOS		B			B			B			B	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 55.3

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

2015 Total AM Peak
 3/3/2014

Natural Cycle: 60

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 12.5

Intersection LOS: B

Intersection Capacity Utilization 73.6%

ICU Level of Service D

Analysis Period (min) 15

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

